



March 31, 2022

United States Environmental Protection Agency
5 Post Office Square, Suite 100
Boston, MA 02109-3912

Subject: Notice of Intent (NOI) for Remediation General Permit (RGP)
Former Attleboro Dye Works
36 Maple Avenue, Seekonk, MA
Release Tracking Number (RTN) 4-21606

To Whom It May Concern:

Environmental Strategies & Management, Inc. (ES&M) has prepared the attached Notice of Intent (NOI) package to apply for a Remediation General Permit (RGP). The RGP would be used during dewatering of two lagoon/settling ponds at the Former Attleboro Dye Works (ADW), located at 36 Maple Avenue in Seekonk, MA (the Site). Discharge at this site is planned to commence in late summer 2022.

The project is being conducted by the Town of Seekonk, MA (Property Owner). The Town acquired the property as a tax taking on November 6, 2019.

The overall 7.8-acre ADW Site consists of three parcels identified by the Town as Map 31, Lot 477; Map 32, Lot 6; and Map 32, Lot 9, including a portion of the Ten Mile River Pond ("Pond"). Remediation and dewatering activities will be conducted at Lot 6. The Site (Lot 9) is improved with three buildings, two of which are partially collapsed and fire damaged. The Site is located in an area of mixed commercial and residential usage and is abutted to the north by Ten Mile River ("River"); to the northeast by the Pond, which was formed by a dam; to the southeast by an automotive repair facility and residences; to the southwest by a church and Mill Canal; to the south by Maple Avenue; to the southeast by residences; and to the west by undeveloped land. The Pond is intermittently dry, which is attributed to a breach in the dam. A Zone II public water supply protection area is located approximately 1,200 feet southeast and south of the Site.

Historic reports indicate that former industrial dyeing processes conducted at the facility included the use of dye fixing agents, and waste dye carriers and the mixing, transfer and storage of metals and petroleum hydrocarbon compounds. These activities occurred during the 60+ year operation of the facility. Prior to the 1960s, the process waste stream was reportedly discharged to the River. In the 1960s, three settling ponds/lagoons ("Lagoons #1, #2 and #3") were constructed to receive the waste through 1980. It appears that waste sludges (lagoon sediment) were allowed to settle in the lagoons and

accumulated wastewater was subsequently discharged from the lagoons to the river. Remediation of Lagoon #3 was conducted in 2021.

Remediation of Lagoon #1 and Lagoon #2 will be conducted under a FY'21 EPA Brownfields Cleanup Grant. Dewatering will be performed to excavate contaminated lagoon sediments. Water collected during the excavation dewatering process will be pumped into and temporarily accumulated in a frac tank. Water in the frac tank will then be pumped through a bag filter and two granulated activated carbon adsorber (GACA) units in series. Water will pass from the second GACA unit through a flow meter/totalizer before being discharged to the Ten Mile River.

The expected 7Q10 flow for the Ten Mile River was calculated by ES&M using the United States Geological Service's online StreamStats tool, and was confirmed by the Massachusetts Department of Environmental Protection (MassDEP) in an email dated March 30, 2022. MassDEP also confirmed the accuracy of the requested dilution factor, which was calculated in accordance with the Permit Instructions.

Threatened and endangered species will not be affected by this project. The United States Fish and Wildlife Service Information for Planning and Consulting (iPAC) system lists the northern long-eared bat as potentially present in the system's discharge area. Since the bat is not aquatic species, it will not be affected by this discharge. Critical habitats are not present in the project area. The iPAC report is included as documentation.

ES&M reviewed the National Register of Historic Places, and determined that no historic properties are present within the vicinity of the Site. A print-out of the National Register of Historic Places on-line mapping tool is included as an attachment.

Please call us at 508-226-1800 if you have any questions.

Sincerely,
Environmental Strategies & Management, Inc.



Tracey Costa, LSP, CHMM, TURP, ENV-SP, LEED Green Associate
Senior Project Manager



Angela Boyd, LSP
Senior Project Manager

Cc: Mr. Shawn E. Cadime, Town Administrator, Town of Seekonk, Massachusetts
Ms. Amy Jean McKeown, Brownfields Project Officer, EPA Region 1

Enc.: Attachment A. Notice of Intent

Attachment B. Figures

Figure 1 – Locus Map

Figure 2 – Site Plan

Figure 3– Proposed Groundwater Treatment System Layout and Lagoon Area

Figure 4– Dewatering Treatment System Piping & Instrumentation Diagram

MassDEP Phase I Assessment Map

Attachment C. StreamStats Report

Attachment D. iPAC results

Attachment E. National Register of Historic Places Map

Attachment F. Tables and Laboratory Analytical Reports

Table 1. Summary of Groundwater Analytical Results-Wells Located Adjacent to Lagoons

Table 2. Summary of Lagoon and River Surface Water Results Laboratory Analytical Reports

Attachment A

Notice of Intent Form

II. Suggested Format for the Remediation General Permit Notice of Intent (NOI)

A. General site information:

1. Name of site: Former Attleboro Dye Works	Site address: 36 Maple Avenue Street:		
2. Site owner Town of Seekonk, MA Owner is (check one): ☐ Federal ☐ State/Tribal ☐ Private ☒ Other; if so, specify: Municipal	City: Seekonk	State: MA	Zip: 02771
3. Site operator, if different than owner ES&M, Inc.	Contact Person: Shawn Cadime, Town Administrator		
	Telephone: 508-336-2910	Email: scadime@seekonk-ma.gov	
4. NPDES permit number assigned by EPA: NPDES permit is (check all that apply): ☒ RGP ☐ DGP ☐ CGP ☐ MSGP ☐ Individual NPDES permit ☐ Other; if so, specify:	5. Other regulatory program(s) that apply to the site (check all that apply): ☒ MA Chapter 21e; list RTN(s): 4-21606 ☐ NH Groundwater Management Permit or Groundwater Release Detection Permit: ☐ CERCLA ☐ UIC Program ☐ POTW Pretreatment ☐ CWA Section 404		
	Mailing address: 100 Peck Street Street:		
	City: Seekonk	State: MA	Zip: 02771
	Contact Person: Tracey Costa		
	Telephone: 508-266-1800	Email: tcosta@esm-inc.com	
	Mailing address: 273 West Main Street Street:		
	City: Norton	State: MA	Zip: 02766

B. Receiving water information:

1. Name of receiving water(s): Ten Mile River	Waterbody identification of receiving water(s): Ten Mile River Segment MA52-03	Classification of receiving water(s): Class B
Receiving water is (check any that apply): ☐ Outstanding Resource Water ☐ Ocean Sanctuary ☐ territorial sea ☐ Wild and Scenic River		
2. Has the operator attached a location map in accordance with the instructions in B, above? (check one): ☒ Yes ☐ No Are sensitive receptors present near the site? (check one): ☐ Yes ☒ No If yes, specify:		
3. Indicate if the receiving water(s) is listed in the State's Integrated List of Waters (i.e., CWA Section 303(d)). Include which designated uses are impaired, and any pollutants indicated. Also, indicate if a final TMDL is available for any of the indicated pollutants. For more information, contact the appropriate State as noted in Part 4.6 of the RGP. Ten Mile River. Draft TMDL In progress (SFY 2022). Total Phosphorus and Metals.		
4. Indicate the seven day-ten-year low flow (7Q10) of the receiving water determined in accordance with the instructions in Appendix V for sites located in Massachusetts and Appendix VI for sites located in New Hampshire.		0.95 MGD
5. Indicate the requested dilution factor for the calculation of water quality-based effluent limitations (WQBELs) determined in accordance with the instructions in Appendix V for sites in Massachusetts and Appendix VI for sites in New Hampshire.		14.19
6. Has the operator received confirmation from the appropriate State for the 7Q10 and dilution factor indicated? (check one): ☒ Yes ☐ No If yes, indicate date confirmation received: 03/30/2022		
7. Has the operator attached a summary of receiving water sampling results as required in Part 4.2 of the RGP in accordance with the instruction in Appendix VIII? (check one): ☒ Yes ☐ No		

C. Source water information:

1. Source water(s) is (check any that apply):			
☒ Contaminated groundwater Has the operator attached a summary of influent sampling results as required in Part 4.2 of the RGP in accordance with the instruction in Appendix VIII? (check one): ☒ Yes ☐ No	☒ Contaminated surface water Has the operator attached a summary of influent sampling results as required in Part 4.2 of the RGP in accordance with the instruction in Appendix VIII? (check one): ☒ Yes ☐ No	☐ The receiving water	☐ Potable water; if so, indicate municipality or origin: ☐ Other; if so, specify:
		☐ A surface water other than the receiving water; if so, indicate waterbody:	

2. Source water contaminants: arsenic, antimony, copper	
a. For source waters that are contaminated groundwater or contaminated surface water, indicate are any contaminants present that are not included in the RGP? (check one): ☐ Yes ☒ No If yes, indicate the contaminant(s) and the maximum concentration present in accordance with the instructions in Appendix VIII.	b. For a source water that is a surface water other than the receiving water, potable water or other, indicate any contaminants present at the maximum concentration in accordance with the instructions in Appendix VIII? (check one): ☐ Yes ☐ No
3. Has the source water been previously chlorinated or otherwise contains residual chlorine? (check one): ☐ Yes ☒ No	

D. Discharge information

1.The discharge(s) is a(n) (check any that apply): ☐ Existing discharge ☒ New discharge ☐ New source	
Outfall(s): West of Lagoon/Settling Pond #2	Outfall location(s): (Latitude, Longitude) 41.896047, -71.330229
Discharges enter the receiving water(s) via (check any that apply): ☒ Direct discharge to the receiving water ☐ Indirect discharge, if so, specify: ☐ A private storm sewer system ☐ A municipal storm sewer system If the discharge enters the receiving water via a private or municipal storm sewer system: Has notification been provided to the owner of this system? (check one): ☐ Yes ☒ No Has the operator has received permission from the owner to use such system for discharges? (check one): ☒ Yes ☐ No, if so, explain, with an estimated timeframe for obtaining permission: Has the operator attached a summary of any additional requirements the owner of this system has specified? (check one): ☐ Yes ☐ No	
Provide the expected start and end dates of discharge(s) (month/year): July/2022 to September/2022	
Indicate if the discharge is expected to occur over a duration of: ☒ less than 12 months ☐ 12 months or more ☐ is an emergency discharge	
Has the operator attached a site plan in accordance with the instructions in D, above? (check one): ☒ Yes ☐ No	

2. Activity Category: (check all that apply)	3. Contamination Type Category: (check all that apply)	
☐ I – Petroleum-Related Site Remediation ☒ II – Non-Petroleum-Related Site Remediation ☐ III – Contaminated Site Dewatering ☐ IV – Dewatering of Pipelines and Tanks ☐ V – Aquifer Pump Testing ☐ VI – Well Development/Rehabilitation ☐ VII – Collection Structure Dewatering/Remediation ☐ VIII – Dredge-Related Dewatering	a. If Activity Category I or II: (check all that apply) ☒ A. Inorganics ☐ B. Non-Halogenated Volatile Organic Compounds ☐ C. Halogenated Volatile Organic Compounds ☐ D. Non-Halogenated Semi-Volatile Organic Compounds ☐ E. Halogenated Semi-Volatile Organic Compounds ☐ F. Fuels Parameters	
	b. If Activity Category III, IV, V, VI, VII or VIII: (check either G or H)	
	<table border="1"> <tr> <td data-bbox="970 800 1419 873">☐ G. Sites with Known Contamination</td><td data-bbox="1419 800 2003 873">☐ H. Sites with Unknown Contamination</td></tr> </table>	☐ G. Sites with Known Contamination
☐ G. Sites with Known Contamination	☐ H. Sites with Unknown Contamination	
<table border="1"> <tr> <td data-bbox="970 873 1419 1409"> c. If Category III-G, IV-G, V-G, VI-G, VII-G or VIII-G: (check all that apply) ☐ A. Inorganics ☐ B. Non-Halogenated Volatile Organic Compounds ☐ C. Halogenated Volatile Organic Compounds ☐ D. Non-Halogenated Semi-Volatile Organic Compounds ☐ E. Halogenated Semi-Volatile Organic Compounds ☐ F. Fuels Parameters </td><td data-bbox="1419 873 2003 1409"> d. If Category III-H, IV-H, V-H, VI-H, VII-H or VIII-H Contamination Type Categories A through F apply </td></tr> </table>	c. If Category III-G, IV-G, V-G, VI-G, VII-G or VIII-G: (check all that apply) ☐ A. Inorganics ☐ B. Non-Halogenated Volatile Organic Compounds ☐ C. Halogenated Volatile Organic Compounds ☐ D. Non-Halogenated Semi-Volatile Organic Compounds ☐ E. Halogenated Semi-Volatile Organic Compounds ☐ F. Fuels Parameters	d. If Category III-H, IV-H, V-H, VI-H, VII-H or VIII-H Contamination Type Categories A through F apply
c. If Category III-G, IV-G, V-G, VI-G, VII-G or VIII-G: (check all that apply) ☐ A. Inorganics ☐ B. Non-Halogenated Volatile Organic Compounds ☐ C. Halogenated Volatile Organic Compounds ☐ D. Non-Halogenated Semi-Volatile Organic Compounds ☐ E. Halogenated Semi-Volatile Organic Compounds ☐ F. Fuels Parameters	d. If Category III-H, IV-H, V-H, VI-H, VII-H or VIII-H Contamination Type Categories A through F apply	

4. Influent and Effluent Characteristics

Parameter	Known or believed absent	Known or believed present	# of samples	Test method (#)	Detection limit (µg/l)	Influent		Effluent Limitations	
						Daily maximum (µg/l)	Daily average (µg/l)	TBEL	WQBEL
A. Inorganics									
Ammonia	✓					ND		Report mg/L	---
Chloride	✓					ND		Report µg/l	---
Total Residual Chlorine	✓					ND		0.2 mg/L	
Total Suspended Solids		✓				ND		30 mg/L	---
Antimony		✓	11	MCP	4	8.3		206 µg/L	
Arsenic		✓	11	MCP	5	0.71		104 µg/L	
Cadmium	✓			MCP	4	ND		10.2 µg/L	
Chromium III	✓					ND		323 µg/L	
Chromium VI	✓		7	MCP	4	ND		323 µg/L	
Copper		✓	11	MCP	10	14		242 µg/L	
Iron	✓					ND		5,000 µg/L	
Lead	✓		11	MCP	10	ND		160 µg/L	
Mercury	✓		11	MCP	0.2	ND		0.739 µg/L	
Nickel	✓		11	MCP	25	ND		1,450 µg/L	
Selenium	✓		11	MCP	10	ND		235.8 µg/L	
Silver	✓		11	MCP	7	ND		35.1 µg/L	
Zinc	✓		11	MCP	50	ND		420 µg/L	
Cyanide	✓					ND		178 mg/L	
B. Non-Halogenated VOCs									
Total BTEX	✓		8	MCP	5	ND		100 µg/L	---
Benzene	✓		8	MCP	2	ND		5.0 µg/L	---
1,4 Dioxane	✓		10	8260	50; 250	ND		200 µg/L	---
Acetone	✓		10	8260	5	ND		7.97 mg/L	---
Phenol	✓					ND		1,080 µg/L	

Parameter	Known or believed absent	Known or believed present	# of samples	Test method (#)	Detection limit (µg/l)	Influent		Effluent Limitations	
						Daily maximum (µg/l)	Daily average (µg/l)	TBEL	WQBEL
C. Halogenated VOCs									
Carbon Tetrachloride	✓		9	8260	1	ND		4.4 µg/L	
1,2 Dichlorobenzene	✓		9	8260	1	ND		600 µg/L	---
1,3 Dichlorobenzene	✓		9	8260	1	ND		320 µg/L	---
1,4 Dichlorobenzene	✓		9	8260	1	ND		5.0 µg/L	---
Total dichlorobenzene	✓		9			ND		763 µg/L in NH	---
1,1 Dichloroethane	✓		9	8260	1	ND		70 µg/L	---
1,2 Dichloroethane	✓		9	8260	1	ND		5.0 µg/L	---
1,1 Dichloroethylene	✓		9	8260	1	ND		3.2 µg/L	---
Ethylene Dibromide	✓					ND		0.05 µg/L	---
Methylene Chloride	✓		9	8260	2	ND		4.6 µg/L	---
1,1,1 Trichloroethane	✓		9	8260	1	ND		200 µg/L	---
1,1,2 Trichloroethane	✓		9	8260	1	ND		5.0 µg/L	---
Trichloroethylene	✓		9	8260	1	ND		5.0 µg/L	---
Tetrachloroethylene	✓		9	8260	1	ND		5.0 µg/L	
cis-1,2 Dichloroethylene	✓		9	8260	1	ND		70 µg/L	---
Vinyl Chloride	✓		9	8260	1	ND		2.0 µg/L	---
D. Non-Halogenated SVOCs									
Total Phthalates	✓					ND		190 µg/L	
Diethylhexyl phthalate	✓					ND		101 µg/L	
Total Group I PAHs	✓					ND		1.0 µg/L	---
Benzo(a)anthracene	✓		7	4.1.1	2	ND		As Total PAHs	
Benzo(a)pyrene	✓		7	4.1.1	2	ND			
Benzo(b)fluoranthene	✓		7	4.1.1	2	ND			
Benzo(k)fluoranthene	✓		7	4.1.1	2	ND			
Chrysene	✓		7	4.1.1	2	ND			
Dibenzo(a,h)anthracene	✓		7	4.1.1	2	ND			
Indeno(1,2,3-cd)pyrene	✓		7	4.1.1	2	ND			

[illegible]

E. Treatment system information

1. Indicate the type(s) of treatment that will be applied to effluent prior to discharge: (check all that apply) ☐ Adsorption/Absorption ☐ Advanced Oxidation Processes ☐ Air Stripping ☒ Granulated Activated Carbon (“GAC”)/Liquid Phase Carbon Adsorption ☐ Ion Exchange ☐ Precipitation/Coagulation/Flocculation ☒ Separation/Filtration ☐ Other; if so, specify:	
2. Provide a written description of all treatment system(s) or processes that will be applied to the effluent prior to discharge. Water will be pumped from a dewatering sump set in Lagoon #2 and discharged to a frac tank. Water in the frac tank will be pumped through bag filters and two carbon adsorbers plumbed in series. Water will pass from the second carbon adsorber through a flow meter/totalizer before discharging to the Ten Mile River. Identify each major treatment component (check any that apply): ☒ Fractionation tanks ☐ Equalization tank ☐ Oil/water separator ☐ Mechanical filter ☒ Media filter ☐ Chemical feed tank ☐ Air stripping unit ☒ Bag filter ☐ Other; if so, specify: Indicate if either of the following will occur (check any that apply): ☐ Chlorination ☐ De-chlorination	
3. Provide the design flow capacity in gallons per minute (gpm) of the most limiting component. Indicate the most limiting component: 50 gpm - dewatering pumps Is use of a flow meter feasible? (check one): ☒ Yes ☐ No, if so, provide justification:	
Provide the proposed maximum effluent flow in gpm.	50
Provide the average effluent flow in gpm.	10
If Activity Category IV applies, indicate the estimated total volume of water that will be discharged:	
4. Has the operator attached a schematic of flow in accordance with the instructions in E, above? (check one): ☒ Yes ☐ No	

F. Chemical and additive information

1. Indicate the type(s) of chemical or additive that will be applied to effluent prior to discharge or that may otherwise be present in the discharge(s): (check all that apply)

☐ Algaecides/biocides ☐ Antifoams ☐ Coagulants ☐ Corrosion/scale inhibitors ☐ Disinfectants ☐ Flocculants ☐ Neutralizing agents ☐ Oxidants ☐ Oxygen ☐ scavengers ☐ pH conditioners ☐ Bioremedial agents, including microbes ☐ Chlorine or chemicals containing chlorine ☐ Other; if so, specify:

2. Provide the following information for each chemical/additive, using attachments, if necessary:

- a. Product name, chemical formula, and manufacturer of the chemical/additive;
- b. Purpose or use of the chemical/additive or remedial agent;
- c. Material Safety Data Sheet (MSDS) and Chemical Abstracts Service (CAS) Registry number for each chemical/additive;
- d. The frequency (hourly, daily, etc.), duration (hours, days), quantity (maximum and average), and method of application for the chemical/additive;
- e. Any material compatibility risks for storage and/or use including the control measures used to minimize such risks; and
- f. If available, the vendor's reported aquatic toxicity (NOAEL and/or LC50 in percent for aquatic organism(s)).

3. Has the operator attached an explanation which demonstrates that the addition of such chemicals/additives may be authorized under this general permit in accordance with the instructions in F, above? (check one): ☐ Yes ☐ No; if no, has the operator attached data that demonstrates each of the 126 priority pollutants in CWA Section 307(a) and 40 CFR Part 423.15(j)(1) are non-detect in discharges with the addition of the proposed chemical/additive? (check one): ☐ Yes ☐ No

G. Endangered Species Act eligibility determination

1. Indicate under which criterion the discharge(s) is eligible for coverage under this general permit:

- ☐ **FWS Criterion A:** No endangered or threatened species or critical habitat are in proximity to the discharges or related activities or come in contact with the “action area”.
- ☐ **FWS Criterion B:** Formal or informal consultation with the FWS under section 7 of the ESA resulted in either a no jeopardy opinion (formal consultation) or a written concurrence by FWS on a finding that the discharges and related activities are “not likely to adversely affect” listed species or critical habitat (informal consultation). Has the operator completed consultation with FWS? (check one): ☐ Yes ☐ No; if no, is consultation underway? (check one): ☐ Yes ☐ No
- ☒ **FWS Criterion C:** Using the best scientific and commercial data available, the effect of the discharges and related activities on listed species and critical habitat have been evaluated. Based on those evaluations, a determination is made by EPA, or by the operator and affirmed by EPA, that the discharges and related activities will have “no effect” on any federally threatened or endangered listed species or designated critical habitat under the jurisdiction of the FWS. This determination was made by: (check one) ☒ the operator ☐ EPA ☐ Other; if so, specify:

- ☐ **NMFS Criterion:** A determination made by EPA is affirmed by the operator that the discharges and related activities will have “no effect” or are “not likely to adversely affect” any federally threatened or endangered listed species or critical habitat under the jurisdiction of NMFS and will not result in any take of listed species. Has the operator previously completed consultation with NMFS? (check one): ☐ Yes ☐ No

2. Has the operator attached supporting documentation of ESA eligibility in accordance with the instructions in Appendix I, and G, above? (check one): ☒ Yes ☐ No

Does the supporting documentation include any written concurrence or finding provided by the Services? (check one): ☐ Yes ☒ No; if yes, attach.

H. National Historic Preservation Act eligibility determination

1. Indicate under which criterion the discharge(s) is eligible for coverage under this general permit:

- ☒ **Criterion A:** No historic properties are present. The discharges and discharge-related activities (e.g., BMPs) do not have the potential to cause effects on historic properties.
- ☐ **Criterion B:** Historic properties are present. Discharges and discharge related activities do not have the potential to cause effects on historic properties.
- ☐ **Criterion C:** Historic properties are present. The discharges and discharge-related activities have the potential to have an effect or will have an adverse effect on historic properties.

2. Has the operator attached supporting documentation of NHPA eligibility in accordance with the instructions in H, above? (check one): ☒ Yes ☐ No

Does the supporting documentation include any written agreement with the State Historic Preservation Officer (SHPO), Tribal Historic Preservation Officer (TPHO), or other tribal representative that outlines measures the operator will carry out to mitigate or prevent any adverse effects on historic properties? (check one): ☐ Yes ☒ No

I. Supplemental information

Describe any supplemental information being provided with the NOI. Include attachments if required or otherwise necessary.

Has the operator attached data, including any laboratory case narrative and chain of custody used to support the application? (check one): ☒ Yes ☐ No

Has the operator attached the certification requirement for the Best Management Practices Plan (BMPP)? (check one): ☒ Yes ☐ No

J. Certification requirement

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I have no personal knowledge that the information submitted is other than true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

BMPP certification statement:

Notification provided to the appropriate State, including a copy of this NOI, if required.

Check one: Yes ☐ No ☐

Notification provided to the municipality in which the discharge is located, including a copy of this NOI, if requested.

Check one: Yes ☐ No ☐

Notification provided to the owner of a private or municipal storm sewer system, if such system is used for site discharges, including a copy of this NOI, if requested.

Check one: Yes ☐ No ☐ NA ☐

Permission obtained from the owner of a private or municipal storm sewer system, if such system is used for site discharges. If yes, attach additional conditions. If no, attach explanation and timeframe for obtaining permission.

Check one: Yes ☐ No ☐ NA ☐

Notification provided to the owner/operator of the area associated with activities covered by an additional discharge permit(s). Additional discharge permit is (check one): ☐ RGP ☐ DGP ☐ CGP ☐ MSGP ☐ Individual NPDES permit
☐ Other; if so, specify:

Check one: Yes ☐ No ☐ NA ☐

Signature:

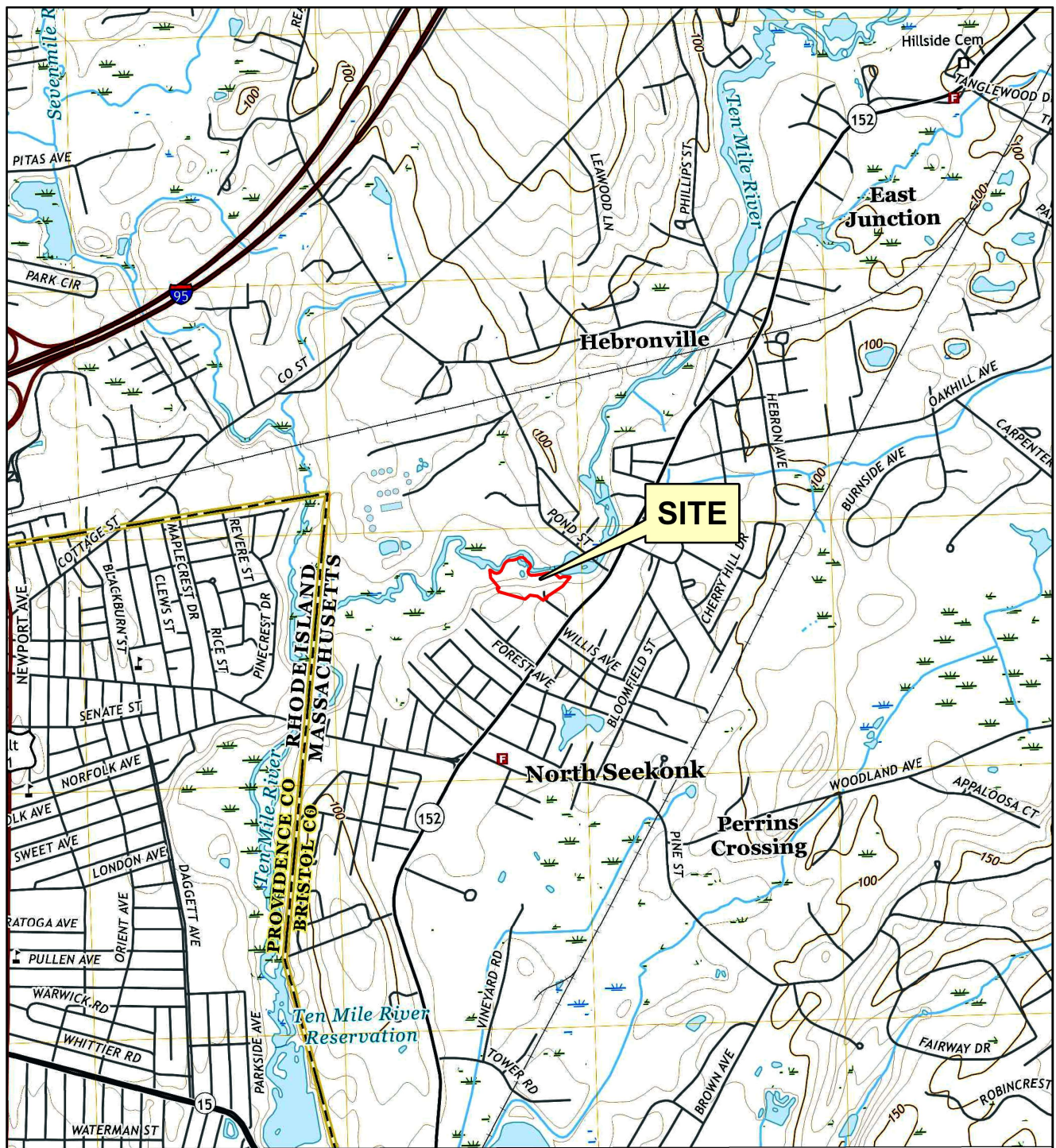


Date: 3/31/2022

Print Name and Title: **Tracey A. Costa, Sr. Project Manager**

Attachment B

Figures



SITE COORDINATES:
LAT 41°53'43"N LONG 71°19'43"W
UTM 19T 4,703,648N 340,682E

SOURCE: 2018 USGS TOPO QUAD
ATTLEBORO, MASSACHUSETTS

0 1,000 2,000 4,000
SCALE IN FEET (1:24,000)

PREPARED BY



Norton, MA 508-226-1800
Pawtucket, RI 401-728-6860
Newburyport, MA 617-840-0363
www.esm-inc.com

LOCUS MAP

Fmr. Attleboro Dye Works
36 Maple Avenue
Seekonk, Massachusetts

DRAWN
DMR

CHECKED
DB

PROJ MGR
TC

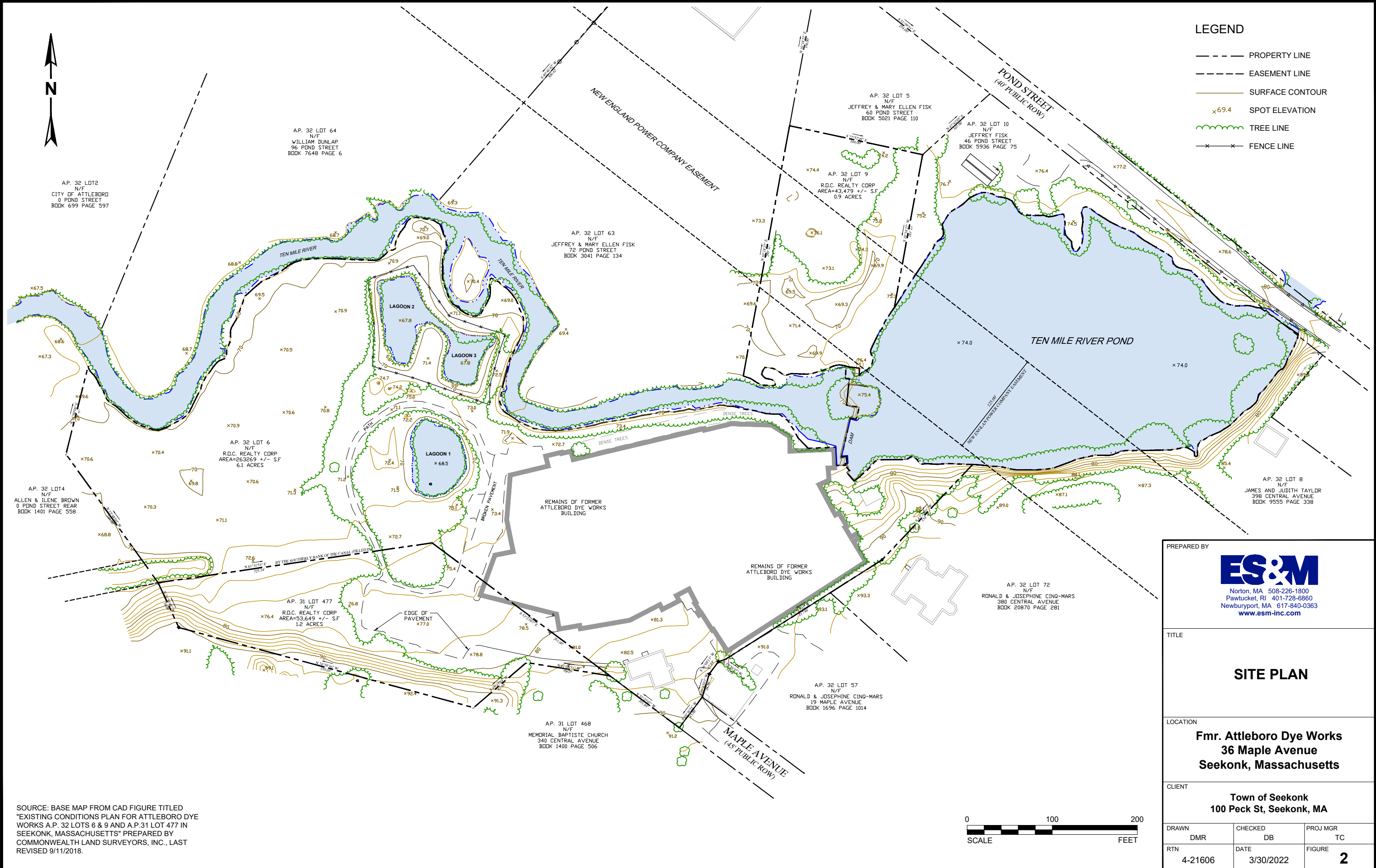
PROJECT
8078-01

DATE
3/30/2022

FIGURE
1

C:\Users\Doreen_Loc\Documents\ESM\0078 ADW Seekonk\0078-01 Seekonk\dwg Tab: SITE PLAN, Plotted: Mar 31, 2022

SOURCE: BASE MAP FROM CAD FIGURE TITLED
"EXISTING CONDITIONS PLAN FOR ATTLEBORO DYE
WORKS A.P. 32 LOTS 6 & 9 AND A.P.31 LOT 477 IN
SEEKONK, MASSACHUSETTS" PREPARED BY
COMMONWEALTH LAND SURVEYORS, INC., LAST
REVISED 9/11/2018.



PREPARED BY



Norton, MA 508-226-1800
Pawtucket, RI 401-728-6860
Newburyport, MA 617-840-0363
www.esm-inc.com

TITLE

SITE PLAN

LOCATION

**Fmr. Attleboro Dye Works
36 Maple Avenue
Seekonk, Massachusetts**

CLIENT

**Town of Seekonk
100 Peck St, Seekonk, MA**

DRAWN

DMR

CHECKED

DB

PROJ MGR

TC

RTN

4-21606

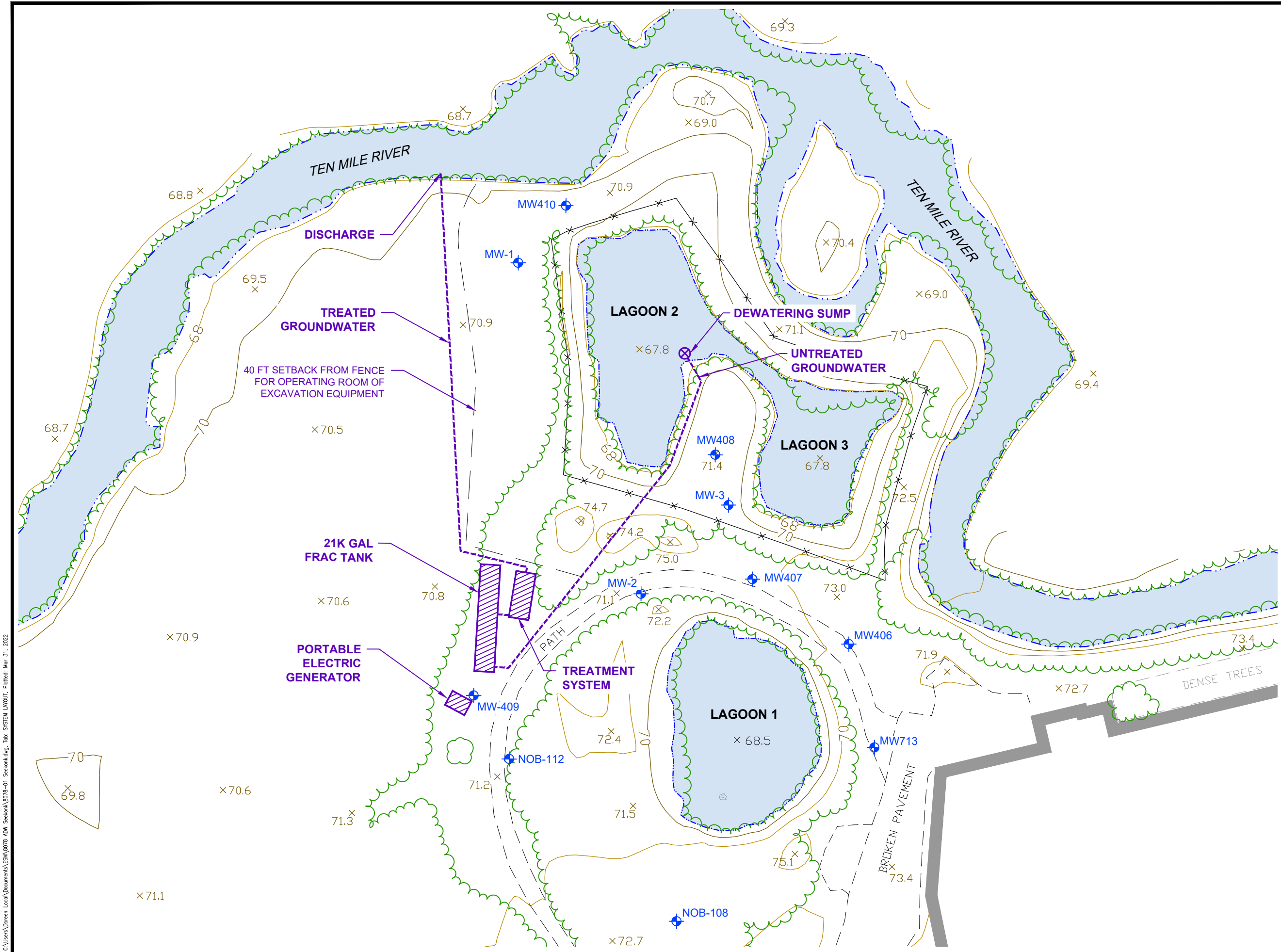
DATE

3/30/2022

FIGURE

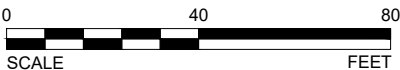
2

C:\Users\Doreen_Loc\Documents\ESM\0078 ADW Seekonk\0078-01 Seekonk.dwg, Tab: SYSTEM LAYOUT, Plotted: Mar 31, 2022



LEGEND

- 70 — SURFACE CONTOUR
- × 69.4 SPOT ELEVATION
- — — TREE LINE
- × — × — FENCE LINE
- — — EXISTING MONITORING WELL



SOURCE: BASE MAP FROM CAD FIGURE TITLED "EXISTING CONDITIONS PLAN FOR ATLEBORO DYE WORKS A.P. 32 LOTS 6 & 9 AND A.P.31 LOT 477 IN SEEKONK, MASSACHUSETTS" PREPARED BY COMMONWEALTH LAND SURVEYORS, INC., LAST REVISED 9/11/2018.

PREPARED BY



Norton, MA 508-226-1800
Pawtucket, RI 401-728-6860
Newburyport, MA 617-840-0363
www.esm-inc.com

TITLE

PROPOSED GROUNDWATER TREATMENT SYSTEM LAYOUT AND LAGOON AREA

LOCATION

**Fmr. Attleboro Dye Works
36 Maple Avenue
Seekonk, Massachusetts**

CLIENT

**Town of Seekonk
100 Peck St, Seekonk, MA**

DRAWN

DMR

CHECKED

DB

PROJ MGR

TC

RTN

4-21606

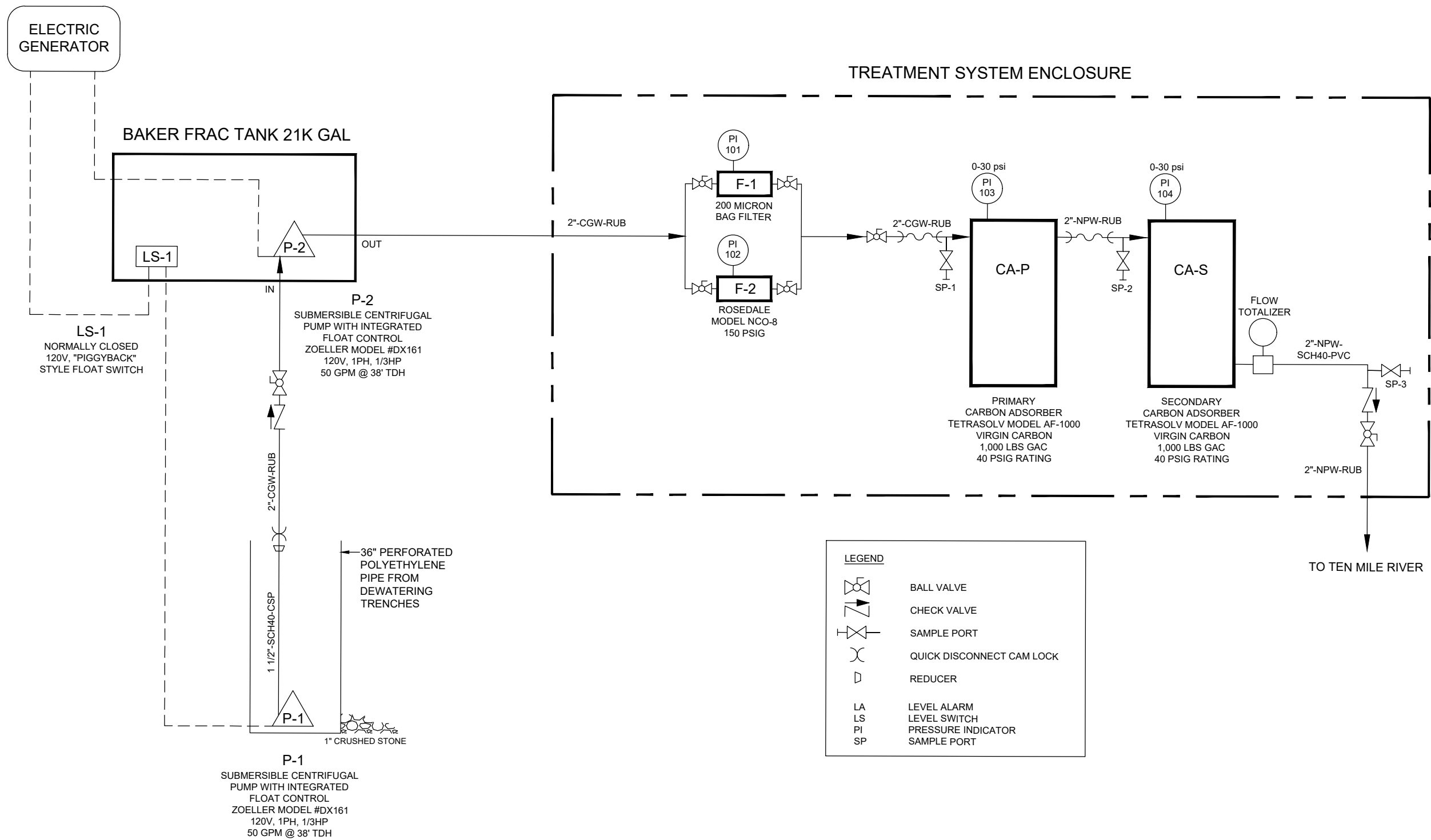
DATE

3/30/2022

FIGURE

3

C:\Users\Doreen_Loc\Documents\ESM\0078 ADW Seekonk\0078-01 Seekonk.dwg, Tab: PID, Plotted: Mar 30, 2022



LEGEND

NOT DRAWN TO SCALE

PREPARED BY

ES&M
Norton, MA 508-226-1800
Pawtucket, RI 401-728-6860
Newburyport, MA 617-840-0363
www.esm-inc.com

TITLE

DEWATERING TREATMENT SYSTEM PIPING & INSTRUMENTATION DIAGRAM

LOCATION

**Fmr. Attleboro Dye Works
36 Maple Avenue
Seekonk, Massachusetts**

CLIENT

**Town of Seekonk
100 Peck St, Seekonk, MA**

DRAWN

DMR

CHECKED

DB

PROJ MGR

TC

RTN

4-21606

DATE

3/30/2022

FIGURE

4

MassDEP - Bureau of Waste Site Cleanup

Phase 1 Site Assessment Map: 500 feet & 0.5 Mile Radii

Site Information:

ATTLEBORO DYE WORKS
36 MAPLE AVENUE SEEKONK, MA
4-000021606

NAD83 UTM Meters:
4640765mN, 306819mE (Zone: 19)
March 30, 2022

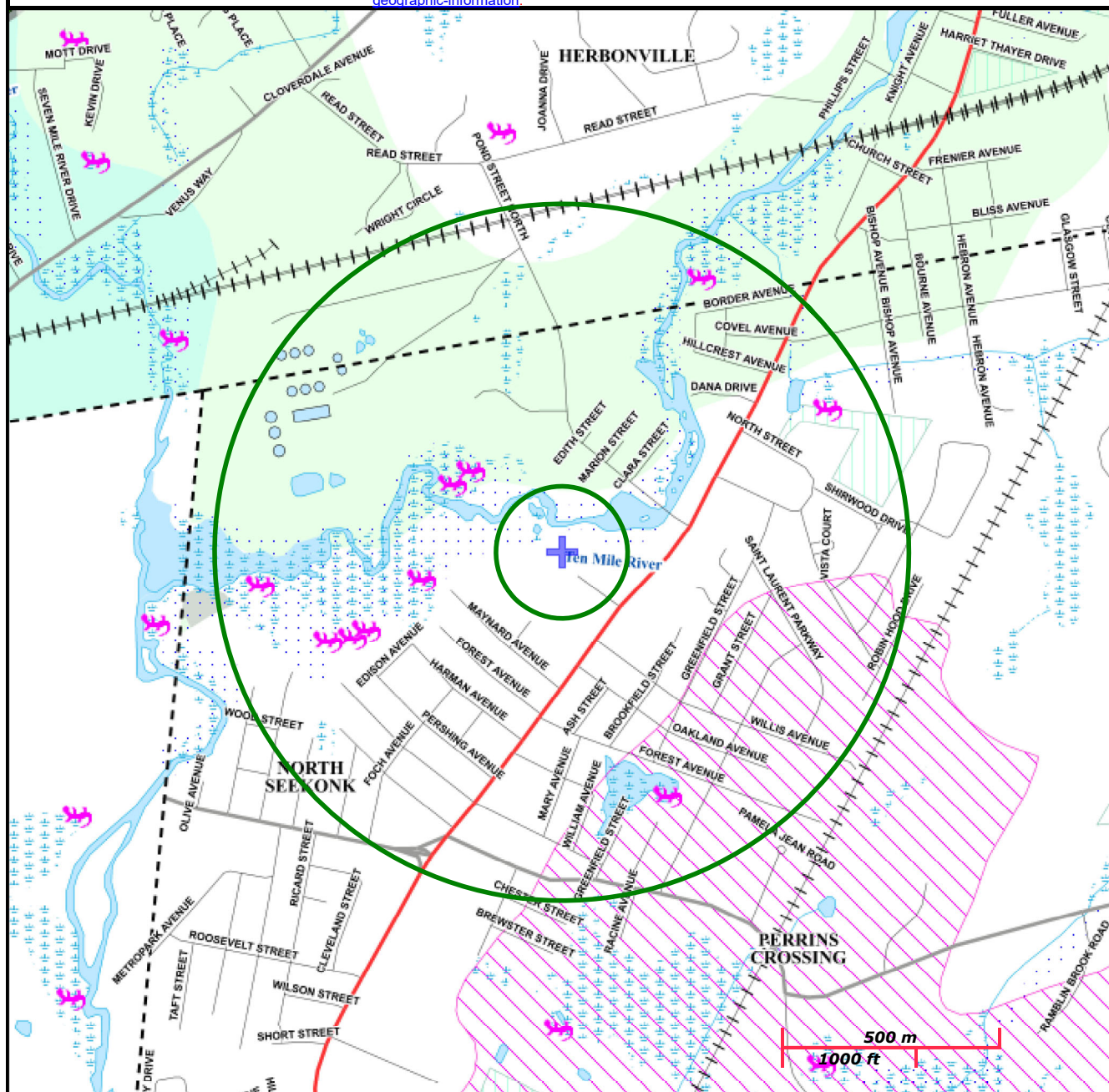
The information shown is the best available at the date of printing. However, it may be incomplete. The responsible party and LSP are ultimately responsible for ascertaining the true conditions surrounding the site. Metadata for data layers shown on this map can be found at:

<https://www.mass.gov/orgs/massgis-bureau-of-geographic-information>



MassDEP

Commonwealth of Massachusetts
Department of Environmental Protection



Roads: Limited Access, Divided, Other Hwy, Major Road, Minor Road, Track, Trail

Boundaries: Town, County, DEP Region; Train; Powerline; Pipeline; Aqueduct

Basins: Major, PWS; Streams: Perennial, Intermittent, Man Made Shore, Dam

Aquifers: Medium Yield, High Yield, EPA Sole Source

Non Potential Drinking Water Source Area: Medium, High (Yield)

PWS Protection Areas: Zone II, IWPA, Zone A

Hydrography: Open Water, PWS Reservoir, Tidal Flat

Wetlands: Freshwater, Saltwater, Cranberry Bog

FEMA 100yr Floodplain; Protected Open Space; ACEC

Est. Rare Wetland Wildlife Hab; Vernal Pool: Cert., Potential

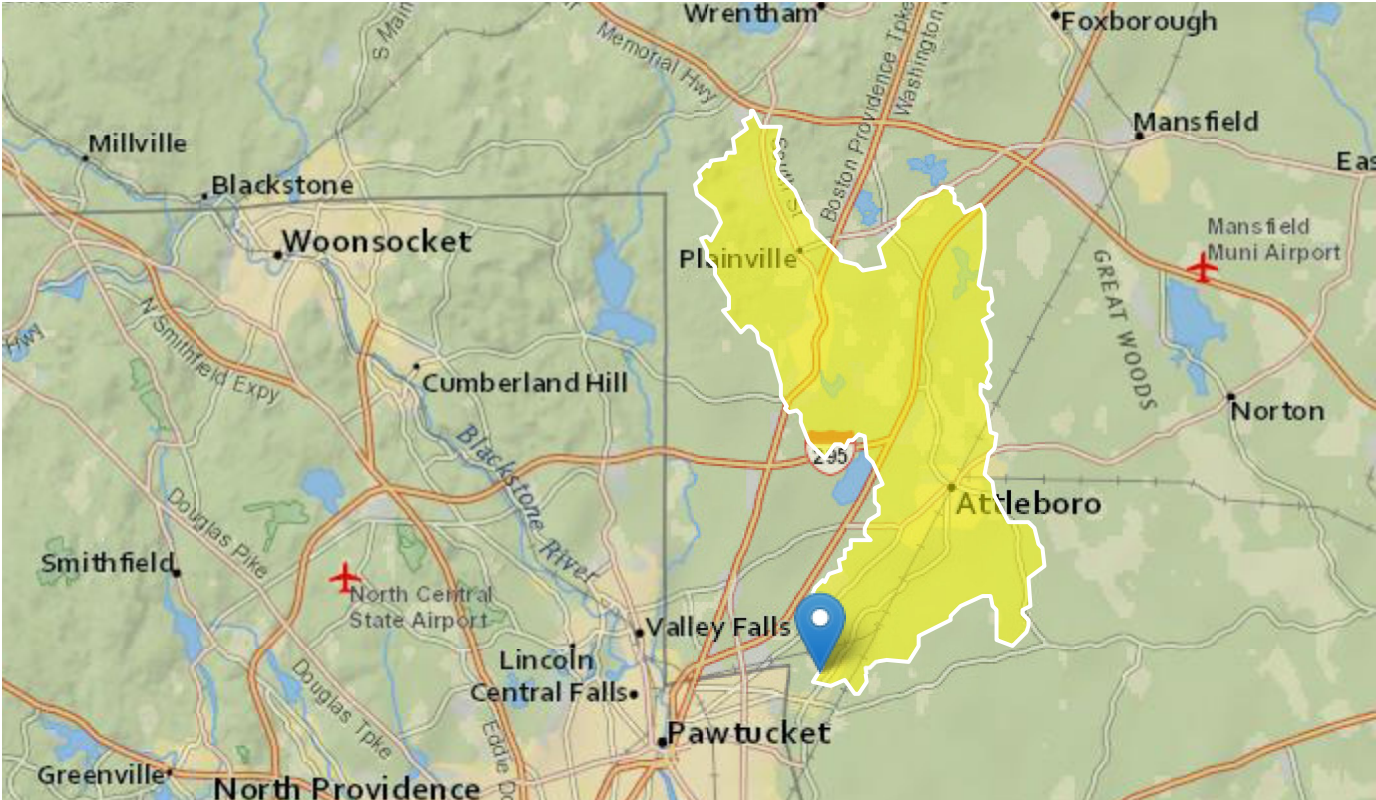
Solid Waste Landfill; PWS: Com. GW, SW, Emerg., Non-Com.

Attachment C

StreamStats Report

StreamStats Report

Region ID: MA
Workspace ID: MA20220329202606902000
Clicked Point (Latitude, Longitude): 41.89592, -71.32895
Time: 2022-03-29 16:26:33 -0400



10 Mile River at 36 Maple Avenue, Seekonk, MA

Basin Characteristics

Parameter Code	Parameter Description	Value	Unit
BSLDEM250	Mean basin slope computed from 1:250K DEM	1.249	percent
DRFTPERSTR	Area of stratified drift per unit of stream length	0.28	square mile per mile
DRNAREA	Area that drains to a point on a stream	28.9	square miles
ELEV	Mean Basin Elevation	179	feet

Parameter Code	Parameter Description	Value	Unit
LC06STOR	Percentage of water bodies and wetlands determined from the NLCD 2006	11.46	percent
MAREGION	Region of Massachusetts 0 for Eastern 1 for Western	0	dimensionless

Low-Flow Statistics Parameters [Statewide Low Flow WRIR00 4135]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	28.9	square miles	1.61	149
BSLDEM250	Mean Basin Slope from 250K DEM	1.249	percent	0.32	24.6
DRFTPERSTR	Stratified Drift per Stream Length	0.28	square mile per mile	0	1.29
MAREGION	Massachusetts Region	0	dimensionless	0	1

Low-Flow Statistics Flow Report [Statewide Low Flow WRIR00 4135]

PIl: Prediction Interval-Lower, Plu: Prediction Interval-Upper, ASEp: Average Standard Error of Prediction, SE: Standard Error (other -- see report)

Statistic	Value	Unit	PIl	Plu	SE	ASEp
7 Day 2 Year Low Flow	3.59	ft ³ /s	1.07	11.6	49.5	49.5
7 Day 10 Year Low Flow	1.47	ft ³ /s	0.355	5.68	70.8	70.8

Low-Flow Statistics Citations

Ries, K.G., III, 2000, Methods for estimating low-flow statistics for Massachusetts streams: U.S. Geological Survey Water Resources Investigations Report 00-4135, 81 p. (<http://pubs.usgs.gov/wri/wri004135/>)

USGS Data Disclaimer: Unless otherwise stated, all data, metadata and related materials are considered to satisfy the quality standards relative to the purpose for which the data were collected. Although these data and associated metadata have been reviewed for accuracy and completeness and approved for release by the U.S. Geological Survey (USGS), no warranty expressed or implied is made regarding the display or utility of the data for other purposes, nor on all computer systems, nor shall the act of distribution constitute any such warranty.

USGS Software Disclaimer: This software has been approved for release by the U.S. Geological Survey (USGS). Although the software has been subjected to rigorous review, the USGS reserves the right to update the software as needed pursuant to further analysis and review. No warranty, expressed or implied, is made by the USGS or the U.S. Government as to the functionality of the software and related material nor shall the fact of release constitute any such warranty. Furthermore, the software is released on condition that neither the USGS nor the U.S. Government shall be held liable for any damages resulting from its authorized or unauthorized use.

USGS Product Names Disclaimer: Any use of trade, firm, or product names is for descriptive purposes only and does not imply endorsement by the U.S. Government.

Application Version: 4.8.1

StreamStats Services Version: 1.2.22

NSS Services Version: 2.1.2

Attachment D

IPaC Results

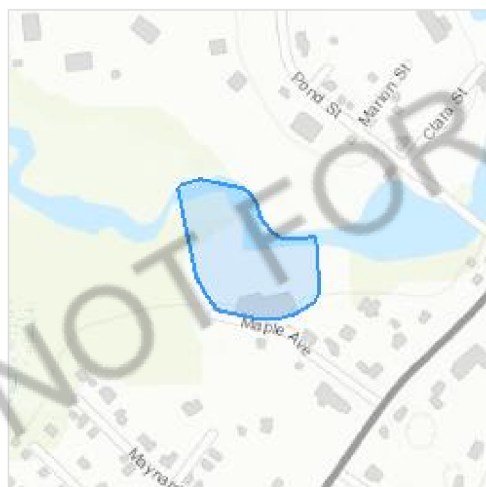
IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

Location

Bristol County, Massachusetts



Local office

New England Ecological Services Field Office

☎ (603) 223-2541

📠 (603) 223-0104

70 Commercial Street, Suite 300
Concord, NH 03301-5094

<http://www.fws.gov/newengland>

Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species¹ and their critical habitats are managed by the [Ecological Services Program](#) of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries²).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact [NOAA Fisheries](#) for [species under their jurisdiction](#).

-
1. Species listed under the [Endangered Species Act](#) are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the [listing status page](#) for more information. IPaC only shows species that are regulated by USFWS (see FAQ).
 2. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location:

Mammals

NAME	STATUS
Northern Long-eared Bat <i>Myotis septentrionalis</i> Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/9045	Threatened

Insects

NAME	STATUS
Monarch Butterfly <i>Danaus plexippus</i> Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/9743	Candidate

Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

THERE ARE NO CRITICAL HABITATS AT THIS LOCATION.

Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act¹ and the Bald and Golden Eagle Protection Act².

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described [below](#).

1. The [Migratory Birds Treaty Act](#) of 1918.
2. The [Bald and Golden Eagle Protection Act](#) of 1940.

Additional information can be found using the following links:

- Birds of Conservation Concern <http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php>
- Measures for avoiding and minimizing impacts to birds
<http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php>
- Nationwide conservation measures for birds
<http://www.fws.gov/migratorybirds/pdf/management/nationwidestandardconservationmeasures.pdf>

The birds listed below are birds of particular concern either because they occur on the [USFWS Birds of Conservation Concern](#) (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ [below](#). This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the [E-bird data mapping tool](#) (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found [below](#).

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME

BREEDING SEASON (IF A BREEDING SEASON IS INDICATED FOR A BIRD ON YOUR LIST, THE BIRD MAY BREED IN YOUR PROJECT AREA SOMETIME WITHIN THE TIMEFRAME SPECIFIED, WHICH IS A VERY LIBERAL ESTIMATE OF THE DATES INSIDE WHICH THE BIRD BREEDS ACROSS ITS ENTIRE RANGE. "BREEDS ELSEWHERE" INDICATES THAT THE BIRD DOES NOT LIKELY BREED IN YOUR PROJECT AREA.)

Bald Eagle *Haliaeetus leucocephalus*

Breeds Oct 15 to Aug 31

This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.

<https://ecos.fws.gov/ecp/species/1626>

Blue-winged Warbler *Vermivora pinus*

Breeds May 1 to Jun 30

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA

Bobolink *Dolichonyx oryzivorus*

Breeds May 20 to Jul 31

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Lesser Yellowlegs *Tringa flavipes*

Breeds elsewhere

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/9679>

Rusty Blackbird *Euphagus carolinus*

Breeds elsewhere

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA

Wood Thrush *Hylocichla mustelina*

Breeds May 10 to Aug 31

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is $0.25/0.25 = 1$; at week 20 it is $0.05/0.25 = 0.2$.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

Breeding Season (■)

Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (I)

Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

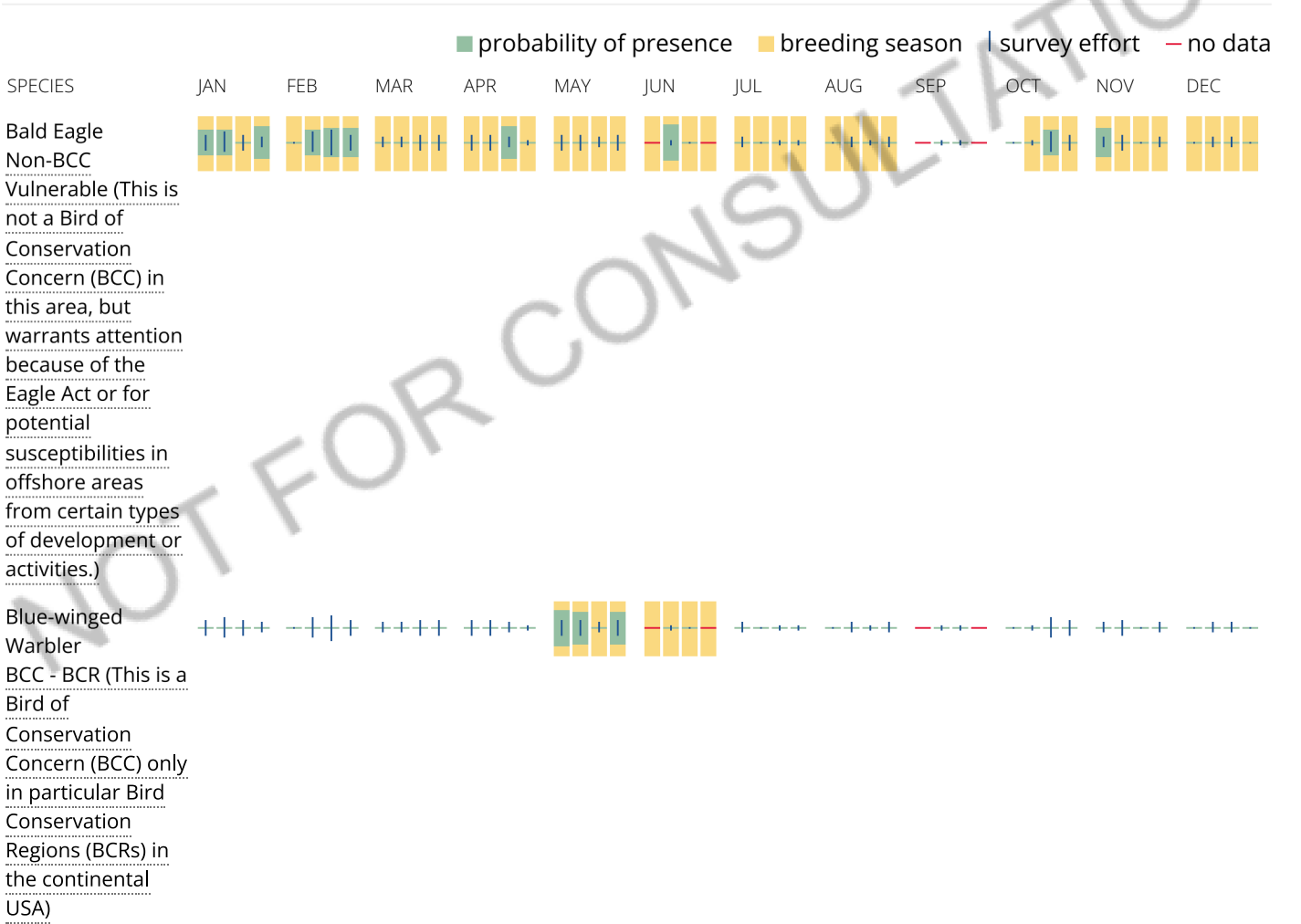
To see a bar's survey effort range, simply hover your mouse cursor over the bar.

No Data (-)

A week is marked as having no data if there were no survey events for that week.

Survey Timeframe

Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.





Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

[Nationwide Conservation Measures](#) describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. [Additional measures](#) or [permits](#) may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the migratory birds potentially occurring in my specified location?

The Migratory Bird Resource List is comprised of USFWS [Birds of Conservation Concern \(BCC\)](#) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the [Avian Knowledge Network \(AKN\)](#). The AKN data is based on a growing collection of [survey, banding, and citizen science datasets](#) and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle ([Eagle Act](#) requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the [AKN Phenology Tool](#).

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the [Avian Knowledge Network \(AKN\)](#). This data is derived from a growing collection of [survey, banding, and citizen science datasets](#).

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering, migrating or present year-round in my project area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may refer to the following resources: [The Cornell Lab of Ornithology All About Birds Bird Guide](#), or (if you are unsuccessful in locating the bird of interest there), the [Cornell Lab of Ornithology Neotropical Birds guide](#). If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are [Birds of Conservation Concern](#) (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the [Eagle Act](#) requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the [Northeast Ocean Data Portal](#). The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review.

Alternately, you may download the bird model results files underlying the portal maps through the [NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf](#) project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the [Diving Bird Study](#) and the [nanotag studies](#) or contact [Caleb Spiegel](#) or [Pam Loring](#).

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to [obtain a permit](#) to avoid violating the Eagle Act should such impacts occur.

Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

Facilities

National Wildlife Refuge lands

Any activity proposed on lands managed by the [National Wildlife Refuge](#) system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS AT THIS LOCATION.

Fish hatcheries

THERE ARE NO FISH HATCHERIES AT THIS LOCATION.

Wetlands in the National Wetlands Inventory

Impacts to [NWI wetlands](#) and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local [U.S. Army Corps of Engineers District](#).

WETLAND INFORMATION IS NOT AVAILABLE AT THIS TIME

This can happen when the National Wetlands Inventory (NWI) map service is unavailable, or for very large projects that intersect many wetland areas. Try again, or visit the [NWI map](#) to view wetlands at this location.

Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tubercid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

Attachment E

National Register of Historic Places Map

National Register of Histori...

National Park Service
U.S. Department of the Interior

Public, non-restricted data depicting National Register spatial data proce...



Attachment F

Tables and Laboratory Analytical Reports

TABLE 1: SUMMARY OF GROUNDWATER LABORATORY ANALYTICAL RESULTS-WELLS ADJACENT TO LAGOONS Former Attleboro Dye Works Site 36 Maple Ave. Seekonk, MA							
Sample Identification	Massachusetts Contingency Plan Reportable Concentrations and Method 1 Groundwater Standards				MW713	MW406	MW407
Sampled By					Ransom	Ransom	Ransom
Sample Number					MW713-W1-010919	MW406-W1-072520	MW407-W1-072521
Sample Date					1/9/2019	7/26/2017	7/26/2017
Well Location					E of Lagoon #1	NE of Lagoon #1	N of Lagoon #1
Depth to Groundwater (ft bgs)					6.53	7.35	6.8
Lab number					L1901070-06	L1725746-01	L1725746-02
	RCGW-2	GW-2	GW-3	UCL			
Extractable Petroleum Hydrocarbons (EPH)	Concentrations in micrograms per liter (µg/l)						
C9-C18 Aliphatics	5000	5000	50000	100000	BRL (100)	BRL (100)	BRL (100)
C19-C36 Aliphatics	50000	NS	50000	100000	BRL (100)	BRL (100)	BRL (100)
Unadjusted C11-C22 Aromatics	~	~	~	~	BRL (100)	BRL (100)	BRL (100)
C11-C22 Aromatics	5000	50000	5000	100000	BRL (100)	BRL (100)	BRL (100)
Acenaphthene	10000	NS	10000	100000	BRL (10)	BRL (0.4)	BRL (0.4)
Acenaphthylene	40	10000	40	100000	NA	BRL (0.4)	BRL (0.4)
Anthracene	30	NS	30	600	NA	BRL (0.4)	BRL (0.4)
Benzo(A)Anthracene	1000	NS	1000	10000	NA	BRL (0.4)	BRL (0.4)
Benzo(A)Pyrene	500	NS	500	5000	NA	BRL (0.2)	BRL (0.2)
Benzo(B)Fluoranthene	400	NS	400	4000	NA	BRL (0.4)	BRL (0.4)
Benzo(G,H,I)Perylene	20	NS	20	500	NA	BRL (0.4)	BRL (0.4)
Benzo(K)Fluoranthene	100	NS	100	1000	NA	BRL (0.4)	BRL (0.4)
Chrysene	70	NS	70	700	NA	BRL (0.4)	BRL (0.4)
Dibenz(A,H)Anthracene	40	NS	40	400	NA	BRL (0.4)	BRL (0.4)
Fluoranthene	200	NS	200	2000	NA	BRL (0.4)	BRL (0.4)
Fluorene	40	NS	40	400	NA	BRL (0.4)	BRL (0.4)
Indeno(1,2,3-Cd)Pyrene	100	NS	100	1000	NA	BRL (0.4)	BRL (0.4)
2-Methylnaphthalene	2000	2000	20000	100000	BRL (10)	BRL (0.4)	BRL (0.4)
Naphthalene	700	700	20000	100000	BRL (10)	BRL (0.4)	BRL (0.4)
Phenanthrene	10000	NS	10000	100000	BRL (10)	BRL (0.4)	BRL (0.4)
Pyrene	20	NS	20	600	NA	BRL (0.4)	BRL (0.4)
Volatile Petroleum Hydrocarbons (VPH)	Concentrations in micrograms per liter (µg/l)						
Unadjusted C5-C8 Aliphatics	~	~	~	~	BRL (50)	BRL (50)	BRL (50)
C5-C8 Aliphatics	3000	3000	50000	100000	BRL (50)	BRL (50)	BRL (50)
Unadjusted C9-C12 Aliphatics	~	~	~	~	BRL (50)	BRL (50)	BRL (50)
C9-C12 Aliphatics	5000	5000	50000	100000	BRL (50)	BRL (50)	BRL (50)
C9-C10 Aromatics	4000	4000	50000	100000	BRL (50)	BRL (50)	BRL (50)
Benzene	1000	1000	10000	100000	BRL (2)	BRL (2)	BRL (2)
Ethylbenzene	5000	20000	5000	100000	BRL (2)	BRL (2)	BRL (2)
Methyl Tert Butyl Ether (MTBE)	5000	50000	50000	100000	BRL (3)	BRL (3)	BRL (3)
Napthalene	700	700	20000	100000	BRL (4)	BRL (4)	BRL (4)
Toluene	40000	50000	40000	100000	BRL (2)	BRL (2)	BRL (2)
M/P-Xylene	3000	3000	5000	100000	BRL (2)	BRL (2)	BRL (2)
O-Xylene	3000	3000	5000	100000	BRL (2)	BRL (2)	BRL (2)
Metals	Concentrations in micrograms per liter (µg/l)						
Antimony	8000	NS	8000	80000	BRL (4)	4.8	BRL (4)
Arsenic	900	NS	900	9000	BRL (5)	BRL (5)	BRL (5)
Barium	50000	NA	50000	100000	NA	NA	NA
Beryllium	200	NS	200	2000	BRL (0.5)	BRL (0.5)	BRL (0.5)
Cadmium	4	NS	4	50	BRL (4)	BRL (4)	BRL (4)
Chromium	300	NS	300	3000	BRL (10)	BRL (10)	BRL (10)
Copper	10	NS	NS	NS	BRL (10)	BRL (10)	BRL (10)
Hexavalent Chromium	100	NS	300	3000	NA	BRL (10)	NA
Lead	10	NS	10	150	BRL (10)	BRL (10)	BRL (10)
Nickel	200	NS	200	2000	BRL (25)	BRL (25)	BRL (25)
Selenium	100	NS	100	1000	BRL (10)	BRL (10)	BRL (10)
Silver	7	NS	7	1000	BRL (7)	BRL (7)	BRL (7)
Thallium	3000	NS	3000	30000	BRL (0.5)	BRL (0.5)	BRL (0.5)
Vanadium	4000	NS	4000	40000	NA	NA	NA
Zinc	900	NS	900	50000	BRL (50)	BRL (50)	BRL (50)
Mercury	20	NS	20	200	BRL (0.2)	BRL (0.2)	BRL (0.2)
Polychlorinated Biphenyls (PCBs)	Concentrations in micrograms per liter (µg/l)						
All Analyzed PCBs	5	5	10	100	BRL (0.25)	BRL (0.25)	NA
Volatile Organic Compounds (VOCs)	Concentrations in micrograms per liter (µg/l)						
all analyzed VOCs	VBC	VBC	VBC	VBC	ND	ND	ND
NOTES: 1. BRL () = below reporting limit indicated in parentheses;standard promulgated 2. ND = not detected and reporting limit not available 3. NA = Not Analyzed 4. NS = No Standard 5. VBC = criteria vary by compound 6. Boldface = Concentration exceeds one or more of the applicable MCP Groundwater Standards or Reportable Conditions 7. RC = Reportable Concentration 8. UCL = Upper Concentration Limit 9. DUP = Duplicate							

TABLE 1: Former Attleboro Dye Works Site 36 Maple Ave. Seekonk, MA						
Sample Identification	Massachusetts Contingency Plan Reportable Concentrations and Method 1 Groundwater Standards				MW408	MW409
Sampled By					Ransom	Ransom
Sample Number					MW408-W1-072522	MW409-W1-072523
Sample Date					7/26/2017	7/26/2017
Well Location					SW of Lagoon #2	W of Lagoon #1
Depth to Groundwater (ft bgs)					7.31	6.91
Lab number					L1725746-03	L1725746-04
	RCGW-2	GW-2	GW-3	UCL		
Extractable Petroleum Hydrocarbons (EPH)	Concentrations in micrograms per liter (µg/l)					
C9-C18 Aliphatics	5000	5000	50000	100000	BRL (100)	BRL (100)
C19-C36 Aliphatics	50000	NS	50000	100000	BRL (100)	BRL (100)
Unadjusted C11-C22 Aromatics	~	~	~	~	BRL (100)	BRL (100)
C11-C22 Aromatics	5000	50000	5000	100000	BRL (100)	BRL (100)
Acenaphthene	10000	NS	10000	100000	BRL (0.4)	BRL (0.4)
Acenaphthylene	40	10000	40	100000	BRL (0.4)	BRL (0.4)
Anthracene	30	NS	30	600	BRL (0.4)	BRL (0.4)
Benzo(A)Anthracene	1000	NS	1000	10000	BRL (0.4)	BRL (0.4)
Benzo(A)Pyrene	500	NS	500	5000	BRL (0.2)	BRL (0.2)
Benzo(B)Fluoranthene	400	NS	400	4000	BRL (0.4)	BRL (0.4)
Benzo(G,H,I)Perylene	20	NS	20	500	BRL (0.4)	BRL (0.4)
Benzo(K)Fluoranthene	100	NS	100	1000	BRL (0.4)	BRL (0.4)
Chrysene	70	NS	70	700	BRL (0.4)	BRL (0.4)
Dibenz(A,H)Anthracene	40	NS	40	400	BRL (0.4)	BRL (0.4)
Fluoranthene	200	NS	200	2000	BRL (0.4)	BRL (0.4)
Fluorene	40	NS	40	400	BRL (0.4)	BRL (0.4)
Indeno(1,2,3-Cd)Pyrene	100	NS	100	1000	BRL (0.4)	BRL (0.4)
2-Methylnaphthalene	2000	2000	20000	100000	BRL (0.4)	BRL (0.4)
Naphthalene	700	700	20000	100000	BRL (0.4)	BRL (0.4)
Phenanthrene	10000	NS	10000	100000	BRL (0.4)	BRL (0.4)
Pyrene	20	NS	20	600	BRL (0.4)	BRL (0.4)
Volatile Petroleum Hydrocarbons (VPH)	Concentrations in micrograms per liter (µg/l)					
Unadjusted C5-C8 Aliphatics	~	~	~	~	BRL (50)	BRL (50)
C5-C8 Aliphatics	3000	3000	50000	100000	BRL (50)	BRL (50)
Unadjusted C9-C12 Aliphatics	~	~	~	~	BRL (50)	BRL (50)
C9-C12 Aliphatics	5000	5000	50000	100000	BRL (50)	BRL (50)
C9-C10 Aromatics	4000	4000	50000	100000	BRL (50)	BRL (50)
Benzene	1000	1000	10000	100000	BRL (2)	BRL (2)
Ethylbenzene	5000	20000	5000	100000	BRL (2)	BRL (2)
Methyl Tert Butyl Ether (MTBE)	5000	50000	50000	100000	BRL (3)	BRL (3)
Napthalene	700	700	20000	100000	BRL (4)	BRL (4)
Toluene	40000	50000	40000	100000	BRL (2)	BRL (2)
M/P-Xylene	3000	3000	5000	100000	BRL (2)	BRL (2)
O-Xylene	3000	3000	5000	100000	BRL (2)	BRL (2)
Metals	Concentrations in micrograms per liter (µg/l)					
Antimony	8000	NS	8000	80000	BRL (4)	BRL (4)
Arsenic	900	NS	900	9000	BRL (5)	BRL (5)
Barium	50000	NA	50000	100000	NA	NA
Beryllium	200	NS	200	2000	BRL (0.5)	BRL (0.5)
Cadmium	4	NS	4	50	BRL (4)	BRL (4)
Chromium	300	NS	300	3000	BRL (10)	BRL (10)
Copper	10	NS	NS	NS	BRL (10)	BRL (10)
Hexavalent Chromium	100	NS	300	3000	BRL (10)	NA
Lead	10	NS	10	150	BRL (10)	BRL (10)
Nickel	200	NS	200	2000	BRL (25)	BRL (25)
Selenium	100	NS	100	1000	BRL (10)	BRL (10)
Silver	7	NS	7	1000	BRL (7)	BRL (7)
Thallium	3000	NS	3000	30000	BRL (0.5)	BRL (0.5)
Vanadium	4000	NS	4000	40000	NA	NA
Zinc	900	NS	900	50000	BRL (50)	BRL (50)
Mercury	20	NS	20	200	BRL (0.2)	BRL (0.2)
Polychlorinated Biphenyls (PCBs)	Concentrations in micrograms per liter (µg/l)					
All Analyzed PCBs	5	5	10	100	BRL (0.25)	NA
Volatile Organic Compounds (VOCs)	Concentrations in micrograms per liter (µg/l)					
all analyzed VOCs	VBC	VBC	VBC	VBC	NA	NA
NOTES: 1. BRL () = below reporting limit indicated in parentheses;standard promulgated 2. ND = not detected and reporting limit not available 3. NA = Not Analyzed 4. NS = No Standard 5. VBC = criteria vary by compound 6. Boldface = Concentration exceeds one or more of the applicable MCP Groundwater Standards or Reportable Conditions 7. RC = Reportable Concentration 8. UCL = Upper Concentration Limit 9. DUP = Duplicate						

TABLE 1: Former Attleboro Dye Works Site 36 Maple Ave. Seekonk, MA						
Sample Identification	Massachusetts Contingency Plan Reportable Concentrations and Method 1 Groundwater Standards				MW410	NOB-108
Sampled By					Ransom	Nobis
Sample Number					MW410-W1-072523	D05299
Sample Date					7/26/2017	1/17/2013
Well Location					NW of Lagoon #2	S of Lagoon #1
Depth to Groundwater (ft bgs)					7.51	7.98
Lab number					L1725905-01	13A0480-03
	RCGW-2	GW-2	GW-3	UCL		
Extractable Petroleum Hydrocarbons (EPH)	Concentrations in micrograms per liter (µg/l)					
C9-C18 Aliphatics	5000	5000	50000	100000	BRL (100)	BRL (110)
C19-C36 Aliphatics	50000	NS	50000	100000	BRL (100)	BRL (110)
Unadjusted C11-C22 Aromatics	~	~	~	~	BRL (100)	BRL (110)
C11-C22 Aromatics	5000	50000	5000	100000	BRL (100)	BRL (110)
Acenaphthene	10000	NS	10000	100000	BRL (0.4)	BRL (2.1)
Acenaphthylene	40	10000	40	100000	BRL (0.4)	BRL (2.1)
Anthracene	30	NS	30	600	BRL (0.4)	BRL (2.1)
Benzo(A)Anthracene	1000	NS	1000	10000	BRL (0.4)	BRL (2.1)
Benzo(A)Pyrene	500	NS	500	5000	BRL (0.2)	BRL (2.1)
Benzo(B)Fluoranthene	400	NS	400	4000	BRL (0.4)	BRL (2.1)
Benzo(G,H,I)Perylene	20	NS	20	500	BRL (0.4)	BRL (2.1)
Benzo(K)Fluoranthene	100	NS	100	1000	BRL (0.4)	BRL (2.1)
Chrysene	70	NS	70	700	BRL (0.4)	BRL (2.1)
Dibenz(A,H)Anthracene	40	NS	40	400	BRL (0.4)	BRL (2.1)
Fluoranthene	200	NS	200	2000	BRL (0.4)	BRL (2.1)
Fluorene	40	NS	40	400	BRL (0.4)	BRL (2.1)
Indeno(1,2,3-Cd)Pyrene	100	NS	100	1000	BRL (0.4)	BRL (2.1)
2-Methylnaphthalene	2000	2000	20000	100000	BRL (0.4)	BRL (2.1)
Naphthalene	700	700	20000	100000	BRL (0.4)	BRL (2.1)
Phenanthrene	10000	NS	10000	100000	BRL (0.4)	BRL (2.1)
Pyrene	20	NS	20	600	BRL (0.4)	BRL (2.1)
Volatile Petroleum Hydrocarbons (VPH)	Concentrations in micrograms per liter (µg/l)					
Unadjusted C5-C8 Aliphatics	~	~	~	~	BRL (50)	BRL (100)
C5-C8 Aliphatics	3000	3000	50000	100000	BRL (50)	BRL (100)
Unadjusted C9-C12 Aliphatics	~	~	~	~	BRL (50)	BRL (100)
C9-C12 Aliphatics	5000	5000	50000	100000	BRL (50)	BRL (100)
C9-C10 Aromatics	4000	4000	50000	100000	BRL (50)	BRL (100)
Benzene	1000	1000	10000	100000	BRL (2)	BRL (1)
Ethylbenzene	5000	20000	5000	100000	BRL (2)	BRL (1)
Methyl Tert Butyl Ether (MTBE)	5000	50000	50000	100000	BRL (3)	BRL (1)
Napthalene	700	700	20000	100000	BRL (4)	BRL (5)
Toluene	40000	50000	40000	100000	BRL (2)	BRL (1)
M/P-Xylene	3000	3000	5000	100000	BRL (2)	BRL (2)
O-Xylene	3000	3000	5000	100000	BRL (2)	BRL (1)
Metals	Concentrations in micrograms per liter (µg/l)					
Antimony	8000	NS	8000	80000	BRL (4)	BRL (5)
Arsenic	900	NS	900	9000	BRL (5)	BRL (2)
Barium	50000	NA	50000	100000	NA	BRL (50)
Beryllium	200	NS	200	2000	BRL (0.5)	BRL (2)
Cadmium	4	NS	4	50	BRL (4)	BRL (2.5)
Chromium	300	NS	300	3000	BRL (10)	BRL (5)
Copper	10	NS	NS	NS	BRL (10)	BRL (25)
Hexavalent Chromium	100	NS	300	3000	NA	BRL (4)
Lead	10	NS	10	150	BRL (10)	BRL (5)
Nickel	200	NS	200	2000	BRL (25)	BRL (25)
Selenium	100	NS	100	1000	BRL (10)	BRL (25)
Silver	7	NS	7	1000	BRL (7)	BRL (2.5)
Thallium	3000	NS	3000	30000	BRL (0.5)	BRL (1)
Vanadium	4000	NS	4000	40000	NA	BRL (25)
Zinc	900	NS	900	50000	BRL (50)	BRL (50)
Mercury	20	NS	20	200	BRL (0.2)	BRL (0.1)
Polychlorinated Biphenyls (PCBs)	Concentrations in micrograms per liter (µg/l)					
All Analyzed PCBs	5	5	10	100	BRL (0.25)	BRL (0.2)
Volatile Organic Compounds (VOCs)	Concentrations in micrograms per liter (µg/l)					
all analyzed VOCs	VBC	VBC	VBC	VBC	ND	ND
NOTES: 1. BRL () = below reporting limit indicated in parentheses;standard promulgated 2. ND = not detected and reporting limit not available 3. NA = Not Analyzed 4. NS = No Standard 5. VBC = criteria vary by compound 6. Boldface = Concentration exceeds one or more of the applicable MCP Groundwater Standards or Reportable Conditions 7. RC = Reportable Concentration 8. UCL = Upper Concentration Limit 9. DUP = Duplicate						

TABLE 1: Former Attleboro Dye Works Site 36 Maple Ave. Seekonk, MA						
Sample Identification	Massachusetts Contingency Plan Reportable Concentrations and Method 1 Groundwater Standards				NOB-112	MW-1
Sampled By					Nobis	Omni
Sample Number					D05303	
Sample Date					1/17/2013	11/10/2008
Well Location					W of Lagoon #1	NW of Lagoon #2
Depth to Groundwater (ft bgs)					7.76	7.21
Lab number					13A0480-07	--
	RCGW-2	GW-2	GW-3	UCL		
Extractable Petroleum Hydrocarbons (EPH)	Concentrations in micrograms per liter (µg/l)					
C9-C18 Aliphatics	5000	5000	50000	100000	BRL (110)	NA
C19-C36 Aliphatics	50000	NS	50000	100000	BRL (110)	NA
Unadjusted C11-C22 Aromatics	~	~	~	~	BRL (110)	NA
C11-C22 Aromatics	5000	50000	5000	100000	BRL (110)	NA
Acenaphthene	10000	NS	10000	100000	BRL (2.1)	NA
Acenaphthylene	40	10000	40	100000	BRL (2.1)	NA
Anthracene	30	NS	30	600	BRL (2.1)	NA
Benzo(A)Anthracene	1000	NS	1000	10000	BRL (2.1)	NA
Benzo(A)Pyrene	500	NS	500	5000	BRL (2.1)	NA
Benzo(B)Fluoranthene	400	NS	400	4000	BRL (2.1)	NA
Benzo(G,H,I)Perylene	20	NS	20	500	BRL (2.1)	NA
Benzo(K)Fluoranthene	100	NS	100	1000	BRL (2.1)	NA
Chrysene	70	NS	70	700	BRL (2.1)	NA
Dibenz(A,H)Anthracene	40	NS	40	400	BRL (2.1)	NA
Fluoranthene	200	NS	200	2000	BRL (2.1)	NA
Fluorene	40	NS	40	400	BRL (2.1)	NA
Indeno(1,2,3-Cd)Pyrene	100	NS	100	1000	BRL (2.1)	NA
2-Methylnaphthalene	2000	2000	20000	100000	BRL (2.1)	NA
Naphthalene	700	700	20000	100000	BRL (2.1)	NA
Phenanthrene	10000	NS	10000	100000	BRL (2.1)	NA
Pyrene	20	NS	20	600	BRL (2.1)	NA
Volatile Petroleum Hydrocarbons (VPH)	Concentrations in micrograms per liter (µg/l)					
Unadjusted C5-C8 Aliphatics	~	~	~	~	BRL (100)	NA
C5-C8 Aliphatics	3000	3000	50000	100000	BRL (100)	NA
Unadjusted C9-C12 Aliphatics	~	~	~	~	BRL (100)	NA
C9-C12 Aliphatics	5000	5000	50000	100000	BRL (100)	NA
C9-C10 Aromatics	4000	4000	50000	100000	BRL (100)	NA
Benzene	1000	1000	10000	100000	BRL (1)	NA
Ethylbenzene	5000	20000	5000	100000	BRL (1)	NA
Methyl Tert Butyl Ether (MTBE)	5000	50000	50000	100000	BRL (1)	NA
Napthalene	700	700	20000	100000	BRL (5)	NA
Toluene	40000	50000	40000	100000	BRL (1)	NA
M/P-Xylene	3000	3000	5000	100000	BRL (2)	NA
O-Xylene	3000	3000	5000	100000	BRL (1)	NA
Metals	Concentrations in micrograms per liter (µg/l)					
Antimony	8000	NS	8000	80000	BRL (5)	BRL (2)
Arsenic	900	NS	900	9000	BRL (2)	BRL (5)
Barium	50000	NA	50000	100000	BRL (50)	14
Beryllium	200	NS	200	2000	BRL (2)	BRL (5)
Cadmium	4	NS	4	50	BRL (2.5)	BRL (4)
Chromium	300	NS	300	3000	BRL (5)	BRL (10)
Copper	10	NS	NS	NS	BRL (25)	BRL (25)
Hexavalent Chromium	100	NS	300	3000	BRL (4)	BRL (4)
Lead	10	NS	10	150	BRL (5)	BRL (10)
Nickel	200	NS	200	2000	BRL (25)	BRL (25)
Selenium	100	NS	100	1000	BRL (25)	BRL (10)
Silver	7	NS	7	1000	BRL (2.5)	BRL (7)
Thallium	3000	NS	3000	30000	BRL (1)	BRL (2)
Vanadium	4000	NS	4000	40000	BRL (25)	10
Zinc	900	NS	900	50000	BRL (50)	BRL (50)
Mercury	20	NS	20	200	BRL (0.1)	BRL (0.2)
Polychlorinated Biphenyls (PCBs)	Concentrations in micrograms per liter (µg/l)					
All Analyzed PCBs	5	5	10	100	BRL (0.2)	NA
Volatile Organic Compounds (VOCs)	Concentrations in micrograms per liter (µg/l)					
all analyzed VOCs	VBC	VBC	VBC	VBC	ND	ND
NOTES: 1. BRL () = below reporting limit indicated in parentheses;standard promulgated 2. ND = not detected and reporting limit not available 3. NA = Not Analyzed 4. NS = No Standard 5. VBC = criteria vary by compound 6. Boldface = Concentration exceeds one or more of the applicable MCP Groundwater Standards or Reportable Conditions 7. RC = Reportable Concentration 8. UCL = Upper Concentration Limit 9. DUP = Duplicate						

TABLE 1: Former Attleboro Dye Works Site 36 Maple Ave. Seekonk, MA						
Sample Identification	Massachusetts Contingency Plan Reportable Concentrations and Method 1 Groundwater Standards				MW-2	MW-3
Sampled By					Omni	Omni
Sample Number						
Sample Date					11/10/2008	11/10/2008
Well Location					NW of Lagoon #1	S of Lagoon #2
Depth to Groundwater (ft bgs)					7.49	7.87
Lab number					--	--
	RCGW-2	GW-2	GW-3	UCL		
Extractable Petroleum Hydrocarbons (EPH)	Concentrations in micrograms per liter (µg/l)					
C9-C18 Aliphatics	5000	5000	50000	100000	NA	NA
C19-C36 Aliphatics	50000	NS	50000	100000	NA	NA
Unadjusted C11-C22 Aromatics	~	~	~	~	NA	NA
C11-C22 Aromatics	5000	50000	5000	100000	NA	NA
Acenaphthene	10000	NS	10000	100000	NA	NA
Acenaphthylene	40	10000	40	100000	NA	NA
Anthracene	30	NS	30	600	NA	NA
Benzo(A)Anthracene	1000	NS	1000	10000	NA	NA
Benzo(A)Pyrene	500	NS	500	5000	NA	NA
Benzo(B)Fluoranthene	400	NS	400	4000	NA	NA
Benzo(G,H,I)Perylene	20	NS	20	500	NA	NA
Benzo(K)Fluoranthene	100	NS	100	1000	NA	NA
Chrysene	70	NS	70	700	NA	NA
Dibenz(A,H)Anthracene	40	NS	40	400	NA	NA
Fluoranthene	200	NS	200	2000	NA	NA
Fluorene	40	NS	40	400	NA	NA
Indeno(1,2,3-Cd)Pyrene	100	NS	100	1000	NA	NA
2-Methylnaphthalene	2000	2000	20000	100000	NA	NA
Naphthalene	700	700	20000	100000	NA	NA
Phenanthrene	10000	NS	10000	100000	NA	NA
Pyrene	20	NS	20	600	NA	NA
Volatile Petroleum Hydrocarbons (VPH)	Concentrations in micrograms per liter (µg/l)					
Unadjusted C5-C8 Aliphatics	~	~	~	~	NA	NA
C5-C8 Aliphatics	3000	3000	50000	100000	NA	NA
Unadjusted C9-C12 Aliphatics	~	~	~	~	NA	NA
C9-C12 Aliphatics	5000	5000	50000	100000	NA	NA
C9-C10 Aromatics	4000	4000	50000	100000	NA	NA
Benzene	1000	1000	10000	100000	NA	NA
Ethylbenzene	5000	20000	5000	100000	NA	NA
Methyl Tert Butyl Ether (MTBE)	5000	50000	50000	100000	NA	NA
Napthalene	700	700	20000	100000	NA	NA
Toluene	40000	50000	40000	100000	NA	NA
M/P-Xylene	3000	3000	5000	100000	NA	NA
O-Xylene	3000	3000	5000	100000	NA	NA
Metals	Concentrations in micrograms per liter (µg/l)					
Antimony	8000	NS	8000	80000	2.7	BRL (2)
Arsenic	900	NS	900	9000	BRL (5)	BRL (5)
Barium	50000	NA	50000	100000	14	36
Beryllium	200	NS	200	2000	BRL (5)	BRL (5)
Cadmium	4	NS	4	50	BRL (4)	BRL (4)
Chromium	300	NS	300	3000	BRL (10)	BRL (10)
Copper	10	NS	NS	NS	BRL (25)	BRL (25)
Hexavalent Chromium	100	NS	300	3000	BRL (4)	BRL (4)
Lead	10	NS	10	150	BRL (10)	BRL (10)
Nickel	200	NS	200	2000	BRL (25)	BRL (25)
Selenium	100	NS	100	1000	BRL (10)	BRL (10)
Silver	7	NS	7	1000	BRL (7)	BRL (7)
Thallium	3000	NS	3000	30000	BRL (2)	BRL (2)
Vanadium	4000	NS	4000	40000	323	BRL (10)
Zinc	900	NS	900	50000	BRL (50)	BRL (50)
Mercury	20	NS	20	200	BRL (0.2)	BRL (0.2)
Polychlorinated Biphenyls (PCBs)	Concentrations in micrograms per liter (µg/l)					
All Analyzed PCBs	5	5	10	100	NA	NA
Volatile Organic Compounds (VOCs)	Concentrations in micrograms per liter (µg/l)					
all analyzed VOCs	VBC	VBC	VBC	VBC	ND	ND
NOTES: 1. BRL () = below reporting limit indicated in parentheses;standard promulgated 2. ND = not detected and reporting limit not available 3. NA = Not Analyzed 4. NS = No Standard 5. VBC = criteria vary by compound 6. Boldface = Concentration exceeds one or more of the applicable MCP Groundwater Standards or Reportable Conditions 7. RC = Reportable Concentration 8. UCL = Upper Concentration Limit 9. DUP = Duplicate						

SUMMARY OF LAGOON AND RIVER SURFACE WATER LABORATORY ANALYTICAL RESULTS						
Former Attleboro Dye Works Site 36 Maple Ave. Seekonk, MA						
Sample Identification	National Recommended Water Quality Criteria- Human Health (consumption of water & organism)	National Recommended Water Quality Criteria- Human Health (consumption of organism only)	SW602	SW605	NOB-302SW	NOB-303SW
Sampled By			Ransom	Ransom	Nobis	Nobis
Sample Location			Ten Mile River	Ten Mile River	Settling Pond #1	Settling Ponds #2/3
Sample Number			MW602-W1-061417	MW605-W1-061417	D05312	D05314
Sample Date			6/14/2017	6/14/2017	4/2/2013	4/2/2013
Lab number			17F0761-01	17F0761-02	13D0093-02	13D0100-01
Extractable Petroleum Hydrocarbons			Concentrations in Micrograms per liter (µg/L)			
C9-C18 Aliphatics	NS	NS	BRL (100)	BRL (100)	BRL (100)	NA
C19-C36 Aliphatics	NS	NS	BRL (100)	BRL (100)	BRL (100)	NA
Unadjusted C11-C22 Aromatics	NS	NS	BRL (100)	BRL (100)	BRL (100)	NA
C11-C22 Aromatics	NS	NS	BRL (100)	BRL (100)	BRL (100)	NA
Acenaphthene	70	90	BRL (2)	BRL (2)	BRL (2)	NA
Acenaphthylene	NS	NS	BRL (2)	BRL (2)	BRL (2)	NA
Anthracene	300	400	BRL (2)	BRL (2)	BRL (2)	NA
Benzo(A)Anthracene	0.0012	0.0013	BRL (2)	BRL (2)	BRL (2)	NA
Benzo(A)Pyrene	0.00012	0.00013	BRL (2)	BRL (2)	BRL (2)	NA
Benzo(B)Fluoranthene	0.0012	0.0013	BRL (2)	BRL (2)	BRL (2)	NA
Benzo(G,H,I)Perylene	NS	NS	BRL (2)	BRL (2)	BRL (2)	NA
Benzo(K)Fluoranthene	0.012	0.013	BRL (2)	BRL (2)	BRL (2)	NA
Chrysene	0.12	0.13	BRL (2)	BRL (2)	BRL (2)	NA
Dibenz(A,H)Anthracene	0.00012	0.00013	BRL (2)	BRL (2)	BRL (2)	NA
Fluoranthene	20	20	BRL (2)	BRL (2)	BRL (2)	NA
Fluorene	50	70	BRL (2)	BRL (2)	BRL (2)	NA
Indeno(1,2,3-Cd)Pyrene	0.0012	0.0013	BRL (2)	BRL (2)	BRL (2)	NA
2-Methylnaphthalene	NS	NS	BRL (2)	BRL (2)	BRL (2)	NA
Naphthalene	NS	NS	BRL (2)	BRL (2)	BRL (2)	NA
Phenanthrene	NS	NS	BRL (2)	BRL (2)	BRL (2)	NA
Pyrene	20	30	BRL (2)	BRL (2)	BRL (2)	NA
TPH	NS	NS	NA	NA	NA	NA
Volatile Petroleum Hydrocarbons (VPH)			Concentrations in Micrograms per liter (µg/L)			
Unadjusted C5-C8 Aliphatics	NS	NS	BRL (100)	BRL (100)	BRL (100)	BRL (100)
C5-C8 Aliphatics	NS	NS	BRL (100)	BRL (100)	BRL (100)	BRL (100)
Unadjusted C9-C12 Aliphatics	NS	NS	BRL (100)	BRL (100)	BRL (100)	BRL (100)
C9-C12 Aliphatics	NS	NS	BRL (100)	BRL (100)	BRL (100)	BRL (100)
C9-C10 Aromatics	NS	NS	BRL (100)	BRL (100)	BRL (100)	BRL (100)
Benzene	0.58-2.1	16-58	BRL (1)	BRL (1)	BRL (1)	BRL (1)
Ethylbenzene	68	130	BRL (1)	BRL (1)	BRL (1)	BRL (1)
Methyl Tert Butyl Ether (MTBE)	NS	NS	BRL (1)	BRL (1)	BRL (1)	BRL (1)
Napthalene	NS	NS	BRL (5)	BRL (5)	BRL (5)	BRL (5)
Toluene	NS	NS	BRL (1)	BRL (1)	BRL (1)	BRL (1)
M/P-Xylene	NS	NS	BRL (2)	BRL (2)	BRL (2)	BRL (2)
O-Xylene	NS	NS	BRL (1)	BRL (1)	BRL (1)	BRL (1)
Metals			Concentrations in Micrograms per liter (µg/L)			
Aluminum	NS	NS				
Antimony	NS	NS	BRL (1)	BRL (1)	8.9	NA
Arsenic	0.018	0.14	0.56	BRL (0.4)	0.71	NA
Barium	1000	NS	NA	NA	BRL (10)	NA
Beryllium	NS	NS	BRL (0.40)	BRL (0.4)	BRL (0.4)	NA
Cadmium	NS	NS	BRL (0.50)	BRL (0.5)	BRL (0.5)	NA
Calcium	NS	NS	NA	NA	NA	NA
Chromium	NS	NS	2.1	2.2	1.1	NA
Cobalt	NS	NS	NA	NA	NA	NA
Copper	1300	NS	13	10	9.1	NA
Hexavalent Chromium	NS	NS	BRL (0.004)	BRL (0.004)	BRL (0.004)	NA
Lead	NS	NS	NS	NS	NS	NS
Magnesium	NS	NS	NS	NS	NS	NS
Manganese	50	100	NA	NA	NA	NS
Nickel	610	4600	25	24	24	NA
Selenium	NS	NS	BRL (5)	BRL (5)	5.8	NA
Silver	NS	NS	BRL (0.5)	BRL (0.5)	BRL (5)	NA
Thallium	0.24	0.47	BRL (0.2)	BRL (0.2)	BRL (0.2)	NA
Vanadium	NS	NS	NA	NA	88	NA
Zinc	7400	26000	16	15	32	NA
Mercury	NS	NS	BRL (0.0001)	BRL (0.0001)	BRL (0.0001)	NA
Polychlorinated Biphenyls (PCBs)			Concentrations in Micrograms per liter (µg/L)			
All Analyzed PCBs	0.000064	0.000065	BRL (0.20)	BRL (0.20)	BRL (0.2)	BRL (0.2)
Volatile Organic Compounds (VOCs)/Semi-volatile Organic Compounds (SVOCs)			Concentrations in Micrograms per liter (µg/L)			
all analyzed VOCs/SVOCs, unless listed below			--	--	--	--
acetone	NS	NS	BRL (10)	BRL (10)	BRL (10)	BRL (10)
2-Butanone (MEK)	NS	NS	BRL (10)	BRL (10)	BRL (10)	BRL (10)
Tetrahydrofuran	NS	NS	BRL (2)	BRL (2)	BRL (2)	BRL (2)
1-Methylnapthalene	NS	NS	NA	NA	NA	NA
2,4-dimethylphenol	NS	NS	NA	NA	BRL (10)	BRL (10)
2-methylphenol	NS	NS	NA	NA	NA	NA
3&4-methylphenol	NS	NS	NA	NA	NA	NA
acetphenone	NS	NS	NA	NA	NA	NA
benzoic acid	NS	NS	NA	NA	NA	NA
bis (2-ethylhexyl) pthalate	0.32	0.37	NA	NA	BRL (10)	BRL (10)
carbazole	NS	NS	NA	NA	NA	NA
dibenzofuran	NS	NS	NA	NA	BRL (5)	BRL (5)
diethylpthalate	600	600	NA	NA	BRL (10)	BRL (10)
phenol	4000	300000	NA	NA	BRL (10)	BRL (10)
pyridine	NS	NS	NA	NA	BRL (10)	BRL (10)
cyanide	4	400	NA	NA	NA	NA
Other Analytes						
hardness	Concentrations in Milligrams per liter (mg/L)		70	76	NA	NA
oxidation-reduction potential (ORP)	Measured in millivolts (mV)		NA	NA	140	10
pH	Measured in pH units		NA	NA	6.2	6
NOTES: 1. BRL () = below reporting limit indicated in parentheses;standard promulgated 2. ND = not detected and reporting limit not available 3. NA = Not Analyzed 4. NS = No Standard 5. VBC =criteria vary by compound 6. Boldface = Concentration exceeds one or more of the applicable MCP Groundwater Standards or Reportable Conditions 7. Aquatic Life criteria is addressed separately under Stage II Ecological Screening tables 8. EPA 2012 samples were collected subsequent to the fire						

January 25, 2013

Gail DeRuzzo
Nobis Engineering
585 Middlesex Street
Lowell, MA 01851

Project Location: 4-21606
Client Job Number:
Project Number: 4-21606
Laboratory Work Order Number: 13A0480

Enclosed are results of analyses for samples received by the laboratory on January 18, 2013. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink, reading "Meghan E. Kelley". The signature is written in a cursive, flowing style.

Meghan E. Kelley
Project Manager

Nobis Engineering
585 Middlesex Street
Lowell, MA 01851
ATTN: Gail DeRuzzo

REPORT DATE: 1/25/2013

PURCHASE ORDER NUMBER:

PROJECT NUMBER: 4-21606

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 13A0480

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

PROJECT LOCATION: 4-21606

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
D05297	13A0480-01	Ground Water	NOB101-GW-011713	MADEP-EPH-04-1.1 MADEP-VPH-04-1.1 SW-846 6020A SW-846 7470A SW-846 8082A SW-846 8260C	
D05298	13A0480-02	Ground Water	NOB103-GW-011713	MADEP-EPH-04-1.1 MADEP-VPH-04-1.1 SW-846 6020A SW-846 7470A SW-846 8082A SW-846 8260C	
D05299	13A0480-03	Ground Water	NOB108-GW-011713	MADEP-EPH-04-1.1 MADEP-VPH-04-1.1 SW-846 6020A SW-846 7470A SW-846 8082A SW-846 8260C SW-846 8270D	
D05300	13A0480-04	Ground Water	NOB110-GW-011713	MADEP-EPH-04-1.1 MADEP-VPH-04-1.1 SW-846 6020A SW-846 7470A SW-846 8082A SW-846 8260C SW-846 8270D	
D05301	13A0480-05	Ground Water	NOB106-GW-011713	MADEP-EPH-04-1.1 MADEP-VPH-04-1.1 SW-846 6020A SW-846 7470A SW-846 8082A SW-846 8260C	
D05302	13A0480-06	Ground Water	NOB-GW-DUP-01	MADEP-EPH-04-1.1 MADEP-VPH-04-1.1 SW-846 6020A SW-846 7470A SW-846 8082A SW-846 8260C SW-846 8270D	

Nobis Engineering
585 Middlesex Street
Lowell, MA 01851
ATTN: Gail DeRuzzo

REPORT DATE: 1/25/2013

PURCHASE ORDER NUMBER:

PROJECT NUMBER: 4-21606

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 13A0480

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

PROJECT LOCATION: 4-21606

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
D05303	13A0480-07	Ground Water	NOB112-GW-011713	MADEP-EPH-04-1.1 MADEP-VPH-04-1.1 SW-846 6020A SW-846 7470A SW-846 8082A SW-846 8260C	
D05304	13A0480-08	Trip Blank Water	NOB-GW-TRIP-BLANK	SW-846 8260C	

CASE NARRATIVE SUMMARY

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

MADEP-VPH-04-1.1**Qualifications:**

Matrix spike and matrix spike duplicate recoveries are outside of control limits. Data validation is not affected since results for this compound in this sample are "not detected", and recovery bias is on the high side.

Analyte & Samples(s) Qualified:**2-Methylpentane, Pentane**

B066455-MS1, B066455-MSD1

SW-846 8260C**Qualifications:**

Laboratory fortified blank/laboratory control sample recovery and duplicate recovery are outside of control limits. Reported value for this compound is likely to be biased on the low side.

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

13A0480-02[D05298], 13A0480-04[D05300], 13A0480-06[D05302], B066505-BLK1, B066505-BS1, B066505-BSD1, B066505-MS1, B066505-MSD1

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

Analyte & Samples(s) Qualified:**2,2-Dichloropropane, Vinyl Chloride**

B066505-BSD1, B066461-BSD1

Either laboratory fortified blank/laboratory control sample or duplicate recovery is outside of control limits, but the other is within limits. RPD outside of control limits. Reduced precision anticipated for any reported result for this compound.

Analyte & Samples(s) Qualified:**1,2,3-Trichlorobenzene, Naphthalene**

B066461-BSD1

Compound classified by MA CAM as difficult with acceptable recoveries of 40-160%. Recovery does not meet 70-130% criteria but does meet difficult compound criteria.

Analyte & Samples(s) Qualified:**Acetone, Bromomethane, Chloromethane, Dichlorodifluoromethane (Freon 12)**

B066461-BSD1, B066461-BS1, B066505-BSD1, B066505-BS1

Matrix spike recovery and matrix spike duplicate recovery outside of control limits. Possibility of sample matrix effects that lead to a low bias for reported result or non-homogeneous sample aliquots cannot be eliminated.

Analyte & Samples(s) Qualified:**2,2-Dichloropropane, Bromomethane**

13A0480-02[D05298], B066505-MS1, B066505-MSD1

Matrix spike recovery and matrix spike duplicate recovery outside of control limits. Possibility of sample matrix effects that lead to a high bias for reported result or non-homogeneous sample aliquots cannot be eliminated.

Analyte & Samples(s) Qualified:**1,2,4-Trimethylbenzene, Bromochloromethane, Chlorobenzene, Diisopropyl Ether (DIPE), Ethylbenzene, m+p Xylene, o-Xylene, p-Isopropyltoluene (p-Cymene)**

13A0480-02[D05298], B066505-MS1, B066505-MSD1

Either matrix spike or matrix spike duplicate is outside of control limits, but the other is within limits. Analysis is in control based on laboratory fortified blank recovery.

Analyte & Samples(s) Qualified:

1,1-Dichloroethane, 1,2-Dichlorobenzene, 1,3,5-Trimethylbenzene, 1,3-Dichlorobenzene, 1,4-Dichlorobenzene, 4-Chlorotoluene, Bromobenzene, Dichlorodifluoromethane (Freon 12), Hexachlorobutadiene, Isopropylbenzene (Cumene), n-Propylbenzene, sec-Butylbenzene, Styrene, tert-Butylbenzene
B066505-MSD1, B066505-MS1

Laboratory fortified blank duplicate RPD is outside of control limits. Reduced precision is anticipated for any reported value for this compound.

Analyte & Samples(s) Qualified:

1,2,3-Trichlorobenzene, 1,2,4-Trichlorobenzene, Bromomethane, Methylene Chloride, Naphthalene, trans-1,2-Dichloroethylene
13A0480-01[D05297], 13A0480-03[D05299], 13A0480-05[D05301], 13A0480-07[D05303], 13A0480-08[D05304], B066461-BLK1, B066461-BS1, B066461-BSD1, 13A0480-02[D05298], 13A0480-04[D05300], 13A0480-06[D05302], B066505-BLK1, B066505-BS1, B066505-BSD1, B066505-MS1, B066505-MSD1

Elevated reporting limit based on lowest point in calibration.
MA CAM reporting limit not met.

Analyte & Samples(s) Qualified:

1,2,3-Trichlorobenzene, 1,2,4-Trichlorobenzene, 1,2-Dibromo-3-chloropropane (DBCP), Bromoform, Carbon Disulfide, Methylene Chloride, Naphthalene
13A0480-01[D05297], 13A0480-02[D05298], 13A0480-03[D05299], 13A0480-04[D05300], 13A0480-05[D05301], 13A0480-06[D05302], 13A0480-07[D05303], 13A0480-08[D05304]

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

Analyte & Samples(s) Qualified:

1,2,3-Trichlorobenzene, 1,2,4-Trichlorobenzene, 1,4-Dioxane, 2,2-Dichloropropane, Acetone, Bromomethane, Chloroethane, Diethyl Ether, Naphthalene, trans-1,3-Dichloropropene, Vinyl Chloride
13A0480-01[D05297], 13A0480-02[D05298], 13A0480-03[D05299], 13A0480-04[D05300], 13A0480-05[D05301], 13A0480-06[D05302], 13A0480-07[D05303], 13A0480-08[D05304], B066461-BLK1, B066461-BS1, B066461-BSD1, B066505-BLK1, B066505-BS1, B066505-BSD1, B066505-MS1, B066505-MSD1

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

Analyte & Samples(s) Qualified:

1,4-Dioxane
13A0480-01[D05297], 13A0480-02[D05298], 13A0480-03[D05299], 13A0480-04[D05300], 13A0480-05[D05301], 13A0480-06[D05302], 13A0480-07[D05303], 13A0480-08[D05304], B066461-BLK1, B066461-BS1, B066461-BSD1, B066505-BLK1, B066505-BS1, B066505-BSD1, B066505-MS1, B066505-MSD1

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

Analyte & Samples(s) Qualified:

1,2,4-Trimethylbenzene, Hexachlorobutadiene
B066505-BS1, B066505-BSD1

SW-846 8270D

Qualifications:

Matrix spike and matrix spike duplicate recoveries are outside of control limits. Data validation is not affected since results for this compound in this sample are "not detected", and recovery bias is on the high side.

Analyte & Samples(s) Qualified:

3/4-Methylphenol
B066590-MS1, B066590-MSD1

Matrix spike duplicate RPD is outside of control limits. Reduced precision is anticipated for reported result for this compound in this sample.

Analyte & Samples(s) Qualified:

2-Chloronaphthalene, Di-n-octylphthalate
13A0480-02[D05298], B066590-MS1, B066590-MSD1

One associated surrogate standard recovery is outside of control limits but the other(s) is/are within limits. All recoveries are > 10%.

Analyte & Samples(s) Qualified:**2,4,6-Tribromophenol**

13A0480-02[D05298], 13A0480-03[D05299], 13A0480-04[D05300], 13A0480-06[D05302], B066590-BLK1, B066590-BS1, B066590-BSD1, B066590-MS1, B066590-MSD1

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

Analyte & Samples(s) Qualified:**4-Nitrophenol, Bis(2-chloroisopropyl)ether**

13A0480-02[D05298], 13A0480-03[D05299], 13A0480-04[D05300], 13A0480-06[D05302], B066590-BLK1, B066590-BS1, B066590-BSD1, B066590-MS1, B066590-MSD1

MADEP-EPH-04-1.1

SPE cartridge contamination with non-petroleum compounds, if present, is verified by GC/MS in each method blank per extraction batch and excluded from C11-C22 aromatic range fraction in all samples in the batch. No significant modifications were made to the method.

MADEP-VPH-04-1.1

No significant modifications were made to the method. All VPH samples were received preserved properly at pH <2 in the proper containers as specified on the chain-of-custody form unless specified in this narrative.

SW-846 8260C

Laboratory control sample recoveries for required MCP Data Enhancement 8260 compounds were all within limits specified by the method except for "difficult analytes" where recovery control limits of 40-160% are used and/or unless otherwise listed in this narrative. Difficult analytes: MIBK, MEK, acetone, 1,4-dioxane, chloromethane, dichlorodifluoromethane, 2-hexanone, and bromomethane.

SW-846 8270D

Laboratory control sample recoveries for required MCP Data Enhancement 8270 compounds were all within control limits specified by the method, 40-140% for base/neutrals and 30-130% for acids except for "difficult analytes" listed below and/or otherwise listed in this narrative. Difficult analytes limits are 15 and 140%: 2,4-dinitrophenol, 4-chloroaniline, 4-nitrophenol, and phenol.

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

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



Michael A. Erickson
Laboratory Director

Project Location: 4-21606

Sample Description: NOB101-GW-011713

Work Order: 13A0480

Date Received: 1/18/2013

Field Sample #: D05297

Sampled: 1/17/2013 14:25

Sample ID: 13A0480-01

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	10	µg/L	1	V-05	SW-846 8260C	1/21/13	1/22/13 8:27	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L	1		SW-846 8260C	1/21/13	1/22/13 8:27	MFF
Benzene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 8:27	MFF
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 8:27	MFF
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 8:27	MFF
Bromodichloromethane	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 8:27	MFF
Bromoform	ND	5.0	µg/L	1	RL-07	SW-846 8260C	1/21/13	1/22/13 8:27	MFF
Bromomethane	ND	2.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 8:27	MFF
2-Butanone (MEK)	ND	10	µg/L	1		SW-846 8260C	1/21/13	1/22/13 8:27	MFF
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 8:27	MFF
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 8:27	MFF
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 8:27	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260C	1/21/13	1/22/13 8:27	MFF
Carbon Disulfide	ND	5.0	µg/L	1	RL-07	SW-846 8260C	1/21/13	1/22/13 8:27	MFF
Carbon Tetrachloride	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 8:27	MFF
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 8:27	MFF
Chlorodibromomethane	ND	2.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 8:27	MFF
Chloroethane	ND	2.0	µg/L	1	V-05	SW-846 8260C	1/21/13	1/22/13 8:27	MFF
Chloroform	ND	2.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 8:27	MFF
Chloromethane	ND	2.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 8:27	MFF
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 8:27	MFF
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 8:27	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1	RL-07	SW-846 8260C	1/21/13	1/22/13 8:27	MFF
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260C	1/21/13	1/22/13 8:27	MFF
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 8:27	MFF
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 8:27	MFF
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 8:27	MFF
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 8:27	MFF
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 8:27	MFF
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 8:27	MFF
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 8:27	MFF
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 8:27	MFF
cis-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 8:27	MFF
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 8:27	MFF
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 8:27	MFF
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260C	1/21/13	1/22/13 8:27	MFF
2,2-Dichloropropane	ND	1.0	µg/L	1	V-05	SW-846 8260C	1/21/13	1/22/13 8:27	MFF
1,1-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	1/21/13	1/22/13 8:27	MFF
cis-1,3-Dichloropropene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 8:27	MFF
trans-1,3-Dichloropropene	ND	2.0	µg/L	1	V-05	SW-846 8260C	1/21/13	1/22/13 8:27	MFF
Diethyl Ether	ND	2.0	µg/L	1	V-05	SW-846 8260C	1/21/13	1/22/13 8:27	MFF
Diisopropyl Ether (DIPE)	ND	0.50	µg/L	1		SW-846 8260C	1/21/13	1/22/13 8:27	MFF
1,4-Dioxane	ND	50	µg/L	1	V-05, V-16	SW-846 8260C	1/21/13	1/22/13 8:27	MFF
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 8:27	MFF

Project Location: 4-21606

Sample Description: NOB101-GW-011713

Work Order: 13A0480

Date Received: 1/18/2013

Field Sample #: D05297

Sampled: 1/17/2013 14:25

Sample ID: 13A0480-01

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Hexachlorobutadiene	ND	0.50	µg/L	1		SW-846 8260C	1/21/13	1/22/13 8:27	MFF
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260C	1/21/13	1/22/13 8:27	MFF
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 8:27	MFF
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 8:27	MFF
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 8:27	MFF
Methylene Chloride	ND	5.0	µg/L	1	RL-07	SW-846 8260C	1/21/13	1/22/13 8:27	MFF
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260C	1/21/13	1/22/13 8:27	MFF
Naphthalene	ND	5.0	µg/L	1	R-05, RL-07, V-05	SW-846 8260C	1/21/13	1/22/13 8:27	MFF
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 8:27	MFF
Styrene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 8:27	MFF
1,1,1,2-Tetrachloroethane	ND	2.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 8:27	MFF
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260C	1/21/13	1/22/13 8:27	MFF
Tetrachloroethylene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 8:27	MFF
Tetrahydrofuran	ND	2.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 8:27	MFF
Toluene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 8:27	MFF
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1	R-05, RL-07, V-05	SW-846 8260C	1/21/13	1/22/13 8:27	MFF
1,2,4-Trichlorobenzene	ND	5.0	µg/L	1	R-05, RL-07, V-05	SW-846 8260C	1/21/13	1/22/13 8:27	MFF
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 8:27	MFF
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 8:27	MFF
Trichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 8:27	MFF
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 8:27	MFF
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 8:27	MFF
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 8:27	MFF
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 8:27	MFF
Vinyl Chloride	ND	2.0	µg/L	1	V-05	SW-846 8260C	1/21/13	1/22/13 8:27	MFF
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 8:27	MFF
o-Xylene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 8:27	MFF

Surrogates	% Recovery	Recovery Limits	Flag
1,2-Dichloroethane-d4	95.9	70-130	1/22/13 8:27
Toluene-d8	98.6	70-130	1/22/13 8:27
4-Bromofluorobenzene	99.1	70-130	1/22/13 8:27

Project Location: 4-21606

Sample Description: NOB101-GW-011713

Work Order: 13A0480

Date Received: 1/18/2013

Field Sample #: D05297

Sampled: 1/17/2013 14:25

Sample ID: 13A0480-01

Sample Matrix: Ground Water

Polychlorinated Biphenyls By GC/ECD

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.20	µg/L	1		SW-846 8082A	1/24/13	1/25/13 11:08	JMB
Aroclor-1221 [1]	ND	0.20	µg/L	1		SW-846 8082A	1/24/13	1/25/13 11:08	JMB
Aroclor-1232 [1]	ND	0.20	µg/L	1		SW-846 8082A	1/24/13	1/25/13 11:08	JMB
Aroclor-1242 [1]	ND	0.20	µg/L	1		SW-846 8082A	1/24/13	1/25/13 11:08	JMB
Aroclor-1248 [1]	ND	0.20	µg/L	1		SW-846 8082A	1/24/13	1/25/13 11:08	JMB
Aroclor-1254 [1]	ND	0.20	µg/L	1		SW-846 8082A	1/24/13	1/25/13 11:08	JMB
Aroclor-1260 [1]	ND	0.20	µg/L	1		SW-846 8082A	1/24/13	1/25/13 11:08	JMB
Aroclor-1262 [1]	ND	0.20	µg/L	1		SW-846 8082A	1/24/13	1/25/13 11:08	JMB
Aroclor-1268 [1]	ND	0.20	µg/L	1		SW-846 8082A	1/24/13	1/25/13 11:08	JMB
Surrogates	% Recovery		Recovery Limits		Flag				
Decachlorobiphenyl [1]	79.7		30-150				1/25/13 11:08		
Decachlorobiphenyl [2]	87.3		30-150				1/25/13 11:08		
Tetrachloro-m-xylene [1]	82.5		30-150				1/25/13 11:08		
Tetrachloro-m-xylene [2]	94.7		30-150				1/25/13 11:08		

Project Location: 4-21606

Sample Description: NOB101-GW-011713

Work Order: 13A0480

Date Received: 1/18/2013

Field Sample #: D05297

Sampled: 1/17/2013 14:25

Sample ID: 13A0480-01

Sample Matrix: Ground Water

Petrolium Hydrocarbons Analyses - EPH

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
C9-C18 Aliphatics	ND	100	µg/L	1		MADEP-EPH-04-1.1	1/22/13	1/24/13 17:20	SCS
C19-C36 Aliphatics	ND	100	µg/L	1		MADEP-EPH-04-1.1	1/22/13	1/24/13 17:20	SCS
Unadjusted C11-C22 Aromatics	ND	100	µg/L	1		MADEP-EPH-04-1.1	1/22/13	1/24/13 17:20	SCS
C11-C22 Aromatics	ND	100	µg/L	1		MADEP-EPH-04-1.1	1/22/13	1/24/13 17:20	SCS
Acenaphthene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	1/22/13	1/24/13 17:20	SCS
Acenaphthylene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	1/22/13	1/24/13 17:20	SCS
Anthracene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	1/22/13	1/24/13 17:20	SCS
Benzo(a)anthracene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	1/22/13	1/24/13 17:20	SCS
Benzo(a)pyrene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	1/22/13	1/24/13 17:20	SCS
Benzo(b)fluoranthene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	1/22/13	1/24/13 17:20	SCS
Benzo(g,h,i)perylene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	1/22/13	1/24/13 17:20	SCS
Benzo(k)fluoranthene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	1/22/13	1/24/13 17:20	SCS
Chrysene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	1/22/13	1/24/13 17:20	SCS
Dibenz(a,h)anthracene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	1/22/13	1/24/13 17:20	SCS
Fluoranthene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	1/22/13	1/24/13 17:20	SCS
Fluorene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	1/22/13	1/24/13 17:20	SCS
Indeno(1,2,3-cd)pyrene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	1/22/13	1/24/13 17:20	SCS
2-Methylnaphthalene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	1/22/13	1/24/13 17:20	SCS
Naphthalene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	1/22/13	1/24/13 17:20	SCS
Phenanthrene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	1/22/13	1/24/13 17:20	SCS
Pyrene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	1/22/13	1/24/13 17:20	SCS

Surrogates	% Recovery	Recovery Limits	Flag
Chlorooctadecane (COD)	78.0	40-140	
o-Terphenyl (OTP)	67.1	40-140	
2-Bromonaphthalene	71.1	40-140	
2-Fluorobiphenyl	74.8	40-140	

Project Location: 4-21606

Sample Description: NOB101-GW-011713

Work Order: 13A0480

Date Received: 1/18/2013

Field Sample #: D05297

Sampled: 1/17/2013 14:25

Sample ID: 13A0480-01

Sample Matrix: Ground Water

Petroleum Hydrocarbons Analyses - VPH

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Unadjusted C5-C8 Aliphatics	ND	100	µg/L	1		MADEP-VPH-04-1.1	1/21/13	1/21/13 15:29	EEH
C5-C8 Aliphatics	ND	100	µg/L	1		MADEP-VPH-04-1.1	1/21/13	1/21/13 15:29	EEH
Unadjusted C9-C12 Aliphatics	ND	100	µg/L	1		MADEP-VPH-04-1.1	1/21/13	1/21/13 15:29	EEH
C9-C12 Aliphatics	ND	100	µg/L	1		MADEP-VPH-04-1.1	1/21/13	1/21/13 15:29	EEH
C9-C10 Aromatics	ND	100	µg/L	1		MADEP-VPH-04-1.1	1/21/13	1/21/13 15:29	EEH
Benzene	ND	1.0	µg/L	1		MADEP-VPH-04-1.1	1/21/13	1/21/13 15:29	EEH
Ethylbenzene	ND	1.0	µg/L	1		MADEP-VPH-04-1.1	1/21/13	1/21/13 15:29	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		MADEP-VPH-04-1.1	1/21/13	1/21/13 15:29	EEH
Naphthalene	ND	5.0	µg/L	1		MADEP-VPH-04-1.1	1/21/13	1/21/13 15:29	EEH
Toluene	ND	1.0	µg/L	1		MADEP-VPH-04-1.1	1/21/13	1/21/13 15:29	EEH
m+p Xylene	ND	2.0	µg/L	1		MADEP-VPH-04-1.1	1/21/13	1/21/13 15:29	EEH
o-Xylene	ND	1.0	µg/L	1		MADEP-VPH-04-1.1	1/21/13	1/21/13 15:29	EEH
Surrogates	% Recovery	Recovery Limits	Flag						
2,5-Dibromotoluene (FID)	88.6	70-130							
2,5-Dibromotoluene (PID)	79.5	70-130							

Project Location: 4-21606

Sample Description: NOB101-GW-011713

Work Order: 13A0480

Date Received: 1/18/2013

Field Sample #: D05297

Sampled: 1/17/2013 14:25

Sample ID: 13A0480-01

Sample Matrix: Ground Water

Metals Analyses (Dissolved)

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Antimony	ND	5.0	µg/L	5		SW-846 6020A	1/19/13	1/21/13 11:39	KSH
Arsenic	ND	2.0	µg/L	5		SW-846 6020A	1/19/13	1/21/13 11:39	KSH
Barium	64	50	µg/L	5		SW-846 6020A	1/19/13	1/21/13 11:39	KSH
Beryllium	ND	2.0	µg/L	5		SW-846 6020A	1/19/13	1/21/13 15:05	KSH
Cadmium	ND	2.5	µg/L	5		SW-846 6020A	1/19/13	1/21/13 11:39	KSH
Chromium	ND	5.0	µg/L	5		SW-846 6020A	1/19/13	1/21/13 11:39	KSH
Copper	ND	25	µg/L	5		SW-846 6020A	1/19/13	1/21/13 11:39	KSH
Lead	ND	5.0	µg/L	5		SW-846 6020A	1/19/13	1/21/13 11:39	KSH
Mercury	ND	0.00010	mg/L	1		SW-846 7470A	1/19/13	1/21/13 11:28	SAJ
Nickel	ND	25	µg/L	5		SW-846 6020A	1/19/13	1/21/13 11:39	KSH
Selenium	ND	25	µg/L	5		SW-846 6020A	1/19/13	1/21/13 11:39	KSH
Silver	ND	2.5	µg/L	5		SW-846 6020A	1/19/13	1/21/13 11:39	KSH
Thallium	ND	1.0	µg/L	5		SW-846 6020A	1/19/13	1/21/13 11:39	KSH
Vanadium	ND	25	µg/L	5		SW-846 6020A	1/19/13	1/21/13 11:39	KSH
Zinc	ND	50	µg/L	5		SW-846 6020A	1/19/13	1/21/13 11:39	KSH

Project Location: 4-21606

Sample Description: NOB103-GW-011713

Work Order: 13A0480

Date Received: 1/18/2013

Field Sample #: D05298

Sampled: 1/17/2013 12:20

Sample ID: 13A0480-02

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	10	µg/L	1	V-05	SW-846 8260C	1/21/13	1/23/13 13:04	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L	1		SW-846 8260C	1/21/13	1/23/13 13:04	MFF
Benzene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/23/13 13:04	MFF
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/23/13 13:04	MFF
Bromochloromethane	ND	1.0	µg/L	1	MS-12	SW-846 8260C	1/21/13	1/23/13 13:04	MFF
Bromodichloromethane	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/23/13 13:04	MFF
Bromoform	ND	5.0	µg/L	1	RL-07	SW-846 8260C	1/21/13	1/23/13 13:04	MFF
Bromomethane	ND	2.0	µg/L	1	L-04, MS-09, R-05, V-05	SW-846 8260C	1/21/13	1/23/13 13:04	MFF
2-Butanone (MEK)	ND	10	µg/L	1		SW-846 8260C	1/21/13	1/23/13 13:04	MFF
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/23/13 13:04	MFF
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/23/13 13:04	MFF
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/23/13 13:04	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260C	1/21/13	1/23/13 13:04	MFF
Carbon Disulfide	ND	5.0	µg/L	1	RL-07	SW-846 8260C	1/21/13	1/23/13 13:04	MFF
Carbon Tetrachloride	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/23/13 13:04	MFF
Chlorobenzene	ND	1.0	µg/L	1	MS-12	SW-846 8260C	1/21/13	1/23/13 13:04	MFF
Chlorodibromomethane	ND	2.0	µg/L	1		SW-846 8260C	1/21/13	1/23/13 13:04	MFF
Chloroethane	ND	2.0	µg/L	1		SW-846 8260C	1/21/13	1/23/13 13:04	MFF
Chloroform	ND	2.0	µg/L	1		SW-846 8260C	1/21/13	1/23/13 13:04	MFF
Chloromethane	ND	2.0	µg/L	1		SW-846 8260C	1/21/13	1/23/13 13:04	MFF
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/23/13 13:04	MFF
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/23/13 13:04	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1	RL-07	SW-846 8260C	1/21/13	1/23/13 13:04	MFF
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260C	1/21/13	1/23/13 13:04	MFF
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/23/13 13:04	MFF
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/23/13 13:04	MFF
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/23/13 13:04	MFF
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/23/13 13:04	MFF
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1		SW-846 8260C	1/21/13	1/23/13 13:04	MFF
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/23/13 13:04	MFF
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/23/13 13:04	MFF
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/23/13 13:04	MFF
cis-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/23/13 13:04	MFF
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1	R-05	SW-846 8260C	1/21/13	1/23/13 13:04	MFF
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/23/13 13:04	MFF
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260C	1/21/13	1/23/13 13:04	MFF
2,2-Dichloropropane	ND	1.0	µg/L	1	MS-09	SW-846 8260C	1/21/13	1/23/13 13:04	MFF
1,1-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	1/21/13	1/23/13 13:04	MFF
cis-1,3-Dichloropropene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/23/13 13:04	MFF
trans-1,3-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260C	1/21/13	1/23/13 13:04	MFF
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260C	1/21/13	1/23/13 13:04	MFF
Diisopropyl Ether (DIPE)	ND	0.50	µg/L	1	MS-12	SW-846 8260C	1/21/13	1/23/13 13:04	MFF
1,4-Dioxane	ND	50	µg/L	1	V-16	SW-846 8260C	1/21/13	1/23/13 13:04	MFF

Project Location: 4-21606

Sample Description: NOB103-GW-011713

Work Order: 13A0480

Date Received: 1/18/2013

Field Sample #: D05298

Sampled: 1/17/2013 12:20

Sample ID: 13A0480-02

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Ethylbenzene	ND	1.0	µg/L	1	MS-12	SW-846 8260C	1/21/13	1/23/13 13:04	MFF
Hexachlorobutadiene	ND	0.50	µg/L	1		SW-846 8260C	1/21/13	1/23/13 13:04	MFF
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260C	1/21/13	1/23/13 13:04	MFF
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/23/13 13:04	MFF
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1	MS-12	SW-846 8260C	1/21/13	1/23/13 13:04	MFF
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/23/13 13:04	MFF
Methylene Chloride	ND	5.0	µg/L	1	R-05, RL-07	SW-846 8260C	1/21/13	1/23/13 13:04	MFF
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260C	1/21/13	1/23/13 13:04	MFF
Naphthalene	ND	5.0	µg/L	1	RL-07, V-05	SW-846 8260C	1/21/13	1/23/13 13:04	MFF
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/23/13 13:04	MFF
Styrene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/23/13 13:04	MFF
1,1,1,2-Tetrachloroethane	ND	2.0	µg/L	1		SW-846 8260C	1/21/13	1/23/13 13:04	MFF
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260C	1/21/13	1/23/13 13:04	MFF
Tetrachloroethylene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/23/13 13:04	MFF
Tetrahydrofuran	ND	2.0	µg/L	1		SW-846 8260C	1/21/13	1/23/13 13:04	MFF
Toluene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/23/13 13:04	MFF
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1	RL-07, V-05	SW-846 8260C	1/21/13	1/23/13 13:04	MFF
1,2,4-Trichlorobenzene	ND	5.0	µg/L	1	RL-07, V-05	SW-846 8260C	1/21/13	1/23/13 13:04	MFF
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/23/13 13:04	MFF
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/23/13 13:04	MFF
Trichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/23/13 13:04	MFF
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260C	1/21/13	1/23/13 13:04	MFF
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260C	1/21/13	1/23/13 13:04	MFF
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1	MS-12	SW-846 8260C	1/21/13	1/23/13 13:04	MFF
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/23/13 13:04	MFF
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260C	1/21/13	1/23/13 13:04	MFF
m+p Xylene	ND	2.0	µg/L	1	MS-12	SW-846 8260C	1/21/13	1/23/13 13:04	MFF
o-Xylene	ND	1.0	µg/L	1	MS-12	SW-846 8260C	1/21/13	1/23/13 13:04	MFF
Surrogates	% Recovery	Recovery Limits	Flag						
1,2-Dichloroethane-d4	95.9	70-130							
Toluene-d8	96.0	70-130							
4-Bromofluorobenzene	99.4	70-130							

Project Location: 4-21606

Sample Description: NOB103-GW-011713

Work Order: 13A0480

Date Received: 1/18/2013

Field Sample #: D05298

Sampled: 1/17/2013 12:20

Sample ID: 13A0480-02

Sample Matrix: Ground Water

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Acenaphthene	ND	5.0	µg/L	1		SW-846 8270D	1/23/13	1/24/13 12:47	CMR
Acenaphthylene	ND	5.0	µg/L	1		SW-846 8270D	1/23/13	1/24/13 12:47	CMR
Acetophenone	ND	10	µg/L	1		SW-846 8270D	1/23/13	1/24/13 12:47	CMR
Aniline	ND	5.0	µg/L	1		SW-846 8270D	1/23/13	1/24/13 12:47	CMR
Anthracene	ND	5.0	µg/L	1		SW-846 8270D	1/23/13	1/24/13 12:47	CMR
Benzo(a)anthracene	ND	5.0	µg/L	1		SW-846 8270D	1/23/13	1/24/13 12:47	CMR
Benzo(a)pyrene	ND	5.0	µg/L	1		SW-846 8270D	1/23/13	1/24/13 12:47	CMR
Benzo(b)fluoranthene	ND	5.0	µg/L	1		SW-846 8270D	1/23/13	1/24/13 12:47	CMR
Benzo(g,h,i)perylene	ND	5.0	µg/L	1		SW-846 8270D	1/23/13	1/24/13 12:47	CMR
Benzo(k)fluoranthene	ND	5.0	µg/L	1		SW-846 8270D	1/23/13	1/24/13 12:47	CMR
Bis(2-chloroethoxy)methane	ND	10	µg/L	1		SW-846 8270D	1/23/13	1/24/13 12:47	CMR
Bis(2-chloroethyl)ether	ND	10	µg/L	1		SW-846 8270D	1/23/13	1/24/13 12:47	CMR
Bis(2-chloroisopropyl)ether	ND	10	µg/L	1	V-05	SW-846 8270D	1/23/13	1/24/13 12:47	CMR
Bis(2-Ethylhexyl)phthalate	ND	10	µg/L	1		SW-846 8270D	1/23/13	1/24/13 12:47	CMR
4-Bromophenylphenylether	ND	10	µg/L	1		SW-846 8270D	1/23/13	1/24/13 12:47	CMR
Butylbenzylphthalate	ND	10	µg/L	1		SW-846 8270D	1/23/13	1/24/13 12:47	CMR
4-Chloroaniline	ND	10	µg/L	1		SW-846 8270D	1/23/13	1/24/13 12:47	CMR
2-Chloronaphthalene	ND	10	µg/L	1	R-06	SW-846 8270D	1/23/13	1/24/13 12:47	CMR
2-Chlorophenol	ND	10	µg/L	1		SW-846 8270D	1/23/13	1/24/13 12:47	CMR
Chrysene	ND	5.0	µg/L	1		SW-846 8270D	1/23/13	1/24/13 12:47	CMR
Dibenz(a,h)anthracene	ND	5.0	µg/L	1		SW-846 8270D	1/23/13	1/24/13 12:47	CMR
Dibenzofuran	ND	5.0	µg/L	1		SW-846 8270D	1/23/13	1/24/13 12:47	CMR
Di-n-butylphthalate	ND	10	µg/L	1		SW-846 8270D	1/23/13	1/24/13 12:47	CMR
1,2-Dichlorobenzene	ND	5.0	µg/L	1		SW-846 8270D	1/23/13	1/24/13 12:47	CMR
1,3-Dichlorobenzene	ND	5.0	µg/L	1		SW-846 8270D	1/23/13	1/24/13 12:47	CMR
1,4-Dichlorobenzene	ND	5.0	µg/L	1		SW-846 8270D	1/23/13	1/24/13 12:47	CMR
3,3-Dichlorobenzidine	ND	10	µg/L	1		SW-846 8270D	1/23/13	1/24/13 12:47	CMR
2,4-Dichlorophenol	ND	10	µg/L	1		SW-846 8270D	1/23/13	1/24/13 12:47	CMR
Diethylphthalate	ND	10	µg/L	1		SW-846 8270D	1/23/13	1/24/13 12:47	CMR
2,4-Dimethylphenol	ND	10	µg/L	1		SW-846 8270D	1/23/13	1/24/13 12:47	CMR
Dimethylphthalate	ND	10	µg/L	1		SW-846 8270D	1/23/13	1/24/13 12:47	CMR
2,4-Dinitrophenol	ND	10	µg/L	1		SW-846 8270D	1/23/13	1/24/13 12:47	CMR
2,4-Dinitrotoluene	ND	10	µg/L	1		SW-846 8270D	1/23/13	1/24/13 12:47	CMR
2,6-Dinitrotoluene	ND	10	µg/L	1		SW-846 8270D	1/23/13	1/24/13 12:47	CMR
Di-n-octylphthalate	ND	10	µg/L	1	R-06	SW-846 8270D	1/23/13	1/24/13 12:47	CMR
1,2-Diphenylhydrazine (as Azobenzene)	ND	10	µg/L	1		SW-846 8270D	1/23/13	1/24/13 12:47	CMR
Fluoranthene	ND	5.0	µg/L	1		SW-846 8270D	1/23/13	1/24/13 12:47	CMR
Fluorene	ND	5.0	µg/L	1		SW-846 8270D	1/23/13	1/24/13 12:47	CMR
Hexachlorobenzene	ND	10	µg/L	1		SW-846 8270D	1/23/13	1/24/13 12:47	CMR
Hexachlorobutadiene	ND	10	µg/L	1		SW-846 8270D	1/23/13	1/24/13 12:47	CMR
Hexachloroethane	ND	10	µg/L	1		SW-846 8270D	1/23/13	1/24/13 12:47	CMR
Indeno(1,2,3-cd)pyrene	ND	5.0	µg/L	1		SW-846 8270D	1/23/13	1/24/13 12:47	CMR
Isophorone	ND	10	µg/L	1		SW-846 8270D	1/23/13	1/24/13 12:47	CMR
2-Methylnaphthalene	ND	5.0	µg/L	1		SW-846 8270D	1/23/13	1/24/13 12:47	CMR

Project Location: 4-21606

Sample Description: NOB103-GW-011713

Work Order: 13A0480

Date Received: 1/18/2013

Field Sample #: D05298

Sampled: 1/17/2013 12:20

Sample ID: 13A0480-02

Sample Matrix: Ground Water

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
2-Methylphenol	ND	10	µg/L	1		SW-846 8270D	1/23/13	1/24/13 12:47	CMR
3/4-Methylphenol	ND	10	µg/L	1		SW-846 8270D	1/23/13	1/24/13 12:47	CMR
Naphthalene	ND	5.0	µg/L	1		SW-846 8270D	1/23/13	1/24/13 12:47	CMR
Nitrobenzene	ND	10	µg/L	1		SW-846 8270D	1/23/13	1/24/13 12:47	CMR
2-Nitrophenol	ND	10	µg/L	1		SW-846 8270D	1/23/13	1/24/13 12:47	CMR
4-Nitrophenol	ND	10	µg/L	1	V-05	SW-846 8270D	1/23/13	1/24/13 12:47	CMR
Pentachlorophenol	ND	10	µg/L	1		SW-846 8270D	1/23/13	1/24/13 12:47	CMR
Phenanthrene	ND	5.0	µg/L	1		SW-846 8270D	1/23/13	1/24/13 12:47	CMR
Phenol	ND	10	µg/L	1		SW-846 8270D	1/23/13	1/24/13 12:47	CMR
Pyrene	ND	5.0	µg/L	1		SW-846 8270D	1/23/13	1/24/13 12:47	CMR
1,2,4-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8270D	1/23/13	1/24/13 12:47	CMR
2,4,5-Trichlorophenol	ND	10	µg/L	1		SW-846 8270D	1/23/13	1/24/13 12:47	CMR
2,4,6-Trichlorophenol	ND	10	µg/L	1		SW-846 8270D	1/23/13	1/24/13 12:47	CMR
Surrogates	% Recovery		Recovery Limits		Flag				
2-Fluorophenol	58.3		15-110				1/24/13 12:47		
Phenol-d6	37.7		15-110				1/24/13 12:47		
Nitrobenzene-d5	90.4		30-130				1/24/13 12:47		
2-Fluorobiphenyl	100		30-130				1/24/13 12:47		
2,4,6-Tribromophenol	125 *		15-110		S-07		1/24/13 12:47		
Terphenyl-d14	121		30-130				1/24/13 12:47		

Project Location: 4-21606

Sample Description: NOB103-GW-011713

Work Order: 13A0480

Date Received: 1/18/2013

Field Sample #: D05298

Sampled: 1/17/2013 12:20

Sample ID: 13A0480-02

Sample Matrix: Ground Water

Polychlorinated Biphenyls By GC/ECD

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.20	µg/L	1		SW-846 8082A	1/21/13	1/24/13 11:15	PJG
Aroclor-1221 [1]	ND	0.20	µg/L	1		SW-846 8082A	1/21/13	1/24/13 11:15	PJG
Aroclor-1232 [1]	ND	0.20	µg/L	1		SW-846 8082A	1/21/13	1/24/13 11:15	PJG
Aroclor-1242 [1]	ND	0.20	µg/L	1		SW-846 8082A	1/21/13	1/24/13 11:15	PJG
Aroclor-1248 [1]	ND	0.20	µg/L	1		SW-846 8082A	1/21/13	1/24/13 11:15	PJG
Aroclor-1254 [1]	ND	0.20	µg/L	1		SW-846 8082A	1/21/13	1/24/13 11:15	PJG
Aroclor-1260 [1]	ND	0.20	µg/L	1		SW-846 8082A	1/21/13	1/24/13 11:15	PJG
Aroclor-1262 [1]	ND	0.20	µg/L	1		SW-846 8082A	1/21/13	1/24/13 11:15	PJG
Aroclor-1268 [1]	ND	0.20	µg/L	1		SW-846 8082A	1/21/13	1/24/13 11:15	PJG
Surrogates	% Recovery	Recovery Limits	Flag						
Decachlorobiphenyl [1]	75.4	30-150							
Decachlorobiphenyl [2]	77.7	30-150							
Tetrachloro-m-xylene [1]	79.0	30-150							
Tetrachloro-m-xylene [2]	80.2	30-150							

Project Location: 4-21606

Sample Description: NOB103-GW-011713

Work Order: 13A0480

Date Received: 1/18/2013

Field Sample #: D05298

Sampled: 1/17/2013 12:20

Sample ID: 13A0480-02

Sample Matrix: Ground Water

Petrolium Hydrocarbons Analyses - EPH

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
C9-C18 Aliphatics	ND	110	µg/L	1		MADEP-EPH-04-1.1	1/22/13	1/24/13 17:41	SCS
C19-C36 Aliphatics	ND	110	µg/L	1		MADEP-EPH-04-1.1	1/22/13	1/24/13 17:41	SCS
Unadjusted C11-C22 Aromatics	ND	110	µg/L	1		MADEP-EPH-04-1.1	1/22/13	1/24/13 17:41	SCS
C11-C22 Aromatics	ND	110	µg/L	1		MADEP-EPH-04-1.1	1/22/13	1/24/13 17:41	SCS
Acenaphthene	ND	2.1	µg/L	1		MADEP-EPH-04-1.1	1/22/13	1/24/13 17:41	SCS
Acenaphthylene	ND	2.1	µg/L	1		MADEP-EPH-04-1.1	1/22/13	1/24/13 17:41	SCS
Anthracene	ND	2.1	µg/L	1		MADEP-EPH-04-1.1	1/22/13	1/24/13 17:41	SCS
Benzo(a)anthracene	ND	2.1	µg/L	1		MADEP-EPH-04-1.1	1/22/13	1/24/13 17:41	SCS
Benzo(a)pyrene	ND	2.1	µg/L	1		MADEP-EPH-04-1.1	1/22/13	1/24/13 17:41	SCS
Benzo(b)fluoranthene	ND	2.1	µg/L	1		MADEP-EPH-04-1.1	1/22/13	1/24/13 17:41	SCS
Benzo(g,h,i)perylene	ND	2.1	µg/L	1		MADEP-EPH-04-1.1	1/22/13	1/24/13 17:41	SCS
Benzo(k)fluoranthene	ND	2.1	µg/L	1		MADEP-EPH-04-1.1	1/22/13	1/24/13 17:41	SCS
Chrysene	ND	2.1	µg/L	1		MADEP-EPH-04-1.1	1/22/13	1/24/13 17:41	SCS
Dibenz(a,h)anthracene	ND	2.1	µg/L	1		MADEP-EPH-04-1.1	1/22/13	1/24/13 17:41	SCS
Fluoranthene	ND	2.1	µg/L	1		MADEP-EPH-04-1.1	1/22/13	1/24/13 17:41	SCS
Fluorene	ND	2.1	µg/L	1		MADEP-EPH-04-1.1	1/22/13	1/24/13 17:41	SCS
Indeno(1,2,3-cd)pyrene	ND	2.1	µg/L	1		MADEP-EPH-04-1.1	1/22/13	1/24/13 17:41	SCS
2-Methylnaphthalene	ND	2.1	µg/L	1		MADEP-EPH-04-1.1	1/22/13	1/24/13 17:41	SCS
Naphthalene	ND	2.1	µg/L	1		MADEP-EPH-04-1.1	1/22/13	1/24/13 17:41	SCS
Phenanthrene	ND	2.1	µg/L	1		MADEP-EPH-04-1.1	1/22/13	1/24/13 17:41	SCS
Pyrene	ND	2.1	µg/L	1		MADEP-EPH-04-1.1	1/22/13	1/24/13 17:41	SCS
Surrogates	% Recovery	Recovery Limits	Flag						
Chlorooctadecane (COD)	71.5	40-140							
o-Terphenyl (OTP)	72.3	40-140							
2-Bromonaphthalene	74.9	40-140							
2-Fluorobiphenyl	79.2	40-140							

Project Location: 4-21606

Sample Description: NOB103-GW-011713

Work Order: 13A0480

Date Received: 1/18/2013

Field Sample #: D05298

Sampled: 1/17/2013 12:20

Sample ID: 13A0480-02

Sample Matrix: Ground Water

Petroleum Hydrocarbons Analyses - VPH

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Unadjusted C5-C8 Aliphatics	ND	100	µg/L	1		MADEP-VPH-04-1.1	1/21/13	1/21/13 13:05	EEH
C5-C8 Aliphatics	ND	100	µg/L	1		MADEP-VPH-04-1.1	1/21/13	1/21/13 13:05	EEH
Unadjusted C9-C12 Aliphatics	ND	100	µg/L	1		MADEP-VPH-04-1.1	1/21/13	1/21/13 13:05	EEH
C9-C12 Aliphatics	ND	100	µg/L	1		MADEP-VPH-04-1.1	1/21/13	1/21/13 13:05	EEH
C9-C10 Aromatics	ND	100	µg/L	1		MADEP-VPH-04-1.1	1/21/13	1/21/13 13:05	EEH
Benzene	ND	1.0	µg/L	1		MADEP-VPH-04-1.1	1/21/13	1/21/13 13:05	EEH
Ethylbenzene	ND	1.0	µg/L	1		MADEP-VPH-04-1.1	1/21/13	1/21/13 13:05	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		MADEP-VPH-04-1.1	1/21/13	1/21/13 13:05	EEH
Naphthalene	ND	5.0	µg/L	1		MADEP-VPH-04-1.1	1/21/13	1/21/13 13:05	EEH
Toluene	ND	1.0	µg/L	1		MADEP-VPH-04-1.1	1/21/13	1/21/13 13:05	EEH
m+p Xylene	ND	2.0	µg/L	1		MADEP-VPH-04-1.1	1/21/13	1/21/13 13:05	EEH
o-Xylene	ND	1.0	µg/L	1		MADEP-VPH-04-1.1	1/21/13	1/21/13 13:05	EEH
Surrogates	% Recovery	Recovery Limits	Flag						
2,5-Dibromotoluene (FID)	82.2	70-130							
2,5-Dibromotoluene (PID)	75.6	70-130							

Project Location: 4-21606

Sample Description: NOB103-GW-011713

Work Order: 13A0480

Date Received: 1/18/2013

Field Sample #: D05298

Sampled: 1/17/2013 12:20

Sample ID: 13A0480-02

Sample Matrix: Ground Water

Metals Analyses (Dissolved)

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Antimony	ND	5.0	µg/L	5		SW-846 6020A	1/19/13	1/21/13 11:35	KSH
Arsenic	ND	2.0	µg/L	5		SW-846 6020A	1/19/13	1/21/13 11:35	KSH
Barium	ND	50	µg/L	5		SW-846 6020A	1/19/13	1/21/13 11:35	KSH
Beryllium	ND	2.0	µg/L	5		SW-846 6020A	1/19/13	1/21/13 15:01	KSH
Cadmium	ND	2.5	µg/L	5		SW-846 6020A	1/19/13	1/21/13 11:35	KSH
Chromium	ND	5.0	µg/L	5		SW-846 6020A	1/19/13	1/21/13 11:35	KSH
Copper	ND	25	µg/L	5		SW-846 6020A	1/19/13	1/21/13 11:35	KSH
Lead	ND	5.0	µg/L	5		SW-846 6020A	1/19/13	1/21/13 11:35	KSH
Mercury	ND	0.00010	mg/L	1		SW-846 7470A	1/19/13	1/21/13 11:30	SAJ
Nickel	ND	25	µg/L	5		SW-846 6020A	1/19/13	1/21/13 11:35	KSH
Selenium	ND	25	µg/L	5		SW-846 6020A	1/19/13	1/21/13 11:35	KSH
Silver	ND	2.5	µg/L	5		SW-846 6020A	1/19/13	1/21/13 11:35	KSH
Thallium	ND	1.0	µg/L	5		SW-846 6020A	1/19/13	1/21/13 11:35	KSH
Vanadium	ND	25	µg/L	5		SW-846 6020A	1/19/13	1/21/13 11:35	KSH
Zinc	ND	50	µg/L	5		SW-846 6020A	1/19/13	1/21/13 11:35	KSH

Project Location: 4-21606

Sample Description: NOB108-GW-011713

Work Order: 13A0480

Date Received: 1/18/2013

Field Sample #: D05299

Sampled: 1/17/2013 12:50

Sample ID: 13A0480-03

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	10	µg/L	1	V-05	SW-846 8260C	1/21/13	1/22/13 8:57	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L	1		SW-846 8260C	1/21/13	1/22/13 8:57	MFF
Benzene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 8:57	MFF
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 8:57	MFF
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 8:57	MFF
Bromodichloromethane	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 8:57	MFF
Bromoform	ND	5.0	µg/L	1	RL-07	SW-846 8260C	1/21/13	1/22/13 8:57	MFF
Bromomethane	ND	2.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 8:57	MFF
2-Butanone (MEK)	ND	10	µg/L	1		SW-846 8260C	1/21/13	1/22/13 8:57	MFF
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 8:57	MFF
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 8:57	MFF
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 8:57	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260C	1/21/13	1/22/13 8:57	MFF
Carbon Disulfide	ND	5.0	µg/L	1	RL-07	SW-846 8260C	1/21/13	1/22/13 8:57	MFF
Carbon Tetrachloride	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 8:57	MFF
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 8:57	MFF
Chlorodibromomethane	ND	2.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 8:57	MFF
Chloroethane	ND	2.0	µg/L	1	V-05	SW-846 8260C	1/21/13	1/22/13 8:57	MFF
Chloroform	ND	2.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 8:57	MFF
Chloromethane	ND	2.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 8:57	MFF
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 8:57	MFF
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 8:57	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1	RL-07	SW-846 8260C	1/21/13	1/22/13 8:57	MFF
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260C	1/21/13	1/22/13 8:57	MFF
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 8:57	MFF
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 8:57	MFF
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 8:57	MFF
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 8:57	MFF
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 8:57	MFF
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 8:57	MFF
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 8:57	MFF
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 8:57	MFF
cis-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 8:57	MFF
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 8:57	MFF
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 8:57	MFF
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260C	1/21/13	1/22/13 8:57	MFF
2,2-Dichloropropane	ND	1.0	µg/L	1	V-05	SW-846 8260C	1/21/13	1/22/13 8:57	MFF
1,1-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	1/21/13	1/22/13 8:57	MFF
cis-1,3-Dichloropropene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 8:57	MFF
trans-1,3-Dichloropropene	ND	2.0	µg/L	1	V-05	SW-846 8260C	1/21/13	1/22/13 8:57	MFF
Diethyl Ether	ND	2.0	µg/L	1	V-05	SW-846 8260C	1/21/13	1/22/13 8:57	MFF
Diisopropyl Ether (DIPE)	ND	0.50	µg/L	1		SW-846 8260C	1/21/13	1/22/13 8:57	MFF
1,4-Dioxane	ND	50	µg/L	1	V-05, V-16	SW-846 8260C	1/21/13	1/22/13 8:57	MFF
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 8:57	MFF

Project Location: 4-21606

Sample Description: NOB108-GW-011713

Work Order: 13A0480

Date Received: 1/18/2013

Field Sample #: D05299

Sampled: 1/17/2013 12:50

Sample ID: 13A0480-03

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Hexachlorobutadiene	ND	0.50	µg/L	1		SW-846 8260C	1/21/13	1/22/13 8:57	MFF
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260C	1/21/13	1/22/13 8:57	MFF
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 8:57	MFF
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 8:57	MFF
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 8:57	MFF
Methylene Chloride	ND	5.0	µg/L	1	RL-07	SW-846 8260C	1/21/13	1/22/13 8:57	MFF
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260C	1/21/13	1/22/13 8:57	MFF
Naphthalene	ND	5.0	µg/L	1	R-05, RL-07, V-05	SW-846 8260C	1/21/13	1/22/13 8:57	MFF
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 8:57	MFF
Styrene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 8:57	MFF
1,1,1,2-Tetrachloroethane	ND	2.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 8:57	MFF
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260C	1/21/13	1/22/13 8:57	MFF
Tetrachloroethylene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 8:57	MFF
Tetrahydrofuran	ND	2.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 8:57	MFF
Toluene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 8:57	MFF
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1	R-05, RL-07, V-05	SW-846 8260C	1/21/13	1/22/13 8:57	MFF
1,2,4-Trichlorobenzene	ND	5.0	µg/L	1	R-05, RL-07, V-05	SW-846 8260C	1/21/13	1/22/13 8:57	MFF
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 8:57	MFF
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 8:57	MFF
Trichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 8:57	MFF
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 8:57	MFF
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 8:57	MFF
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 8:57	MFF
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 8:57	MFF
Vinyl Chloride	ND	2.0	µg/L	1	V-05	SW-846 8260C	1/21/13	1/22/13 8:57	MFF
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 8:57	MFF
o-Xylene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 8:57	MFF

Surrogates	% Recovery	Recovery Limits	Flag
1,2-Dichloroethane-d4	97.1	70-130	1/22/13 8:57
Toluene-d8	96.6	70-130	1/22/13 8:57
4-Bromofluorobenzene	99.7	70-130	1/22/13 8:57

Project Location: 4-21606

Sample Description: NOB108-GW-011713

Work Order: 13A0480

Date Received: 1/18/2013

Field Sample #: D05299

Sampled: 1/17/2013 12:50

Sample ID: 13A0480-03

Sample Matrix: Ground Water

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Acenaphthene	ND	5.0	µg/L	1		SW-846 8270D	1/23/13	1/24/13 13:20	CMR
Acenaphthylene	ND	5.0	µg/L	1		SW-846 8270D	1/23/13	1/24/13 13:20	CMR
Acetophenone	ND	10	µg/L	1		SW-846 8270D	1/23/13	1/24/13 13:20	CMR
Aniline	ND	5.0	µg/L	1		SW-846 8270D	1/23/13	1/24/13 13:20	CMR
Anthracene	ND	5.0	µg/L	1		SW-846 8270D	1/23/13	1/24/13 13:20	CMR
Benzo(a)anthracene	ND	5.0	µg/L	1		SW-846 8270D	1/23/13	1/24/13 13:20	CMR
Benzo(a)pyrene	ND	5.0	µg/L	1		SW-846 8270D	1/23/13	1/24/13 13:20	CMR
Benzo(b)fluoranthene	ND	5.0	µg/L	1		SW-846 8270D	1/23/13	1/24/13 13:20	CMR
Benzo(g,h,i)perylene	ND	5.0	µg/L	1		SW-846 8270D	1/23/13	1/24/13 13:20	CMR
Benzo(k)fluoranthene	ND	5.0	µg/L	1		SW-846 8270D	1/23/13	1/24/13 13:20	CMR
Bis(2-chloroethoxy)methane	ND	10	µg/L	1		SW-846 8270D	1/23/13	1/24/13 13:20	CMR
Bis(2-chloroethyl)ether	ND	10	µg/L	1		SW-846 8270D	1/23/13	1/24/13 13:20	CMR
Bis(2-chloroisopropyl)ether	ND	10	µg/L	1	V-05	SW-846 8270D	1/23/13	1/24/13 13:20	CMR
Bis(2-Ethylhexyl)phthalate	ND	10	µg/L	1		SW-846 8270D	1/23/13	1/24/13 13:20	CMR
4-Bromophenylphenylether	ND	10	µg/L	1		SW-846 8270D	1/23/13	1/24/13 13:20	CMR
Butylbenzylphthalate	ND	10	µg/L	1		SW-846 8270D	1/23/13	1/24/13 13:20	CMR
4-Chloroaniline	ND	10	µg/L	1		SW-846 8270D	1/23/13	1/24/13 13:20	CMR
2-Chloronaphthalene	ND	10	µg/L	1		SW-846 8270D	1/23/13	1/24/13 13:20	CMR
2-Chlorophenol	ND	10	µg/L	1		SW-846 8270D	1/23/13	1/24/13 13:20	CMR
Chrysene	ND	5.0	µg/L	1		SW-846 8270D	1/23/13	1/24/13 13:20	CMR
Dibenz(a,h)anthracene	ND	5.0	µg/L	1		SW-846 8270D	1/23/13	1/24/13 13:20	CMR
Dibenzofuran	ND	5.0	µg/L	1		SW-846 8270D	1/23/13	1/24/13 13:20	CMR
Di-n-butylphthalate	ND	10	µg/L	1		SW-846 8270D	1/23/13	1/24/13 13:20	CMR
1,2-Dichlorobenzene	ND	5.0	µg/L	1		SW-846 8270D	1/23/13	1/24/13 13:20	CMR
1,3-Dichlorobenzene	ND	5.0	µg/L	1		SW-846 8270D	1/23/13	1/24/13 13:20	CMR
1,4-Dichlorobenzene	ND	5.0	µg/L	1		SW-846 8270D	1/23/13	1/24/13 13:20	CMR
3,3-Dichlorobenzidine	ND	10	µg/L	1		SW-846 8270D	1/23/13	1/24/13 13:20	CMR
2,4-Dichlorophenol	ND	10	µg/L	1		SW-846 8270D	1/23/13	1/24/13 13:20	CMR
Diethylphthalate	ND	10	µg/L	1		SW-846 8270D	1/23/13	1/24/13 13:20	CMR
2,4-Dimethylphenol	ND	10	µg/L	1		SW-846 8270D	1/23/13	1/24/13 13:20	CMR
Dimethylphthalate	ND	10	µg/L	1		SW-846 8270D	1/23/13	1/24/13 13:20	CMR
2,4-Dinitrophenol	ND	10	µg/L	1		SW-846 8270D	1/23/13	1/24/13 13:20	CMR
2,4-Dinitrotoluene	ND	10	µg/L	1		SW-846 8270D	1/23/13	1/24/13 13:20	CMR
2,6-Dinitrotoluene	ND	10	µg/L	1		SW-846 8270D	1/23/13	1/24/13 13:20	CMR
Di-n-octylphthalate	ND	10	µg/L	1		SW-846 8270D	1/23/13	1/24/13 13:20	CMR
1,2-Diphenylhydrazine (as Azobenzene)	ND	10	µg/L	1		SW-846 8270D	1/23/13	1/24/13 13:20	CMR
Fluoranthene	ND	5.0	µg/L	1		SW-846 8270D	1/23/13	1/24/13 13:20	CMR
Fluorene	ND	5.0	µg/L	1		SW-846 8270D	1/23/13	1/24/13 13:20	CMR
Hexachlorobenzene	ND	10	µg/L	1		SW-846 8270D	1/23/13	1/24/13 13:20	CMR
Hexachlorobutadiene	ND	10	µg/L	1		SW-846 8270D	1/23/13	1/24/13 13:20	CMR
Hexachloroethane	ND	10	µg/L	1		SW-846 8270D	1/23/13	1/24/13 13:20	CMR
Indeno(1,2,3-cd)pyrene	ND	5.0	µg/L	1		SW-846 8270D	1/23/13	1/24/13 13:20	CMR
Isophorone	ND	10	µg/L	1		SW-846 8270D	1/23/13	1/24/13 13:20	CMR
2-Methylnaphthalene	ND	5.0	µg/L	1		SW-846 8270D	1/23/13	1/24/13 13:20	CMR

Project Location: 4-21606

Sample Description: NOB108-GW-011713

Work Order: 13A0480

Date Received: 1/18/2013

Field Sample #: D05299

Sampled: 1/17/2013 12:50

Sample ID: 13A0480-03

Sample Matrix: Ground Water

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
2-Methylphenol	ND	10	µg/L	1		SW-846 8270D	1/23/13	1/24/13 13:20	CMR
3/4-Methylphenol	ND	10	µg/L	1		SW-846 8270D	1/23/13	1/24/13 13:20	CMR
Naphthalene	ND	5.0	µg/L	1		SW-846 8270D	1/23/13	1/24/13 13:20	CMR
Nitrobenzene	ND	10	µg/L	1		SW-846 8270D	1/23/13	1/24/13 13:20	CMR
2-Nitrophenol	ND	10	µg/L	1		SW-846 8270D	1/23/13	1/24/13 13:20	CMR
4-Nitrophenol	ND	10	µg/L	1	V-05	SW-846 8270D	1/23/13	1/24/13 13:20	CMR
Pentachlorophenol	ND	10	µg/L	1		SW-846 8270D	1/23/13	1/24/13 13:20	CMR
Phenanthrene	ND	5.0	µg/L	1		SW-846 8270D	1/23/13	1/24/13 13:20	CMR
Phenol	ND	10	µg/L	1		SW-846 8270D	1/23/13	1/24/13 13:20	CMR
Pyrene	ND	5.0	µg/L	1		SW-846 8270D	1/23/13	1/24/13 13:20	CMR
1,2,4-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8270D	1/23/13	1/24/13 13:20	CMR
2,4,5-Trichlorophenol	ND	10	µg/L	1		SW-846 8270D	1/23/13	1/24/13 13:20	CMR
2,4,6-Trichlorophenol	ND	10	µg/L	1		SW-846 8270D	1/23/13	1/24/13 13:20	CMR
Surrogates	% Recovery		Recovery Limits		Flag				
2-Fluorophenol	51.8		15-110				1/24/13 13:20		
Phenol-d6	33.6		15-110				1/24/13 13:20		
Nitrobenzene-d5	82.7		30-130				1/24/13 13:20		
2-Fluorobiphenyl	93.0		30-130				1/24/13 13:20		
2,4,6-Tribromophenol	119 *		15-110		S-07		1/24/13 13:20		
Terphenyl-d14	115		30-130				1/24/13 13:20		

Project Location: 4-21606

Sample Description: NOB108-GW-011713

Work Order: 13A0480

Date Received: 1/18/2013

Field Sample #: D05299

Sampled: 1/17/2013 12:50

Sample ID: 13A0480-03

Sample Matrix: Ground Water

Polychlorinated Biphenyls By GC/ECD

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.20	µg/L	1		SW-846 8082A	1/21/13	1/24/13 11:28	PJG
Aroclor-1221 [1]	ND	0.20	µg/L	1		SW-846 8082A	1/21/13	1/24/13 11:28	PJG
Aroclor-1232 [1]	ND	0.20	µg/L	1		SW-846 8082A	1/21/13	1/24/13 11:28	PJG
Aroclor-1242 [1]	ND	0.20	µg/L	1		SW-846 8082A	1/21/13	1/24/13 11:28	PJG
Aroclor-1248 [1]	ND	0.20	µg/L	1		SW-846 8082A	1/21/13	1/24/13 11:28	PJG
Aroclor-1254 [1]	ND	0.20	µg/L	1		SW-846 8082A	1/21/13	1/24/13 11:28	PJG
Aroclor-1260 [1]	ND	0.20	µg/L	1		SW-846 8082A	1/21/13	1/24/13 11:28	PJG
Aroclor-1262 [1]	ND	0.20	µg/L	1		SW-846 8082A	1/21/13	1/24/13 11:28	PJG
Aroclor-1268 [1]	ND	0.20	µg/L	1		SW-846 8082A	1/21/13	1/24/13 11:28	PJG
Surrogates	% Recovery	Recovery Limits	Flag						
Decachlorobiphenyl [1]	74.8	30-150							
Decachlorobiphenyl [2]	77.2	30-150							
Tetrachloro-m-xylene [1]	76.2	30-150							
Tetrachloro-m-xylene [2]	78.0	30-150							

Project Location: 4-21606

Sample Description: NOB108-GW-011713

Work Order: 13A0480

Date Received: 1/18/2013

Field Sample #: D05299

Sampled: 1/17/2013 12:50

Sample ID: 13A0480-03

Sample Matrix: Ground Water

Petrolium Hydrocarbons Analyses - EPH

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
C9-C18 Aliphatics	ND	100	µg/L	1		MADEP-EPH-04-1.1	1/22/13	1/24/13 18:02	SCS
C19-C36 Aliphatics	ND	100	µg/L	1		MADEP-EPH-04-1.1	1/22/13	1/24/13 18:02	SCS
Unadjusted C11-C22 Aromatics	ND	100	µg/L	1		MADEP-EPH-04-1.1	1/22/13	1/24/13 18:02	SCS
C11-C22 Aromatics	ND	100	µg/L	1		MADEP-EPH-04-1.1	1/22/13	1/24/13 18:02	SCS
Acenaphthene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	1/22/13	1/24/13 18:02	SCS
Acenaphthylene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	1/22/13	1/24/13 18:02	SCS
Anthracene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	1/22/13	1/24/13 18:02	SCS
Benzo(a)anthracene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	1/22/13	1/24/13 18:02	SCS
Benzo(a)pyrene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	1/22/13	1/24/13 18:02	SCS
Benzo(b)fluoranthene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	1/22/13	1/24/13 18:02	SCS
Benzo(g,h,i)perylene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	1/22/13	1/24/13 18:02	SCS
Benzo(k)fluoranthene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	1/22/13	1/24/13 18:02	SCS
Chrysene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	1/22/13	1/24/13 18:02	SCS
Dibenz(a,h)anthracene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	1/22/13	1/24/13 18:02	SCS
Fluoranthene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	1/22/13	1/24/13 18:02	SCS
Fluorene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	1/22/13	1/24/13 18:02	SCS
Indeno(1,2,3-cd)pyrene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	1/22/13	1/24/13 18:02	SCS
2-Methylnaphthalene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	1/22/13	1/24/13 18:02	SCS
Naphthalene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	1/22/13	1/24/13 18:02	SCS
Phenanthrene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	1/22/13	1/24/13 18:02	SCS
Pyrene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	1/22/13	1/24/13 18:02	SCS

Surrogates	% Recovery	Recovery Limits	Flag
Chlorooctadecane (COD)	75.6	40-140	
o-Terphenyl (OTP)	73.6	40-140	
2-Bromonaphthalene	75.5	40-140	
2-Fluorobiphenyl	81.1	40-140	

Project Location: 4-21606

Sample Description: NOB108-GW-011713

Work Order: 13A0480

Date Received: 1/18/2013

Field Sample #: D05299

Sampled: 1/17/2013 12:50

Sample ID: 13A0480-03

Sample Matrix: Ground Water

Petroleum Hydrocarbons Analyses - VPH

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Unadjusted C5-C8 Aliphatics	ND	100	µg/L	1		MADEP-VPH-04-1.1	1/21/13	1/21/13 16:05	EEH
C5-C8 Aliphatics	ND	100	µg/L	1		MADEP-VPH-04-1.1	1/21/13	1/21/13 16:05	EEH
Unadjusted C9-C12 Aliphatics	ND	100	µg/L	1		MADEP-VPH-04-1.1	1/21/13	1/21/13 16:05	EEH
C9-C12 Aliphatics	ND	100	µg/L	1		MADEP-VPH-04-1.1	1/21/13	1/21/13 16:05	EEH
C9-C10 Aromatics	ND	100	µg/L	1		MADEP-VPH-04-1.1	1/21/13	1/21/13 16:05	EEH
Benzene	ND	1.0	µg/L	1		MADEP-VPH-04-1.1	1/21/13	1/21/13 16:05	EEH
Ethylbenzene	ND	1.0	µg/L	1		MADEP-VPH-04-1.1	1/21/13	1/21/13 16:05	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		MADEP-VPH-04-1.1	1/21/13	1/21/13 16:05	EEH
Naphthalene	ND	5.0	µg/L	1		MADEP-VPH-04-1.1	1/21/13	1/21/13 16:05	EEH
Toluene	ND	1.0	µg/L	1		MADEP-VPH-04-1.1	1/21/13	1/21/13 16:05	EEH
m+p Xylene	ND	2.0	µg/L	1		MADEP-VPH-04-1.1	1/21/13	1/21/13 16:05	EEH
o-Xylene	ND	1.0	µg/L	1		MADEP-VPH-04-1.1	1/21/13	1/21/13 16:05	EEH
Surrogates	% Recovery	Recovery Limits	Flag						
2,5-Dibromotoluene (FID)	81.6	70-130							
2,5-Dibromotoluene (PID)	75.0	70-130							

Project Location: 4-21606

Sample Description: NOB108-GW-011713

Work Order: 13A0480

Date Received: 1/18/2013

Field Sample #: D05299

Sampled: 1/17/2013 12:50

Sample ID: 13A0480-03

Sample Matrix: Ground Water

Metals Analyses (Dissolved)

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Antimony	ND	5.0	µg/L	5		SW-846 6020A	1/19/13	1/21/13 11:42	KSH
Arsenic	ND	2.0	µg/L	5		SW-846 6020A	1/19/13	1/21/13 11:42	KSH
Barium	ND	50	µg/L	5		SW-846 6020A	1/19/13	1/21/13 11:42	KSH
Beryllium	ND	2.0	µg/L	5		SW-846 6020A	1/19/13	1/21/13 15:20	KSH
Cadmium	ND	2.5	µg/L	5		SW-846 6020A	1/19/13	1/21/13 11:42	KSH
Chromium	ND	5.0	µg/L	5		SW-846 6020A	1/19/13	1/21/13 11:42	KSH
Copper	ND	25	µg/L	5		SW-846 6020A	1/19/13	1/21/13 11:42	KSH
Lead	ND	5.0	µg/L	5		SW-846 6020A	1/19/13	1/21/13 11:42	KSH
Mercury	ND	0.00010	mg/L	1		SW-846 7470A	1/19/13	1/21/13 11:32	SAJ
Nickel	ND	25	µg/L	5		SW-846 6020A	1/19/13	1/21/13 11:42	KSH
Selenium	ND	25	µg/L	5		SW-846 6020A	1/19/13	1/21/13 11:42	KSH
Silver	ND	2.5	µg/L	5		SW-846 6020A	1/19/13	1/21/13 11:42	KSH
Thallium	ND	1.0	µg/L	5		SW-846 6020A	1/19/13	1/21/13 11:42	KSH
Vanadium	ND	25	µg/L	5		SW-846 6020A	1/19/13	1/21/13 11:42	KSH
Zinc	ND	50	µg/L	5		SW-846 6020A	1/19/13	1/21/13 11:42	KSH

Project Location: 4-21606

Sample Description: NOB110-GW-011713

Work Order: 13A0480

Date Received: 1/18/2013

Field Sample #: D05300

Sampled: 1/17/2013 10:20

Sample ID: 13A0480-04

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	10	µg/L	1	V-05	SW-846 8260C	1/21/13	1/23/13 14:05	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L	1		SW-846 8260C	1/21/13	1/23/13 14:05	MFF
Benzene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/23/13 14:05	MFF
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/23/13 14:05	MFF
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/23/13 14:05	MFF
Bromodichloromethane	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/23/13 14:05	MFF
Bromoform	ND	5.0	µg/L	1	RL-07	SW-846 8260C	1/21/13	1/23/13 14:05	MFF
Bromomethane	ND	2.0	µg/L	1	L-04, R-05, V-05	SW-846 8260C	1/21/13	1/23/13 14:05	MFF
2-Butanone (MEK)	ND	10	µg/L	1		SW-846 8260C	1/21/13	1/23/13 14:05	MFF
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/23/13 14:05	MFF
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/23/13 14:05	MFF
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/23/13 14:05	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260C	1/21/13	1/23/13 14:05	MFF
Carbon Disulfide	ND	5.0	µg/L	1	RL-07	SW-846 8260C	1/21/13	1/23/13 14:05	MFF
Carbon Tetrachloride	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/23/13 14:05	MFF
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/23/13 14:05	MFF
Chlorodibromomethane	ND	2.0	µg/L	1		SW-846 8260C	1/21/13	1/23/13 14:05	MFF
Chloroethane	ND	2.0	µg/L	1		SW-846 8260C	1/21/13	1/23/13 14:05	MFF
Chloroform	ND	2.0	µg/L	1		SW-846 8260C	1/21/13	1/23/13 14:05	MFF
Chloromethane	ND	2.0	µg/L	1		SW-846 8260C	1/21/13	1/23/13 14:05	MFF
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/23/13 14:05	MFF
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/23/13 14:05	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1	RL-07	SW-846 8260C	1/21/13	1/23/13 14:05	MFF
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260C	1/21/13	1/23/13 14:05	MFF
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/23/13 14:05	MFF
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/23/13 14:05	MFF
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/23/13 14:05	MFF
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/23/13 14:05	MFF
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1		SW-846 8260C	1/21/13	1/23/13 14:05	MFF
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/23/13 14:05	MFF
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/23/13 14:05	MFF
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/23/13 14:05	MFF
cis-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/23/13 14:05	MFF
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1	R-05	SW-846 8260C	1/21/13	1/23/13 14:05	MFF
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/23/13 14:05	MFF
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260C	1/21/13	1/23/13 14:05	MFF
2,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/23/13 14:05	MFF
1,1-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	1/21/13	1/23/13 14:05	MFF
cis-1,3-Dichloropropene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/23/13 14:05	MFF
trans-1,3-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260C	1/21/13	1/23/13 14:05	MFF
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260C	1/21/13	1/23/13 14:05	MFF
Diisopropyl Ether (DIPE)	ND	0.50	µg/L	1		SW-846 8260C	1/21/13	1/23/13 14:05	MFF
1,4-Dioxane	ND	50	µg/L	1	V-16	SW-846 8260C	1/21/13	1/23/13 14:05	MFF
Ethylbenzene	1.3	1.0	µg/L	1		SW-846 8260C	1/21/13	1/23/13 14:05	MFF

Project Location: 4-21606

Sample Description: NOB110-GW-011713

Work Order: 13A0480

Date Received: 1/18/2013

Field Sample #: D05300

Sampled: 1/17/2013 10:20

Sample ID: 13A0480-04

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Hexachlorobutadiene	ND	0.50	µg/L	1		SW-846 8260C	1/21/13	1/23/13 14:05	MFF
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260C	1/21/13	1/23/13 14:05	MFF
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/23/13 14:05	MFF
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/23/13 14:05	MFF
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/23/13 14:05	MFF
Methylene Chloride	ND	5.0	µg/L	1	R-05, RL-07	SW-846 8260C	1/21/13	1/23/13 14:05	MFF
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260C	1/21/13	1/23/13 14:05	MFF
Naphthalene	ND	5.0	µg/L	1	RL-07, V-05	SW-846 8260C	1/21/13	1/23/13 14:05	MFF
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/23/13 14:05	MFF
Styrene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/23/13 14:05	MFF
1,1,1,2-Tetrachloroethane	ND	2.0	µg/L	1		SW-846 8260C	1/21/13	1/23/13 14:05	MFF
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260C	1/21/13	1/23/13 14:05	MFF
Tetrachloroethylene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/23/13 14:05	MFF
Tetrahydrofuran	ND	2.0	µg/L	1		SW-846 8260C	1/21/13	1/23/13 14:05	MFF
Toluene	500	10	µg/L	10		SW-846 8260C	1/24/13	1/24/13 12:52	LBD
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1	RL-07, V-05	SW-846 8260C	1/21/13	1/23/13 14:05	MFF
1,2,4-Trichlorobenzene	ND	5.0	µg/L	1	V-05, RL-07	SW-846 8260C	1/21/13	1/23/13 14:05	MFF
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/23/13 14:05	MFF
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/23/13 14:05	MFF
Trichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/23/13 14:05	MFF
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260C	1/21/13	1/23/13 14:05	MFF
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260C	1/21/13	1/23/13 14:05	MFF
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/23/13 14:05	MFF
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/23/13 14:05	MFF
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260C	1/21/13	1/23/13 14:05	MFF
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260C	1/21/13	1/23/13 14:05	MFF
o-Xylene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/23/13 14:05	MFF
Surrogates	% Recovery	Recovery Limits	Flag						
1,2-Dichloroethane-d4	97.3	70-130							
1,2-Dichloroethane-d4	90.6	70-130							
Toluene-d8	96.3	70-130							
Toluene-d8	99.0	70-130							
4-Bromofluorobenzene	101	70-130							
4-Bromofluorobenzene	99.8	70-130							

Project Location: 4-21606

Sample Description: NOB110-GW-011713

Work Order: 13A0480

Date Received: 1/18/2013

Field Sample #: D05300

Sampled: 1/17/2013 10:20

Sample ID: 13A0480-04

Sample Matrix: Ground Water

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Acenaphthene	ND	5.0	µg/L	1		SW-846 8270D	1/23/13	1/24/13 13:52	CMR
Acenaphthylene	ND	5.0	µg/L	1		SW-846 8270D	1/23/13	1/24/13 13:52	CMR
Acetophenone	ND	10	µg/L	1		SW-846 8270D	1/23/13	1/24/13 13:52	CMR
Aniline	ND	5.0	µg/L	1		SW-846 8270D	1/23/13	1/24/13 13:52	CMR
Anthracene	ND	5.0	µg/L	1		SW-846 8270D	1/23/13	1/24/13 13:52	CMR
Benzo(a)anthracene	ND	5.0	µg/L	1		SW-846 8270D	1/23/13	1/24/13 13:52	CMR
Benzo(a)pyrene	ND	5.0	µg/L	1		SW-846 8270D	1/23/13	1/24/13 13:52	CMR
Benzo(b)fluoranthene	ND	5.0	µg/L	1		SW-846 8270D	1/23/13	1/24/13 13:52	CMR
Benzo(g,h,i)perylene	ND	5.0	µg/L	1		SW-846 8270D	1/23/13	1/24/13 13:52	CMR
Benzo(k)fluoranthene	ND	5.0	µg/L	1		SW-846 8270D	1/23/13	1/24/13 13:52	CMR
Bis(2-chloroethoxy)methane	ND	10	µg/L	1		SW-846 8270D	1/23/13	1/24/13 13:52	CMR
Bis(2-chloroethyl)ether	ND	10	µg/L	1		SW-846 8270D	1/23/13	1/24/13 13:52	CMR
Bis(2-chloroisopropyl)ether	ND	10	µg/L	1	V-05	SW-846 8270D	1/23/13	1/24/13 13:52	CMR
Bis(2-Ethylhexyl)phthalate	ND	10	µg/L	1		SW-846 8270D	1/23/13	1/24/13 13:52	CMR
4-Bromophenylphenylether	ND	10	µg/L	1		SW-846 8270D	1/23/13	1/24/13 13:52	CMR
Butylbenzylphthalate	ND	10	µg/L	1		SW-846 8270D	1/23/13	1/24/13 13:52	CMR
4-Chloroaniline	ND	10	µg/L	1		SW-846 8270D	1/23/13	1/24/13 13:52	CMR
2-Chloronaphthalene	ND	10	µg/L	1		SW-846 8270D	1/23/13	1/24/13 13:52	CMR
2-Chlorophenol	ND	10	µg/L	1		SW-846 8270D	1/23/13	1/24/13 13:52	CMR
Chrysene	ND	5.0	µg/L	1		SW-846 8270D	1/23/13	1/24/13 13:52	CMR
Dibenz(a,h)anthracene	ND	5.0	µg/L	1		SW-846 8270D	1/23/13	1/24/13 13:52	CMR
Dibenzofuran	ND	5.0	µg/L	1		SW-846 8270D	1/23/13	1/24/13 13:52	CMR
Di-n-butylphthalate	ND	10	µg/L	1		SW-846 8270D	1/23/13	1/24/13 13:52	CMR
1,2-Dichlorobenzene	ND	5.0	µg/L	1		SW-846 8270D	1/23/13	1/24/13 13:52	CMR
1,3-Dichlorobenzene	ND	5.0	µg/L	1		SW-846 8270D	1/23/13	1/24/13 13:52	CMR
1,4-Dichlorobenzene	ND	5.0	µg/L	1		SW-846 8270D	1/23/13	1/24/13 13:52	CMR
3,3-Dichlorobenzidine	ND	10	µg/L	1		SW-846 8270D	1/23/13	1/24/13 13:52	CMR
2,4-Dichlorophenol	ND	10	µg/L	1		SW-846 8270D	1/23/13	1/24/13 13:52	CMR
Diethylphthalate	ND	10	µg/L	1		SW-846 8270D	1/23/13	1/24/13 13:52	CMR
2,4-Dimethylphenol	ND	10	µg/L	1		SW-846 8270D	1/23/13	1/24/13 13:52	CMR
Dimethylphthalate	ND	10	µg/L	1		SW-846 8270D	1/23/13	1/24/13 13:52	CMR
2,4-Dinitrophenol	ND	10	µg/L	1		SW-846 8270D	1/23/13	1/24/13 13:52	CMR
2,4-Dinitrotoluene	ND	10	µg/L	1		SW-846 8270D	1/23/13	1/24/13 13:52	CMR
2,6-Dinitrotoluene	ND	10	µg/L	1		SW-846 8270D	1/23/13	1/24/13 13:52	CMR
Di-n-octylphthalate	ND	10	µg/L	1		SW-846 8270D	1/23/13	1/24/13 13:52	CMR
1,2-Diphenylhydrazine (as Azobenzene)	ND	10	µg/L	1		SW-846 8270D	1/23/13	1/24/13 13:52	CMR
Fluoranthene	ND	5.0	µg/L	1		SW-846 8270D	1/23/13	1/24/13 13:52	CMR
Fluorene	ND	5.0	µg/L	1		SW-846 8270D	1/23/13	1/24/13 13:52	CMR
Hexachlorobenzene	ND	10	µg/L	1		SW-846 8270D	1/23/13	1/24/13 13:52	CMR
Hexachlorobutadiene	ND	10	µg/L	1		SW-846 8270D	1/23/13	1/24/13 13:52	CMR
Hexachloroethane	ND	10	µg/L	1		SW-846 8270D	1/23/13	1/24/13 13:52	CMR
Indeno(1,2,3-cd)pyrene	ND	5.0	µg/L	1		SW-846 8270D	1/23/13	1/24/13 13:52	CMR
Isophorone	ND	10	µg/L	1		SW-846 8270D	1/23/13	1/24/13 13:52	CMR
2-Methylnaphthalene	ND	5.0	µg/L	1		SW-846 8270D	1/23/13	1/24/13 13:52	CMR

Project Location: 4-21606

Sample Description: NOB110-GW-011713

Work Order: 13A0480

Date Received: 1/18/2013

Field Sample #: D05300

Sampled: 1/17/2013 10:20

Sample ID: 13A0480-04

Sample Matrix: Ground Water

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
2-Methylphenol	ND	10	µg/L	1		SW-846 8270D	1/23/13	1/24/13 13:52	CMR
3/4-Methylphenol	12	10	µg/L	1		SW-846 8270D	1/23/13	1/24/13 13:52	CMR
Naphthalene	ND	5.0	µg/L	1		SW-846 8270D	1/23/13	1/24/13 13:52	CMR
Nitrobenzene	ND	10	µg/L	1		SW-846 8270D	1/23/13	1/24/13 13:52	CMR
2-Nitrophenol	ND	10	µg/L	1		SW-846 8270D	1/23/13	1/24/13 13:52	CMR
4-Nitrophenol	ND	10	µg/L	1	V-05	SW-846 8270D	1/23/13	1/24/13 13:52	CMR
Pentachlorophenol	ND	10	µg/L	1		SW-846 8270D	1/23/13	1/24/13 13:52	CMR
Phenanthrene	ND	5.0	µg/L	1		SW-846 8270D	1/23/13	1/24/13 13:52	CMR
Phenol	ND	10	µg/L	1		SW-846 8270D	1/23/13	1/24/13 13:52	CMR
Pyrene	ND	5.0	µg/L	1		SW-846 8270D	1/23/13	1/24/13 13:52	CMR
1,2,4-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8270D	1/23/13	1/24/13 13:52	CMR
2,4,5-Trichlorophenol	ND	10	µg/L	1		SW-846 8270D	1/23/13	1/24/13 13:52	CMR
2,4,6-Trichlorophenol	ND	10	µg/L	1		SW-846 8270D	1/23/13	1/24/13 13:52	CMR
Surrogates	% Recovery	Recovery Limits			Flag				
2-Fluorophenol	58.3	15-110						1/24/13 13:52	
Phenol-d6	38.2	15-110						1/24/13 13:52	
Nitrobenzene-d5	90.3	30-130						1/24/13 13:52	
2-Fluorobiphenyl	102	30-130						1/24/13 13:52	
2,4,6-Tribromophenol	144 *	15-110			S-07			1/24/13 13:52	
Terphenyl-d14	130	30-130						1/24/13 13:52	

Project Location: 4-21606

Sample Description: NOB110-GW-011713

Work Order: 13A0480

Date Received: 1/18/2013

Field Sample #: D05300

Sampled: 1/17/2013 10:20

Sample ID: 13A0480-04

Sample Matrix: Ground Water

Polychlorinated Biphenyls By GC/ECD

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.20	µg/L	1		SW-846 8082A	1/24/13	1/25/13 11:21	JMB
Aroclor-1221 [1]	ND	0.20	µg/L	1		SW-846 8082A	1/24/13	1/25/13 11:21	JMB
Aroclor-1232 [1]	ND	0.20	µg/L	1		SW-846 8082A	1/24/13	1/25/13 11:21	JMB
Aroclor-1242 [1]	ND	0.20	µg/L	1		SW-846 8082A	1/24/13	1/25/13 11:21	JMB
Aroclor-1248 [1]	ND	0.20	µg/L	1		SW-846 8082A	1/24/13	1/25/13 11:21	JMB
Aroclor-1254 [1]	ND	0.20	µg/L	1		SW-846 8082A	1/24/13	1/25/13 11:21	JMB
Aroclor-1260 [1]	ND	0.20	µg/L	1		SW-846 8082A	1/24/13	1/25/13 11:21	JMB
Aroclor-1262 [1]	ND	0.20	µg/L	1		SW-846 8082A	1/24/13	1/25/13 11:21	JMB
Aroclor-1268 [1]	ND	0.20	µg/L	1		SW-846 8082A	1/24/13	1/25/13 11:21	JMB
Surrogates	% Recovery	Recovery Limits	Flag						
Decachlorobiphenyl [1]	68.8	30-150							
Decachlorobiphenyl [2]	73.0	30-150							
Tetrachloro-m-xylene [1]	84.7	30-150							
Tetrachloro-m-xylene [2]	97.2	30-150							

Project Location: 4-21606

Sample Description: NOB110-GW-011713

Work Order: 13A0480

Date Received: 1/18/2013

Field Sample #: D05300

Sampled: 1/17/2013 10:20

Sample ID: 13A0480-04

Sample Matrix: Ground Water

Petrolium Hydrocarbons Analyses - EPH

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
C9-C18 Aliphatics	ND	100	µg/L	1		MADEP-EPH-04-1.1	1/22/13	1/24/13 18:23	SCS
C19-C36 Aliphatics	ND	100	µg/L	1		MADEP-EPH-04-1.1	1/22/13	1/24/13 18:23	SCS
Unadjusted C11-C22 Aromatics	ND	100	µg/L	1		MADEP-EPH-04-1.1	1/22/13	1/24/13 18:23	SCS
C11-C22 Aromatics	ND	100	µg/L	1		MADEP-EPH-04-1.1	1/22/13	1/24/13 18:23	SCS
Acenaphthene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	1/22/13	1/24/13 18:23	SCS
Acenaphthylene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	1/22/13	1/24/13 18:23	SCS
Anthracene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	1/22/13	1/24/13 18:23	SCS
Benzo(a)anthracene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	1/22/13	1/24/13 18:23	SCS
Benzo(a)pyrene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	1/22/13	1/24/13 18:23	SCS
Benzo(b)fluoranthene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	1/22/13	1/24/13 18:23	SCS
Benzo(g,h,i)perylene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	1/22/13	1/24/13 18:23	SCS
Benzo(k)fluoranthene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	1/22/13	1/24/13 18:23	SCS
Chrysene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	1/22/13	1/24/13 18:23	SCS
Dibenz(a,h)anthracene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	1/22/13	1/24/13 18:23	SCS
Fluoranthene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	1/22/13	1/24/13 18:23	SCS
Fluorene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	1/22/13	1/24/13 18:23	SCS
Indeno(1,2,3-cd)pyrene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	1/22/13	1/24/13 18:23	SCS
2-Methylnaphthalene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	1/22/13	1/24/13 18:23	SCS
Naphthalene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	1/22/13	1/24/13 18:23	SCS
Phenanthrene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	1/22/13	1/24/13 18:23	SCS
Pyrene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	1/22/13	1/24/13 18:23	SCS
Surrogates	% Recovery	Recovery Limits	Flag						
Chlorooctadecane (COD)	72.1	40-140							
o-Terphenyl (OTP)	68.6	40-140							
2-Bromonaphthalene	70.6	40-140							
2-Fluorobiphenyl	78.7	40-140							

Project Location: 4-21606

Sample Description: NOB110-GW-011713

Work Order: 13A0480

Date Received: 1/18/2013

Field Sample #: D05300

Sampled: 1/17/2013 10:20

Sample ID: 13A0480-04

Sample Matrix: Ground Water

Petroleum Hydrocarbons Analyses - VPH

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Unadjusted C5-C8 Aliphatics	2100	100	µg/L	1		MADEP-VPH-04-1.1	1/21/13	1/21/13 16:41	EEH
C5-C8 Aliphatics	1300	100	µg/L	1		MADEP-VPH-04-1.1	1/21/13	1/21/13 16:41	EEH
Unadjusted C9-C12 Aliphatics	ND	100	µg/L	1		MADEP-VPH-04-1.1	1/21/13	1/21/13 16:41	EEH
C9-C12 Aliphatics	ND	100	µg/L	1		MADEP-VPH-04-1.1	1/21/13	1/21/13 16:41	EEH
C9-C10 Aromatics	ND	100	µg/L	1		MADEP-VPH-04-1.1	1/21/13	1/21/13 16:41	EEH
Benzene	ND	1.0	µg/L	1		MADEP-VPH-04-1.1	1/21/13	1/21/13 16:41	EEH
Ethylbenzene	1.9	1.0	µg/L	1		MADEP-VPH-04-1.1	1/21/13	1/21/13 16:41	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		MADEP-VPH-04-1.1	1/21/13	1/21/13 16:41	EEH
Naphthalene	ND	5.0	µg/L	1		MADEP-VPH-04-1.1	1/21/13	1/21/13 16:41	EEH
Toluene	730	1.0	µg/L	1		MADEP-VPH-04-1.1	1/21/13	1/21/13 16:41	EEH
m+p Xylene	2.6	2.0	µg/L	1		MADEP-VPH-04-1.1	1/21/13	1/21/13 16:41	EEH
o-Xylene	ND	1.0	µg/L	1		MADEP-VPH-04-1.1	1/21/13	1/21/13 16:41	EEH
Surrogates	% Recovery	Recovery Limits	Flag						
2,5-Dibromotoluene (FID)	96.2	70-130							
2,5-Dibromotoluene (PID)	85.1	70-130							

Project Location: 4-21606

Sample Description: NOB110-GW-011713

Work Order: 13A0480

Date Received: 1/18/2013

Field Sample #: D05300

Sampled: 1/17/2013 10:20

Sample ID: 13A0480-04

Sample Matrix: Ground Water

Metals Analyses (Dissolved)

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Antimony	ND	5.0	µg/L	5		SW-846 6020A	1/19/13	1/21/13 11:46	KSH
Arsenic	2.6	2.0	µg/L	5		SW-846 6020A	1/19/13	1/21/13 11:46	KSH
Barium	ND	50	µg/L	5		SW-846 6020A	1/19/13	1/21/13 11:46	KSH
Beryllium	ND	2.0	µg/L	5		SW-846 6020A	1/19/13	1/21/13 15:23	KSH
Cadmium	ND	2.5	µg/L	5		SW-846 6020A	1/19/13	1/21/13 11:46	KSH
Chromium	ND	5.0	µg/L	5		SW-846 6020A	1/19/13	1/21/13 11:46	KSH
Copper	ND	25	µg/L	5		SW-846 6020A	1/19/13	1/21/13 11:46	KSH
Lead	ND	5.0	µg/L	5		SW-846 6020A	1/19/13	1/21/13 11:46	KSH
Mercury	ND	0.00010	mg/L	1		SW-846 7470A	1/19/13	1/21/13 11:38	SAJ
Nickel	ND	25	µg/L	5		SW-846 6020A	1/19/13	1/21/13 11:46	KSH
Selenium	ND	25	µg/L	5		SW-846 6020A	1/19/13	1/21/13 11:46	KSH
Silver	ND	2.5	µg/L	5		SW-846 6020A	1/19/13	1/21/13 11:46	KSH
Thallium	ND	1.0	µg/L	5		SW-846 6020A	1/19/13	1/21/13 11:46	KSH
Vanadium	ND	25	µg/L	5		SW-846 6020A	1/19/13	1/21/13 11:46	KSH
Zinc	ND	50	µg/L	5		SW-846 6020A	1/19/13	1/21/13 11:46	KSH

Project Location: 4-21606

Sample Description: NOB106-GW-011713

Work Order: 13A0480

Date Received: 1/18/2013

Field Sample #: D05301

Sampled: 1/17/2013 08:55

Sample ID: 13A0480-05

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	10	µg/L	1	V-05	SW-846 8260C	1/21/13	1/22/13 9:28	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L	1		SW-846 8260C	1/21/13	1/22/13 9:28	MFF
Benzene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 9:28	MFF
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 9:28	MFF
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 9:28	MFF
Bromodichloromethane	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 9:28	MFF
Bromoform	ND	5.0	µg/L	1	RL-07	SW-846 8260C	1/21/13	1/22/13 9:28	MFF
Bromomethane	ND	2.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 9:28	MFF
2-Butanone (MEK)	ND	10	µg/L	1		SW-846 8260C	1/21/13	1/22/13 9:28	MFF
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 9:28	MFF
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 9:28	MFF
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 9:28	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260C	1/21/13	1/22/13 9:28	MFF
Carbon Disulfide	ND	5.0	µg/L	1	RL-07	SW-846 8260C	1/21/13	1/22/13 9:28	MFF
Carbon Tetrachloride	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 9:28	MFF
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 9:28	MFF
Chlorodibromomethane	ND	2.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 9:28	MFF
Chloroethane	ND	2.0	µg/L	1	V-05	SW-846 8260C	1/21/13	1/22/13 9:28	MFF
Chloroform	ND	2.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 9:28	MFF
Chloromethane	ND	2.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 9:28	MFF
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 9:28	MFF
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 9:28	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1	RL-07	SW-846 8260C	1/21/13	1/22/13 9:28	MFF
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260C	1/21/13	1/22/13 9:28	MFF
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 9:28	MFF
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 9:28	MFF
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 9:28	MFF
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 9:28	MFF
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 9:28	MFF
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 9:28	MFF
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 9:28	MFF
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 9:28	MFF
cis-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 9:28	MFF
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 9:28	MFF
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 9:28	MFF
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260C	1/21/13	1/22/13 9:28	MFF
2,2-Dichloropropane	ND	1.0	µg/L	1	V-05	SW-846 8260C	1/21/13	1/22/13 9:28	MFF
1,1-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	1/21/13	1/22/13 9:28	MFF
cis-1,3-Dichloropropene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 9:28	MFF
trans-1,3-Dichloropropene	ND	2.0	µg/L	1	V-05	SW-846 8260C	1/21/13	1/22/13 9:28	MFF
Diethyl Ether	ND	2.0	µg/L	1	V-05	SW-846 8260C	1/21/13	1/22/13 9:28	MFF
Diisopropyl Ether (DIPE)	ND	0.50	µg/L	1		SW-846 8260C	1/21/13	1/22/13 9:28	MFF
1,4-Dioxane	ND	50	µg/L	1	V-05, V-16	SW-846 8260C	1/21/13	1/22/13 9:28	MFF
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 9:28	MFF

Project Location: 4-21606

Sample Description: NOB106-GW-011713

Work Order: 13A0480

Date Received: 1/18/2013

Field Sample #: D05301

Sampled: 1/17/2013 08:55

Sample ID: 13A0480-05

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Hexachlorobutadiene	ND	0.50	µg/L	1		SW-846 8260C	1/21/13	1/22/13 9:28	MFF
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260C	1/21/13	1/22/13 9:28	MFF
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 9:28	MFF
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 9:28	MFF
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 9:28	MFF
Methylene Chloride	ND	5.0	µg/L	1	RL-07	SW-846 8260C	1/21/13	1/22/13 9:28	MFF
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260C	1/21/13	1/22/13 9:28	MFF
Naphthalene	ND	5.0	µg/L	1	R-05, RL-07, V-05	SW-846 8260C	1/21/13	1/22/13 9:28	MFF
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 9:28	MFF
Styrene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 9:28	MFF
1,1,1,2-Tetrachloroethane	ND	2.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 9:28	MFF
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260C	1/21/13	1/22/13 9:28	MFF
Tetrachloroethylene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 9:28	MFF
Tetrahydrofuran	ND	2.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 9:28	MFF
Toluene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 9:28	MFF
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1	R-05, RL-07, V-05	SW-846 8260C	1/21/13	1/22/13 9:28	MFF
1,2,4-Trichlorobenzene	ND	5.0	µg/L	1	R-05, RL-07, V-05	SW-846 8260C	1/21/13	1/22/13 9:28	MFF
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 9:28	MFF
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 9:28	MFF
Trichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 9:28	MFF
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 9:28	MFF
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 9:28	MFF
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 9:28	MFF
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 9:28	MFF
Vinyl Chloride	ND	2.0	µg/L	1	V-05	SW-846 8260C	1/21/13	1/22/13 9:28	MFF
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 9:28	MFF
o-Xylene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 9:28	MFF
Surrogates	% Recovery	Recovery Limits	Flag						
1,2-Dichloroethane-d4	95.7	70-130							
Toluene-d8	97.1	70-130							
4-Bromofluorobenzene	99.1	70-130							

Project Location: 4-21606

Sample Description: NOB106-GW-011713

Work Order: 13A0480

Date Received: 1/18/2013

Field Sample #: D05301

Sampled: 1/17/2013 08:55

Sample ID: 13A0480-05

Sample Matrix: Ground Water

Polychlorinated Biphenyls By GC/ECD

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.20	µg/L	1		SW-846 8082A	1/21/13	1/24/13 11:54	PJG
Aroclor-1221 [1]	ND	0.20	µg/L	1		SW-846 8082A	1/21/13	1/24/13 11:54	PJG
Aroclor-1232 [1]	ND	0.20	µg/L	1		SW-846 8082A	1/21/13	1/24/13 11:54	PJG
Aroclor-1242 [1]	ND	0.20	µg/L	1		SW-846 8082A	1/21/13	1/24/13 11:54	PJG
Aroclor-1248 [1]	ND	0.20	µg/L	1		SW-846 8082A	1/21/13	1/24/13 11:54	PJG
Aroclor-1254 [1]	ND	0.20	µg/L	1		SW-846 8082A	1/21/13	1/24/13 11:54	PJG
Aroclor-1260 [1]	ND	0.20	µg/L	1		SW-846 8082A	1/21/13	1/24/13 11:54	PJG
Aroclor-1262 [1]	ND	0.20	µg/L	1		SW-846 8082A	1/21/13	1/24/13 11:54	PJG
Aroclor-1268 [1]	ND	0.20	µg/L	1		SW-846 8082A	1/21/13	1/24/13 11:54	PJG
Surrogates	% Recovery	Recovery Limits	Flag						
Decachlorobiphenyl [1]	78.4	30-150							
Decachlorobiphenyl [2]	80.6	30-150							
Tetrachloro-m-xylene [1]	82.5	30-150							
Tetrachloro-m-xylene [2]	84.3	30-150							

Project Location: 4-21606

Sample Description: NOB106-GW-011713

Work Order: 13A0480

Date Received: 1/18/2013

Field Sample #: D05301

Sampled: 1/17/2013 08:55

Sample ID: 13A0480-05

Sample Matrix: Ground Water

Petrolium Hydrocarbons Analyses - EPH

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
C9-C18 Aliphatics	ND	100	µg/L	1		MADEP-EPH-04-1.1	1/22/13	1/24/13 18:44	SCS
C19-C36 Aliphatics	ND	100	µg/L	1		MADEP-EPH-04-1.1	1/22/13	1/24/13 18:44	SCS
Unadjusted C11-C22 Aromatics	ND	100	µg/L	1		MADEP-EPH-04-1.1	1/22/13	1/24/13 18:44	SCS
C11-C22 Aromatics	ND	100	µg/L	1		MADEP-EPH-04-1.1	1/22/13	1/24/13 18:44	SCS
Acenaphthene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	1/22/13	1/24/13 18:44	SCS
Acenaphthylene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	1/22/13	1/24/13 18:44	SCS
Anthracene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	1/22/13	1/24/13 18:44	SCS
Benzo(a)anthracene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	1/22/13	1/24/13 18:44	SCS
Benzo(a)pyrene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	1/22/13	1/24/13 18:44	SCS
Benzo(b)fluoranthene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	1/22/13	1/24/13 18:44	SCS
Benzo(g,h,i)perylene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	1/22/13	1/24/13 18:44	SCS
Benzo(k)fluoranthene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	1/22/13	1/24/13 18:44	SCS
Chrysene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	1/22/13	1/24/13 18:44	SCS
Dibenz(a,h)anthracene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	1/22/13	1/24/13 18:44	SCS
Fluoranthene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	1/22/13	1/24/13 18:44	SCS
Fluorene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	1/22/13	1/24/13 18:44	SCS
Indeno(1,2,3-cd)pyrene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	1/22/13	1/24/13 18:44	SCS
2-Methylnaphthalene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	1/22/13	1/24/13 18:44	SCS
Naphthalene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	1/22/13	1/24/13 18:44	SCS
Phenanthrene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	1/22/13	1/24/13 18:44	SCS
Pyrene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	1/22/13	1/24/13 18:44	SCS
Surrogates	% Recovery	Recovery Limits	Flag						
Chlorooctadecane (COD)	59.5	40-140							
o-Terphenyl (OTP)	65.7	40-140							
2-Bromonaphthalene	73.1	40-140							
2-Fluorobiphenyl	76.7	40-140							

Project Location: 4-21606

Sample Description: NOB106-GW-011713

Work Order: 13A0480

Date Received: 1/18/2013

Field Sample #: D05301

Sampled: 1/17/2013 08:55

Sample ID: 13A0480-05

Sample Matrix: Ground Water

Petroleum Hydrocarbons Analyses - VPH

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Unadjusted C5-C8 Aliphatics	ND	100	µg/L	1		MADEP-VPH-04-1.1	1/21/13	1/21/13 17:17	EEH
C5-C8 Aliphatics	ND	100	µg/L	1		MADEP-VPH-04-1.1	1/21/13	1/21/13 17:17	EEH
Unadjusted C9-C12 Aliphatics	ND	100	µg/L	1		MADEP-VPH-04-1.1	1/21/13	1/21/13 17:17	EEH
C9-C12 Aliphatics	ND	100	µg/L	1		MADEP-VPH-04-1.1	1/21/13	1/21/13 17:17	EEH
C9-C10 Aromatics	ND	100	µg/L	1		MADEP-VPH-04-1.1	1/21/13	1/21/13 17:17	EEH
Benzene	ND	1.0	µg/L	1		MADEP-VPH-04-1.1	1/21/13	1/21/13 17:17	EEH
Ethylbenzene	ND	1.0	µg/L	1		MADEP-VPH-04-1.1	1/21/13	1/21/13 17:17	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		MADEP-VPH-04-1.1	1/21/13	1/21/13 17:17	EEH
Naphthalene	ND	5.0	µg/L	1		MADEP-VPH-04-1.1	1/21/13	1/21/13 17:17	EEH
Toluene	ND	1.0	µg/L	1		MADEP-VPH-04-1.1	1/21/13	1/21/13 17:17	EEH
m+p Xylene	ND	2.0	µg/L	1		MADEP-VPH-04-1.1	1/21/13	1/21/13 17:17	EEH
o-Xylene	ND	1.0	µg/L	1		MADEP-VPH-04-1.1	1/21/13	1/21/13 17:17	EEH
Surrogates	% Recovery	Recovery Limits	Flag						
2,5-Dibromotoluene (FID)	84.7	70-130							
2,5-Dibromotoluene (PID)	76.7	70-130							

Project Location: 4-21606

Sample Description: NOB106-GW-011713

Work Order: 13A0480

Date Received: 1/18/2013

Field Sample #: D05301

Sampled: 1/17/2013 08:55

Sample ID: 13A0480-05

Sample Matrix: Ground Water

Metals Analyses (Dissolved)

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Antimony	ND	5.0	µg/L	5		SW-846 6020A	1/19/13	1/21/13 12:10	KSH
Arsenic	ND	2.0	µg/L	5		SW-846 6020A	1/19/13	1/21/13 12:10	KSH
Barium	ND	50	µg/L	5		SW-846 6020A	1/19/13	1/21/13 12:10	KSH
Beryllium	ND	2.0	µg/L	5		SW-846 6020A	1/19/13	1/21/13 12:10	KSH
Cadmium	ND	2.5	µg/L	5		SW-846 6020A	1/19/13	1/21/13 12:10	KSH
Chromium	ND	5.0	µg/L	5		SW-846 6020A	1/19/13	1/21/13 12:10	KSH
Copper	ND	25	µg/L	5		SW-846 6020A	1/19/13	1/21/13 12:10	KSH
Lead	ND	5.0	µg/L	5		SW-846 6020A	1/19/13	1/21/13 12:10	KSH
Mercury	ND	0.00010	mg/L	1		SW-846 7470A	1/19/13	1/21/13 11:39	SAJ
Nickel	ND	25	µg/L	5		SW-846 6020A	1/19/13	1/21/13 12:10	KSH
Selenium	ND	25	µg/L	5		SW-846 6020A	1/19/13	1/21/13 12:10	KSH
Silver	ND	2.5	µg/L	5		SW-846 6020A	1/19/13	1/21/13 12:10	KSH
Thallium	ND	1.0	µg/L	5		SW-846 6020A	1/19/13	1/21/13 12:10	KSH
Vanadium	ND	25	µg/L	5		SW-846 6020A	1/19/13	1/21/13 12:10	KSH
Zinc	ND	50	µg/L	5		SW-846 6020A	1/19/13	1/21/13 12:10	KSH

Project Location: 4-21606

Sample Description: NOB-GW-DUP-01

Work Order: 13A0480

Date Received: 1/18/2013

Field Sample #: D05302

Sampled: 1/17/2013 10:50

Sample ID: 13A0480-06

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	10	µg/L	1	V-05	SW-846 8260C	1/21/13	1/23/13 13:34	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L	1		SW-846 8260C	1/21/13	1/23/13 13:34	MFF
Benzene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/23/13 13:34	MFF
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/23/13 13:34	MFF
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/23/13 13:34	MFF
Bromodichloromethane	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/23/13 13:34	MFF
Bromoform	ND	5.0	µg/L	1	RL-07	SW-846 8260C	1/21/13	1/23/13 13:34	MFF
Bromomethane	ND	2.0	µg/L	1	L-04, R-05, V-05	SW-846 8260C	1/21/13	1/23/13 13:34	MFF
2-Butanone (MEK)	ND	10	µg/L	1		SW-846 8260C	1/21/13	1/23/13 13:34	MFF
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/23/13 13:34	MFF
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/23/13 13:34	MFF
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/23/13 13:34	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260C	1/21/13	1/23/13 13:34	MFF
Carbon Disulfide	ND	5.0	µg/L	1	RL-07	SW-846 8260C	1/21/13	1/23/13 13:34	MFF
Carbon Tetrachloride	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/23/13 13:34	MFF
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/23/13 13:34	MFF
Chlorodibromomethane	ND	2.0	µg/L	1		SW-846 8260C	1/21/13	1/23/13 13:34	MFF
Chloroethane	ND	2.0	µg/L	1		SW-846 8260C	1/21/13	1/23/13 13:34	MFF
Chloroform	ND	2.0	µg/L	1		SW-846 8260C	1/21/13	1/23/13 13:34	MFF
Chloromethane	ND	2.0	µg/L	1		SW-846 8260C	1/21/13	1/23/13 13:34	MFF
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/23/13 13:34	MFF
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/23/13 13:34	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1	RL-07	SW-846 8260C	1/21/13	1/23/13 13:34	MFF
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260C	1/21/13	1/23/13 13:34	MFF
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/23/13 13:34	MFF
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/23/13 13:34	MFF
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/23/13 13:34	MFF
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/23/13 13:34	MFF
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1		SW-846 8260C	1/21/13	1/23/13 13:34	MFF
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/23/13 13:34	MFF
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/23/13 13:34	MFF
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/23/13 13:34	MFF
cis-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/23/13 13:34	MFF
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1	R-05	SW-846 8260C	1/21/13	1/23/13 13:34	MFF
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/23/13 13:34	MFF
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260C	1/21/13	1/23/13 13:34	MFF
2,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/23/13 13:34	MFF
1,1-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	1/21/13	1/23/13 13:34	MFF
cis-1,3-Dichloropropene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/23/13 13:34	MFF
trans-1,3-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260C	1/21/13	1/23/13 13:34	MFF
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260C	1/21/13	1/23/13 13:34	MFF
Diisopropyl Ether (DIPE)	ND	0.50	µg/L	1		SW-846 8260C	1/21/13	1/23/13 13:34	MFF
1,4-Dioxane	ND	50	µg/L	1	V-16	SW-846 8260C	1/21/13	1/23/13 13:34	MFF
Ethylbenzene	1.6	1.0	µg/L	1		SW-846 8260C	1/21/13	1/23/13 13:34	MFF

Project Location: 4-21606

Sample Description: NOB-GW-DUP-01

Work Order: 13A0480

Date Received: 1/18/2013

Field Sample #: D05302

Sampled: 1/17/2013 10:50

Sample ID: 13A0480-06

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Hexachlorobutadiene	ND	0.50	µg/L	1		SW-846 8260C	1/21/13	1/23/13 13:34	MFF
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260C	1/21/13	1/23/13 13:34	MFF
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/23/13 13:34	MFF
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/23/13 13:34	MFF
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/23/13 13:34	MFF
Methylene Chloride	ND	5.0	µg/L	1	R-05, RL-07	SW-846 8260C	1/21/13	1/23/13 13:34	MFF
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260C	1/21/13	1/23/13 13:34	MFF
Naphthalene	ND	5.0	µg/L	1	RL-07, V-05	SW-846 8260C	1/21/13	1/23/13 13:34	MFF
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/23/13 13:34	MFF
Styrene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/23/13 13:34	MFF
1,1,1,2-Tetrachloroethane	ND	2.0	µg/L	1		SW-846 8260C	1/21/13	1/23/13 13:34	MFF
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260C	1/21/13	1/23/13 13:34	MFF
Tetrachloroethylene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/23/13 13:34	MFF
Tetrahydrofuran	ND	2.0	µg/L	1		SW-846 8260C	1/21/13	1/23/13 13:34	MFF
Toluene	530	10	µg/L	10		SW-846 8260C	1/24/13	1/24/13 13:19	LBD
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1	RL-07, V-05	SW-846 8260C	1/21/13	1/23/13 13:34	MFF
1,2,4-Trichlorobenzene	ND	5.0	µg/L	1	RL-07, V-05	SW-846 8260C	1/21/13	1/23/13 13:34	MFF
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/23/13 13:34	MFF
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/23/13 13:34	MFF
Trichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/23/13 13:34	MFF
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260C	1/21/13	1/23/13 13:34	MFF
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260C	1/21/13	1/23/13 13:34	MFF
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/23/13 13:34	MFF
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/23/13 13:34	MFF
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260C	1/21/13	1/23/13 13:34	MFF
m+p Xylene	2.1	2.0	µg/L	1		SW-846 8260C	1/21/13	1/23/13 13:34	MFF
o-Xylene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/23/13 13:34	MFF
Surrogates	% Recovery	Recovery Limits	Flag						
1,2-Dichloroethane-d4	95.8	70-130							
1,2-Dichloroethane-d4	89.3	70-130							
Toluene-d8	98.0	70-130							
Toluene-d8	100	70-130							
4-Bromofluorobenzene	100	70-130							
4-Bromofluorobenzene	104	70-130							

Project Location: 4-21606

Sample Description: NOB-GW-DUP-01

Work Order: 13A0480

Date Received: 1/18/2013

Field Sample #: D05302

Sampled: 1/17/2013 10:50

Sample ID: 13A0480-06

Sample Matrix: Ground Water

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Acenaphthene	ND	5.0	µg/L	1		SW-846 8270D	1/23/13	1/24/13 14:25	CMR
Acenaphthylene	ND	5.0	µg/L	1		SW-846 8270D	1/23/13	1/24/13 14:25	CMR
Acetophenone	ND	10	µg/L	1		SW-846 8270D	1/23/13	1/24/13 14:25	CMR
Aniline	ND	5.0	µg/L	1		SW-846 8270D	1/23/13	1/24/13 14:25	CMR
Anthracene	ND	5.0	µg/L	1		SW-846 8270D	1/23/13	1/24/13 14:25	CMR
Benzo(a)anthracene	ND	5.0	µg/L	1		SW-846 8270D	1/23/13	1/24/13 14:25	CMR
Benzo(a)pyrene	ND	5.0	µg/L	1		SW-846 8270D	1/23/13	1/24/13 14:25	CMR
Benzo(b)fluoranthene	ND	5.0	µg/L	1		SW-846 8270D	1/23/13	1/24/13 14:25	CMR
Benzo(g,h,i)perylene	ND	5.0	µg/L	1		SW-846 8270D	1/23/13	1/24/13 14:25	CMR
Benzo(k)fluoranthene	ND	5.0	µg/L	1		SW-846 8270D	1/23/13	1/24/13 14:25	CMR
Bis(2-chloroethoxy)methane	ND	10	µg/L	1		SW-846 8270D	1/23/13	1/24/13 14:25	CMR
Bis(2-chloroethyl)ether	ND	10	µg/L	1		SW-846 8270D	1/23/13	1/24/13 14:25	CMR
Bis(2-chloroisopropyl)ether	ND	10	µg/L	1	V-05	SW-846 8270D	1/23/13	1/24/13 14:25	CMR
Bis(2-Ethylhexyl)phthalate	ND	10	µg/L	1		SW-846 8270D	1/23/13	1/24/13 14:25	CMR
4-Bromophenylphenylether	ND	10	µg/L	1		SW-846 8270D	1/23/13	1/24/13 14:25	CMR
Butylbenzylphthalate	ND	10	µg/L	1		SW-846 8270D	1/23/13	1/24/13 14:25	CMR
4-Chloroaniline	ND	10	µg/L	1		SW-846 8270D	1/23/13	1/24/13 14:25	CMR
2-Chloronaphthalene	ND	10	µg/L	1		SW-846 8270D	1/23/13	1/24/13 14:25	CMR
2-Chlorophenol	ND	10	µg/L	1		SW-846 8270D	1/23/13	1/24/13 14:25	CMR
Chrysene	ND	5.0	µg/L	1		SW-846 8270D	1/23/13	1/24/13 14:25	CMR
Dibenz(a,h)anthracene	ND	5.0	µg/L	1		SW-846 8270D	1/23/13	1/24/13 14:25	CMR
Dibenzofuran	ND	5.0	µg/L	1		SW-846 8270D	1/23/13	1/24/13 14:25	CMR
Di-n-butylphthalate	ND	10	µg/L	1		SW-846 8270D	1/23/13	1/24/13 14:25	CMR
1,2-Dichlorobenzene	ND	5.0	µg/L	1		SW-846 8270D	1/23/13	1/24/13 14:25	CMR
1,3-Dichlorobenzene	ND	5.0	µg/L	1		SW-846 8270D	1/23/13	1/24/13 14:25	CMR
1,4-Dichlorobenzene	ND	5.0	µg/L	1		SW-846 8270D	1/23/13	1/24/13 14:25	CMR
3,3-Dichlorobenzidine	ND	10	µg/L	1		SW-846 8270D	1/23/13	1/24/13 14:25	CMR
2,4-Dichlorophenol	ND	10	µg/L	1		SW-846 8270D	1/23/13	1/24/13 14:25	CMR
Diethylphthalate	ND	10	µg/L	1		SW-846 8270D	1/23/13	1/24/13 14:25	CMR
2,4-Dimethylphenol	ND	10	µg/L	1		SW-846 8270D	1/23/13	1/24/13 14:25	CMR
Dimethylphthalate	ND	10	µg/L	1		SW-846 8270D	1/23/13	1/24/13 14:25	CMR
2,4-Dinitrophenol	ND	10	µg/L	1		SW-846 8270D	1/23/13	1/24/13 14:25	CMR
2,4-Dinitrotoluene	ND	10	µg/L	1		SW-846 8270D	1/23/13	1/24/13 14:25	CMR
2,6-Dinitrotoluene	ND	10	µg/L	1		SW-846 8270D	1/23/13	1/24/13 14:25	CMR
Di-n-octylphthalate	ND	10	µg/L	1		SW-846 8270D	1/23/13	1/24/13 14:25	CMR
1,2-Diphenylhydrazine (as Azobenzene)	ND	10	µg/L	1		SW-846 8270D	1/23/13	1/24/13 14:25	CMR
Fluoranthene	ND	5.0	µg/L	1		SW-846 8270D	1/23/13	1/24/13 14:25	CMR
Fluorene	ND	5.0	µg/L	1		SW-846 8270D	1/23/13	1/24/13 14:25	CMR
Hexachlorobenzene	ND	10	µg/L	1		SW-846 8270D	1/23/13	1/24/13 14:25	CMR
Hexachlorobutadiene	ND	10	µg/L	1		SW-846 8270D	1/23/13	1/24/13 14:25	CMR
Hexachloroethane	ND	10	µg/L	1		SW-846 8270D	1/23/13	1/24/13 14:25	CMR
Indeno(1,2,3-cd)pyrene	ND	5.0	µg/L	1		SW-846 8270D	1/23/13	1/24/13 14:25	CMR
Isophorone	ND	10	µg/L	1		SW-846 8270D	1/23/13	1/24/13 14:25	CMR
2-Methylnaphthalene	ND	5.0	µg/L	1		SW-846 8270D	1/23/13	1/24/13 14:25	CMR

Project Location: 4-21606

Sample Description: NOB-GW-DUP-01

Work Order: 13A0480

Date Received: 1/18/2013

Field Sample #: D05302

Sampled: 1/17/2013 10:50

Sample ID: 13A0480-06

Sample Matrix: Ground Water

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
2-Methylphenol	ND	10	µg/L	1		SW-846 8270D	1/23/13	1/24/13 14:25	CMR
3/4-Methylphenol	ND	10	µg/L	1		SW-846 8270D	1/23/13	1/24/13 14:25	CMR
Naphthalene	ND	5.0	µg/L	1		SW-846 8270D	1/23/13	1/24/13 14:25	CMR
Nitrobenzene	ND	10	µg/L	1		SW-846 8270D	1/23/13	1/24/13 14:25	CMR
2-Nitrophenol	ND	10	µg/L	1		SW-846 8270D	1/23/13	1/24/13 14:25	CMR
4-Nitrophenol	ND	10	µg/L	1	V-05	SW-846 8270D	1/23/13	1/24/13 14:25	CMR
Pentachlorophenol	ND	10	µg/L	1		SW-846 8270D	1/23/13	1/24/13 14:25	CMR
Phenanthrene	ND	5.0	µg/L	1		SW-846 8270D	1/23/13	1/24/13 14:25	CMR
Phenol	ND	10	µg/L	1		SW-846 8270D	1/23/13	1/24/13 14:25	CMR
Pyrene	ND	5.0	µg/L	1		SW-846 8270D	1/23/13	1/24/13 14:25	CMR
1,2,4-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8270D	1/23/13	1/24/13 14:25	CMR
2,4,5-Trichlorophenol	ND	10	µg/L	1		SW-846 8270D	1/23/13	1/24/13 14:25	CMR
2,4,6-Trichlorophenol	ND	10	µg/L	1		SW-846 8270D	1/23/13	1/24/13 14:25	CMR
Surrogates	% Recovery		Recovery Limits		Flag				
2-Fluorophenol	59.9		15-110			1/24/13 14:25			
Phenol-d6	40.0		15-110			1/24/13 14:25			
Nitrobenzene-d5	92.6		30-130			1/24/13 14:25			
2-Fluorobiphenyl	103		30-130			1/24/13 14:25			
2,4,6-Tribromophenol	145 *		15-110		S-07	1/24/13 14:25			
Terphenyl-d14	122		30-130			1/24/13 14:25			

Project Location: 4-21606

Sample Description: NOB-GW-DUP-01

Work Order: 13A0480

Date Received: 1/18/2013

Field Sample #: D05302

Sampled: 1/17/2013 10:50

Sample ID: 13A0480-06

Sample Matrix: Ground Water

Polychlorinated Biphenyls By GC/ECD

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.20	µg/L	1		SW-846 8082A	1/24/13	1/25/13 11:34	JMB
Aroclor-1221 [1]	ND	0.20	µg/L	1		SW-846 8082A	1/24/13	1/25/13 11:34	JMB
Aroclor-1232 [1]	ND	0.20	µg/L	1		SW-846 8082A	1/24/13	1/25/13 11:34	JMB
Aroclor-1242 [1]	ND	0.20	µg/L	1		SW-846 8082A	1/24/13	1/25/13 11:34	JMB
Aroclor-1248 [1]	ND	0.20	µg/L	1		SW-846 8082A	1/24/13	1/25/13 11:34	JMB
Aroclor-1254 [1]	ND	0.20	µg/L	1		SW-846 8082A	1/24/13	1/25/13 11:34	JMB
Aroclor-1260 [1]	ND	0.20	µg/L	1		SW-846 8082A	1/24/13	1/25/13 11:34	JMB
Aroclor-1262 [1]	ND	0.20	µg/L	1		SW-846 8082A	1/24/13	1/25/13 11:34	JMB
Aroclor-1268 [1]	ND	0.20	µg/L	1		SW-846 8082A	1/24/13	1/25/13 11:34	JMB
Surrogates	% Recovery	Recovery Limits	Flag						
Decachlorobiphenyl [1]	69.7	30-150							
Decachlorobiphenyl [2]	73.8	30-150							
Tetrachloro-m-xylene [1]	80.2	30-150							
Tetrachloro-m-xylene [2]	91.9	30-150							

Project Location: 4-21606

Sample Description: NOB-GW-DUP-01

Work Order: 13A0480

Date Received: 1/18/2013

Field Sample #: D05302

Sampled: 1/17/2013 10:50

Sample ID: 13A0480-06

Sample Matrix: Ground Water

Petrolium Hydrocarbons Analyses - EPH

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
C9-C18 Aliphatics	ND	100	µg/L	1		MADEP-EPH-04-1.1	1/22/13	1/24/13 19:04	SCS
C19-C36 Aliphatics	ND	100	µg/L	1		MADEP-EPH-04-1.1	1/22/13	1/24/13 19:04	SCS
Unadjusted C11-C22 Aromatics	ND	100	µg/L	1		MADEP-EPH-04-1.1	1/22/13	1/24/13 19:04	SCS
C11-C22 Aromatics	ND	100	µg/L	1		MADEP-EPH-04-1.1	1/22/13	1/24/13 19:04	SCS
Acenaphthene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	1/22/13	1/24/13 19:04	SCS
Acenaphthylene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	1/22/13	1/24/13 19:04	SCS
Anthracene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	1/22/13	1/24/13 19:04	SCS
Benzo(a)anthracene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	1/22/13	1/24/13 19:04	SCS
Benzo(a)pyrene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	1/22/13	1/24/13 19:04	SCS
Benzo(b)fluoranthene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	1/22/13	1/24/13 19:04	SCS
Benzo(g,h,i)perylene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	1/22/13	1/24/13 19:04	SCS
Benzo(k)fluoranthene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	1/22/13	1/24/13 19:04	SCS
Chrysene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	1/22/13	1/24/13 19:04	SCS
Dibenz(a,h)anthracene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	1/22/13	1/24/13 19:04	SCS
Fluoranthene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	1/22/13	1/24/13 19:04	SCS
Fluorene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	1/22/13	1/24/13 19:04	SCS
Indeno(1,2,3-cd)pyrene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	1/22/13	1/24/13 19:04	SCS
2-Methylnaphthalene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	1/22/13	1/24/13 19:04	SCS
Naphthalene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	1/22/13	1/24/13 19:04	SCS
Phenanthrene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	1/22/13	1/24/13 19:04	SCS
Pyrene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	1/22/13	1/24/13 19:04	SCS
Surrogates	% Recovery	Recovery Limits	Flag						
Chlorooctadecane (COD)	57.0	40-140							
o-Terphenyl (OTP)	66.8	40-140							
2-Bromonaphthalene	72.6	40-140							
2-Fluorobiphenyl	77.5	40-140							

Project Location: 4-21606

Sample Description: NOB-GW-DUP-01

Work Order: 13A0480

Date Received: 1/18/2013

Field Sample #: D05302

Sampled: 1/17/2013 10:50

Sample ID: 13A0480-06

Sample Matrix: Ground Water

Petroleum Hydrocarbons Analyses - VPH

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Unadjusted C5-C8 Aliphatics	1400	100	µg/L	1		MADEP-VPH-04-1.1	1/21/13	1/21/13 17:53	EEH
C5-C8 Aliphatics	920	100	µg/L	1		MADEP-VPH-04-1.1	1/21/13	1/21/13 17:53	EEH
Unadjusted C9-C12 Aliphatics	ND	100	µg/L	1		MADEP-VPH-04-1.1	1/21/13	1/21/13 17:53	EEH
C9-C12 Aliphatics	ND	100	µg/L	1		MADEP-VPH-04-1.1	1/21/13	1/21/13 17:53	EEH
C9-C10 Aromatics	ND	100	µg/L	1		MADEP-VPH-04-1.1	1/21/13	1/21/13 17:53	EEH
Benzene	ND	1.0	µg/L	1		MADEP-VPH-04-1.1	1/21/13	1/21/13 17:53	EEH
Ethylbenzene	1.4	1.0	µg/L	1		MADEP-VPH-04-1.1	1/21/13	1/21/13 17:53	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		MADEP-VPH-04-1.1	1/21/13	1/21/13 17:53	EEH
Naphthalene	ND	5.0	µg/L	1		MADEP-VPH-04-1.1	1/21/13	1/21/13 17:53	EEH
Toluene	500	1.0	µg/L	1		MADEP-VPH-04-1.1	1/21/13	1/21/13 17:53	EEH
m+p Xylene	ND	2.0	µg/L	1		MADEP-VPH-04-1.1	1/21/13	1/21/13 17:53	EEH
o-Xylene	ND	1.0	µg/L	1		MADEP-VPH-04-1.1	1/21/13	1/21/13 17:53	EEH
Surrogates	% Recovery	Recovery Limits	Flag						
2,5-Dibromotoluene (FID)	82.5	70-130							
2,5-Dibromotoluene (PID)	75.0	70-130							

Project Location: 4-21606

Sample Description: NOB-GW-DUP-01

Work Order: 13A0480

Date Received: 1/18/2013

Field Sample #: D05302

Sampled: 1/17/2013 10:50

Sample ID: 13A0480-06

Sample Matrix: Ground Water

Metals Analyses (Dissolved)

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Antimony	ND	5.0	µg/L	5		SW-846 6020A	1/19/13	1/21/13 12:14	KSH
Arsenic	ND	2.0	µg/L	5		SW-846 6020A	1/19/13	1/21/13 12:14	KSH
Barium	ND	50	µg/L	5		SW-846 6020A	1/19/13	1/21/13 12:14	KSH
Beryllium	ND	2.0	µg/L	5		SW-846 6020A	1/19/13	1/21/13 12:14	KSH
Cadmium	ND	2.5	µg/L	5		SW-846 6020A	1/19/13	1/21/13 12:14	KSH
Chromium	ND	5.0	µg/L	5		SW-846 6020A	1/19/13	1/21/13 12:14	KSH
Copper	ND	25	µg/L	5		SW-846 6020A	1/19/13	1/21/13 12:14	KSH
Lead	ND	5.0	µg/L	5		SW-846 6020A	1/19/13	1/21/13 12:14	KSH
Mercury	ND	0.00010	mg/L	1		SW-846 7470A	1/19/13	1/21/13 11:41	SAJ
Nickel	ND	25	µg/L	5		SW-846 6020A	1/19/13	1/21/13 12:14	KSH
Selenium	ND	25	µg/L	5		SW-846 6020A	1/19/13	1/21/13 12:14	KSH
Silver	ND	2.5	µg/L	5		SW-846 6020A	1/19/13	1/21/13 12:14	KSH
Thallium	ND	1.0	µg/L	5		SW-846 6020A	1/19/13	1/21/13 12:14	KSH
Vanadium	ND	25	µg/L	5		SW-846 6020A	1/19/13	1/21/13 12:14	KSH
Zinc	ND	50	µg/L	5		SW-846 6020A	1/19/13	1/21/13 12:14	KSH

Project Location: 4-21606

Sample Description: NOB112-GW-011713

Work Order: 13A0480

Date Received: 1/18/2013

Field Sample #: D05303

Sampled: 1/17/2013 11:30

Sample ID: 13A0480-07

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	10	µg/L	1	V-05	SW-846 8260C	1/21/13	1/22/13 9:59	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L	1		SW-846 8260C	1/21/13	1/22/13 9:59	MFF
Benzene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 9:59	MFF
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 9:59	MFF
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 9:59	MFF
Bromodichloromethane	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 9:59	MFF
Bromoform	ND	5.0	µg/L	1	RL-07	SW-846 8260C	1/21/13	1/22/13 9:59	MFF
Bromomethane	ND	2.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 9:59	MFF
2-Butanone (MEK)	ND	10	µg/L	1		SW-846 8260C	1/21/13	1/22/13 9:59	MFF
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 9:59	MFF
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 9:59	MFF
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 9:59	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260C	1/21/13	1/22/13 9:59	MFF
Carbon Disulfide	ND	5.0	µg/L	1	RL-07	SW-846 8260C	1/21/13	1/22/13 9:59	MFF
Carbon Tetrachloride	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 9:59	MFF
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 9:59	MFF
Chlorodibromomethane	ND	2.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 9:59	MFF
Chloroethane	ND	2.0	µg/L	1	V-05	SW-846 8260C	1/21/13	1/22/13 9:59	MFF
Chloroform	ND	2.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 9:59	MFF
Chloromethane	ND	2.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 9:59	MFF
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 9:59	MFF
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 9:59	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1	RL-07	SW-846 8260C	1/21/13	1/22/13 9:59	MFF
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260C	1/21/13	1/22/13 9:59	MFF
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 9:59	MFF
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 9:59	MFF
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 9:59	MFF
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 9:59	MFF
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 9:59	MFF
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 9:59	MFF
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 9:59	MFF
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 9:59	MFF
cis-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 9:59	MFF
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 9:59	MFF
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 9:59	MFF
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260C	1/21/13	1/22/13 9:59	MFF
2,2-Dichloropropane	ND	1.0	µg/L	1	V-05	SW-846 8260C	1/21/13	1/22/13 9:59	MFF
1,1-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	1/21/13	1/22/13 9:59	MFF
cis-1,3-Dichloropropene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 9:59	MFF
trans-1,3-Dichloropropene	ND	2.0	µg/L	1	V-05	SW-846 8260C	1/21/13	1/22/13 9:59	MFF
Diethyl Ether	ND	2.0	µg/L	1	V-05	SW-846 8260C	1/21/13	1/22/13 9:59	MFF
Diisopropyl Ether (DIPE)	ND	0.50	µg/L	1		SW-846 8260C	1/21/13	1/22/13 9:59	MFF
1,4-Dioxane	ND	50	µg/L	1	V-05, V-16	SW-846 8260C	1/21/13	1/22/13 9:59	MFF
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 9:59	MFF

Project Location: 4-21606

Sample Description: NOB112-GW-011713

Work Order: 13A0480

Date Received: 1/18/2013

Field Sample #: D05303

Sampled: 1/17/2013 11:30

Sample ID: 13A0480-07

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Hexachlorobutadiene	ND	0.50	µg/L	1		SW-846 8260C	1/21/13	1/22/13 9:59	MFF
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260C	1/21/13	1/22/13 9:59	MFF
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 9:59	MFF
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 9:59	MFF
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 9:59	MFF
Methylene Chloride	ND	5.0	µg/L	1	RL-07	SW-846 8260C	1/21/13	1/22/13 9:59	MFF
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260C	1/21/13	1/22/13 9:59	MFF
Naphthalene	ND	5.0	µg/L	1	R-05, RL-07, V-05	SW-846 8260C	1/21/13	1/22/13 9:59	MFF
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 9:59	MFF
Styrene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 9:59	MFF
1,1,1,2-Tetrachloroethane	ND	2.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 9:59	MFF
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260C	1/21/13	1/22/13 9:59	MFF
Tetrachloroethylene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 9:59	MFF
Tetrahydrofuran	ND	2.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 9:59	MFF
Toluene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 9:59	MFF
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1	R-05, RL-07, V-05	SW-846 8260C	1/21/13	1/22/13 9:59	MFF
1,2,4-Trichlorobenzene	ND	5.0	µg/L	1	R-05, RL-07, V-05	SW-846 8260C	1/21/13	1/22/13 9:59	MFF
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 9:59	MFF
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 9:59	MFF
Trichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 9:59	MFF
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 9:59	MFF
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 9:59	MFF
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 9:59	MFF
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 9:59	MFF
Vinyl Chloride	ND	2.0	µg/L	1	V-05	SW-846 8260C	1/21/13	1/22/13 9:59	MFF
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 9:59	MFF
o-Xylene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 9:59	MFF

Surrogates	% Recovery	Recovery Limits	Flag
1,2-Dichloroethane-d4	97.7	70-130	1/22/13 9:59
Toluene-d8	97.4	70-130	1/22/13 9:59
4-Bromofluorobenzene	99.3	70-130	1/22/13 9:59

Project Location: 4-21606

Sample Description: NOB112-GW-011713

Work Order: 13A0480

Date Received: 1/18/2013

Field Sample #: D05303

Sampled: 1/17/2013 11:30

Sample ID: 13A0480-07

Sample Matrix: Ground Water

Polychlorinated Biphenyls By GC/ECD

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.20	µg/L	1		SW-846 8082A	1/24/13	1/25/13 11:47	JMB
Aroclor-1221 [1]	ND	0.20	µg/L	1		SW-846 8082A	1/24/13	1/25/13 11:47	JMB
Aroclor-1232 [1]	ND	0.20	µg/L	1		SW-846 8082A	1/24/13	1/25/13 11:47	JMB
Aroclor-1242 [1]	ND	0.20	µg/L	1		SW-846 8082A	1/24/13	1/25/13 11:47	JMB
Aroclor-1248 [1]	ND	0.20	µg/L	1		SW-846 8082A	1/24/13	1/25/13 11:47	JMB
Aroclor-1254 [1]	ND	0.20	µg/L	1		SW-846 8082A	1/24/13	1/25/13 11:47	JMB
Aroclor-1260 [1]	ND	0.20	µg/L	1		SW-846 8082A	1/24/13	1/25/13 11:47	JMB
Aroclor-1262 [1]	ND	0.20	µg/L	1		SW-846 8082A	1/24/13	1/25/13 11:47	JMB
Aroclor-1268 [1]	ND	0.20	µg/L	1		SW-846 8082A	1/24/13	1/25/13 11:47	JMB
Surrogates	% Recovery	Recovery Limits	Flag						
Decachlorobiphenyl [1]	78.3	30-150							
Decachlorobiphenyl [2]	83.1	30-150							
Tetrachloro-m-xylene [1]	81.3	30-150							
Tetrachloro-m-xylene [2]	93.2	30-150							

Project Location: 4-21606

Sample Description: NOB112-GW-011713

Work Order: 13A0480

Date Received: 1/18/2013

Field Sample #: D05303

Sampled: 1/17/2013 11:30

Sample ID: 13A0480-07

Sample Matrix: Ground Water

Petrolium Hydrocarbons Analyses - EPH

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
C9-C18 Aliphatics	ND	100	µg/L	1		MADEP-EPH-04-1.1	1/22/13	1/24/13 19:25	SCS
C19-C36 Aliphatics	ND	100	µg/L	1		MADEP-EPH-04-1.1	1/22/13	1/24/13 19:25	SCS
Unadjusted C11-C22 Aromatics	ND	100	µg/L	1		MADEP-EPH-04-1.1	1/22/13	1/24/13 19:25	SCS
C11-C22 Aromatics	ND	100	µg/L	1		MADEP-EPH-04-1.1	1/22/13	1/24/13 19:25	SCS
Acenaphthene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	1/22/13	1/24/13 19:25	SCS
Acenaphthylene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	1/22/13	1/24/13 19:25	SCS
Anthracene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	1/22/13	1/24/13 19:25	SCS
Benzo(a)anthracene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	1/22/13	1/24/13 19:25	SCS
Benzo(a)pyrene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	1/22/13	1/24/13 19:25	SCS
Benzo(b)fluoranthene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	1/22/13	1/24/13 19:25	SCS
Benzo(g,h,i)perylene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	1/22/13	1/24/13 19:25	SCS
Benzo(k)fluoranthene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	1/22/13	1/24/13 19:25	SCS
Chrysene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	1/22/13	1/24/13 19:25	SCS
Dibenz(a,h)anthracene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	1/22/13	1/24/13 19:25	SCS
Fluoranthene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	1/22/13	1/24/13 19:25	SCS
Fluorene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	1/22/13	1/24/13 19:25	SCS
Indeno(1,2,3-cd)pyrene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	1/22/13	1/24/13 19:25	SCS
2-Methylnaphthalene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	1/22/13	1/24/13 19:25	SCS
Naphthalene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	1/22/13	1/24/13 19:25	SCS
Phenanthrene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	1/22/13	1/24/13 19:25	SCS
Pyrene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	1/22/13	1/24/13 19:25	SCS
Surrogates	% Recovery	Recovery Limits	Flag						
Chlorooctadecane (COD)	63.0	40-140							
o-Terphenyl (OTP)	78.1	40-140							
2-Bromonaphthalene	81.9	40-140							
2-Fluorobiphenyl	88.6	40-140							

Project Location: 4-21606

Sample Description: NOB112-GW-011713

Work Order: 13A0480

Date Received: 1/18/2013

Field Sample #: D05303

Sampled: 1/17/2013 11:30

Sample ID: 13A0480-07

Sample Matrix: Ground Water

Petroleum Hydrocarbons Analyses - VPH

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Unadjusted C5-C8 Aliphatics	ND	100	µg/L	1		MADEP-VPH-04-1.1	1/21/13	1/21/13 18:29	EEH
C5-C8 Aliphatics	ND	100	µg/L	1		MADEP-VPH-04-1.1	1/21/13	1/21/13 18:29	EEH
Unadjusted C9-C12 Aliphatics	ND	100	µg/L	1		MADEP-VPH-04-1.1	1/21/13	1/21/13 18:29	EEH
C9-C12 Aliphatics	ND	100	µg/L	1		MADEP-VPH-04-1.1	1/21/13	1/21/13 18:29	EEH
C9-C10 Aromatics	ND	100	µg/L	1		MADEP-VPH-04-1.1	1/21/13	1/21/13 18:29	EEH
Benzene	ND	1.0	µg/L	1		MADEP-VPH-04-1.1	1/21/13	1/21/13 18:29	EEH
Ethylbenzene	ND	1.0	µg/L	1		MADEP-VPH-04-1.1	1/21/13	1/21/13 18:29	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		MADEP-VPH-04-1.1	1/21/13	1/21/13 18:29	EEH
Naphthalene	ND	5.0	µg/L	1		MADEP-VPH-04-1.1	1/21/13	1/21/13 18:29	EEH
Toluene	ND	1.0	µg/L	1		MADEP-VPH-04-1.1	1/21/13	1/21/13 18:29	EEH
m+p Xylene	ND	2.0	µg/L	1		MADEP-VPH-04-1.1	1/21/13	1/21/13 18:29	EEH
o-Xylene	ND	1.0	µg/L	1		MADEP-VPH-04-1.1	1/21/13	1/21/13 18:29	EEH
Surrogates	% Recovery	Recovery Limits	Flag						
2,5-Dibromotoluene (FID)	96.5	70-130							
2,5-Dibromotoluene (PID)	86.0	70-130							

Project Location: 4-21606

Sample Description: NOB112-GW-011713

Work Order: 13A0480

Date Received: 1/18/2013

Field Sample #: D05303

Sampled: 1/17/2013 11:30

Sample ID: 13A0480-07

Sample Matrix: Ground Water

Metals Analyses (Dissolved)

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Antimony	ND	5.0	µg/L	5		SW-846 6020A	1/19/13	1/21/13 12:18	KSH
Arsenic	ND	2.0	µg/L	5		SW-846 6020A	1/19/13	1/21/13 12:18	KSH
Barium	ND	50	µg/L	5		SW-846 6020A	1/19/13	1/21/13 12:18	KSH
Beryllium	ND	2.0	µg/L	5		SW-846 6020A	1/19/13	1/21/13 12:18	KSH
Cadmium	ND	2.5	µg/L	5		SW-846 6020A	1/19/13	1/21/13 12:18	KSH
Chromium	ND	5.0	µg/L	5		SW-846 6020A	1/19/13	1/21/13 12:18	KSH
Copper	ND	25	µg/L	5		SW-846 6020A	1/19/13	1/21/13 12:18	KSH
Lead	ND	5.0	µg/L	5		SW-846 6020A	1/19/13	1/21/13 12:18	KSH
Mercury	ND	0.00010	mg/L	1		SW-846 7470A	1/19/13	1/21/13 11:43	SAJ
Nickel	ND	25	µg/L	5		SW-846 6020A	1/19/13	1/21/13 12:18	KSH
Selenium	ND	25	µg/L	5		SW-846 6020A	1/19/13	1/21/13 12:18	KSH
Silver	ND	2.5	µg/L	5		SW-846 6020A	1/19/13	1/21/13 12:18	KSH
Thallium	ND	1.0	µg/L	5		SW-846 6020A	1/19/13	1/21/13 12:18	KSH
Vanadium	ND	25	µg/L	5		SW-846 6020A	1/19/13	1/21/13 12:18	KSH
Zinc	ND	50	µg/L	5		SW-846 6020A	1/19/13	1/21/13 12:18	KSH

Project Location: 4-21606

Sample Description: NOB-GW-TRIP-BLANK

Work Order: 13A0480

Date Received: 1/18/2013

Field Sample #: D05304

Sampled: 1/17/2013 07:00

Sample ID: 13A0480-08

Sample Matrix: Trip Blank Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	10	µg/L	1	V-05	SW-846 8260C	1/21/13	1/22/13 10:30	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L	1		SW-846 8260C	1/21/13	1/22/13 10:30	MFF
Benzene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 10:30	MFF
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 10:30	MFF
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 10:30	MFF
Bromodichloromethane	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 10:30	MFF
Bromoform	ND	5.0	µg/L	1	RL-07	SW-846 8260C	1/21/13	1/22/13 10:30	MFF
Bromomethane	ND	2.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 10:30	MFF
2-Butanone (MEK)	ND	10	µg/L	1		SW-846 8260C	1/21/13	1/22/13 10:30	MFF
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 10:30	MFF
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 10:30	MFF
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 10:30	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260C	1/21/13	1/22/13 10:30	MFF
Carbon Disulfide	ND	5.0	µg/L	1	RL-07	SW-846 8260C	1/21/13	1/22/13 10:30	MFF
Carbon Tetrachloride	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 10:30	MFF
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 10:30	MFF
Chlorodibromomethane	ND	2.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 10:30	MFF
Chloroethane	ND	2.0	µg/L	1	V-05	SW-846 8260C	1/21/13	1/22/13 10:30	MFF
Chloroform	ND	2.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 10:30	MFF
Chloromethane	ND	2.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 10:30	MFF
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 10:30	MFF
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 10:30	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1	RL-07	SW-846 8260C	1/21/13	1/22/13 10:30	MFF
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260C	1/21/13	1/22/13 10:30	MFF
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 10:30	MFF
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 10:30	MFF
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 10:30	MFF
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 10:30	MFF
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 10:30	MFF
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 10:30	MFF
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 10:30	MFF
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 10:30	MFF
cis-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 10:30	MFF
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 10:30	MFF
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 10:30	MFF
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260C	1/21/13	1/22/13 10:30	MFF
2,2-Dichloropropane	ND	1.0	µg/L	1	V-05	SW-846 8260C	1/21/13	1/22/13 10:30	MFF
1,1-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	1/21/13	1/22/13 10:30	MFF
cis-1,3-Dichloropropene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 10:30	MFF
trans-1,3-Dichloropropene	ND	2.0	µg/L	1	V-05	SW-846 8260C	1/21/13	1/22/13 10:30	MFF
Diethyl Ether	ND	2.0	µg/L	1	V-05	SW-846 8260C	1/21/13	1/22/13 10:30	MFF
Diisopropyl Ether (DIPE)	ND	0.50	µg/L	1		SW-846 8260C	1/21/13	1/22/13 10:30	MFF
1,4-Dioxane	ND	50	µg/L	1	V-05, V-16	SW-846 8260C	1/21/13	1/22/13 10:30	MFF
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 10:30	MFF

Project Location: 4-21606

Sample Description: NOB-GW-TRIP-BLANK

Work Order: 13A0480

Date Received: 1/18/2013

Field Sample #: D05304

Sampled: 1/17/2013 07:00

Sample ID: 13A0480-08

Sample Matrix: Trip Blank Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Hexachlorobutadiene	ND	0.50	µg/L	1		SW-846 8260C	1/21/13	1/22/13 10:30	MFF
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260C	1/21/13	1/22/13 10:30	MFF
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 10:30	MFF
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 10:30	MFF
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 10:30	MFF
Methylene Chloride	ND	5.0	µg/L	1	RL-07	SW-846 8260C	1/21/13	1/22/13 10:30	MFF
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260C	1/21/13	1/22/13 10:30	MFF
Naphthalene	ND	5.0	µg/L	1	R-05, RL-07, V-05	SW-846 8260C	1/21/13	1/22/13 10:30	MFF
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 10:30	MFF
Styrene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 10:30	MFF
1,1,1,2-Tetrachloroethane	ND	2.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 10:30	MFF
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260C	1/21/13	1/22/13 10:30	MFF
Tetrachloroethylene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 10:30	MFF
Tetrahydrofuran	ND	2.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 10:30	MFF
Toluene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 10:30	MFF
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1	R-05, RL-07, V-05	SW-846 8260C	1/21/13	1/22/13 10:30	MFF
1,2,4-Trichlorobenzene	ND	5.0	µg/L	1	R-05, RL-07, V-05	SW-846 8260C	1/21/13	1/22/13 10:30	MFF
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 10:30	MFF
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 10:30	MFF
Trichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 10:30	MFF
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 10:30	MFF
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 10:30	MFF
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 10:30	MFF
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 10:30	MFF
Vinyl Chloride	ND	2.0	µg/L	1	V-05	SW-846 8260C	1/21/13	1/22/13 10:30	MFF
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 10:30	MFF
o-Xylene	ND	1.0	µg/L	1		SW-846 8260C	1/21/13	1/22/13 10:30	MFF

Surrogates	% Recovery	Recovery Limits	Flag
1,2-Dichloroethane-d4	97.8	70-130	1/22/13 10:30
Toluene-d8	97.2	70-130	1/22/13 10:30
4-Bromofluorobenzene	97.7	70-130	1/22/13 10:30

Sample Extraction Data**Prep Method: SW-846 3510C-MADEP-EPH-04-1.1**

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
13A0480-01 [D05297]	B066495	1000	2.00	01/22/13
13A0480-02 [D05298]	B066495	950	2.00	01/22/13
13A0480-03 [D05299]	B066495	1000	2.00	01/22/13
13A0480-04 [D05300]	B066495	1000	2.00	01/22/13
13A0480-05 [D05301]	B066495	1000	2.00	01/22/13
13A0480-06 [D05302]	B066495	1000	2.00	01/22/13
13A0480-07 [D05303]	B066495	1000	2.00	01/22/13

Prep Method: MA VPH-MADEP-VPH-04-1.1

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
13A0480-01 [D05297]	B066455	5	5.00	01/21/13
13A0480-02 [D05298]	B066455	5	5.00	01/21/13
13A0480-03 [D05299]	B066455	5	5.00	01/21/13
13A0480-04 [D05300]	B066455	5	5.00	01/21/13
13A0480-05 [D05301]	B066455	5	5.00	01/21/13
13A0480-06 [D05302]	B066455	5	5.00	01/21/13
13A0480-07 [D05303]	B066455	5	5.00	01/21/13

Prep Method: SW-846 3005A Dissolved-SW-846 6020A

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
13A0480-01 [D05297]	B066419	50.0	50.0	01/19/13
13A0480-02 [D05298]	B066419	50.0	50.0	01/19/13
13A0480-03 [D05299]	B066419	50.0	50.0	01/19/13
13A0480-04 [D05300]	B066419	50.0	50.0	01/19/13
13A0480-05 [D05301]	B066419	50.0	50.0	01/19/13
13A0480-06 [D05302]	B066419	50.0	50.0	01/19/13
13A0480-07 [D05303]	B066419	50.0	50.0	01/19/13

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

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
13A0480-01 [D05297]	B066420	6.00	6.00	01/19/13
13A0480-02 [D05298]	B066420	6.00	6.00	01/19/13
13A0480-03 [D05299]	B066420	6.00	6.00	01/19/13
13A0480-04 [D05300]	B066420	6.00	6.00	01/19/13
13A0480-05 [D05301]	B066420	6.00	6.00	01/19/13
13A0480-06 [D05302]	B066420	6.00	6.00	01/19/13
13A0480-07 [D05303]	B066420	6.00	6.00	01/19/13

Prep Method: SW-846 3510C-SW-846 8082A

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
13A0480-02 [D05298]	B066478	1000	10.0	01/21/13
13A0480-03 [D05299]	B066478	1000	10.0	01/21/13
13A0480-05 [D05301]	B066478	1000	10.0	01/21/13

Sample Extraction Data**Prep Method: SW-846 3510C-SW-846 8082A**

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
13A0480-01RE1 [D05297]	B066691	1000	10.0	01/24/13
13A0480-04RE1 [D05300]	B066691	1000	10.0	01/24/13
13A0480-06RE1 [D05302]	B066691	1000	10.0	01/24/13
13A0480-07RE1 [D05303]	B066691	1000	10.0	01/24/13

Prep Method: SW-846 5030B-SW-846 8260C

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
13A0480-01 [D05297]	B066461	5	5.00	01/21/13
13A0480-03 [D05299]	B066461	5	5.00	01/21/13
13A0480-05 [D05301]	B066461	5	5.00	01/21/13
13A0480-07 [D05303]	B066461	5	5.00	01/21/13
13A0480-08 [D05304]	B066461	5	5.00	01/21/13

Prep Method: SW-846 5030B-SW-846 8260C

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
13A0480-02 [D05298]	B066505	5	5.00	01/21/13
13A0480-04 [D05300]	B066505	5	5.00	01/21/13
13A0480-06 [D05302]	B066505	5	5.00	01/21/13

Prep Method: SW-846 5030B-SW-846 8260C

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
13A0480-04RE1 [D05300]	B066660	0.5	5.00	01/24/13
13A0480-06RE1 [D05302]	B066660	0.5	5.00	01/24/13

Prep Method: SW-846 3510C-SW-846 8270D

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
13A0480-02 [D05298]	B066590	1000	1.00	01/23/13
13A0480-03 [D05299]	B066590	1000	1.00	01/23/13
13A0480-04 [D05300]	B066590	1000	1.00	01/23/13
13A0480-06 [D05302]	B066590	1000	1.00	01/23/13

QUALITY CONTROL
Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B066461 - SW-846 5030B										
Blank (B066461-BLK1)				Prepared: 01/21/13 Analyzed: 01/22/13						
Acetone	ND	10	µg/L							V-05
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L							
Benzene	ND	1.0	µg/L							
Bromobenzene	ND	1.0	µg/L							
Bromochloromethane	ND	1.0	µg/L							
Bromodichloromethane	ND	1.0	µg/L							
Bromoform	ND	5.0	µg/L							
Bromomethane	ND	2.0	µg/L							
2-Butanone (MEK)	ND	10	µg/L							
n-Butylbenzene	ND	1.0	µg/L							
sec-Butylbenzene	ND	1.0	µg/L							
tert-Butylbenzene	ND	1.0	µg/L							
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L							
Carbon Disulfide	ND	5.0	µg/L							
Carbon Tetrachloride	ND	1.0	µg/L							
Chlorobenzene	ND	1.0	µg/L							
Chlorodibromomethane	ND	2.0	µg/L							
Chloroethane	ND	2.0	µg/L							V-05
Chloroform	ND	2.0	µg/L							
Chloromethane	ND	2.0	µg/L							
2-Chlorotoluene	ND	1.0	µg/L							
4-Chlorotoluene	ND	1.0	µg/L							
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L							
1,2-Dibromoethane (EDB)	ND	0.50	µg/L							
Dibromomethane	ND	1.0	µg/L							
1,2-Dichlorobenzene	ND	1.0	µg/L							
1,3-Dichlorobenzene	ND	1.0	µg/L							
1,4-Dichlorobenzene	ND	1.0	µg/L							
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L							
1,1-Dichloroethane	ND	1.0	µg/L							
1,2-Dichloroethane	ND	1.0	µg/L							
1,1-Dichloroethylene	ND	1.0	µg/L							
cis-1,2-Dichloroethylene	ND	1.0	µg/L							
trans-1,2-Dichloroethylene	ND	1.0	µg/L							
1,2-Dichloropropane	ND	1.0	µg/L							
1,3-Dichloropropane	ND	0.50	µg/L							
2,2-Dichloropropane	ND	1.0	µg/L							V-05
1,1-Dichloropropene	ND	0.50	µg/L							
cis-1,3-Dichloropropene	ND	1.0	µg/L							
trans-1,3-Dichloropropene	ND	2.0	µg/L							V-05
Diethyl Ether	ND	2.0	µg/L							V-05
Diisopropyl Ether (DIPE)	ND	0.50	µg/L							
1,4-Dioxane	ND	50	µg/L							V-05, V-16
Ethylbenzene	ND	1.0	µg/L							
Hexachlorobutadiene	ND	0.50	µg/L							
2-Hexanone (MBK)	ND	10	µg/L							
Isopropylbenzene (Cumene)	ND	1.0	µg/L							
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L							
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L							
Methylene Chloride	ND	5.0	µg/L							
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L							
Naphthalene	ND	5.0	µg/L							R-05, V-05

QUALITY CONTROL
Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes

Batch B066461 - SW-846 5030B
Blank (B066461-BLK1)

Prepared: 01/21/13 Analyzed: 01/22/13

n-Propylbenzene	ND	1.0	µg/L							
Styrene	ND	1.0	µg/L							
1,1,1,2-Tetrachloroethane	ND	2.0	µg/L							
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L							
Tetrachloroethylene	ND	1.0	µg/L							
Tetrahydrofuran	ND	2.0	µg/L							
Toluene	ND	1.0	µg/L							
1,2,3-Trichlorobenzene	ND	5.0	µg/L							R-05, V-05
1,2,4-Trichlorobenzene	ND	5.0	µg/L							V-05, R-05
1,1,1-Trichloroethane	ND	1.0	µg/L							
1,1,2-Trichloroethane	ND	1.0	µg/L							
Trichloroethylene	ND	1.0	µg/L							
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L							
1,2,3-Trichloropropane	ND	2.0	µg/L							
1,2,4-Trimethylbenzene	ND	1.0	µg/L							
1,3,5-Trimethylbenzene	ND	1.0	µg/L							
Vinyl Chloride	ND	2.0	µg/L							V-05
m+p Xylene	ND	2.0	µg/L							
o-Xylene	ND	1.0	µg/L							
Surrogate: 1,2-Dichloroethane-d4	23.8		µg/L	25.0		95.0	70-130			
Surrogate: Toluene-d8	24.4		µg/L	25.0		97.6	70-130			
Surrogate: 4-Bromofluorobenzene	24.7		µg/L	25.0		98.9	70-130			

LCS (B066461-BS1)

Prepared: 01/21/13 Analyzed: 01/22/13

Acetone	73.9	10	µg/L	100		73.9	40-160			V-05	†
tert-Amyl Methyl Ether (TAME)	10.2	0.50	µg/L	10.0		102	70-130				
Benzene	11.5	1.0	µg/L	10.0		115	70-130				
Bromobenzene	11.8	1.0	µg/L	10.0		118	70-130				
Bromochloromethane	12.2	1.0	µg/L	10.0		122	70-130				
Bromodichloromethane	10.6	1.0	µg/L	10.0		106	70-130				
Bromoform	9.57	5.0	µg/L	10.0		95.7	70-130				
Bromomethane	5.72	2.0	µg/L	10.0		57.2	40-160			L-14	†
2-Butanone (MEK)	97.6	10	µg/L	100		97.6	40-160				†
n-Butylbenzene	11.3	1.0	µg/L	10.0		113	70-130				
sec-Butylbenzene	11.5	1.0	µg/L	10.0		115	70-130				
tert-Butylbenzene	11.4	1.0	µg/L	10.0		114	70-130				
tert-Butyl Ethyl Ether (TBEE)	10.7	0.50	µg/L	10.0		107	70-130				
Carbon Disulfide	7.67	5.0	µg/L	10.0		76.7	70-130				
Carbon Tetrachloride	10.3	1.0	µg/L	10.0		103	70-130				
Chlorobenzene	11.8	1.0	µg/L	10.0		118	70-130				
Chlorodibromomethane	8.81	2.0	µg/L	10.0		88.1	70-130				
Chloroethane	8.76	2.0	µg/L	10.0		87.6	70-130			V-05	
Chloroform	11.0	2.0	µg/L	10.0		110	70-130				
Chloromethane	8.06	2.0	µg/L	10.0		80.6	40-160				†
2-Chlorotoluene	10.9	1.0	µg/L	10.0		109	70-130				
4-Chlorotoluene	11.4	1.0	µg/L	10.0		114	70-130				
1,2-Dibromo-3-chloropropane (DBCP)	9.58	5.0	µg/L	10.0		95.8	70-130				
1,2-Dibromoethane (EDB)	11.0	0.50	µg/L	10.0		110	70-130				
Dibromomethane	11.5	1.0	µg/L	10.0		115	70-130				
1,2-Dichlorobenzene	11.4	1.0	µg/L	10.0		114	70-130				
1,3-Dichlorobenzene	11.5	1.0	µg/L	10.0		115	70-130				
1,4-Dichlorobenzene	11.6	1.0	µg/L	10.0		116	70-130				

QUALITY CONTROL
Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B066461 - SW-846 5030B										
LCS (B066461-BS1)					Prepared: 01/21/13 Analyzed: 01/22/13					
Dichlorodifluoromethane (Freon 12)	7.29	2.0	µg/L	10.0		72.9	40-160			†
1,1-Dichloroethane	11.8	1.0	µg/L	10.0		118	70-130			
1,2-Dichloroethane	10.3	1.0	µg/L	10.0		103	70-130			
1,1-Dichloroethylene	8.98	1.0	µg/L	10.0		89.8	70-130			
cis-1,2-Dichloroethylene	10.8	1.0	µg/L	10.0		108	70-130			
trans-1,2-Dichloroethylene	11.5	1.0	µg/L	10.0		115	70-130			
1,2-Dichloropropane	11.5	1.0	µg/L	10.0		115	70-130			
1,3-Dichloropropane	11.2	0.50	µg/L	10.0		112	70-130			
2,2-Dichloropropane	8.51	1.0	µg/L	10.0		85.1	70-130			V-05
1,1-Dichloropropene	11.5	0.50	µg/L	10.0		115	70-130			
cis-1,3-Dichloropropene	8.52	1.0	µg/L	10.0		85.2	70-130			
trans-1,3-Dichloropropene	8.55	2.0	µg/L	10.0		85.5	70-130			V-05
Diethyl Ether	8.29	2.0	µg/L	10.0		82.9	70-130			V-05
Diisopropyl Ether (DIPE)	12.4	0.50	µg/L	10.0		124	70-130			
1,4-Dioxane	99.3	50	µg/L	100		99.3	40-160			V-05, V-16 †
Ethylbenzene	12.0	1.0	µg/L	10.0		120	70-130			
Hexachlorobutadiene	12.3	0.50	µg/L	10.0		123	70-130			
2-Hexanone (MBK)	99.5	10	µg/L	100		99.5	40-160			†
Isopropylbenzene (Cumene)	11.5	1.0	µg/L	10.0		115	70-130			
p-Isopropyltoluene (p-Cymene)	12.2	1.0	µg/L	10.0		122	70-130			
Methyl tert-Butyl Ether (MTBE)	11.2	1.0	µg/L	10.0		112	70-130			
Methylene Chloride	11.1	5.0	µg/L	10.0		111	70-130			
4-Methyl-2-pentanone (MIBK)	102	10	µg/L	100		102	40-160			†
Naphthalene	8.72	5.0	µg/L	10.0		87.2	70-130			R-05, V-05
n-Propylbenzene	11.4	1.0	µg/L	10.0		114	70-130			
Styrene	11.6	1.0	µg/L	10.0		116	70-130			
1,1,1,2-Tetrachloroethane	11.0	2.0	µg/L	10.0		110	70-130			
1,1,1,2,2-Tetrachloroethane	11.7	0.50	µg/L	10.0		117	70-130			
Tetrachloroethylene	10.7	1.0	µg/L	10.0		107	70-130			
Tetrahydrofuran	11.1	2.0	µg/L	10.0		111	70-130			
Toluene	11.0	1.0	µg/L	10.0		110	70-130			
1,2,3-Trichlorobenzene	9.19	5.0	µg/L	10.0		91.9	70-130			R-05, V-05
1,2,4-Trichlorobenzene	9.12	5.0	µg/L	10.0		91.2	70-130			R-05, V-05
1,1,1-Trichloroethane	10.4	1.0	µg/L	10.0		104	70-130			
1,1,2-Trichloroethane	11.3	1.0	µg/L	10.0		113	70-130			
Trichloroethylene	11.1	1.0	µg/L	10.0		111	70-130			
Trichlorofluoromethane (Freon 11)	9.93	2.0	µg/L	10.0		99.3	70-130			
1,2,3-Trichloropropane	11.3	2.0	µg/L	10.0		113	70-130			
1,2,4-Trimethylbenzene	11.9	1.0	µg/L	10.0		119	70-130			
1,3,5-Trimethylbenzene	11.5	1.0	µg/L	10.0		115	70-130			
Vinyl Chloride	7.28	2.0	µg/L	10.0		72.8	70-130			V-05
m+p Xylene	23.5	2.0	µg/L	20.0		117	70-130			
o-Xylene	11.6	1.0	µg/L	10.0		116	70-130			
Surrogate: 1,2-Dichloroethane-d4	23.6		µg/L	25.0		94.5	70-130			
Surrogate: Toluene-d8	24.8		µg/L	25.0		99.0	70-130			
Surrogate: 4-Bromofluorobenzene	25.5		µg/L	25.0		102	70-130			

QUALITY CONTROL
Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B066461 - SW-846 5030B										
LCS Dup (B066461-BSD1)					Prepared: 01/21/13 Analyzed: 01/22/13					
Acetone	67.3	10	µg/L	100		67.3	40-160	9.35	20	L-14, V-05 †
tert-Amyl Methyl Ether (TAME)	9.84	0.50	µg/L	10.0		98.4	70-130	3.79	20	
Benzene	11.2	1.0	µg/L	10.0		112	70-130	2.38	20	
Bromobenzene	11.2	1.0	µg/L	10.0		112	70-130	5.40	20	
Bromochloromethane	12.2	1.0	µg/L	10.0		122	70-130	0.246	20	
Bromodichloromethane	10.4	1.0	µg/L	10.0		104	70-130	1.90	20	
Bromoform	8.99	5.0	µg/L	10.0		89.9	70-130	6.25	20	
Bromomethane	6.22	2.0	µg/L	10.0		62.2	40-160	8.38	20	L-14 †
2-Butanone (MEK)	85.3	10	µg/L	100		85.3	40-160	13.4	20	†
n-Butylbenzene	10.9	1.0	µg/L	10.0		109	70-130	4.05	20	
sec-Butylbenzene	11.5	1.0	µg/L	10.0		115	70-130	0.435	20	
tert-Butylbenzene	11.2	1.0	µg/L	10.0		112	70-130	1.15	20	
tert-Butyl Ethyl Ether (TBEE)	10.4	0.50	µg/L	10.0		104	70-130	3.03	20	
Carbon Disulfide	7.36	5.0	µg/L	10.0		73.6	70-130	4.13	20	
Carbon Tetrachloride	9.72	1.0	µg/L	10.0		97.2	70-130	5.99	20	
Chlorobenzene	11.5	1.0	µg/L	10.0		115	70-130	2.66	20	
Chlorodibromomethane	8.42	2.0	µg/L	10.0		84.2	70-130	4.53	20	
Chloroethane	8.47	2.0	µg/L	10.0		84.7	70-130	3.37	20	V-05
Chloroform	10.9	2.0	µg/L	10.0		109	70-130	1.10	20	
Chloromethane	8.00	2.0	µg/L	10.0		80.0	40-160	0.747	20	†
2-Chlorotoluene	10.7	1.0	µg/L	10.0		107	70-130	2.32	20	
4-Chlorotoluene	11.0	1.0	µg/L	10.0		110	70-130	3.92	20	
1,2-Dibromo-3-chloropropane (DBCP)	8.49	5.0	µg/L	10.0		84.9	70-130	12.1	20	
1,2-Dibromoethane (EDB)	10.4	0.50	µg/L	10.0		104	70-130	5.49	20	
Dibromomethane	10.8	1.0	µg/L	10.0		108	70-130	5.64	20	
1,2-Dichlorobenzene	11.2	1.0	µg/L	10.0		112	70-130	1.50	20	
1,3-Dichlorobenzene	11.4	1.0	µg/L	10.0		114	70-130	0.876	20	
1,4-Dichlorobenzene	11.5	1.0	µg/L	10.0		115	70-130	1.47	20	
Dichlorodifluoromethane (Freon 12)	6.67	2.0	µg/L	10.0		66.7	40-160	8.88	20	L-14 †
1,1-Dichloroethane	11.5	1.0	µg/L	10.0		115	70-130	2.65	20	
1,2-Dichloroethane	10.1	1.0	µg/L	10.0		101	70-130	1.76	20	
1,1-Dichloroethylene	8.86	1.0	µg/L	10.0		88.6	70-130	1.35	20	
cis-1,2-Dichloroethylene	10.4	1.0	µg/L	10.0		104	70-130	3.97	20	
trans-1,2-Dichloroethylene	11.2	1.0	µg/L	10.0		112	70-130	2.83	20	
1,2-Dichloropropane	11.4	1.0	µg/L	10.0		114	70-130	0.524	20	
1,3-Dichloropropane	10.8	0.50	µg/L	10.0		108	70-130	3.44	20	
2,2-Dichloropropane	8.00	1.0	µg/L	10.0		80.0	70-130	6.18	20	V-05
1,1-Dichloropropene	10.9	0.50	µg/L	10.0		109	70-130	5.16	20	
cis-1,3-Dichloropropene	8.32	1.0	µg/L	10.0		83.2	70-130	2.38	20	
trans-1,3-Dichloropropene	8.25	2.0	µg/L	10.0		82.5	70-130	3.57	20	V-05
Diethyl Ether	8.35	2.0	µg/L	10.0		83.5	70-130	0.721	20	V-05
Diisopropyl Ether (DIPE)	12.2	0.50	µg/L	10.0		122	70-130	0.813	20	
1,4-Dioxane	83.1	50	µg/L	100		83.1	40-160	17.7	20	V-05, V-16 †
Ethylbenzene	11.5	1.0	µg/L	10.0		115	70-130	4.26	20	
Hexachlorobutadiene	11.4	0.50	µg/L	10.0		114	70-130	7.86	20	
2-Hexanone (MBK)	85.9	10	µg/L	100		85.9	40-160	14.7	20	†
Isopropylbenzene (Cumene)	11.0	1.0	µg/L	10.0		110	70-130	3.99	20	
p-Isopropyltoluene (p-Cymene)	12.1	1.0	µg/L	10.0		121	70-130	0.575	20	
Methyl tert-Butyl Ether (MTBE)	10.7	1.0	µg/L	10.0		107	70-130	4.10	20	
Methylene Chloride	11.0	5.0	µg/L	10.0		110	70-130	1.54	20	
4-Methyl-2-pentanone (MIBK)	90.0	10	µg/L	100		90.0	40-160	12.8	20	†
Naphthalene	6.87	5.0	µg/L	10.0		68.7	* 70-130	23.7	* 20	V-05, L-07A, R-05

QUALITY CONTROL
Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes

Batch B066461 - SW-846 5030B
LCS Dup (B066461-BSD1)

Prepared: 01/21/13 Analyzed: 01/22/13

n-Propylbenzene	11.0	1.0	µg/L	10.0		110	70-130	3.48	20	
Styrene	11.3	1.0	µg/L	10.0		113	70-130	2.97	20	
1,1,1,2-Tetrachloroethane	10.8	2.0	µg/L	10.0		108	70-130	1.83	20	
1,1,2,2-Tetrachloroethane	10.4	0.50	µg/L	10.0		104	70-130	11.7	20	
Tetrachloroethylene	10.3	1.0	µg/L	10.0		103	70-130	3.70	20	
Tetrahydrofuran	9.70	2.0	µg/L	10.0		97.0	70-130	13.1	20	
Toluene	10.6	1.0	µg/L	10.0		106	70-130	3.05	20	
1,2,3-Trichlorobenzene	6.53	5.0	µg/L	10.0		65.3	* 70-130	33.8	* 20	L-07A, R-05, V-05
1,2,4-Trichlorobenzene	7.11	5.0	µg/L	10.0		71.1	70-130	24.8	* 20	V-05, R-05
1,1,1-Trichloroethane	10.1	1.0	µg/L	10.0		101	70-130	3.41	20	
1,1,2-Trichloroethane	11.0	1.0	µg/L	10.0		110	70-130	2.33	20	
Trichloroethylene	10.9	1.0	µg/L	10.0		109	70-130	2.27	20	
Trichlorofluoromethane (Freon 11)	9.57	2.0	µg/L	10.0		95.7	70-130	3.69	20	
1,2,3-Trichloropropane	10.2	2.0	µg/L	10.0		102	70-130	10.3	20	
1,2,4-Trimethylbenzene	11.8	1.0	µg/L	10.0		118	70-130	1.18	20	
1,3,5-Trimethylbenzene	11.1	1.0	µg/L	10.0		111	70-130	3.81	20	
Vinyl Chloride	6.90	2.0	µg/L	10.0		69.0	* 70-130	5.36	20	L-07, V-05
m+p Xylene	23.0	2.0	µg/L	20.0		115	70-130	1.89	20	
o-Xylene	11.3	1.0	µg/L	10.0		113	70-130	2.53	20	
Surrogate: 1,2-Dichloroethane-d4	23.4		µg/L	25.0		93.6	70-130			
Surrogate: Toluene-d8	24.6		µg/L	25.0		98.4	70-130			
Surrogate: 4-Bromofluorobenzene	25.5		µg/L	25.0		102	70-130			

Batch B066505 - SW-846 5030B
Blank (B066505-BLK1)

Prepared: 01/22/13 Analyzed: 01/23/13

Acetone	ND	10	µg/L							V-05
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L							
Benzene	ND	1.0	µg/L							
Bromobenzene	ND	1.0	µg/L							
Bromochloromethane	ND	1.0	µg/L							
Bromodichloromethane	ND	1.0	µg/L							
Bromoform	ND	5.0	µg/L							
Bromomethane	ND	2.0	µg/L							L-04, R-05, V-05
2-Butanone (MEK)	ND	10	µg/L							
n-Butylbenzene	ND	1.0	µg/L							
sec-Butylbenzene	ND	1.0	µg/L							
tert-Butylbenzene	ND	1.0	µg/L							
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L							
Carbon Disulfide	ND	5.0	µg/L							
Carbon Tetrachloride	ND	1.0	µg/L							
Chlorobenzene	ND	1.0	µg/L							
Chlorodibromomethane	ND	2.0	µg/L							
Chloroethane	ND	2.0	µg/L							
Chloroform	ND	2.0	µg/L							
Chloromethane	ND	2.0	µg/L							
2-Chlorotoluene	ND	1.0	µg/L							
4-Chlorotoluene	ND	1.0	µg/L							
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L							
1,2-Dibromoethane (EDB)	ND	0.50	µg/L							
Dibromomethane	ND	1.0	µg/L							
1,2-Dichlorobenzene	ND	1.0	µg/L							
1,3-Dichlorobenzene	ND	1.0	µg/L							

QUALITY CONTROL
Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B066505 - SW-846 5030B										
Blank (B066505-BLK1)				Prepared: 01/22/13 Analyzed: 01/23/13						
1,4-Dichlorobenzene	ND	1.0	µg/L							
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L							
1,1-Dichloroethane	ND	1.0	µg/L							
1,2-Dichloroethane	ND	1.0	µg/L							
1,1-Dichloroethylene	ND	1.0	µg/L							
cis-1,2-Dichloroethylene	ND	1.0	µg/L							
trans-1,2-Dichloroethylene	ND	1.0	µg/L							R-05
1,2-Dichloropropane	ND	1.0	µg/L							
1,3-Dichloropropane	ND	0.50	µg/L							
2,2-Dichloropropane	ND	1.0	µg/L							
1,1-Dichloropropene	ND	0.50	µg/L							
cis-1,3-Dichloropropene	ND	1.0	µg/L							
trans-1,3-Dichloropropene	ND	2.0	µg/L							
Diethyl Ether	ND	2.0	µg/L							
Diisopropyl Ether (DIPE)	ND	0.50	µg/L							
1,4-Dioxane	ND	50	µg/L							V-16
Ethylbenzene	ND	1.0	µg/L							
Hexachlorobutadiene	ND	0.50	µg/L							
2-Hexanone (MBK)	ND	10	µg/L							
Isopropylbenzene (Cumene)	ND	1.0	µg/L							
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L							
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L							
Methylene Chloride	ND	5.0	µg/L							R-05
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L							
Naphthalene	ND	5.0	µg/L							V-05
n-Propylbenzene	ND	1.0	µg/L							
Styrene	ND	1.0	µg/L							
1,1,1,2-Tetrachloroethane	ND	2.0	µg/L							
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L							
Tetrachloroethylene	ND	1.0	µg/L							
Tetrahydrofuran	ND	2.0	µg/L							
Toluene	ND	1.0	µg/L							
1,2,3-Trichlorobenzene	ND	5.0	µg/L							V-05
1,2,4-Trichlorobenzene	ND	5.0	µg/L							V-05
1,1,1-Trichloroethane	ND	1.0	µg/L							
1,1,2-Trichloroethane	ND	1.0	µg/L							
Trichloroethylene	ND	1.0	µg/L							
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L							
1,2,3-Trichloropropane	ND	2.0	µg/L							
1,2,4-Trimethylbenzene	ND	1.0	µg/L							
1,3,5-Trimethylbenzene	ND	1.0	µg/L							
Vinyl Chloride	ND	2.0	µg/L							
m+p Xylene	ND	2.0	µg/L							
o-Xylene	ND	1.0	µg/L							
Surrogate: 1,2-Dichloroethane-d4	23.7		µg/L	25.0		94.9	70-130			
Surrogate: Toluene-d8	24.4		µg/L	25.0		97.8	70-130			
Surrogate: 4-Bromofluorobenzene	25.0		µg/L	25.0		100	70-130			

QUALITY CONTROL
Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B066505 - SW-846 5030B										
LCS (B066505-BS1)					Prepared: 01/22/13 Analyzed: 01/23/13					
Acetone	73.1	10	µg/L	100		73.1	40-160			V-05 †
tert-Amyl Methyl Ether (TAME)	10.1	0.50	µg/L	10.0		101	70-130			
Benzene	11.4	1.0	µg/L	10.0		114	70-130			
Bromobenzene	11.6	1.0	µg/L	10.0		116	70-130			
Bromochloromethane	12.2	1.0	µg/L	10.0		122	70-130			
Bromodichloromethane	11.2	1.0	µg/L	10.0		112	70-130			
Bromoform	10.1	5.0	µg/L	10.0		101	70-130			
Bromomethane	2.12	2.0	µg/L	10.0		21.2 *	40-160			L-04, R-05, V-05 †
2-Butanone (MEK)	91.2	10	µg/L	100		91.2	40-160			†
n-Butylbenzene	11.0	1.0	µg/L	10.0		110	70-130			
sec-Butylbenzene	11.4	1.0	µg/L	10.0		114	70-130			
tert-Butylbenzene	11.4	1.0	µg/L	10.0		114	70-130			
tert-Butyl Ethyl Ether (TBEE)	10.9	0.50	µg/L	10.0		109	70-130			
Carbon Disulfide	9.03	5.0	µg/L	10.0		90.3	70-130			
Carbon Tetrachloride	10.7	1.0	µg/L	10.0		107	70-130			
Chlorobenzene	11.7	1.0	µg/L	10.0		117	70-130			
Chlorodibromomethane	9.09	2.0	µg/L	10.0		90.9	70-130			
Chloroethane	8.77	2.0	µg/L	10.0		87.7	70-130			
Chloroform	11.1	2.0	µg/L	10.0		111	70-130			
Chloromethane	7.32	2.0	µg/L	10.0		73.2	40-160			†
2-Chlorotoluene	11.0	1.0	µg/L	10.0		110	70-130			
4-Chlorotoluene	11.3	1.0	µg/L	10.0		113	70-130			
1,2-Dibromo-3-chloropropane (DBCP)	9.94	5.0	µg/L	10.0		99.4	70-130			
1,2-Dibromoethane (EDB)	11.2	0.50	µg/L	10.0		112	70-130			
Dibromomethane	11.5	1.0	µg/L	10.0		115	70-130			
1,2-Dichlorobenzene	11.4	1.0	µg/L	10.0		114	70-130			
1,3-Dichlorobenzene	11.4	1.0	µg/L	10.0		114	70-130			
1,4-Dichlorobenzene	11.7	1.0	µg/L	10.0		117	70-130			
Dichlorodifluoromethane (Freon 12)	6.76	2.0	µg/L	10.0		67.6	40-160			L-14 †
1,1-Dichloroethane	11.8	1.0	µg/L	10.0		118	70-130			
1,2-Dichloroethane	10.4	1.0	µg/L	10.0		104	70-130			
1,1-Dichloroethylene	9.48	1.0	µg/L	10.0		94.8	70-130			
cis-1,2-Dichloroethylene	10.5	1.0	µg/L	10.0		105	70-130			
trans-1,2-Dichloroethylene	11.4	1.0	µg/L	10.0		114	70-130			R-05
1,2-Dichloropropane	11.6	1.0	µg/L	10.0		116	70-130			
1,3-Dichloropropane	11.3	0.50	µg/L	10.0		113	70-130			
2,2-Dichloropropane	7.61	1.0	µg/L	10.0		76.1	70-130			
1,1-Dichloropropene	11.1	0.50	µg/L	10.0		111	70-130			
cis-1,3-Dichloropropene	8.63	1.0	µg/L	10.0		86.3	70-130			
trans-1,3-Dichloropropene	8.79	2.0	µg/L	10.0		87.9	70-130			
Diethyl Ether	8.74	2.0	µg/L	10.0		87.4	70-130			
Diisopropyl Ether (DIPE)	12.3	0.50	µg/L	10.0		123	70-130			
1,4-Dioxane	102	50	µg/L	100		102	40-160			V-16 †
Ethylbenzene	11.8	1.0	µg/L	10.0		118	70-130			
Hexachlorobutadiene	11.6	0.50	µg/L	10.0		116	70-130			V-20
2-Hexanone (MBK)	93.8	10	µg/L	100		93.8	40-160			†
Isopropylbenzene (Cumene)	11.5	1.0	µg/L	10.0		115	70-130			
p-Isopropyltoluene (p-Cymene)	12.1	1.0	µg/L	10.0		121	70-130			
Methyl tert-Butyl Ether (MTBE)	11.3	1.0	µg/L	10.0		113	70-130			
Methylene Chloride	10.6	5.0	µg/L	10.0		106	70-130			R-05
4-Methyl-2-pentanone (MIBK)	98.1	10	µg/L	100		98.1	40-160			†
Naphthalene	7.65	5.0	µg/L	10.0		76.5	70-130			V-05

QUALITY CONTROL
Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes

Batch B066505 - SW-846 5030B
LCS (B066505-BS1)

Prepared: 01/22/13 Analyzed: 01/23/13

n-Propylbenzene	11.1	1.0	µg/L	10.0		111	70-130			
Styrene	11.5	1.0	µg/L	10.0		115	70-130			
1,1,1,2-Tetrachloroethane	11.6	2.0	µg/L	10.0		116	70-130			
1,1,2,2-Tetrachloroethane	11.3	0.50	µg/L	10.0		113	70-130			
Tetrachloroethylene	10.8	1.0	µg/L	10.0		108	70-130			
Tetrahydrofuran	10.2	2.0	µg/L	10.0		102	70-130			
Toluene	11.0	1.0	µg/L	10.0		110	70-130			
1,2,3-Trichlorobenzene	7.63	5.0	µg/L	10.0		76.3	70-130			V-05
1,2,4-Trichlorobenzene	7.76	5.0	µg/L	10.0		77.6	70-130			V-05
1,1,1-Trichloroethane	10.9	1.0	µg/L	10.0		109	70-130			
1,1,2-Trichloroethane	11.4	1.0	µg/L	10.0		114	70-130			
Trichloroethylene	11.2	1.0	µg/L	10.0		112	70-130			
Trichlorofluoromethane (Freon 11)	10.4	2.0	µg/L	10.0		104	70-130			
1,2,3-Trichloropropane	11.2	2.0	µg/L	10.0		112	70-130			
1,2,4-Trimethylbenzene	11.8	1.0	µg/L	10.0		118	70-130			V-20
1,3,5-Trimethylbenzene	11.3	1.0	µg/L	10.0		113	70-130			
Vinyl Chloride	7.01	2.0	µg/L	10.0		70.1	70-130			
m+p Xylene	23.6	2.0	µg/L	20.0		118	70-130			
o-Xylene	11.6	1.0	µg/L	10.0		116	70-130			
Surrogate: 1,2-Dichloroethane-d4	23.5		µg/L	25.0		94.1	70-130			
Surrogate: Toluene-d8	24.7		µg/L	25.0		98.9	70-130			
Surrogate: 4-Bromofluorobenzene	25.8		µg/L	25.0		103	70-130			

LCS Dup (B066505-BS1)

Prepared: 01/22/13 Analyzed: 01/23/13

Acetone	83.2	10	µg/L	100		83.2	40-160	12.9	20	V-05	†
tert-Amyl Methyl Ether (TAME)	10.1	0.50	µg/L	10.0		101	70-130	0.0987	20		
Benzene	10.9	1.0	µg/L	10.0		109	70-130	4.39	20		
Bromobenzene	11.2	1.0	µg/L	10.0		112	70-130	3.94	20		
Bromochloromethane	11.9	1.0	µg/L	10.0		119	70-130	1.83	20		
Bromodichloromethane	10.7	1.0	µg/L	10.0		107	70-130	3.93	20		
Bromoform	9.82	5.0	µg/L	10.0		98.2	70-130	2.51	20		
Bromomethane	3.81	2.0	µg/L	10.0		38.1	* 40-160	57.0	* 20	L-04, R-05, V-05	†
2-Butanone (MEK)	94.4	10	µg/L	100		94.4	40-160	3.36	20		†
n-Butylbenzene	10.4	1.0	µg/L	10.0		104	70-130	5.72	20		
sec-Butylbenzene	11.1	1.0	µg/L	10.0		111	70-130	3.29	20		
tert-Butylbenzene	11.0	1.0	µg/L	10.0		110	70-130	4.10	20		
tert-Butyl Ethyl Ether (TBEE)	10.7	0.50	µg/L	10.0		107	70-130	2.04	20		
Carbon Disulfide	9.34	5.0	µg/L	10.0		93.4	70-130	3.38	20		
Carbon Tetrachloride	9.84	1.0	µg/L	10.0		98.4	70-130	8.47	20		
Chlorobenzene	11.2	1.0	µg/L	10.0		112	70-130	4.01	20		
Chlorodibromomethane	8.92	2.0	µg/L	10.0		89.2	70-130	1.89	20		
Chloroethane	9.23	2.0	µg/L	10.0		92.3	70-130	5.11	20		
Chloroform	10.6	2.0	µg/L	10.0		106	70-130	4.87	20		
Chloromethane	6.91	2.0	µg/L	10.0		69.1	40-160	5.76	20	L-14	†
2-Chlorotoluene	10.6	1.0	µg/L	10.0		106	70-130	3.05	20		
4-Chlorotoluene	11.0	1.0	µg/L	10.0		110	70-130	2.43	20		
1,2-Dibromo-3-chloropropane (DBCP)	9.85	5.0	µg/L	10.0		98.5	70-130	0.910	20		
1,2-Dibromoethane (EDB)	10.8	0.50	µg/L	10.0		108	70-130	3.19	20		
Dibromomethane	11.3	1.0	µg/L	10.0		113	70-130	1.67	20		
1,2-Dichlorobenzene	11.2	1.0	µg/L	10.0		112	70-130	1.85	20		
1,3-Dichlorobenzene	11.2	1.0	µg/L	10.0		112	70-130	2.12	20		
1,4-Dichlorobenzene	11.4	1.0	µg/L	10.0		114	70-130	2.78	20		

QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B066505 - SW-846 5030B										
LCS Dup (B066505-BSD1)					Prepared: 01/22/13 Analyzed: 01/23/13					
Dichlorodifluoromethane (Freon 12)	6.54	2.0	µg/L	10.0		65.4	40-160	3.31	20	L-14 †
1,1-Dichloroethane	11.4	1.0	µg/L	10.0		114	70-130	4.31	20	
1,2-Dichloroethane	10.3	1.0	µg/L	10.0		103	70-130	0.386	20	
1,1-Dichloroethylene	9.72	1.0	µg/L	10.0		97.2	70-130	2.50	20	
cis-1,2-Dichloroethylene	10.1	1.0	µg/L	10.0		101	70-130	3.50	20	
trans-1,2-Dichloroethylene	8.71	1.0	µg/L	10.0		87.1	70-130	27.1 *	20	R-05
1,2-Dichloropropane	11.4	1.0	µg/L	10.0		114	70-130	2.35	20	
1,3-Dichloropropane	10.8	0.50	µg/L	10.0		108	70-130	4.16	20	
2,2-Dichloropropane	6.99	1.0	µg/L	10.0		69.9 *	70-130	8.49	20	L-07
1,1-Dichloropropene	10.8	0.50	µg/L	10.0		108	70-130	3.01	20	
cis-1,3-Dichloropropene	8.29	1.0	µg/L	10.0		82.9	70-130	4.02	20	
trans-1,3-Dichloropropene	8.33	2.0	µg/L	10.0		83.3	70-130	5.37	20	
Diethyl Ether	9.60	2.0	µg/L	10.0		96.0	70-130	9.38	20	
Diisopropyl Ether (DIPE)	12.0	0.50	µg/L	10.0		120	70-130	2.30	20	
1,4-Dioxane	113	50	µg/L	100		113	40-160	9.93	20	V-16 †
Ethylbenzene	11.4	1.0	µg/L	10.0		114	70-130	3.96	20	
Hexachlorobutadiene	11.5	0.50	µg/L	10.0		115	70-130	1.47	20	V-20
2-Hexanone (MBK)	94.7	10	µg/L	100		94.7	40-160	0.923	20	†
Isopropylbenzene (Cumene)	11.0	1.0	µg/L	10.0		110	70-130	4.28	20	
p-Isopropyltoluene (p-Cymene)	11.7	1.0	µg/L	10.0		117	70-130	3.37	20	
Methyl tert-Butyl Ether (MTBE)	9.67	1.0	µg/L	10.0		96.7	70-130	15.5	20	
Methylene Chloride	7.57	5.0	µg/L	10.0		75.7	70-130	33.8 *	20	R-05
4-Methyl-2-pentanone (MIBK)	98.3	10	µg/L	100		98.3	40-160	0.204	20	†
Naphthalene	7.60	5.0	µg/L	10.0		76.0	70-130	0.656	20	V-05
n-Propylbenzene	10.7	1.0	µg/L	10.0		107	70-130	4.13	20	
Styrene	11.1	1.0	µg/L	10.0		111	70-130	3.46	20	
1,1,1,2-Tetrachloroethane	11.0	2.0	µg/L	10.0		110	70-130	5.50	20	
1,1,2,2-Tetrachloroethane	11.4	0.50	µg/L	10.0		114	70-130	0.967	20	
Tetrachloroethylene	10.2	1.0	µg/L	10.0		102	70-130	5.89	20	
Tetrahydrofuran	10.6	2.0	µg/L	10.0		106	70-130	3.65	20	
Toluene	10.3	1.0	µg/L	10.0		103	70-130	7.23	20	
1,2,3-Trichlorobenzene	7.65	5.0	µg/L	10.0		76.5	70-130	0.262	20	V-05
1,2,4-Trichlorobenzene	7.75	5.0	µg/L	10.0		77.5	70-130	0.129	20	V-05
1,1,1-Trichloroethane	10.2	1.0	µg/L	10.0		102	70-130	7.40	20	
1,1,2-Trichloroethane	10.9	1.0	µg/L	10.0		109	70-130	4.76	20	
Trichloroethylene	10.8	1.0	µg/L	10.0		108	70-130	3.83	20	
Trichlorofluoromethane (Freon 11)	10.4	2.0	µg/L	10.0		104	70-130	0.0963	20	
1,2,3-Trichloropropane	11.2	2.0	µg/L	10.0		112	70-130	0.535	20	
1,2,4-Trimethylbenzene	11.4	1.0	µg/L	10.0		114	70-130	3.20	20	V-20
1,3,5-Trimethylbenzene	10.9	1.0	µg/L	10.0		109	70-130	3.34	20	
Vinyl Chloride	7.01	2.0	µg/L	10.0		70.1	70-130	0.00	20	
m+p Xylene	22.6	2.0	µg/L	20.0		113	70-130	4.25	20	
o-Xylene	11.1	1.0	µg/L	10.0		111	70-130	4.22	20	
Surrogate: 1,2-Dichloroethane-d4	23.6		µg/L	25.0		94.2	70-130			
Surrogate: Toluene-d8	24.2		µg/L	25.0		96.7	70-130			
Surrogate: 4-Bromofluorobenzene	25.6		µg/L	25.0		102	70-130			

QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B066505 - SW-846 5030B										
Matrix Spike (B066505-MS1)	Source: 13A0480-02			Prepared: 01/22/13 Analyzed: 01/23/13						
Acetone	77.4	10	µg/L	100	0.810	76.6	70-130			V-05
tert-Amyl Methyl Ether (TAME)	11.2	0.50	µg/L	10.0	ND	112	70-130			
Benzene	12.6	1.0	µg/L	10.0	ND	126	70-130			
Bromobenzene	13.0	1.0	µg/L	10.0	ND	130	70-130			
Bromochloromethane	13.6	1.0	µg/L	10.0	ND	136	* 70-130			MS-12
Bromodichloromethane	11.7	1.0	µg/L	10.0	ND	117	70-130			
Bromoform	10.0	5.0	µg/L	10.0	ND	100	70-130			
Bromomethane	4.65	2.0	µg/L	10.0	ND	46.5	* 70-130			L-04, MS-09, R-05, V-05
2-Butanone (MEK)	101	10	µg/L	100	ND	101	70-130			
n-Butylbenzene	12.0	1.0	µg/L	10.0	ND	120	70-130			
sec-Butylbenzene	12.7	1.0	µg/L	10.0	ND	127	70-130			
tert-Butylbenzene	12.8	1.0	µg/L	10.0	ND	128	70-130			
tert-Butyl Ethyl Ether (TBEE)	11.9	0.50	µg/L	10.0	ND	119	70-130			
Carbon Disulfide	7.47	5.0	µg/L	10.0	ND	74.7	70-130			
Carbon Tetrachloride	10.7	1.0	µg/L	10.0	ND	107	70-130			
Chlorobenzene	13.3	1.0	µg/L	10.0	ND	133	* 70-130			MS-12
Chlorodibromomethane	9.36	2.0	µg/L	10.0	ND	93.6	70-130			
Chloroethane	9.83	2.0	µg/L	10.0	ND	98.3	70-130			
Chloroform	12.0	2.0	µg/L	10.0	ND	120	70-130			
Chloromethane	8.43	2.0	µg/L	10.0	ND	84.3	70-130			
2-Chlorotoluene	12.3	1.0	µg/L	10.0	ND	123	70-130			
4-Chlorotoluene	12.5	1.0	µg/L	10.0	ND	125	70-130			
1,2-Dibromo-3-chloropropane (DBCP)	10.1	5.0	µg/L	10.0	ND	101	70-130			
1,2-Dibromoethane (EDB)	12.2	0.50	µg/L	10.0	ND	122	70-130			
Dibromomethane	12.4	1.0	µg/L	10.0	ND	124	70-130			
1,2-Dichlorobenzene	12.8	1.0	µg/L	10.0	ND	128	70-130			
1,3-Dichlorobenzene	12.6	1.0	µg/L	10.0	ND	126	70-130			
1,4-Dichlorobenzene	13.0	1.0	µg/L	10.0	ND	130	70-130			
Dichlorodifluoromethane (Freon 12)	6.06	2.0	µg/L	10.0	ND	60.6	* 70-130			MS-24
1,1-Dichloroethane	12.9	1.0	µg/L	10.0	ND	129	70-130			
1,2-Dichloroethane	11.2	1.0	µg/L	10.0	ND	112	70-130			
1,1-Dichloroethylene	9.75	1.0	µg/L	10.0	ND	97.5	70-130			
cis-1,2-Dichloroethylene	11.4	1.0	µg/L	10.0	0.360	111	70-130			
trans-1,2-Dichloroethylene	12.4	1.0	µg/L	10.0	ND	124	70-130			
1,2-Dichloropropane	12.8	1.0	µg/L	10.0	ND	128	70-130			
1,3-Dichloropropane	12.4	0.50	µg/L	10.0	ND	124	70-130			
2,2-Dichloropropane	5.99	1.0	µg/L	10.0	ND	59.9	* 70-130			MS-09
1,1-Dichloropropene	12.2	0.50	µg/L	10.0	ND	122	70-130			
cis-1,3-Dichloropropene	8.70	1.0	µg/L	10.0	ND	87.0	70-130			
trans-1,3-Dichloropropene	8.62	2.0	µg/L	10.0	ND	86.2	70-130			
Diethyl Ether	10.0	2.0	µg/L	10.0	ND	100	70-130			
Diisopropyl Ether (DIPE)	13.2	0.50	µg/L	10.0	ND	132	* 70-130			MS-12
1,4-Dioxane	122	50	µg/L	100	ND	122	70-130			V-16
Ethylbenzene	13.4	1.0	µg/L	10.0	ND	134	* 70-130			MS-12
Hexachlorobutadiene	12.0	0.50	µg/L	10.0	ND	120	70-130			
2-Hexanone (MBK)	106	10	µg/L	100	ND	106	70-130			
Isopropylbenzene (Cumene)	12.9	1.0	µg/L	10.0	ND	129	70-130			
p-Isopropyltoluene (p-Cymene)	13.3	1.0	µg/L	10.0	ND	133	* 70-130			MS-12
Methyl tert-Butyl Ether (MTBE)	12.2	1.0	µg/L	10.0	ND	122	70-130			
Methylene Chloride	11.3	5.0	µg/L	10.0	ND	113	70-130			
4-Methyl-2-pentanone (MIBK)	110	10	µg/L	100	ND	110	70-130			
Naphthalene	9.65	5.0	µg/L	10.0	ND	96.5	70-130			V-05

QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B066505 - SW-846 5030B										
Matrix Spike (B066505-MS1)	Source: 13A0480-02			Prepared: 01/22/13 Analyzed: 01/23/13						
n-Propylbenzene	12.4	1.0	µg/L	10.0	ND	124	70-130			
Styrene	13.0	1.0	µg/L	10.0	ND	130	70-130			
1,1,1,2-Tetrachloroethane	12.5	2.0	µg/L	10.0	ND	125	70-130			
1,1,2,2-Tetrachloroethane	12.7	0.50	µg/L	10.0	ND	127	70-130			
Tetrachloroethylene	12.5	1.0	µg/L	10.0	0.520	120	70-130			
Tetrahydrofuran	11.5	2.0	µg/L	10.0	ND	115	70-130			
Toluene	12.5	1.0	µg/L	10.0	ND	125	70-130			
1,2,3-Trichlorobenzene	8.25	5.0	µg/L	10.0	ND	82.5	70-130			V-05
1,2,4-Trichlorobenzene	9.71	5.0	µg/L	10.0	ND	97.1	70-130			V-05
1,1,1-Trichloroethane	11.5	1.0	µg/L	10.0	ND	115	70-130			
1,1,2-Trichloroethane	12.6	1.0	µg/L	10.0	ND	126	70-130			
Trichloroethylene	12.5	1.0	µg/L	10.0	0.220	123	70-130			
Trichlorofluoromethane (Freon 11)	10.1	2.0	µg/L	10.0	ND	101	70-130			
1,2,3-Trichloropropane	12.6	2.0	µg/L	10.0	ND	126	70-130			
1,2,4-Trimethylbenzene	13.3	1.0	µg/L	10.0	ND	133	* 70-130			MS-12
1,3,5-Trimethylbenzene	12.6	1.0	µg/L	10.0	ND	126	70-130			
Vinyl Chloride	7.76	2.0	µg/L	10.0	ND	77.6	70-130			
m+p Xylene	26.4	2.0	µg/L	20.0	ND	132	* 70-130			MS-12
o-Xylene	13.1	1.0	µg/L	10.0	ND	131	* 70-130			MS-12
Surrogate: 1,2-Dichloroethane-d4	22.5		µg/L	25.0		89.8	70-130			
Surrogate: Toluene-d8	24.7		µg/L	25.0		98.6	70-130			
Surrogate: 4-Bromofluorobenzene	25.6		µg/L	25.0		102	70-130			
Matrix Spike Dup (B066505-MSD1)	Source: 13A0480-02			Prepared: 01/22/13 Analyzed: 01/23/13						
Acetone	80.6	10	µg/L	100	0.810	79.8	70-130	3.98	30	V-05
tert-Amyl Methyl Ether (TAME)	11.2	0.50	µg/L	10.0	ND	112	70-130	0.178	30	
Benzene	12.9	1.0	µg/L	10.0	ND	129	70-130	2.20	30	
Bromobenzene	13.4	1.0	µg/L	10.0	ND	134	* 70-130	2.43	30	MS-24
Bromochloromethane	13.7	1.0	µg/L	10.0	ND	137	* 70-130	0.735	30	MS-12
Bromodichloromethane	12.1	1.0	µg/L	10.0	ND	121	70-130	3.62	30	
Bromoform	10.3	5.0	µg/L	10.0	ND	103	70-130	2.85	30	
Bromomethane	5.69	2.0	µg/L	10.0	ND	56.9	* 70-130	20.1	30	L-04, MS-09, R-05, V-05
2-Butanone (MEK)	99.6	10	µg/L	100	ND	99.6	70-130	1.05	30	
n-Butylbenzene	12.7	1.0	µg/L	10.0	ND	127	70-130	5.68	30	
sec-Butylbenzene	13.5	1.0	µg/L	10.0	ND	135	* 70-130	6.19	30	MS-24
tert-Butylbenzene	13.4	1.0	µg/L	10.0	ND	134	* 70-130	4.44	30	MS-24
tert-Butyl Ethyl Ether (TBEE)	12.1	0.50	µg/L	10.0	ND	121	70-130	1.42	30	
Carbon Disulfide	8.27	5.0	µg/L	10.0	ND	82.7	70-130	10.2	30	
Carbon Tetrachloride	11.5	1.0	µg/L	10.0	ND	115	70-130	7.75	30	
Chlorobenzene	13.6	1.0	µg/L	10.0	ND	136	* 70-130	2.67	30	MS-12
Chlorodibromomethane	9.64	2.0	µg/L	10.0	ND	96.4	70-130	2.95	30	
Chloroethane	10.2	2.0	µg/L	10.0	ND	102	70-130	3.30	30	
Chloroform	12.3	2.0	µg/L	10.0	ND	123	70-130	2.97	30	
Chloromethane	9.13	2.0	µg/L	10.0	ND	91.3	70-130	7.97	30	
2-Chlorotoluene	12.6	1.0	µg/L	10.0	ND	126	70-130	2.97	30	
4-Chlorotoluene	13.1	1.0	µg/L	10.0	ND	131	* 70-130	4.38	30	MS-24
1,2-Dibromo-3-chloropropane (DBCP)	10.1	5.0	µg/L	10.0	ND	101	70-130	0.495	30	
1,2-Dibromoethane (EDB)	12.4	0.50	µg/L	10.0	ND	124	70-130	1.14	30	
Dibromomethane	12.5	1.0	µg/L	10.0	ND	125	70-130	0.481	30	
1,2-Dichlorobenzene	13.1	1.0	µg/L	10.0	ND	131	* 70-130	2.40	30	MS-24
1,3-Dichlorobenzene	13.1	1.0	µg/L	10.0	ND	131	* 70-130	3.51	30	MS-24
1,4-Dichlorobenzene	13.2	1.0	µg/L	10.0	ND	132	* 70-130	2.29	30	MS-24

QUALITY CONTROL
Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B066505 - SW-846 5030B										
Matrix Spike Dup (B066505-MSD1)	Source: 13A0480-02			Prepared: 01/22/13 Analyzed: 01/23/13						
Dichlorodifluoromethane (Freon 12)	7.15	2.0	µg/L	10.0	ND	71.5	70-130	16.5	30	
1,1-Dichloroethane	13.4	1.0	µg/L	10.0	ND	134 *	70-130	3.19	30	MS-24
1,2-Dichloroethane	11.3	1.0	µg/L	10.0	ND	113	70-130	0.976	30	
1,1-Dichloroethylene	10.9	1.0	µg/L	10.0	ND	109	70-130	10.8	30	
cis-1,2-Dichloroethylene	11.7	1.0	µg/L	10.0	0.360	114	70-130	2.76	30	
trans-1,2-Dichloroethylene	13.0	1.0	µg/L	10.0	ND	130	70-130	4.97	30	
1,2-Dichloropropane	13.0	1.0	µg/L	10.0	ND	130	70-130	1.63	30	
1,3-Dichloropropane	12.5	0.50	µg/L	10.0	ND	125	70-130	1.36	30	
2,2-Dichloropropane	6.29	1.0	µg/L	10.0	ND	62.9 *	70-130	4.89	30	MS-09
1,1-Dichloropropene	12.7	0.50	µg/L	10.0	ND	127	70-130	4.10	30	
cis-1,3-Dichloropropene	9.06	1.0	µg/L	10.0	ND	90.6	70-130	4.05	30	
trans-1,3-Dichloropropene	8.94	2.0	µg/L	10.0	ND	89.4	70-130	3.64	30	
Diethyl Ether	10.2	2.0	µg/L	10.0	ND	102	70-130	2.07	30	
Diisopropyl Ether (DIPE)	13.4	0.50	µg/L	10.0	ND	134 *	70-130	1.80	30	MS-12
1,4-Dioxane	123	50	µg/L	100	ND	123	70-130	0.849	30	V-16
Ethylbenzene	13.8	1.0	µg/L	10.0	ND	138 *	70-130	3.31	30	MS-12
Hexachlorobutadiene	13.2	0.50	µg/L	10.0	ND	132 *	70-130	9.94	30	MS-24
2-Hexanone (MBK)	104	10	µg/L	100	ND	104	70-130	1.58	30	
Isopropylbenzene (Cumene)	13.5	1.0	µg/L	10.0	ND	135 *	70-130	4.63	30	MS-24
p-Isopropyltoluene (p-Cymene)	14.0	1.0	µg/L	10.0	ND	140 *	70-130	5.64	30	MS-12
Methyl tert-Butyl Ether (MTBE)	12.5	1.0	µg/L	10.0	ND	125	70-130	2.43	30	
Methylene Chloride	11.5	5.0	µg/L	10.0	ND	115	70-130	1.58	30	
4-Methyl-2-pentanone (MIBK)	107	10	µg/L	100	ND	107	70-130	2.58	30	
Naphthalene	9.90	5.0	µg/L	10.0	ND	99.0	70-130	2.56	30	V-05
n-Propylbenzene	13.1	1.0	µg/L	10.0	ND	131 *	70-130	5.66	30	MS-24
Styrene	13.4	1.0	µg/L	10.0	ND	134 *	70-130	2.35	30	MS-24
1,1,1,2-Tetrachloroethane	12.8	2.0	µg/L	10.0	ND	128	70-130	2.21	30	
1,1,2,2-Tetrachloroethane	12.8	0.50	µg/L	10.0	ND	128	70-130	1.02	30	
Tetrachloroethylene	13.0	1.0	µg/L	10.0	0.520	125	70-130	4.24	30	
Tetrahydrofuran	11.1	2.0	µg/L	10.0	ND	111	70-130	3.99	30	
Toluene	12.8	1.0	µg/L	10.0	ND	128	70-130	2.61	30	
1,2,3-Trichlorobenzene	8.95	5.0	µg/L	10.0	ND	89.5	70-130	8.14	30	V-05
1,2,4-Trichlorobenzene	9.64	5.0	µg/L	10.0	ND	96.4	70-130	0.724	30	V-05
1,1,1-Trichloroethane	12.2	1.0	µg/L	10.0	ND	122	70-130	5.48	30	
1,1,2-Trichloroethane	12.7	1.0	µg/L	10.0	ND	127	70-130	0.871	30	
Trichloroethylene	13.1	1.0	µg/L	10.0	0.220	128	70-130	4.30	30	
Trichlorofluoromethane (Freon 11)	10.9	2.0	µg/L	10.0	ND	109	70-130	8.19	30	
1,2,3-Trichloropropane	12.7	2.0	µg/L	10.0	ND	127	70-130	0.396	30	
1,2,4-Trimethylbenzene	13.5	1.0	µg/L	10.0	ND	135 *	70-130	1.49	30	MS-12
1,3,5-Trimethylbenzene	13.1	1.0	µg/L	10.0	ND	131 *	70-130	3.74	30	MS-24
Vinyl Chloride	8.24	2.0	µg/L	10.0	ND	82.4	70-130	6.00	30	
m+p Xylene	27.3	2.0	µg/L	20.0	ND	136 *	70-130	3.24	30	MS-12
o-Xylene	13.6	1.0	µg/L	10.0	ND	136 *	70-130	4.04	30	MS-12
Surrogate: 1,2-Dichloroethane-d4	22.3		µg/L	25.0		89.3	70-130			
Surrogate: Toluene-d8	24.5		µg/L	25.0		98.0	70-130			
Surrogate: 4-Bromofluorobenzene	25.9		µg/L	25.0		104	70-130			

QUALITY CONTROL
Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B066660 - SW-846 5030B										
Blank (B066660-BLK1)				Prepared & Analyzed: 01/24/13						
Toluene	ND	1.0	µg/L							
Surrogate: 1,2-Dichloroethane-d4	22.6		µg/L	25.0		90.5	70-130			
Surrogate: Toluene-d8	24.9		µg/L	25.0		99.5	70-130			
Surrogate: 4-Bromofluorobenzene	26.4		µg/L	25.0		105	70-130			
LCS (B066660-BS1)				Prepared & Analyzed: 01/24/13						
Toluene	11.5	1.0	µg/L	10.0		115	70-130			
Surrogate: 1,2-Dichloroethane-d4	22.5		µg/L	25.0		89.8	70-130			
Surrogate: Toluene-d8	24.6		µg/L	25.0		98.3	70-130			
Surrogate: 4-Bromofluorobenzene	24.7		µg/L	25.0		98.7	70-130			
LCS Dup (B066660-BSD1)				Prepared & Analyzed: 01/24/13						
Toluene	11.8	1.0	µg/L	10.0		118	70-130	2.65	20	
Surrogate: 1,2-Dichloroethane-d4	23.8		µg/L	25.0		95.0	70-130			
Surrogate: Toluene-d8	25.8		µg/L	25.0		103	70-130			
Surrogate: 4-Bromofluorobenzene	25.8		µg/L	25.0		103	70-130			

QUALITY CONTROL
Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B066590 - SW-846 3510C										
Blank (B066590-BLK1)				Prepared: 01/23/13 Analyzed: 01/24/13						
Acenaphthene	ND	5.0	µg/L							
Acenaphthylene	ND	5.0	µg/L							
Acetophenone	ND	10	µg/L							
Aniline	ND	5.0	µg/L							
Anthracene	ND	5.0	µg/L							
Benzo(a)anthracene	ND	5.0	µg/L							
Benzo(a)pyrene	ND	5.0	µg/L							
Benzo(b)fluoranthene	ND	5.0	µg/L							
Benzo(g,h,i)perylene	ND	5.0	µg/L							
Benzo(k)fluoranthene	ND	5.0	µg/L							
Bis(2-chloroethoxy)methane	ND	10	µg/L							
Bis(2-chloroethyl)ether	ND	10	µg/L							
Bis(2-chloroisopropyl)ether	ND	10	µg/L							V-05
Bis(2-Ethylhexyl)phthalate	ND	10	µg/L							
4-Bromophenylphenylether	ND	10	µg/L							
Butylbenzylphthalate	ND	10	µg/L							
4-Chloroaniline	ND	10	µg/L							
2-Chloronaphthalene	ND	10	µg/L							
2-Chlorophenol	ND	10	µg/L							
Chrysene	ND	5.0	µg/L							
Dibenz(a,h)anthracene	ND	5.0	µg/L							
Dibenzofuran	ND	5.0	µg/L							
Di-n-butylphthalate	ND	10	µg/L							
1,2-Dichlorobenzene	ND	5.0	µg/L							
1,3-Dichlorobenzene	ND	5.0	µg/L							
1,4-Dichlorobenzene	ND	5.0	µg/L							
3,3-Dichlorobenzidine	ND	10	µg/L							
2,4-Dichlorophenol	ND	10	µg/L							
Diethylphthalate	ND	10	µg/L							
2,4-Dimethylphenol	ND	10	µg/L							
Dimethylphthalate	ND	10	µg/L							
2,4-Dinitrophenol	ND	10	µg/L							
2,4-Dinitrotoluene	ND	10	µg/L							
2,6-Dinitrotoluene	ND	10	µg/L							
Di-n-octylphthalate	ND	10	µg/L							
1,2-Diphenylhydrazine (as Azobenzene)	ND	10	µg/L							
Fluoranthene	ND	5.0	µg/L							
Fluorene	ND	5.0	µg/L							
Hexachlorobenzene	ND	10	µg/L							
Hexachlorobutadiene	ND	10	µg/L							
Hexachloroethane	ND	10	µg/L							
Indeno(1,2,3-cd)pyrene	ND	5.0	µg/L							
Isophorone	ND	10	µg/L							
2-Methylnaphthalene	ND	5.0	µg/L							
2-Methylphenol	ND	10	µg/L							
3/4-Methylphenol	ND	10	µg/L							
Naphthalene	ND	5.0	µg/L							
Nitrobenzene	ND	10	µg/L							
2-Nitrophenol	ND	10	µg/L							
4-Nitrophenol	ND	10	µg/L							V-05
Pentachlorophenol	ND	10	µg/L							
Phenanthrene	ND	5.0	µg/L							

QUALITY CONTROL
Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes

Batch B066590 - SW-846 3510C
Blank (B066590-BLK1)

Prepared: 01/23/13 Analyzed: 01/24/13

Phenol	ND	10	µg/L							
Pyrene	ND	5.0	µg/L							
1,2,4-Trichlorobenzene	ND	5.0	µg/L							
2,4,5-Trichlorophenol	ND	10	µg/L							
2,4,6-Trichlorophenol	ND	10	µg/L							
Surrogate: 2-Fluorophenol	128		µg/L	200		64.2	15-110			
Surrogate: Phenol-d6	106		µg/L	200		52.8	15-110			
Surrogate: Nitrobenzene-d5	91.5		µg/L	100		91.5	30-130			
Surrogate: 2-Fluorobiphenyl	104		µg/L	100		104	30-130			
Surrogate: 2,4,6-Tribromophenol	259		µg/L	200		129 *	15-110			S-07
Surrogate: Terphenyl-d14	119		µg/L	100		119	30-130			

LCS (B066590-BS1)

Prepared: 01/23/13 Analyzed: 01/24/13

Acenaphthene	50.4	5.0	µg/L	50.0		101	40-140			
Acenaphthylene	49.8	5.0	µg/L	50.0		99.5	40-140			
Acetophenone	46.4	10	µg/L	50.0		92.9	40-140			
Aniline	31.7	5.0	µg/L	50.0		63.5	40-140			
Anthracene	52.8	5.0	µg/L	50.0		106	40-140			
Benzo(a)anthracene	54.3	5.0	µg/L	50.0		109	40-140			
Benzo(a)pyrene	55.7	5.0	µg/L	50.0		111	40-140			
Benzo(b)fluoranthene	56.6	5.0	µg/L	50.0		113	40-140			
Benzo(g,h,i)perylene	48.3	5.0	µg/L	50.0		96.6	40-140			
Benzo(k)fluoranthene	55.6	5.0	µg/L	50.0		111	40-140			
Bis(2-chloroethoxy)methane	50.2	10	µg/L	50.0		100	40-140			
Bis(2-chloroethyl)ether	48.6	10	µg/L	50.0		97.3	40-140			
Bis(2-chloroisopropyl)ether	38.5	10	µg/L	50.0		77.0	40-140			V-05
Bis(2-Ethylhexyl)phthalate	54.2	10	µg/L	50.0		108	40-140			
4-Bromophenylphenylether	55.4	10	µg/L	50.0		111	40-140			
Butylbenzylphthalate	51.9	10	µg/L	50.0		104	40-140			
4-Chloroaniline	45.6	10	µg/L	50.0		91.1	15-140			†
2-Chloronaphthalene	49.9	10	µg/L	50.0		99.8	40-140			
2-Chlorophenol	47.0	10	µg/L	50.0		94.0	30-130			
Chrysene	55.9	5.0	µg/L	50.0		112	40-140			
Dibenz(a,h)anthracene	51.7	5.0	µg/L	50.0		103	40-140			
Dibenzofuran	50.9	5.0	µg/L	50.0		102	40-140			
Di-n-butylphthalate	52.2	10	µg/L	50.0		104	40-140			
1,2-Dichlorobenzene	42.2	5.0	µg/L	50.0		84.5	40-140			
1,3-Dichlorobenzene	41.0	5.0	µg/L	50.0		81.9	40-140			
1,4-Dichlorobenzene	41.4	5.0	µg/L	50.0		82.9	40-140			
3,3-Dichlorobenzidine	60.9	10	µg/L	50.0		122	40-140			
2,4-Dichlorophenol	52.0	10	µg/L	50.0		104	30-130			
Diethylphthalate	50.2	10	µg/L	50.0		100	40-140			
2,4-Dimethylphenol	53.6	10	µg/L	50.0		107	30-130			
Dimethylphthalate	52.2	10	µg/L	50.0		104	40-140			
2,4-Dinitrophenol	54.4	10	µg/L	50.0		109	15-140			†
2,4-Dinitrotoluene	53.8	10	µg/L	50.0		108	40-140			
2,6-Dinitrotoluene	54.3	10	µg/L	50.0		109	40-140			
Di-n-octylphthalate	53.0	10	µg/L	50.0		106	40-140			
1,2-Diphenylhydrazine (as Azobenzene)	48.4	10	µg/L	50.0		96.8	40-140			
Fluoranthene	54.9	5.0	µg/L	50.0		110	40-140			
Fluorene	53.3	5.0	µg/L	50.0		107	40-140			
Hexachlorobenzene	55.7	10	µg/L	50.0		111	40-140			

QUALITY CONTROL

Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes

Batch B066590 - SW-846 3510C

LCS (B066590-BS1)

Prepared: 01/23/13 Analyzed: 01/24/13

Hexachlorobutadiene	43.9	10	µg/L	50.0		87.7	40-140			
Hexachloroethane	37.8	10	µg/L	50.0		75.6	40-140			
Indeno(1,2,3-cd)pyrene	51.6	5.0	µg/L	50.0		103	40-140			
Isophorone	46.6	10	µg/L	50.0		93.3	40-140			
2-Methylnaphthalene	46.9	5.0	µg/L	50.0		93.9	40-140			
2-Methylphenol	42.0	10	µg/L	50.0		83.9	30-130			
3/4-Methylphenol	59.8	10	µg/L	50.0		120	30-130			
Naphthalene	45.5	5.0	µg/L	50.0		91.0	40-140			
Nitrobenzene	42.9	10	µg/L	50.0		85.8	40-140			
2-Nitrophenol	52.5	10	µg/L	50.0		105	30-130			
4-Nitrophenol	21.4	10	µg/L	50.0		42.9	15-140			V-05 †
Pentachlorophenol	53.8	10	µg/L	50.0		108	30-130			
Phenanthrene	53.4	5.0	µg/L	50.0		107	40-140			
Phenol	23.9	10	µg/L	50.0		47.7	15-140			†
Pyrene	52.1	5.0	µg/L	50.0		104	40-140			
1,2,4-Trichlorobenzene	46.7	5.0	µg/L	50.0		93.4	40-140			
2,4,5-Trichlorophenol	52.5	10	µg/L	50.0		105	30-130			
2,4,6-Trichlorophenol	56.1	10	µg/L	50.0		112	30-130			
Surrogate: 2-Fluorophenol	125		µg/L	200		62.3	15-110			
Surrogate: Phenol-d6	83.6		µg/L	200		41.8	15-110			
Surrogate: Nitrobenzene-d5	90.0		µg/L	100		90.0	30-130			
Surrogate: 2-Fluorobiphenyl	101		µg/L	100		101	30-130			
Surrogate: 2,4,6-Tribromophenol	262		µg/L	200		131 *	15-110			S-07
Surrogate: Terphenyl-d14	111		µg/L	100		111	30-130			

LCS Dup (B066590-BSD1)

Prepared: 01/23/13 Analyzed: 01/24/13

Acenaphthene	50.6	5.0	µg/L	50.0		101	40-140	0.377	20	
Acenaphthylene	49.9	5.0	µg/L	50.0		99.7	40-140	0.201	20	
Acetophenone	46.3	10	µg/L	50.0		92.6	40-140	0.345	20	
Aniline	31.6	5.0	µg/L	50.0		63.2	40-140	0.379	20	
Anthracene	53.4	5.0	µg/L	50.0		107	40-140	1.13	20	
Benzo(a)anthracene	55.0	5.0	µg/L	50.0		110	40-140	1.33	20	
Benzo(a)pyrene	56.1	5.0	µg/L	50.0		112	40-140	0.805	20	
Benzo(b)fluoranthene	59.8	5.0	µg/L	50.0		120	40-140	5.43	20	
Benzo(g,h,i)perylene	47.6	5.0	µg/L	50.0		95.2	40-140	1.44	20	
Benzo(k)fluoranthene	55.2	5.0	µg/L	50.0		110	40-140	0.596	20	
Bis(2-chloroethoxy)methane	51.0	10	µg/L	50.0		102	40-140	1.60	20	
Bis(2-chloroethyl)ether	49.3	10	µg/L	50.0		98.6	40-140	1.31	20	
Bis(2-chloroisopropyl)ether	38.8	10	µg/L	50.0		77.6	40-140	0.854	20	V-05
Bis(2-Ethylhexyl)phthalate	55.3	10	µg/L	50.0		111	40-140	2.01	20	
4-Bromophenylphenylether	54.6	10	µg/L	50.0		109	40-140	1.55	20	
Butylbenzylphthalate	53.6	10	µg/L	50.0		107	40-140	3.22	20	
4-Chloroaniline	45.5	10	µg/L	50.0		91.0	15-140	0.132	20	†
2-Chloronaphthalene	49.4	10	µg/L	50.0		98.7	40-140	1.09	20	
2-Chlorophenol	47.5	10	µg/L	50.0		95.0	30-130	1.06	20	
Chrysene	57.4	5.0	µg/L	50.0		115	40-140	2.68	20	
Dibenz(a,h)anthracene	50.6	5.0	µg/L	50.0		101	40-140	2.11	20	
Dibenzofuran	51.0	5.0	µg/L	50.0		102	40-140	0.0196	20	
Di-n-butylphthalate	53.5	10	µg/L	50.0		107	40-140	2.37	20	
1,2-Dichlorobenzene	42.2	5.0	µg/L	50.0		84.4	40-140	0.0710	20	
1,3-Dichlorobenzene	41.2	5.0	µg/L	50.0		82.3	40-140	0.512	20	
1,4-Dichlorobenzene	41.3	5.0	µg/L	50.0		82.6	40-140	0.363	20	

QUALITY CONTROL
Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes

Batch B066590 - SW-846 3510C
LCS Dup (B066590-BSD1)

Prepared: 01/23/13 Analyzed: 01/24/13

3,3-Dichlorobenzidine	59.5	10	µg/L	50.0		119	40-140	2.28	20	
2,4-Dichlorophenol	52.6	10	µg/L	50.0		105	30-130	1.26	20	
Diethylphthalate	50.7	10	µg/L	50.0		101	40-140	1.17	20	
2,4-Dimethylphenol	53.3	10	µg/L	50.0		107	30-130	0.524	20	
Dimethylphthalate	52.4	10	µg/L	50.0		105	40-140	0.249	20	
2,4-Dinitrophenol	50.8	10	µg/L	50.0		102	15-140	7.01	20	†
2,4-Dinitrotoluene	54.6	10	µg/L	50.0		109	40-140	1.48	20	
2,6-Dinitrotoluene	55.5	10	µg/L	50.0		111	40-140	2.13	20	
Di-n-octylphthalate	57.8	10	µg/L	50.0		116	40-140	8.56	20	
1,2-Diphenylhydrazine (as Azobenzene)	43.5	10	µg/L	50.0		87.0	40-140	10.7	20	
Fluoranthene	56.7	5.0	µg/L	50.0		113	40-140	3.30	20	
Fluorene	53.6	5.0	µg/L	50.0		107	40-140	0.524	20	
Hexachlorobenzene	55.4	10	µg/L	50.0		111	40-140	0.504	20	
Hexachlorobutadiene	43.7	10	µg/L	50.0		87.4	40-140	0.342	20	
Hexachloroethane	38.4	10	µg/L	50.0		76.9	40-140	1.71	20	
Indeno(1,2,3-cd)pyrene	51.6	5.0	µg/L	50.0		103	40-140	0.0388	20	
Isophorone	47.0	10	µg/L	50.0		94.0	40-140	0.726	20	
2-Methylnaphthalene	47.0	5.0	µg/L	50.0		94.0	40-140	0.149	20	
2-Methylphenol	41.4	10	µg/L	50.0		82.8	30-130	1.30	20	
3/4-Methylphenol	56.0	10	µg/L	50.0		112	30-130	6.65	20	
Naphthalene	45.3	5.0	µg/L	50.0		90.5	40-140	0.551	20	
Nitrobenzene	42.5	10	µg/L	50.0		85.0	40-140	0.937	20	
2-Nitrophenol	52.8	10	µg/L	50.0		106	30-130	0.646	20	
4-Nitrophenol	21.7	10	µg/L	50.0		43.4	15-140	1.30	20	V-05 †
Pentachlorophenol	55.7	10	µg/L	50.0		111	30-130	3.38	20	
Phenanthrene	53.6	5.0	µg/L	50.0		107	40-140	0.299	20	
Phenol	23.1	10	µg/L	50.0		46.2	15-140	3.37	20	†
Pyrene	52.0	5.0	µg/L	50.0		104	40-140	0.307	20	
1,2,4-Trichlorobenzene	46.4	5.0	µg/L	50.0		92.7	40-140	0.795	20	
2,4,5-Trichlorophenol	52.9	10	µg/L	50.0		106	30-130	0.797	20	
2,4,6-Trichlorophenol	56.2	10	µg/L	50.0		112	30-130	0.196	20	
Surrogate: 2-Fluorophenol	125		µg/L	200		62.5	15-110			
Surrogate: Phenol-d6	83.8		µg/L	200		41.9	15-110			
Surrogate: Nitrobenzene-d5	90.2		µg/L	100		90.2	30-130			
Surrogate: 2-Fluorobiphenyl	101		µg/L	100		101	30-130			
Surrogate: 2,4,6-Tribromophenol	269		µg/L	200		135	* 15-110			S-07
Surrogate: Terphenyl-d14	111		µg/L	100		111	30-130			

Matrix Spike (B066590-MS1)
Source: 13A0480-02

Prepared: 01/23/13 Analyzed: 01/24/13

Acenaphthene	56.7	5.0	µg/L	50.0	ND	113	40-140			
Acenaphthylene	55.8	5.0	µg/L	50.0	ND	112	40-140			
Acetophenone	50.8	10	µg/L	50.0	ND	102	40-140			
Aniline	31.2	5.0	µg/L	50.0	ND	62.4	40-140			
Anthracene	58.3	5.0	µg/L	50.0	ND	117	40-140			
Benzo(a)anthracene	59.6	5.0	µg/L	50.0	ND	119	40-140			
Benzo(a)pyrene	61.7	5.0	µg/L	50.0	ND	123	40-140			
Benzo(b)fluoranthene	66.6	5.0	µg/L	50.0	ND	133	40-140			
Benzo(g,h,i)perylene	49.0	5.0	µg/L	50.0	ND	98.0	40-140			
Benzo(k)fluoranthene	61.4	5.0	µg/L	50.0	ND	123	40-140			
Bis(2-chloroethoxy)methane	55.7	10	µg/L	50.0	ND	111	40-140			
Bis(2-chloroethyl)ether	52.7	10	µg/L	50.0	ND	105	40-140			
Bis(2-chloroisopropyl)ether	42.6	10	µg/L	50.0	ND	85.2	40-140			V-05

QUALITY CONTROL
Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B066590 - SW-846 3510C										
Matrix Spike (B066590-MS1)	Source: 13A0480-02			Prepared: 01/23/13 Analyzed: 01/24/13						
Bis(2-Ethylhexyl)phthalate	58.6	10	µg/L	50.0	ND	117	40-140			
4-Bromophenylphenylether	59.4	10	µg/L	50.0	ND	119	40-140			
Butylbenzylphthalate	58.0	10	µg/L	50.0	ND	116	40-140			
4-Chloroaniline	45.4	10	µg/L	50.0	ND	90.7	40-140			
2-Chloronaphthalene	56.0	10	µg/L	50.0	ND	112	40-140			R-06
2-Chlorophenol	50.7	10	µg/L	50.0	ND	101	30-130			
Chrysene	62.4	5.0	µg/L	50.0	ND	125	40-140			
Dibenz(a,h)anthracene	53.6	5.0	µg/L	50.0	ND	107	40-140			
Dibenzofuran	56.7	5.0	µg/L	50.0	ND	113	40-140			
Di-n-butylphthalate	58.6	10	µg/L	50.0	ND	117	40-140			
1,2-Dichlorobenzene	47.7	5.0	µg/L	50.0	ND	95.4	40-140			
1,3-Dichlorobenzene	47.1	5.0	µg/L	50.0	ND	94.2	40-140			
1,4-Dichlorobenzene	46.9	5.0	µg/L	50.0	ND	93.7	40-140			
3,3-Dichlorobenzidine	57.6	10	µg/L	50.0	ND	115	40-140			
2,4-Dichlorophenol	57.9	10	µg/L	50.0	ND	116	30-130			
Diethylphthalate	56.4	10	µg/L	50.0	ND	113	40-140			
2,4-Dimethylphenol	59.0	10	µg/L	50.0	ND	118	30-130			
Dimethylphthalate	58.6	10	µg/L	50.0	ND	117	40-140			
2,4-Dinitrophenol	60.3	10	µg/L	50.0	ND	121	40-140			
2,4-Dinitrotoluene	61.2	10	µg/L	50.0	ND	122	40-140			
2,6-Dinitrotoluene	61.8	10	µg/L	50.0	ND	124	40-140			
Di-n-octylphthalate	64.7	10	µg/L	50.0	ND	129	40-140			R-06
1,2-Diphenylhydrazine (as Azobenzene)	52.6	10	µg/L	50.0	ND	105	40-140			
Fluoranthene	63.5	5.0	µg/L	50.0	ND	127	40-140			
Fluorene	59.9	5.0	µg/L	50.0	ND	120	40-140			
Hexachlorobenzene	60.7	10	µg/L	50.0	ND	121	40-140			
Hexachlorobutadiene	51.2	10	µg/L	50.0	ND	102	40-140			
Hexachloroethane	44.0	10	µg/L	50.0	ND	88.0	40-140			
Indeno(1,2,3-cd)pyrene	53.1	5.0	µg/L	50.0	ND	106	40-140			
Isophorone	51.7	10	µg/L	50.0	ND	103	40-140			
2-Methylnaphthalene	53.1	5.0	µg/L	50.0	ND	106	40-140			
2-Methylphenol	45.0	10	µg/L	50.0	ND	90.0	30-130			
3/4-Methylphenol	88.4	10	µg/L	50.0	ND	177 *	30-130			MS-15
Naphthalene	51.1	5.0	µg/L	50.0	ND	102	40-140			
Nitrobenzene	47.2	10	µg/L	50.0	ND	94.4	40-140			
2-Nitrophenol	58.1	10	µg/L	50.0	ND	116	30-130			
4-Nitrophenol	30.5	10	µg/L	50.0	ND	60.9	30-130			V-05
Pentachlorophenol	61.9	10	µg/L	50.0	ND	124	30-130			
Phenanthrene	59.0	5.0	µg/L	50.0	ND	118	40-140			
Phenol	23.0	10	µg/L	50.0	ND	46.0	30-130			
Pyrene	55.9	5.0	µg/L	50.0	ND	112	40-140			
1,2,4-Trichlorobenzene	53.5	5.0	µg/L	50.0	ND	107	40-140			
2,4,5-Trichlorophenol	59.1	10	µg/L	50.0	ND	118	30-130			
2,4,6-Trichlorophenol	63.2	10	µg/L	50.0	ND	126	30-130			
Surrogate: 2-Fluorophenol	128		µg/L	200		64.0	15-110			
Surrogate: Phenol-d6	83.0		µg/L	200		41.5	15-110			
Surrogate: Nitrobenzene-d5	98.8		µg/L	100		98.8	30-130			
Surrogate: 2-Fluorobiphenyl	112		µg/L	100		112	30-130			
Surrogate: 2,4,6-Tribromophenol	302		µg/L	200		151 *	15-110			S-07
Surrogate: Terphenyl-d14	117		µg/L	100		117	30-130			

QUALITY CONTROL

Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B066590 - SW-846 3510C										
Matrix Spike Dup (B066590-MSD1)	Source: 13A0480-02			Prepared: 01/23/13 Analyzed: 01/24/13						
Acenaphthene	50.4	5.0	µg/L	50.0	ND	101	40-140	11.7	20	
Acenaphthylene	50.3	5.0	µg/L	50.0	ND	101	40-140	10.3	20	
Acetophenone	46.1	10	µg/L	50.0	ND	92.2	40-140	9.56	20	
Aniline	28.9	5.0	µg/L	50.0	ND	57.7	40-140	7.73	20	
Anthracene	52.6	5.0	µg/L	50.0	ND	105	40-140	10.2	20	
Benzo(a)anthracene	55.0	5.0	µg/L	50.0	ND	110	40-140	8.12	20	
Benzo(a)pyrene	56.2	5.0	µg/L	50.0	ND	112	40-140	9.35	20	
Benzo(b)fluoranthene	58.6	5.0	µg/L	50.0	ND	117	40-140	12.9	20	
Benzo(g,h,i)perylene	48.8	5.0	µg/L	50.0	ND	97.5	40-140	0.491	20	
Benzo(k)fluoranthene	52.7	5.0	µg/L	50.0	ND	105	40-140	15.2	20	
Bis(2-chloroethoxy)methane	48.7	10	µg/L	50.0	ND	97.4	40-140	13.4	20	
Bis(2-chloroethyl)ether	45.4	10	µg/L	50.0	ND	90.9	40-140	14.8	20	
Bis(2-chloroisopropyl)ether	38.1	10	µg/L	50.0	ND	76.3	40-140	11.0	20	V-05
Bis(2-Ethylhexyl)phthalate	52.7	10	µg/L	50.0	ND	105	40-140	10.6	20	
4-Bromophenylphenylether	55.5	10	µg/L	50.0	ND	111	40-140	6.77	20	
Butylbenzylphthalate	52.4	10	µg/L	50.0	ND	105	40-140	10.2	20	
4-Chloroaniline	43.3	10	µg/L	50.0	ND	86.6	40-140	4.67	20	
2-Chloronaphthalene	44.0	10	µg/L	50.0	ND	88.0	40-140	24.0 *	20	R-06
2-Chlorophenol	45.7	10	µg/L	50.0	ND	91.4	30-130	10.3	20	
Chrysene	55.5	5.0	µg/L	50.0	ND	111	40-140	11.7	20	
Dibenz(a,h)anthracene	52.2	5.0	µg/L	50.0	ND	104	40-140	2.65	20	
Dibenzofuran	51.8	5.0	µg/L	50.0	ND	104	40-140	8.94	20	
Di-n-butylphthalate	51.1	10	µg/L	50.0	ND	102	40-140	13.6	20	
1,2-Dichlorobenzene	42.3	5.0	µg/L	50.0	ND	84.5	40-140	12.1	20	
1,3-Dichlorobenzene	41.1	5.0	µg/L	50.0	ND	82.1	40-140	13.7	20	
1,4-Dichlorobenzene	41.6	5.0	µg/L	50.0	ND	83.2	40-140	11.9	20	
3,3-Dichlorobenzidine	55.1	10	µg/L	50.0	ND	110	40-140	4.47	20	
2,4-Dichlorophenol	52.5	10	µg/L	50.0	ND	105	30-130	9.69	20	
Diethylphthalate	50.2	10	µg/L	50.0	ND	100	40-140	11.6	20	
2,4-Dimethylphenol	53.4	10	µg/L	50.0	ND	107	30-130	10.0	20	
Dimethylphthalate	52.5	10	µg/L	50.0	ND	105	40-140	10.9	20	
2,4-Dinitrophenol	59.1	10	µg/L	50.0	ND	118	40-140	2.03	20	
2,4-Dinitrotoluene	54.2	10	µg/L	50.0	ND	108	40-140	12.2	20	
2,6-Dinitrotoluene	55.6	10	µg/L	50.0	ND	111	40-140	10.5	20	
Di-n-octylphthalate	51.3	10	µg/L	50.0	ND	103	40-140	23.0 *	20	R-06
1,2-Diphenylhydrazine (as Azobenzene)	48.7	10	µg/L	50.0	ND	97.4	40-140	7.58	20	
Fluoranthene	53.6	5.0	µg/L	50.0	ND	107	40-140	16.8	20	
Fluorene	53.8	5.0	µg/L	50.0	ND	108	40-140	10.7	20	
Hexachlorobenzene	55.3	10	µg/L	50.0	ND	111	40-140	9.36	20	
Hexachlorobutadiene	45.4	10	µg/L	50.0	ND	90.8	40-140	12.0	20	
Hexachloroethane	38.8	10	µg/L	50.0	ND	77.6	40-140	12.5	20	
Indeno(1,2,3-cd)pyrene	52.6	5.0	µg/L	50.0	ND	105	40-140	1.00	20	
Isophorone	46.6	10	µg/L	50.0	ND	93.1	40-140	10.4	20	
2-Methylnaphthalene	48.6	5.0	µg/L	50.0	ND	97.1	40-140	8.89	20	
2-Methylphenol	40.8	10	µg/L	50.0	ND	81.7	30-130	9.65	20	
3/4-Methylphenol	81.0	10	µg/L	50.0	ND	162 *	30-130	8.74	20	MS-15
Naphthalene	46.3	5.0	µg/L	50.0	ND	92.6	40-140	9.78	20	
Nitrobenzene	42.5	10	µg/L	50.0	ND	85.0	40-140	10.4	20	
2-Nitrophenol	52.8	10	µg/L	50.0	ND	106	30-130	9.45	20	
4-Nitrophenol	27.1	10	µg/L	50.0	ND	54.3	30-130	11.6	20	V-05
Pentachlorophenol	55.4	10	µg/L	50.0	ND	111	30-130	11.0	20	
Phenanthrene	54.3	5.0	µg/L	50.0	ND	109	40-140	8.24	20	

QUALITY CONTROL
Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes

Batch B066590 - SW-846 3510C

Matrix Spike Dup (B066590-MSD1)		Source: 13A0480-02		Prepared: 01/23/13 Analyzed: 01/24/13						
Phenol	22.2	10	µg/L	50.0	ND	44.5	30-130	3.27	20	
Pyrene	54.2	5.0	µg/L	50.0	ND	108	40-140	3.12	20	
1,2,4-Trichlorobenzene	48.0	5.0	µg/L	50.0	ND	96.1	40-140	10.7	20	
2,4,5-Trichlorophenol	54.0	10	µg/L	50.0	ND	108	30-130	9.16	20	
2,4,6-Trichlorophenol	57.0	10	µg/L	50.0	ND	114	30-130	10.4	20	
Surrogate: 2-Fluorophenol	153		µg/L	200		76.4	15-110			
Surrogate: Phenol-d6	78.7		µg/L	200		39.3	15-110			
Surrogate: Nitrobenzene-d5	89.5		µg/L	100		89.5	30-130			
Surrogate: 2-Fluorobiphenyl	100		µg/L	100		100	30-130			
Surrogate: 2,4,6-Tribromophenol	269		µg/L	200		134 *	15-110			S-07
Surrogate: Terphenyl-d14	112		µg/L	100		112	30-130			

QUALITY CONTROL
Polychlorinated Biphenyls By GC/ECD - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes

Batch B066478 - SW-846 3510C
Blank (B066478-BLK1)

Prepared: 01/21/13 Analyzed: 01/22/13

Aroclor-1016	ND	0.20	µg/L							
Aroclor-1016 [2C]	ND	0.20	µg/L							
Aroclor-1221	ND	0.20	µg/L							
Aroclor-1221 [2C]	ND	0.20	µg/L							
Aroclor-1232	ND	0.20	µg/L							
Aroclor-1232 [2C]	ND	0.20	µg/L							
Aroclor-1242	ND	0.20	µg/L							
Aroclor-1242 [2C]	ND	0.20	µg/L							
Aroclor-1248	ND	0.20	µg/L							
Aroclor-1248 [2C]	ND	0.20	µg/L							
Aroclor-1254	ND	0.20	µg/L							
Aroclor-1254 [2C]	ND	0.20	µg/L							
Aroclor-1260	ND	0.20	µg/L							
Aroclor-1260 [2C]	ND	0.20	µg/L							
Aroclor-1262	ND	0.20	µg/L							
Aroclor-1262 [2C]	ND	0.20	µg/L							
Aroclor-1268	ND	0.20	µg/L							
Aroclor-1268 [2C]	ND	0.20	µg/L							
Surrogate: Decachlorobiphenyl	1.53		µg/L	2.00		76.4	30-150			
Surrogate: Decachlorobiphenyl [2C]	1.54		µg/L	2.00		76.9	30-150			
Surrogate: Tetrachloro-m-xylene	1.60		µg/L	2.00		79.8	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	1.58		µg/L	2.00		78.8	30-150			

LCS (B066478-BS1)

Prepared: 01/21/13 Analyzed: 01/22/13

Aroclor-1016	0.54	0.20	µg/L	0.500		108	40-140			
Aroclor-1016 [2C]	0.54	0.20	µg/L	0.500		108	40-140			
Aroclor-1260	0.52	0.20	µg/L	0.500		104	40-140			
Aroclor-1260 [2C]	0.53	0.20	µg/L	0.500		105	40-140			
Surrogate: Decachlorobiphenyl	1.59		µg/L	2.00		79.4	30-150			
Surrogate: Decachlorobiphenyl [2C]	1.53		µg/L	2.00		76.4	30-150			
Surrogate: Tetrachloro-m-xylene	1.60		µg/L	2.00		80.1	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	1.57		µg/L	2.00		78.6	30-150			

LCS Dup (B066478-BSD1)

Prepared: 01/21/13 Analyzed: 01/22/13

Aroclor-1016	0.51	0.20	µg/L	0.500		103	40-140	4.74	20	
Aroclor-1016 [2C]	0.51	0.20	µg/L	0.500		103	40-140	4.98	20	
Aroclor-1260	0.50	0.20	µg/L	0.500		99.8	40-140	4.29	20	
Aroclor-1260 [2C]	0.50	0.20	µg/L	0.500		101	40-140	4.56	20	
Surrogate: Decachlorobiphenyl	1.49		µg/L	2.00		74.7	30-150			
Surrogate: Decachlorobiphenyl [2C]	1.50		µg/L	2.00		75.1	30-150			
Surrogate: Tetrachloro-m-xylene	1.54		µg/L	2.00		76.9	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	1.52		µg/L	2.00		75.9	30-150			

QUALITY CONTROL
Polychlorinated Biphenyls By GC/ECD - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes

Batch B066478 - SW-846 3510C
Matrix Spike (B066478-MS1)
Source: 13A0480-02

Prepared: 01/21/13 Analyzed: 01/24/13

Aroclor-1016	0.47	0.20	µg/L	0.500	ND	93.7	40-140			
Aroclor-1016 [2C]	0.55	0.20	µg/L	0.500	ND	111	40-140			
Aroclor-1260	0.42	0.20	µg/L	0.500	ND	84.9	40-140			
Aroclor-1260 [2C]	0.50	0.20	µg/L	0.500	ND	99.3	40-140			
Surrogate: Decachlorobiphenyl	1.40		µg/L	2.00		70.0	30-150			
Surrogate: Decachlorobiphenyl [2C]	1.43		µg/L	2.00		71.7	30-150			
Surrogate: Tetrachloro-m-xylene	1.51		µg/L	2.00		75.6	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	1.56		µg/L	2.00		78.1	30-150			

Matrix Spike Dup (B066478-MSD1)
Source: 13A0480-02

Prepared: 01/21/13 Analyzed: 01/24/13

Aroclor-1016	0.48	0.20	µg/L	0.500	ND	96.2	40-140	2.67	50	
Aroclor-1016 [2C]	0.52	0.20	µg/L	0.500	ND	105	40-140	5.38	50	
Aroclor-1260	0.46	0.20	µg/L	0.500	ND	92.1	40-140	8.07	50	
Aroclor-1260 [2C]	0.52	0.20	µg/L	0.500	ND	104	40-140	4.50	50	
Surrogate: Decachlorobiphenyl	1.53		µg/L	2.00		76.6	30-150			
Surrogate: Decachlorobiphenyl [2C]	1.55		µg/L	2.00		77.6	30-150			
Surrogate: Tetrachloro-m-xylene	1.63		µg/L	2.00		81.3	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	1.67		µg/L	2.00		83.5	30-150			

Batch B066691 - SW-846 3510C
Blank (B066691-BLK1)

Prepared: 01/24/13 Analyzed: 01/25/13

Aroclor-1016	ND	0.20	µg/L							
Aroclor-1016 [2C]	ND	0.20	µg/L							
Aroclor-1221	ND	0.20	µg/L							
Aroclor-1221 [2C]	ND	0.20	µg/L							
Aroclor-1232	ND	0.20	µg/L							
Aroclor-1232 [2C]	ND	0.20	µg/L							
Aroclor-1242	ND	0.20	µg/L							
Aroclor-1242 [2C]	ND	0.20	µg/L							
Aroclor-1248	ND	0.20	µg/L							
Aroclor-1248 [2C]	ND	0.20	µg/L							
Aroclor-1254	ND	0.20	µg/L							
Aroclor-1254 [2C]	ND	0.20	µg/L							
Aroclor-1260	ND	0.20	µg/L							
Aroclor-1260 [2C]	ND	0.20	µg/L							
Aroclor-1262	ND	0.20	µg/L							
Aroclor-1262 [2C]	ND	0.20	µg/L							
Aroclor-1268	ND	0.20	µg/L							
Aroclor-1268 [2C]	ND	0.20	µg/L							
Surrogate: Decachlorobiphenyl	1.26		µg/L	2.00		63.1	30-150			
Surrogate: Decachlorobiphenyl [2C]	1.32		µg/L	2.00		65.8	30-150			
Surrogate: Tetrachloro-m-xylene	1.70		µg/L	2.00		85.1	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	1.94		µg/L	2.00		96.9	30-150			

QUALITY CONTROL
Polychlorinated Biphenyls By GC/ECD - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes

Batch B066691 - SW-846 3510C
LCS (B066691-BS1)

Prepared: 01/24/13 Analyzed: 01/25/13

Aroclor-1016	0.52	0.20	µg/L	0.500		104	40-140			
Aroclor-1016 [2C]	0.54	0.20	µg/L	0.500		108	40-140			
Aroclor-1260	0.48	0.20	µg/L	0.500		96.6	40-140			
Aroclor-1260 [2C]	0.47	0.20	µg/L	0.500		93.8	40-140			
Surrogate: Decachlorobiphenyl	1.45		µg/L	2.00		72.4	30-150			
Surrogate: Decachlorobiphenyl [2C]	1.47		µg/L	2.00		73.7	30-150			
Surrogate: Tetrachloro-m-xylene	1.67		µg/L	2.00		83.7	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	1.91		µg/L	2.00		95.7	30-150			

LCS Dup (B066691-BSD1)

Prepared: 01/24/13 Analyzed: 01/25/13

Aroclor-1016	0.55	0.20	µg/L	0.500		111	40-140	6.39	20	
Aroclor-1016 [2C]	0.56	0.20	µg/L	0.500		112	40-140	4.06	20	
Aroclor-1260	0.49	0.20	µg/L	0.500		97.7	40-140	1.13	20	
Aroclor-1260 [2C]	0.52	0.20	µg/L	0.500		103	40-140	9.66	20	
Surrogate: Decachlorobiphenyl	1.49		µg/L	2.00		74.4	30-150			
Surrogate: Decachlorobiphenyl [2C]	1.62		µg/L	2.00		81.2	30-150			
Surrogate: Tetrachloro-m-xylene	1.73		µg/L	2.00		86.4	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	1.98		µg/L	2.00		98.8	30-150			

QUALITY CONTROL
Petroleum Hydrocarbons Analyses - EPH - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes

Batch B066495 - SW-846 3510C
Blank (B066495-BLK1)

Prepared & Analyzed: 01/22/13

C9-C18 Aliphatics	ND	100	µg/L							
C19-C36 Aliphatics	ND	100	µg/L							
Unadjusted C11-C22 Aromatics	ND	100	µg/L							
C11-C22 Aromatics	ND	100	µg/L							
Acenaphthene	ND	2.0	µg/L							
Acenaphthylene	ND	2.0	µg/L							
Anthracene	ND	2.0	µg/L							
Benzo(a)anthracene	ND	2.0	µg/L							
Benzo(a)pyrene	ND	2.0	µg/L							
Benzo(b)fluoranthene	ND	2.0	µg/L							
Benzo(g,h,i)perylene	ND	2.0	µg/L							
Benzo(k)fluoranthene	ND	2.0	µg/L							
Chrysene	ND	2.0	µg/L							
Dibenz(a,h)anthracene	ND	2.0	µg/L							
Fluoranthene	ND	2.0	µg/L							
Fluorene	ND	2.0	µg/L							
Indeno(1,2,3-cd)pyrene	ND	2.0	µg/L							
2-Methylnaphthalene	ND	2.0	µg/L							
Naphthalene	ND	2.0	µg/L							
Phenanthrene	ND	2.0	µg/L							
Pyrene	ND	2.0	µg/L							
Surrogate: Chlorooctadecane (COD)	81.1		µg/L	99.8		81.2	40-140			
Surrogate: o-Terphenyl (OTP)	69.3		µg/L	100		69.3	40-140			
Surrogate: 2-Bromonaphthalene	70.9		µg/L	100		70.9	40-140			
Surrogate: 2-Fluorobiphenyl	76.7		µg/L	100		76.7	40-140			

LCS (B066495-BS1)

Prepared & Analyzed: 01/22/13

Acenaphthene	73.3	2.0	µg/L	100		73.3	40-140			
Acenaphthylene	72.6	2.0	µg/L	100		72.6	40-140			
Anthracene	75.9	2.0	µg/L	100		75.9	40-140			
Benzo(a)anthracene	74.7	2.0	µg/L	100		74.7	40-140			
Benzo(a)pyrene	72.5	2.0	µg/L	100		72.5	40-140			
Benzo(b)fluoranthene	75.1	2.0	µg/L	100		75.1	40-140			
Benzo(g,h,i)perylene	79.8	2.0	µg/L	100		79.8	40-140			
Benzo(k)fluoranthene	73.4	2.0	µg/L	100		73.4	40-140			
Chrysene	69.8	2.0	µg/L	100		69.8	40-140			
Dibenz(a,h)anthracene	78.7	2.0	µg/L	100		78.7	40-140			
Fluoranthene	74.3	2.0	µg/L	100		74.3	40-140			
Fluorene	74.8	2.0	µg/L	100		74.8	40-140			
Indeno(1,2,3-cd)pyrene	80.7	2.0	µg/L	100		80.7	40-140			
2-Methylnaphthalene	70.7	2.0	µg/L	100		70.7	40-140			
Naphthalene	61.6	2.0	µg/L	100		61.6	40-140			
Phenanthrene	76.3	2.0	µg/L	100		76.3	40-140			
Pyrene	72.3	2.0	µg/L	100		72.3	40-140			
n-Decane	51.1	2.0	µg/L	100		51.1	40-140			
n-Docosane	86.2	2.0	µg/L	100		86.2	40-140			
n-Dodecane	68.9	2.0	µg/L	100		68.9	40-140			
n-Eicosane	88.2	2.0	µg/L	100		88.2	40-140			
n-Hexacosane	80.7	2.0	µg/L	100		80.7	40-140			
n-Hexadecane	88.9	2.0	µg/L	100		88.9	40-140			
n-Hexatriacontane	79.6	2.0	µg/L	100		79.6	40-140			
n-Nonadecane	86.8	2.0	µg/L	100		86.8	40-140			

QUALITY CONTROL
Petroleum Hydrocarbons Analyses - EPH - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes

Batch B066495 - SW-846 3510C
LCS (B066495-BS1)

Prepared & Analyzed: 01/22/13

n-Nonane	39.8	2.0	µg/L	100		39.8	30-140			
n-Octacosane	77.7	2.0	µg/L	100		77.7	40-140			
n-Octadecane	90.4	2.0	µg/L	100		90.4	40-140			
n-Tetracosane	83.0	2.0	µg/L	100		83.0	40-140			
n-Tetradecane	82.5	2.0	µg/L	100		82.5	40-140			
n-Triacontane	77.8	2.0	µg/L	100		77.8	40-140			
Naphthalene-aliphatic fraction	ND	2.0	µg/L	100			0-5			
2-Methylnaphthalene-aliphatic fraction	ND	2.0	µg/L	100			0-5			
Surrogate: Chlorooctadecane (COD)	88.5		µg/L	99.8		88.7	40-140			
Surrogate: o-Terphenyl (OTP)	75.7		µg/L	100		75.7	40-140			
Surrogate: 2-Bromonaphthalene	76.0		µg/L	100		76.0	40-140			
Surrogate: 2-Fluorobiphenyl	82.1		µg/L	100		82.1	40-140			

LCS Dup (B066495-BSD1)

Prepared & Analyzed: 01/22/13

Acenaphthene	76.7	2.0	µg/L	100		76.7	40-140	4.48	25	
Acenaphthylene	75.4	2.0	µg/L	100		75.4	40-140	3.70	25	
Anthracene	79.5	2.0	µg/L	100		79.5	40-140	4.71	25	
Benzo(a)anthracene	78.3	2.0	µg/L	100		78.3	40-140	4.78	25	
Benzo(a)pyrene	75.7	2.0	µg/L	100		75.7	40-140	4.23	25	
Benzo(b)fluoranthene	78.3	2.0	µg/L	100		78.3	40-140	4.12	25	
Benzo(g,h,i)perylene	82.2	2.0	µg/L	100		82.2	40-140	2.93	25	
Benzo(k)fluoranthene	76.8	2.0	µg/L	100		76.8	40-140	4.64	25	
Chrysene	73.2	2.0	µg/L	100		73.2	40-140	4.73	25	
Dibenz(a,h)anthracene	82.1	2.0	µg/L	100		82.1	40-140	4.23	25	
Fluoranthene	78.1	2.0	µg/L	100		78.1	40-140	5.02	25	
Fluorene	78.2	2.0	µg/L	100		78.2	40-140	4.41	25	
Indeno(1,2,3-cd)pyrene	83.7	2.0	µg/L	100		83.7	40-140	3.66	25	
2-Methylnaphthalene	74.4	2.0	µg/L	100		74.4	40-140	5.10	25	
Naphthalene	66.0	2.0	µg/L	100		66.0	40-140	6.89	25	
Phenanthrene	80.1	2.0	µg/L	100		80.1	40-140	4.77	25	
Pyrene	76.1	2.0	µg/L	100		76.1	40-140	5.10	25	
n-Decane	57.4	2.0	µg/L	100		57.4	40-140	11.6	25	
n-Docosane	88.9	2.0	µg/L	100		88.9	40-140	3.09	25	
n-Dodecane	71.4	2.0	µg/L	100		71.4	40-140	3.53	25	
n-Eicosane	91.4	2.0	µg/L	100		91.4	40-140	3.60	25	
n-Hexacosane	83.5	2.0	µg/L	100		83.5	40-140	3.42	25	
n-Hexadecane	92.2	2.0	µg/L	100		92.2	40-140	3.63	25	
n-Hexatriacontane	82.3	2.0	µg/L	100		82.3	40-140	3.35	25	
n-Nonadecane	90.4	2.0	µg/L	100		90.4	40-140	4.06	25	
n-Nonane	47.1	2.0	µg/L	100		47.1	30-140	16.7	25	
n-Octacosane	80.6	2.0	µg/L	100		80.6	40-140	3.64	25	
n-Octadecane	93.3	2.0	µg/L	100		93.3	40-140	3.13	25	
n-Tetracosane	86.3	2.0	µg/L	100		86.3	40-140	3.91	25	
n-Tetradecane	84.7	2.0	µg/L	100		84.7	40-140	2.70	25	
n-Triacontane	80.7	2.0	µg/L	100		80.7	40-140	3.69	25	
Naphthalene-aliphatic fraction	ND	2.0	µg/L	100			0-5			
2-Methylnaphthalene-aliphatic fraction	ND	2.0	µg/L	100			0-5			
Surrogate: Chlorooctadecane (COD)	88.3		µg/L	99.8		88.4	40-140			
Surrogate: o-Terphenyl (OTP)	77.6		µg/L	100		77.6	40-140			
Surrogate: 2-Bromonaphthalene	78.5		µg/L	100		78.5	40-140			
Surrogate: 2-Fluorobiphenyl	83.5		µg/L	100		83.5	40-140			

QUALITY CONTROL
Petroleum Hydrocarbons Analyses - EPH - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes

Batch B066495 - SW-846 3510C

Matrix Spike (B066495-MS1)	Source: 13A0480-02			Prepared: 01/22/13		Analyzed: 01/25/13				
C9-C18 Aliphatics	537	100	µg/L	625	76.0	73.7	40-140			
C19-C36 Aliphatics	761	100	µg/L	833	79.4	81.8	40-140			
Unadjusted C11-C22 Aromatics	1440	100	µg/L	1770	92.4	75.8	40-140			
Acenaphthene	74.7	2.1	µg/L	104	0.00	71.7	40-140			
Acenaphthylene	73.1	2.1	µg/L	104	0.00	70.2	40-140			
Anthracene	79.9	2.1	µg/L	104	0.00	76.7	40-140			
Benzo(a)anthracene	80.5	2.1	µg/L	104	0.00	77.3	40-140			
Benzo(a)pyrene	77.5	2.1	µg/L	104	0.00	74.4	40-140			
Benzo(b)fluoranthene	80.7	2.1	µg/L	104	0.00	77.5	40-140			
Benzo(g,h,i)perylene	84.9	2.1	µg/L	104	0.00	81.5	40-140			
Benzo(k)fluoranthene	78.9	2.1	µg/L	104	0.00	75.7	40-140			
Chrysene	75.2	2.1	µg/L	104	0.00	72.2	40-140			
Dibenz(a,h)anthracene	83.8	2.1	µg/L	104	0.00	80.4	40-140			
Fluoranthene	80.1	2.1	µg/L	104	0.00	76.9	40-140			
Fluorene	77.2	2.1	µg/L	104	0.00	74.1	40-140			
Indeno(1,2,3-cd)pyrene	86.0	2.1	µg/L	104	0.00	82.6	40-140			
2-Methylnaphthalene	72.0	2.1	µg/L	104	0.00	69.1	40-140			
Naphthalene	64.2	2.1	µg/L	104	0.00	61.6	40-140			
Phenanthrene	80.7	2.1	µg/L	104	0.00	77.5	40-140			
Pyrene	77.9	2.1	µg/L	104	0.00	74.8	40-140			
Surrogate: Chlorooctadecane (COD)	82.9		µg/L	104		79.8	40-140			
Surrogate: o-Terphenyl (OTP)	79.0		µg/L	104		75.9	40-140			
Surrogate: 2-Bromonaphthalene	81.6		µg/L	104		78.4	40-140			
Surrogate: 2-Fluorobiphenyl	87.5		µg/L	104		84.0	40-140			

Matrix Spike Dup (B066495-MSD1)	Source: 13A0480-02			Prepared: 01/22/13		Analyzed: 01/25/13				
C9-C18 Aliphatics	502	100	µg/L	625	76.0	68.2	40-140	6.62	50	
C19-C36 Aliphatics	737	100	µg/L	833	79.4	78.9	40-140	3.15	50	
Unadjusted C11-C22 Aromatics	1340	100	µg/L	1770	92.4	70.7	40-140	6.55	50	
Acenaphthene	71.6	2.1	µg/L	104	0.00	68.7	40-140	4.25	50	
Acenaphthylene	70.0	2.1	µg/L	104	0.00	67.2	40-140	4.34	50	
Anthracene	75.1	2.1	µg/L	104	0.00	72.1	40-140	6.15	50	
Benzo(a)anthracene	76.6	2.1	µg/L	104	0.00	73.6	40-140	4.92	50	
Benzo(a)pyrene	74.0	2.1	µg/L	104	0.00	71.1	40-140	4.57	50	
Benzo(b)fluoranthene	77.1	2.1	µg/L	104	0.00	74.0	40-140	4.52	50	
Benzo(g,h,i)perylene	81.2	2.1	µg/L	104	0.00	77.9	40-140	4.50	50	
Benzo(k)fluoranthene	75.5	2.1	µg/L	104	0.00	72.5	40-140	4.32	50	
Chrysene	71.8	2.1	µg/L	104	0.00	68.9	40-140	4.75	50	
Dibenz(a,h)anthracene	80.8	2.1	µg/L	104	0.00	77.6	40-140	3.58	50	
Fluoranthene	75.9	2.1	µg/L	104	0.00	72.8	40-140	5.38	50	
Fluorene	73.8	2.1	µg/L	104	0.00	70.9	40-140	4.44	50	
Indeno(1,2,3-cd)pyrene	82.8	2.1	µg/L	104	0.00	79.4	40-140	3.89	50	
2-Methylnaphthalene	69.0	2.1	µg/L	104	0.00	66.2	40-140	4.36	50	
Naphthalene	61.6	2.1	µg/L	104	0.00	59.1	40-140	4.14	50	
Phenanthrene	76.5	2.1	µg/L	104	0.00	73.4	40-140	5.39	50	
Pyrene	73.9	2.1	µg/L	104	0.00	71.0	40-140	5.18	50	
Surrogate: Chlorooctadecane (COD)	82.0		µg/L	104		78.9	40-140			
Surrogate: o-Terphenyl (OTP)	75.2		µg/L	104		72.1	40-140			
Surrogate: 2-Bromonaphthalene	77.9		µg/L	104		74.8	40-140			
Surrogate: 2-Fluorobiphenyl	83.3		µg/L	104		80.0	40-140			

QUALITY CONTROL
Petroleum Hydrocarbons Analyses - VPH - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes

Batch B066455 - MA VPH
Blank (B066455-BLK1)

Prepared & Analyzed: 01/21/13

Unadjusted C5-C8 Aliphatics	ND	100	µg/L							
C5-C8 Aliphatics	ND	100	µg/L							
Unadjusted C9-C12 Aliphatics	ND	100	µg/L							
C9-C12 Aliphatics	ND	100	µg/L							
C9-C10 Aromatics	ND	100	µg/L							
Benzene	ND	1.0	µg/L							
Ethylbenzene	ND	1.0	µg/L							
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L							
Naphthalene	ND	5.0	µg/L							
Toluene	ND	1.0	µg/L							
m+p Xylene	ND	2.0	µg/L							
o-Xylene	ND	1.0	µg/L							
Surrogate: 2,5-Dibromotoluene (FID)	32.9		µg/L	40.0		82.3	70-130			
Surrogate: 2,5-Dibromotoluene (PID)	29.9		µg/L	40.0		74.8	70-130			

LCS (B066455-BS1)

Prepared & Analyzed: 01/21/13

Benzene	110	1.0	µg/L	100		110	70-130			
Butylcyclohexane	96.8	1.0	µg/L	100		96.8	70-130			
Decane	111	1.0	µg/L	100		111	70-130			
Ethylbenzene	103	1.0	µg/L	100		103	70-130			
Methyl tert-Butyl Ether (MTBE)	105	1.0	µg/L	100		105	70-130			
2-Methylpentane	121	1.0	µg/L	100		121	70-130			
Naphthalene	97.2	5.0	µg/L	100		97.2	70-130			
Nonane	105	1.0	µg/L	100		105	30-130			
Pentane	129	1.0	µg/L	100		129	70-130			
Toluene	107	1.0	µg/L	100		107	70-130			
1,2,4-Trimethylbenzene	101	1.0	µg/L	100		101	70-130			
2,2,4-Trimethylpentane	110	1.0	µg/L	100		110	70-130			
m+p Xylene	209	2.0	µg/L	200		105	70-130			
o-Xylene	106	1.0	µg/L	100		106	70-130			
Surrogate: 2,5-Dibromotoluene (FID)	37.7		µg/L	40.0		94.3	70-130			
Surrogate: 2,5-Dibromotoluene (PID)	34.3		µg/L	40.0		85.7	70-130			

LCS Dup (B066455-BS1)

Prepared & Analyzed: 01/21/13

Benzene	107	1.0	µg/L	100		107	70-130	2.87	25	
Butylcyclohexane	99.1	1.0	µg/L	100		99.1	70-130	2.33	25	
Decane	113	1.0	µg/L	100		113	70-130	1.54	25	
Ethylbenzene	100	1.0	µg/L	100		100	70-130	3.08	25	
Methyl tert-Butyl Ether (MTBE)	102	1.0	µg/L	100		102	70-130	2.36	25	
2-Methylpentane	117	1.0	µg/L	100		117	70-130	3.03	25	
Naphthalene	93.0	5.0	µg/L	100		93.0	70-130	4.44	25	
Nonane	109	1.0	µg/L	100		109	30-130	3.73	25	
Pentane	124	1.0	µg/L	100		124	70-130	3.35	25	
Toluene	105	1.0	µg/L	100		105	70-130	2.46	25	
1,2,4-Trimethylbenzene	98.8	1.0	µg/L	100		98.8	70-130	2.41	25	
2,2,4-Trimethylpentane	111	1.0	µg/L	100		111	70-130	0.536	25	
m+p Xylene	204	2.0	µg/L	200		102	70-130	2.84	25	
o-Xylene	103	1.0	µg/L	100		103	70-130	2.92	25	
Surrogate: 2,5-Dibromotoluene (FID)	40.2		µg/L	40.0		101	70-130			
Surrogate: 2,5-Dibromotoluene (PID)	32.5		µg/L	40.0		81.3	70-130			

QUALITY CONTROL
Petroleum Hydrocarbons Analyses - VPH - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes

Batch B066455 - MA VPH

Matrix Spike (B066455-MS1)		Source: 13A0480-02			Prepared & Analyzed: 01/21/13					
Benzene	116	1.0	µg/L	100	0.00	116	70-130			
Butylcyclohexane	100	1.0	µg/L	100	0.00	100	70-130			
Decane	111	1.0	µg/L	100	0.00	111	70-130			
Ethylbenzene	110	1.0	µg/L	100	0.00	110	70-130			
Methyl tert-Butyl Ether (MTBE)	106	1.0	µg/L	100	0.00	106	70-130			
2-Methylpentane	135	1.0	µg/L	100	0.00	135 *	70-130			MS-15
Naphthalene	94.6	5.0	µg/L	100	0.00	94.6	70-130			
Nonane	103	1.0	µg/L	100	0.00	103	30-130			
Pentane	146	1.0	µg/L	100	0.00	146 *	70-130			MS-15
Toluene	114	1.0	µg/L	100	0.00	114	70-130			
1,2,4-Trimethylbenzene	106	1.0	µg/L	100	0.00	106	70-130			
2,2,4-Trimethylpentane	115	1.0	µg/L	100	0.00	115	70-130			
m+p Xylene	223	2.0	µg/L	200	0.00	111	70-130			
o-Xylene	111	1.0	µg/L	100	0.00	111	70-130			
Surrogate: 2,5-Dibromotoluene (FID)	38.3		µg/L	40.0		95.6	70-130			
Surrogate: 2,5-Dibromotoluene (PID)	34.8		µg/L	40.0		87.1	70-130			

Matrix Spike Dup (B066455-MSD1)		Source: 13A0480-02			Prepared & Analyzed: 01/21/13					
Benzene	113	1.0	µg/L	100	0.00	113	70-130	2.94	50	
Butylcyclohexane	102	1.0	µg/L	100	0.00	102	70-130	1.78	50	
Decane	111	1.0	µg/L	100	0.00	111	70-130	0.522	50	
Ethylbenzene	107	1.0	µg/L	100	0.00	107	70-130	2.62	50	
Methyl tert-Butyl Ether (MTBE)	103	1.0	µg/L	100	0.00	103	70-130	3.09	50	
2-Methylpentane	130	1.0	µg/L	100	0.00	130	70-130	3.28	50	MS-15
Naphthalene	91.3	5.0	µg/L	100	0.00	91.3	70-130	3.50	50	
Nonane	109	1.0	µg/L	100	0.00	109	30-130	6.14	50	
Pentane	139	1.0	µg/L	100	0.00	139 *	70-130	4.79	50	MS-15
Toluene	111	1.0	µg/L	100	0.00	111	70-130	2.66	50	
1,2,4-Trimethylbenzene	104	1.0	µg/L	100	0.00	104	70-130	1.51	50	
2,2,4-Trimethylpentane	124	1.0	µg/L	100	0.00	124	70-130	7.25	50	
m+p Xylene	218	2.0	µg/L	200	0.00	109	70-130	2.14	20	
o-Xylene	108	1.0	µg/L	100	0.00	108	70-130	2.39	50	
Surrogate: 2,5-Dibromotoluene (FID)	35.3		µg/L	40.0		88.3	70-130			
Surrogate: 2,5-Dibromotoluene (PID)	32.5		µg/L	40.0		81.2	70-130			

QUALITY CONTROL
Metals Analyses (Dissolved) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes

Batch B066419 - SW-846 3005A Dissolved
Blank (B066419-BLK1)

Prepared: 01/19/13 Analyzed: 01/21/13

Antimony	ND	5.0	µg/L
Arsenic	ND	2.0	µg/L
Barium	ND	50	µg/L
Beryllium	ND	2.0	µg/L
Cadmium	ND	2.5	µg/L
Chromium	ND	5.0	µg/L
Copper	ND	25	µg/L
Lead	ND	5.0	µg/L
Nickel	ND	25	µg/L
Selenium	ND	25	µg/L
Silver	ND	2.5	µg/L
Thallium	ND	1.0	µg/L
Vanadium	ND	25	µg/L
Zinc	ND	50	µg/L

LCS (B066419-BS1)

Prepared: 01/19/13 Analyzed: 01/21/13

Antimony	244	5.0	µg/L	250	97.5	80-120
Arsenic	236	2.0	µg/L	250	94.5	80-120
Barium	233	50	µg/L	250	93.0	80-120
Beryllium	216	2.0	µg/L	250	86.4	80-120
Cadmium	240	2.5	µg/L	250	96.1	80-120
Chromium	243	5.0	µg/L	250	97.1	80-120
Copper	244	25	µg/L	250	97.5	80-120
Lead	250	5.0	µg/L	250	99.9	80-120
Nickel	238	25	µg/L	250	95.1	80-120
Selenium	236	25	µg/L	250	94.3	80-120
Silver	232	2.5	µg/L	250	92.6	80-120
Thallium	236	1.0	µg/L	250	94.6	80-120
Vanadium	238	25	µg/L	250	95.4	80-120
Zinc	245	50	µg/L	250	98.1	80-120

LCS Dup (B066419-BSD1)

Prepared: 01/19/13 Analyzed: 01/21/13

Antimony	233	5.0	µg/L	250	93.4	80-120	4.31	20
Arsenic	228	2.0	µg/L	250	91.3	80-120	3.43	20
Barium	229	50	µg/L	250	91.8	80-120	1.37	20
Beryllium	221	2.0	µg/L	250	88.4	80-120	2.36	20
Cadmium	228	2.5	µg/L	250	91.2	80-120	5.21	20
Chromium	235	5.0	µg/L	250	94.1	80-120	3.20	20
Copper	232	25	µg/L	250	92.9	80-120	4.89	20
Lead	237	5.0	µg/L	250	94.8	80-120	5.25	20
Nickel	231	25	µg/L	250	92.3	80-120	2.96	20
Selenium	230	25	µg/L	250	92.2	80-120	2.27	20
Silver	223	2.5	µg/L	250	89.3	80-120	3.67	20
Thallium	223	1.0	µg/L	250	89.1	80-120	5.99	20
Vanadium	233	25	µg/L	250	93.1	80-120	2.40	20
Zinc	231	50	µg/L	250	92.5	80-120	5.87	20

QUALITY CONTROL
Metals Analyses (Dissolved) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes

Batch B066419 - SW-846 3005A Dissolved

Duplicate (B066419-DUP1)		Source: 13A0480-02			Prepared: 01/19/13		Analyzed: 01/21/13			
Antimony	ND	5.0	µg/L			ND		NC	20	
Arsenic	ND	2.0	µg/L			ND		NC	20	
Barium	ND	50	µg/L			ND		NC	20	
Beryllium	ND	2.0	µg/L			ND		NC	20	
Cadmium	ND	2.5	µg/L			ND		NC	20	
Chromium	ND	5.0	µg/L			ND		NC	20	
Copper	ND	25	µg/L			ND		NC	20	
Lead	ND	5.0	µg/L			ND		NC	20	
Nickel	ND	25	µg/L			ND		NC	20	
Selenium	ND	25	µg/L			ND		NC	20	
Silver	ND	2.5	µg/L			ND		NC	20	
Thallium	ND	1.0	µg/L			ND		NC	20	
Vanadium	ND	25	µg/L			ND		NC	20	
Zinc	ND	50	µg/L			ND		NC	20	

Matrix Spike (B066419-MS1)		Source: 13A0480-02			Prepared: 01/19/13		Analyzed: 01/21/13			
Antimony	239	5.0	µg/L	250	0.798	95.4	75-125			
Arsenic	231	2.0	µg/L	250	ND	92.5	75-125			
Barium	249	50	µg/L	250	15.4	93.3	75-125			
Beryllium	225	2.0	µg/L	250	ND	90.0	75-125			
Cadmium	234	2.5	µg/L	250	ND	93.8	75-125			
Chromium	244	5.0	µg/L	250	ND	97.7	75-125			
Copper	245	25	µg/L	250	4.01	96.5	75-125			
Lead	244	5.0	µg/L	250	ND	97.6	75-125			
Nickel	242	25	µg/L	250	3.49	95.5	75-125			
Selenium	229	25	µg/L	250	ND	91.7	75-125			
Silver	216	2.5	µg/L	250	ND	86.2	75-125			
Thallium	232	1.0	µg/L	250	ND	92.7	75-125			
Vanadium	252	25	µg/L	250	ND	101	75-125			
Zinc	246	50	µg/L	250	12.3	93.6	75-125			

Matrix Spike Dup (B066419-MSD1)		Source: 13A0480-02			Prepared: 01/19/13		Analyzed: 01/21/13			
Antimony	234	5.0	µg/L	250	0.798	93.3	75-125	2.24	20	
Arsenic	236	2.0	µg/L	250	ND	94.3	75-125	1.95	20	
Barium	240	50	µg/L	250	15.4	90.0	75-125	3.34	20	
Beryllium	224	2.0	µg/L	250	ND	89.5	75-125	0.590	20	
Cadmium	230	2.5	µg/L	250	ND	91.8	75-125	2.09	20	
Chromium	248	5.0	µg/L	250	ND	99.3	75-125	1.61	20	
Copper	243	25	µg/L	250	4.01	95.5	75-125	0.970	20	
Lead	244	5.0	µg/L	250	ND	97.5	75-125	0.0842	20	
Nickel	240	25	µg/L	250	3.49	94.5	75-125	1.13	20	
Selenium	236	25	µg/L	250	ND	94.4	75-125	2.86	20	
Silver	213	2.5	µg/L	250	ND	85.1	75-125	1.32	20	
Thallium	229	1.0	µg/L	250	ND	91.7	75-125	1.04	20	
Vanadium	249	25	µg/L	250	ND	99.6	75-125	1.27	20	
Zinc	249	50	µg/L	250	12.3	94.7	75-125	1.11	20	

QUALITY CONTROL
Metals Analyses (Dissolved) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B066420 - SW-846 7470A Prep										
Blank (B066420-BLK1)				Prepared: 01/19/13 Analyzed: 01/21/13						
Mercury	ND	0.00010	mg/L							
LCS (B066420-BS1)				Prepared: 01/19/13 Analyzed: 01/21/13						
Mercury	0.00186	0.00010	mg/L	0.00200		93.2	80-120			
LCS Dup (B066420-BSD1)				Prepared: 01/19/13 Analyzed: 01/21/13						
Mercury	0.00186	0.00010	mg/L	0.00200		93.1	80-120	0.104	20	
Duplicate (B066420-DUP1)				Source: 13A0480-02		Prepared: 01/19/13 Analyzed: 01/21/13				
Mercury	ND	0.00010	mg/L		ND			NC	20	
Matrix Spike (B066420-MS1)				Source: 13A0480-02		Prepared: 01/19/13 Analyzed: 01/21/13				
Mercury	0.00187	0.00010	mg/L	0.00200	ND	93.5	75-125			
Matrix Spike Dup (B066420-MSD1)				Source: 13A0480-02		Prepared: 01/19/13 Analyzed: 01/21/13				
Mercury	0.00186	0.00010	mg/L	0.00200	ND	92.8	75-125	0.726	20	

FLAG/QUALIFIER SUMMARY

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
	Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.
L-04	Laboratory fortified blank/laboratory control sample recovery and duplicate recovery are outside of control limits. Reported value for this compound is likely to be biased on the low side.
L-07	Either laboratory fortified blank/laboratory control sample or duplicate recovery is outside of control limits, but the other is within limits. RPD between the two LFB/LCS results is within method specified criteria.
L-07A	Either laboratory fortified blank/laboratory control sample or duplicate recovery is outside of control limits, but the other is within limits. RPD outside of control limits. Reduced precision anticipated for any reported result for this compound.
L-14	Compound classified by MA CAM as difficult with acceptable recoveries of 40-160%. Recovery does not meet 70-130% criteria but does meet difficult compound criteria.
MS-09	Matrix spike recovery and matrix spike duplicate recovery outside of control limits. Possibility of sample matrix effects that lead to a low bias for reported result or non-homogeneous sample aliquots cannot be eliminated.
MS-12	Matrix spike recovery and matrix spike duplicate recovery outside of control limits. Possibility of sample matrix effects that lead to a high bias for reported result or non-homogeneous sample aliquots cannot be eliminated.
MS-15	Matrix spike and matrix spike duplicate recoveries are outside of control limits. Data validation is not affected since results for this compound in this sample are "not detected", and recovery bias is on the high side.
MS-24	Either matrix spike or matrix spike duplicate is outside of control limits, but the other is within limits. Analysis is in control based on laboratory fortified blank recovery.
R-05	Laboratory fortified blank duplicate RPD is outside of control limits. Reduced precision is anticipated for any reported value for this compound.
R-06	Matrix spike duplicate RPD is outside of control limits. Reduced precision is anticipated for reported result for this compound in this sample.
RL-07	Elevated reporting limit based on lowest point in calibration. MA CAM reporting limit not met.
S-07	One associated surrogate standard recovery is outside of control limits but the other(s) is/are within limits. All recoveries are > 10%.
V-05	Continuing calibration did not meet method specifications and was biased on the low side for this compound. Increased uncertainty is associated with the reported value which is likely to be biased on the low side.
V-16	Response factor is less than method specified minimum acceptable value. Reduced precision and accuracy may be associated with reported result.
V-20	Continuing calibration did not meet method specifications and was biased on the high side. Data validation is not affected since sample result was "not detected" for this compound.

CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
MADEP-EPH-04-1.1 in Water	
C9-C18 Aliphatics	CT,NC,WA,ME,NH-P
C19-C36 Aliphatics	CT,NC,WA,ME,NH-P
Unadjusted C11-C22 Aromatics	CT,NC,WA,ME,NH-P
C11-C22 Aromatics	CT,NC,WA,ME,NH-P
Acenaphthene	CT,NC,WA,ME,NH-P
Acenaphthylene	CT,NC,WA,ME,NH-P
Anthracene	CT,NC,WA,ME,NH-P
Benzo(a)anthracene	CT,NC,WA,ME,NH-P
Benzo(a)pyrene	CT,NC,WA,ME,NH-P
Benzo(b)fluoranthene	CT,NC,WA,ME,NH-P
Benzo(g,h,i)perylene	CT,NC,WA,ME,NH-P
Benzo(k)fluoranthene	CT,NC,WA,ME,NH-P
Chrysene	CT,NC,WA,ME,NH-P
Dibenz(a,h)anthracene	CT,NC,WA,ME,NH-P
Fluoranthene	CT,NC,WA,ME,NH-P
Fluorene	CT,NC,WA,ME
Indeno(1,2,3-cd)pyrene	CT,NC,WA,ME,NH-P
2-Methylnaphthalene	CT,NC,WA,ME
Naphthalene	CT,NC,WA,ME,NH-P
Phenanthrene	CT,NC,WA,ME,NH-P
Pyrene	CT,NC,WA,ME,NH-P
MADEP-VPH-04-1.1 in Water	
Unadjusted C5-C8 Aliphatics	CT,NC,WA,ME,NH-P
C5-C8 Aliphatics	CT,NC,WA,ME,NH-P
Unadjusted C9-C12 Aliphatics	CT,NC,WA,ME,NH-P
C9-C12 Aliphatics	CT,NC,WA,ME,NH-P
C9-C10 Aromatics	CT,NC,WA,ME,NH-P
Benzene	CT,NC,WA,ME,NH-P
Ethylbenzene	CT,NC,WA,ME,NH-P
Methyl tert-Butyl Ether (MTBE)	CT,NC,WA,ME,NH-P
Naphthalene	CT,NC,WA,ME,NH-P
Toluene	CT,NC,WA,ME,NH-P
m+p Xylene	CT,NC,WA,ME,NH-P
o-Xylene	CT,NC,WA,ME,NH-P
SW-846 6020A in Water	
Antimony	CT,NH,NY,RI,NC,ME,VA
Arsenic	CT,NH,NY,RI,NC,ME,VA
Barium	MA,NY,CT,NC,NH,ME,VA
Beryllium	CT,NH,NY,RI,NC,ME,VA
Cadmium	CT,NH,NY,RI,NC,ME,VA
Chromium	CT,NH,NY,RI,NC,ME,VA
Copper	CT,NH,NY,RI,NC,ME,VA
Lead	CT,NH,NY,RI,NC,ME,VA
Nickel	CT,NH,NY,RI,NC,ME,VA
Selenium	CT,NH,NY,RI,NC,ME,VA
Silver	CT,NC,NH,NY,RI,ME,VA

CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
SW-846 6020A in Water	
Thallium	CT,NH,NY,RI,NC,ME,VA
Vanadium	CT,NH,NY,RI,NC,ME,VA
Zinc	CT,NH,NY,RI,NC,ME,VA
SW-846 7470A in Water	
Mercury	CT,NH,NY,RI,NC,ME,VA
SW-846 8082A in Water	
Aroclor-1016	CT,NH,NY,RI,NC,ME,VA
Aroclor-1016 [2C]	CT,NH,NY,RI,NC,ME,VA
Aroclor-1221	CT,NH,NY,RI,NC,ME,VA
Aroclor-1221 [2C]	CT,NH,NY,RI,NC,ME,VA
Aroclor-1232	CT,NH,NY,RI,NC,ME,VA
Aroclor-1232 [2C]	CT,NH,NY,RI,NC,ME,VA
Aroclor-1242	CT,NH,NY,RI,NC,ME,VA
Aroclor-1242 [2C]	CT,NH,NY,RI,NC,ME,VA
Aroclor-1248	CT,NH,NY,RI,NC,ME,VA
Aroclor-1248 [2C]	CT,NH,NY,RI,NC,ME,VA
Aroclor-1254	CT,NH,NY,RI,NC,ME,VA
Aroclor-1254 [2C]	CT,NH,NY,RI,NC,ME,VA
Aroclor-1260	CT,NH,NY,RI,NC,ME,VA
Aroclor-1260 [2C]	CT,NH,NY,RI,NC,ME,VA
Aroclor-1262	NC
Aroclor-1262 [2C]	NC
Aroclor-1268	NC
Aroclor-1268 [2C]	NC
SW-846 8260C in Water	
Acetone	CT,NH,NY,ME
tert-Amyl Methyl Ether (TAME)	NH,NY,ME
Benzene	CT,NH,NY,ME,RI
Bromobenzene	ME
Bromochloromethane	NH,NY,ME
Bromodichloromethane	CT,NH,NY,ME,RI
Bromoform	CT,NH,NY,ME,RI
Bromomethane	CT,NH,NY,ME,RI
2-Butanone (MEK)	CT,NH,NY,ME
n-Butylbenzene	NY,ME
sec-Butylbenzene	NY,ME
tert-Butylbenzene	NY,ME
tert-Butyl Ethyl Ether (TBEE)	NH,NY,ME
Carbon Disulfide	CT,NH,NY,ME
Carbon Tetrachloride	CT,NH,NY,ME,RI
Chlorobenzene	CT,NH,NY,ME,RI
Chlorodibromomethane	CT,NH,NY,ME,RI
Chloroethane	CT,NH,NY,ME,RI
Chloroform	CT,NH,NY,ME,RI
Chloromethane	CT,NH,NY,ME,RI
2-Chlorotoluene	NY,ME

CERTIFICATIONS
Certified Analyses included in this Report

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

SW-846 8270D in Water

CERTIFICATIONS

Certified Analyses included in this Report

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

CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
<i>SW-846 8270D in Water</i>	
4-Nitrophenol	CT,NY,NH,RI
Pentachlorophenol	CT,NY,NH,RI
Phenanthrene	CT,NY,NH,RI
Phenol	CT,NY,NH,RI
Pyrene	CT,NY,NH,RI
1,2,4-Trichlorobenzene	CT,NY,NH,RI
2,4,5-Trichlorophenol	CT,NY,NH
2,4,6-Trichlorophenol	CT,NY,NH,RI

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

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC	100033	02/1/2014
MA	Massachusetts DEP	M-MA100	06/30/2013
CT	Connecticut Department of Public Health	PH-0567	09/30/2013
NY	New York State Department of Health	10899 NELAP	04/1/2013
NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2013
RI	Rhode Island Department of Health	LAO00112	12/30/2013
NC	North Carolina Div. of Water Quality	652	12/31/2013
NJ	New Jersey DEP	MA007 NELAP	06/30/2013
FL	Florida Department of Health	E871027 NELAP	06/30/2013
VT	Vermont Department of Health Lead Laboratory	LL015036	07/30/2013
WA	State of Washington Department of Ecology	C2065	02/23/2013
ME	State of Maine	2011028	06/9/2013
VA	Commonwealth of Virginia	460217	12/14/2013
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2012

CHAIN OF CUSTODY RECORD

Site #: 4-21606

Project Code: 80081.03

Cooler #: 1

Lab: Contest Analytical Laboratory

Lab Phone: 413-525-2332

Sample #	Matrix/Sampler	Coll. Method	Analysis/Turnaround	Tag/Preservative/Bottles	Station Location	Collected	For Lab Use Only
D05297	Ground Water/ Josh Stewart	Grab	VPH w/ Targets, VPH w/ Targets, VPH w/ Targets, EPH w/ Targets, EPH w/ Targets, VOCs, VOCs, VOCs, Metals (PPM, Ba, V), PCBs, PCBs	321 (HCl), 322 (HCl), 323 (HCl), 324 (HCl), 325 (HCl), 326 (HCl), 327 (HCl), 328 (HCl), 329 (HNO3), 330 (4 C), 331 (4 C) (11)	NOB101-GW-011713	01/17/2013 14:25	01
D05298	Ground Water/ Erk Johnson	Grab	VPH w/ Targets, VPH w/ Targets, VPH w/ Targets, EPH w/ Targets, EPH w/ Targets, VOCs, VOCs, Metals (PPM, Ba, V), PCBs, PCBs, VPH w/ Targets, VPH w/ Targets, EPH w/ Targets, EPH w/ Targets, VOCs, VOCs, VOCs, Metals (PPM, Ba, V), PCBs, PCBs, SVOCs, SVOCs, SVOCs, SVOCs, SVOCs, SVOCs	332 (HCl), 333 (HCl), 334 (HCl), 335 (HCl), 336 (HCl), 337 (HCl), 338 (HCl), 339 (HCl), 340 (HNO3), 341 (4 C), 342 (4 C), 343 (HCl), 344 (HCl), 345 (HCl), 346 (HCl), 347 (HCl), 348 (HCl), 349 (HCl), 350 (HCl), 351 (HNO3), 352 (4 C), 353 (4 C), 354 (HCl), 355 (HCl), 356 (HCl), 357 (HCl), 358 (HCl), 359 (HCl), 360 (HCl), 361 (HCl), 362 (HNO3), 363 (4 C), 364 (4 C), 456 (4 C), 457 (4 C), 458 (4 C), 459 (4 C), 460 (4 C), 461 (4 C) (39)	NOB103-GW-011713	01/17/2013 12:20	02

Sample(s) to be used for Lab QC: D05298 - Special Instructions: Metals have been field filtered prior to preservation. Please contact Nobis with any questions or concerns.

Shipment for Case Complete? ☐

[illegible]

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
NORRIS COLD STORAGE	Eric Oden	11/17/13	NORRIS COLD STORAGE	11/17/13	18:00						
X COVERER	Eric Oden	11/28/13	11:35	11/28/13	11:39						
X	11/18/13	19:40	36	11/18/13	19:40						

CHAIN OF CUSTODY RECORD

Date Shipped: 1/18/2013

Site #: 4-21606

CarrierName: Contest Driver

Project Code: 80081.03

AirbillNo: N/A

Cooler #: 7

Sample #	Matrix/Sampler	Coll. Method	Analysis/Turnaround	Tag/Preservative/Bottles	Station Location	Collected	For Lab Use Only
D05299	Ground Water/ Josh Stewart	Grab	VPH w/ Targets, VPH w/ Targets, VPH w/ Targets, EPH w/ Targets, EPH w/ Targets, VOCs, VOCs, VOCs, Metals (PPM, Ba, V), PCBs, PCBs, SVOCs, SVOCs	365 (HCl), 366 (HCl), 367 (HCl), 368 (HCl), 369 (HCl), 370 (HCl), 371 (HCl), 372 (HCl), 373 (HNO3), 374 (4 C), 375 (4 C), 462 (4 C), 463 (4 C) (13)	NOB108-GW-011713	01/17/2013 12:50	03
D05300	Ground Water/ Erik Johnson	Grab	VPH w/ Targets, VPH w/ Targets, VPH w/ Targets, EPH w/ Targets, EPH w/ Targets, VOCs, VOCs, VOCs, Metals (PPM, Ba, V), PCBs, PCBs, SVOCs, SVOCs	376 (HCl), 377 (HCl), 378 (HCl), 379 (HCl), 380 (HCl), 381 (HCl), 382 (HCl), 383 (HCl), 384 (HNO3), 385 (4 C), 386 (4 C), 464 (4 C), 465 (4 C) (13)	NOB110-GW-011713	01/17/2013 10:20	04
D05301	Ground Water/ Erik Johnson	Grab	VPH w/ Targets, VPH w/ Targets, VPH w/ Targets, EPH w/ Targets, EPH w/ Targets, VOCs, VOCs, VOCs, Metals (PPM, Ba, V), PCBs, PCBs	387 (HCl), 388 (HCl), 389 (HCl), 390 (HCl), 391 (HCl), 392 (HCl), 393 (HCl), 394 (HCl), 395 (HNO3), 396 (4 C), 397 (4 C) (11)	NOB106-GW-011713	01/17/2013 08:55	05
D05302	Ground Water/ Erik Johnson	Grab	VPH w/ Targets, VPH w/ Targets, VPH w/ Targets, EPH w/ Targets, EPH w/ Targets, VOCs, VOCs, VOCs, Metals (PPM, Ba, V), PCBs, PCBs, SVOCs	409 (HCl), 410 (HCl), 411 (HCl), 412 (HCl), 413 (HCl), 414 (HCl), 415 (HCl), 416 (HCl), 417 (HNO3), 418 (4 C), 419 (4 C), 466 (4 C) (12)	NOB-GW-DUP-01	01/17/2013 10:50	06

Special Instructions: Metals have been field filtered prior to preservation. Please contact Nobis with any questions or concerns

Shipment for Case Complete? ☐

Samples Transferred From Chain of Custody

Analysis Key

6W-2/3 Per Out 12/23/2015

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
carrier	Erin	7/19/17	Ned's Cold Storage	11/17/13	18:00						
		11/35		11/18/13	17:30						
		11/18/13	3.6								
		19:00	Stronghold	11/18/13	19:46						

~~MA~~ MA MCP Certification Form needed.

CHAIN OF CUSTODY RECORD

Site #: 4-21606

Project Code: 80081.03

Cooler #: 1

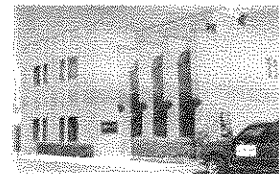
[illegible]

Shipment for Case Complete? N	Samples Transferred From Chain of Custody #

Analysis Key

[illegible]

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



Sample Receipt Checklist

CLIENT NAME: Nobis RECEIVED BY: SD DATE: 1/18/13

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

2) Does the chain agree with the samples?

If not, explain:

3) Are all the samples in good condition?

If not, explain:

4) How were the samples received:

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

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

Temperature °C by Temp blank _____ Temperature °C by Temp gun 3.6

5) Are there Dissolved samples for the lab to filter?

Yes No

Who was notified _____ Date _____ Time _____

6) Are there any RUSH or SHORT HOLDING TIME samples?

Yes No

Who was notified _____ Date _____ Time _____

7) Location where samples are stored:

19

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

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

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

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

Containers received at Con-Test

	# of containers		# of containers
1 Liter Amber	<u>48</u>	8 oz amber/clear jar	
500 mL Amber		4 oz amber/clear jar	
250 mL Amber (8oz amber)		2 oz amber/clear jar	
1 Liter Plastic		Air Cassette	
500 mL Plastic		Hg/Hopcalite Tube	
250 mL plastic	<u>9</u>	Plastic Bag / Ziploc	
40 mL Vial - type listed below	<u>57</u>	PM 2.5 / PM 10	
Colisure / bacteria bottle		PUF Cartridge	
Dissolved Oxygen bottle		SOC Kit	
Encore		TO-17 Tubes	
Flashpoint bottle		Non-ConTest Container	
Perchlorate Kit		Other glass jar	
Other		Other	

Laboratory Comments:

40 mL vials: # HCl _____ # Methanol _____
Bisulfate _____ # DI Water _____
Thiosulfate _____ Unpreserved _____

Time and Date Frozen:

Doc# 277

Rev. 3 May 2012

MADEP MCP Analytical Method Report Certification Form

Laboratory Name: Con-Test Analytical Laboratory	Project #: 13A0480
Project Location: 4-21606	RTN:

This Form provides certifications for the following data set: [list Laboratory Sample ID Number(s)]

13A0480-01 thru 13A0480-08

Matrices: Water

CAM Protocol (check all that below)

8260 VOC CAM II A (X)	7470/7471 Hg CAM IIIB (X)	MassDEP VPH CAM IV A (X)	8081 Pesticides CAM V B ()	7196 Hex Cr CAM VI B ()	MassDEP APH CAM IX A ()
8270 SVOC CAM II B (X)	7010 Metals CAM III C ()	MassDEP EPH CAM IV A (X)	8151 Herbicides CAM V C ()	8330 Explosives CAM VIII A ()	TO-15 VOC CAM IX B ()
6010 Metals CAM III A ()	6020 Metals CAM III D (X)	8082 PCB CAM V A (X)	9014 Total Cyanide/PAC CAM VI A ()	6860 Perchlorate CAM VIII B ()	

Affirmative response to Questions A through F is required for "Presumptive Certainty" status

A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?	☒ Yes ☐ No ¹
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	☒ Yes ☐ No ¹
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	☒ Yes ☐ No ¹
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data?	☒ Yes ☐ No ¹
E a	VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications).	☒ Yes ☐ No ¹
E b	APH and TO-15 Methods only: Was the complete analyte list reported for each method?	☐ Yes ☐ No ¹
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all No responses to Questions A through E)?	☒ Yes ☐ No ¹

A response to questions G, H and I below is required for "Presumptive Certainty" status

G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	☐ Yes ☒ No ¹

Data User Note: Data that achieve "Presumptive Certainty" status may not necessarily meet the data usability and representativeness requirements described in 310 CMR 40. 1056 (2)(k) and WSC-07-350.

H	Were all QC performance standards specified in the CAM protocol(s) achieved?	☐ Yes ☒ No ¹
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	☒ Yes ☐ No ¹

¹ All Negative responses must be addressed in an attached Environmental Laboratory case narrative.

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

Signature: 	Position: Laboratory Director
Printed Name: Michael A. Erickson	Date: 01/25/13

January 27, 2013

Tracey Costa
Nobis Engineering
585 Middlesex Street
Lowell, MA 01851

Project Location: Seekonk, MA
Client Job Number:
Project Number: 80081.03
Laboratory Work Order Number: 13A0453

Enclosed are results of analyses for samples received by the laboratory on January 17, 2013. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink, reading "Meghan E. Kelley". The signature is written in a cursive style with a large, flowing "M" and a long, sweeping "y" at the end.

Meghan E. Kelley
Project Manager

Nobis Engineering
585 Middlesex Street
Lowell, MA 01851
ATTN: Tracey Costa

REPORT DATE: 1/27/2013

PURCHASE ORDER NUMBER: MO-10-008

PROJECT NUMBER: 80081.03

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 13A0453

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

PROJECT LOCATION: Seekonk, MA

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
D05297	13A0453-01	Ground Water		SW-846 7196A	
D05298	13A0453-02	Ground Water		SW-846 7196A	
D05299	13A0453-03	Ground Water		SW-846 7196A	
D05300	13A0453-04	Ground Water		SW-846 7196A	
D05301	13A0453-05	Ground Water		SW-846 7196A	
D05302	13A0453-06	Ground Water		SW-846 7196A	
D05303	13A0453-07	Ground Water		SW-846 7196A	

CASE NARRATIVE SUMMARY

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

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

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

A handwritten signature in black ink, appearing to read "M. Erickson", is displayed on a light gray rectangular background.

Michael A. Erickson
Laboratory Director

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

Project Location: Seekonk, MA

Sample Description:

Work Order: 13A0453

Date Received: 1/17/2013

Field Sample #: D05297

Sampled: 1/17/2013 14:25

Sample ID: 13A0453-01

Sample Matrix: Ground Water

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

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Hexavalent Chromium	ND	0.0040	mg/L	1		SW-846 7196A	1/17/13	1/17/13 17:50	AED

Project Location: Seekonk, MA

Sample Description:

Work Order: 13A0453

Date Received: 1/17/2013

Sampled: 1/17/2013 12:20

Field Sample #: D05298

Sample ID: 13A0453-02

Sample Matrix: Ground Water

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

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Hexavalent Chromium	ND	0.0040	mg/L	1		SW-846 7196A	1/17/13	1/17/13 17:50	AED

Project Location: Seekonk, MA

Sample Description:

Work Order: 13A0453

Date Received: 1/17/2013

Field Sample #: D05299

Sampled: 1/17/2013 12:50

Sample ID: 13A0453-03

Sample Matrix: Ground Water

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

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Hexavalent Chromium	ND	0.0040	mg/L	1		SW-846 7196A	1/17/13	1/17/13 17:50	AED

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

Project Location: Seekonk, MA

Sample Description:

Work Order: 13A0453

Date Received: 1/17/2013

Sampled: 1/17/2013 10:20

Field Sample #: D05300

Sample ID: 13A0453-04

Sample Matrix: Ground Water

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

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Hexavalent Chromium	ND	0.0040	mg/L	1		SW-846 7196A	1/17/13	1/17/13 17:50	AED

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

Project Location: Seekonk, MA

Sample Description:

Work Order: 13A0453

Date Received: 1/17/2013

Sampled: 1/17/2013 08:55

Field Sample #: D05301

Sample ID: 13A0453-05

Sample Matrix: Ground Water

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

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Hexavalent Chromium	ND	0.0040	mg/L	1		SW-846 7196A	1/17/13	1/17/13 17:50	AED

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

Project Location: Seekonk, MA

Sample Description:

Work Order: 13A0453

Date Received: 1/17/2013

Sampled: 1/17/2013 10:50

Field Sample #: D05302

Sample ID: 13A0453-06

Sample Matrix: Ground Water

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

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Hexavalent Chromium	ND	0.0040	mg/L	1		SW-846 7196A	1/17/13	1/17/13 17:50	AED

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

Project Location: Seekonk, MA

Sample Description:

Work Order: 13A0453

Date Received: 1/17/2013

Sampled: 1/17/2013 11:30

Field Sample #: D05303

Sample ID: 13A0453-07

Sample Matrix: Ground Water

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

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Hexavalent Chromium	ND	0.0040	mg/L	1		SW-846 7196A	1/17/13	1/17/13 17:50	AED

Sample Extraction Data

SW-846 7196A

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
13A0453-01 [D05297]	B066381	50.0	50.0	01/17/13
13A0453-02 [D05298]	B066381	50.0	50.0	01/17/13
13A0453-03 [D05299]	B066381	50.0	50.0	01/17/13
13A0453-04 [D05300]	B066381	50.0	50.0	01/17/13
13A0453-05 [D05301]	B066381	50.0	50.0	01/17/13
13A0453-06 [D05302]	B066381	50.0	50.0	01/17/13
13A0453-07 [D05303]	B066381	50.0	50.0	01/17/13

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B066381 - SW-846 7196A										
Blank (B066381-BLK1)				Prepared & Analyzed: 01/17/13						
Hexavalent Chromium	ND	0.0040	mg/L							
LCS (B066381-BS1)				Prepared & Analyzed: 01/17/13						
Hexavalent Chromium	0.10	0.0040	mg/L	0.100		100	80-120			
LCS Dup (B066381-BSD1)				Prepared & Analyzed: 01/17/13						
Hexavalent Chromium	0.10	0.0040	mg/L	0.100		103	80-120	3.16	20	
Matrix Spike (B066381-MS1)				Prepared & Analyzed: 01/17/13						
Hexavalent Chromium	0.10	0.0040	mg/L	0.100	ND	102	75-125			
Matrix Spike Dup (B066381-MSD1)				Prepared & Analyzed: 01/17/13						
Hexavalent Chromium	0.10	0.0040	mg/L	0.100	ND	102	75-125	0.00	20	

FLAG/QUALIFIER SUMMARY

- * QC result is outside of established limits.
- † Wide recovery limits established for difficult compound.
- ‡ Wide RPD limits established for difficult compound.
- # Data exceeded client recommended or regulatory level

Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.

CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications

SW-846 7196A in Water

Hexavalent Chromium CT,NH,NY,RI,NC,ME,VA

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

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC	100033	02/1/2014
MA	Massachusetts DEP	M-MA100	06/30/2013
CT	Connecticut Department of Public Health	PH-0567	09/30/2013
NY	New York State Department of Health	10899 NELAP	04/1/2013
NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2013
RI	Rhode Island Department of Health	LAO00112	12/30/2013
NC	North Carolina Div. of Water Quality	652	12/31/2013
NJ	New Jersey DEP	MA007 NELAP	06/30/2013
FL	Florida Department of Health	E871027 NELAP	06/30/2013
VT	Vermont Department of Health Lead Laboratory	LL015036	07/30/2013
WA	State of Washington Department of Ecology	C2065	02/23/2013
ME	State of Maine	2011028	06/9/2013
VA	Commonwealth of Virginia	460217	12/14/2013
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2012



con-test
ANALYTICAL LABORATORY

Phone: 413-525-2332
Fax: 413-525-6405
Email: info@contestlabs.com
www.contestlabs.com

CHAIN OF CUSTODY RECORD

39 Spruce Street
East Longmeadow, MA 01028

Page 1 of 1

Company Name: **NOBIS ENGINEERING**

Telephone: **978-683-0891**

Address: **585 MIDDLESEX ST**

Project # **80081.03**

LOWELL, MA 01851

Client PO#

Attention: **TRACEY COSTA**

DATA DELIVERY (check all that apply)
☐ FAX ☒ EMAIL ☒ WEBSITE

Project Location: **SEEKONK, MA**

Fax #

Sampled By: **E. JOHNSON / J. STEWART**

Email: **tcosta@nobiseng.com**

Project Proposal Provided? (for billing purposes)

☐ Yes ☐ No proposal date

Collection

☐ "Enhanced Data Package"

Con-Test Lab ID

Client Sample ID / Description

Beginning Date/Time

Ending Date/Time

Composite

Grab

*Matrix Code

*Matrix Code

*Matrix Code

*Matrix Code

*Matrix Code

*Matrix Code

*Matrix Code

*Matrix Code

*Matrix Code

*Matrix Code

*Matrix Code

*Matrix Code

*Matrix Code

01 DOS297

1/17/13 14:25

X

GW

U

X

X

X

X

X

X

X

X

X

X

X

X

X

X

02 DOS298*

1/17/13 12:20

X

GW

U

X

X

X

X

X

X

X

X

X

X

X

X

X

X

03 DOS299

1/17/13 12:50

X

GW

U

X

X

X

X

X

X

X

X

X

X

X

X

X

X

04 DOS300

1/17/13 10:20

X

GW

U

X

X

X

X

X

X

X

X

X

X

X

X

X

X

05 DOS301

1/17/13 8:55

X

GW

U

X

X

X

X

X

X

X

X

X

X

X

X

X

X

06 DOS302

1/17/13 10:50

X

GW

U

X

X

X

X

X

X

X

X

X

X

X

X

X

X

07 DOS303

1/17/13 11:30

X

GW

U

X

X

X

X

X

X

X

X

X

X

X

X

X

X

Comments: 24 HR HOLD TIME, NOTE SAMPLE TIMES.

CALL w/ ANY QUESTIONS, THANKS!

- Erik

* MS/MSD

PROVIDED FOR

DO S298

H - High; M - Medium; L - Low; C - Clean; U - Unknown

Please use the following codes to let Con-Test know if a specific sample may be high in concentration in Matrix/Conc. Code Box:

Matrix Code:

GW= groundwater

WW= wastewater

DW= drinking water

A= air

S= soil/solid

SL= sludge

O= other

**Preservation

I= Iced

H= HCL

M= Methanol

N= Nitric Acid

S= Sulfuric Acid

B= Sodium bisulfate

X= Na hydroxide

T= Na thiosulfate

O= Other

***Cont. Code:

A= amber glass

G= glass

P= plastic

ST= sterile

V= vial

S= summa can

T= tedlar bag

O= Other

***Container Code

Dissolved Meta

Field Filtered

Lab to Filter

of Containers

** Preservation

***Container Code

Relinquished by: (signature)

Date/Time: 1/17/13 14:50

Turnaround

7-Day

10-Day

Other

RUSH!

24-Hr

48-Hr

72-Hr

14-Day

Require lab approval

Other:

Detection Limit Requirements

Massachusetts:

Connecticut:

Is your project MCP or RCP?

MCP Form Required

RCP Form Required

Relinquished by: (signature)

Date/Time: 1/17/13 17:10

Relinquished by: (signature)

Date/Time: 1/17/13 17:10

Relinquished by: (signature)

Date/Time: 1/17/13 17:10

Relinquished by: (signature)

Date/Time: 1/17/13 17:10

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Relinquished by: (signature)

Date/Time: 1/17/13 17:10

Relinquished by: (signature)

Date/Time: 1/17/13 17:10

Relinquished by: (signature)

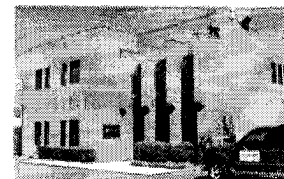
Relinquished by: (signature)

Date/Time: 1/17/13 17:10

Relinquished by: (signature)

Date/Time

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



Sample Receipt Checklist

CLIENT NAME: Nobis RECEIVED BY: KKM DATE: 1/17/13

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

2) Does the chain agree with the samples?

If not, explain:

3) Are all the samples in good condition?

If not, explain:

4) How were the samples received:

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

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

Temperature °C by Temp blank _____ Temperature °C by Temp gun 4.8

5) Are there Dissolved samples for the lab to filter?

Yes No

Who was notified _____ Date _____ Time _____

6) Are there any RUSH or SHORT HOLDING TIME samples?

Yes No

Who was notified ADD Date 1/17/13 Time 17:20

7) Location where samples are stored:

19

Permission to subcontract samples? Yes No

(Walk-in clients only) if not already approved

Client Signature: _____

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

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

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

Containers received at Con-Test

	# of containers		# of containers
1 Liter Amber		8 oz amber/clear jar	
500 mL Amber		4 oz amber/clear jar	
250 mL Amber (8oz amber)		2 oz amber/clear jar	
1 Liter Plastic		Air Cassette	
500 mL Plastic		Hg/Hopcalite Tube	
250 mL plastic	<u>9</u>	Plastic Bag / Ziploc	
40 mL Vial - type listed below		PM 2.5 / PM 10	
Colisure / bacteria bottle		PUF Cartridge	
Dissolved Oxygen bottle		SOC Kit	
Encore		TO-17 Tubes	
Flashpoint bottle		Non-ConTest Container	
Perchlorate Kit		Other glass jar	
Other		Other	

Laboratory Comments:

40 mL vials: # HCl _____ # Methanol _____

Doc# 277 # Bisulfate _____ # DI Water _____

Rev. 3 May 2012 # Thiosulfate _____ Unpreserved _____

Time and Date Frozen:

MADEP MCP Analytical Method Report Certification Form

Laboratory Name: Con-Test Analytical Laboratory

Project #: 13A0453

Project Location: Seekonk, MA

RTN:

This Form provides certifications for the following data set: [list Laboratory Sample ID Number(s)]

13A0453-01 thru 13A0453-07

Matrices: Water

CAM Protocol (check all that below)

8260 VOC CAM II A ()	7470/7471 Hg CAM IIIB ()	MassDEP VPH CAM IV A ()	8081 Pesticides CAM V B ()	7196 Hex Cr CAM VI B (X)	MassDEP APH CAM IX A ()
8270 SVOC CAM II B ()	7010 Metals CAM III C ()	MassDEP EPH CAM IV A ()	8151 Herbicides CAM V C ()	8330 Explosives CAM VIII A ()	TO-15 VOC CAM IX B ()
6010 Metals CAM III A ()	6020 Metals CAM III D ()	8082 PCB CAM V A ()	9014 Total Cyanide/PAC CAM VI A ()	6860 Perchlorate CAM VIII B ()	

Affirmative response to Questions A through F is required for "Presumptive Certainty" status

A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?	☒ Yes ☐ No ¹
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	☒ Yes ☐ No ¹
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	☒ Yes ☐ No ¹
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data?	☒ Yes ☐ No ¹
E a	VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications).	☐ Yes ☐ No ¹
E b	APH and TO-15 Methods only: Was the complete analyte list reported for each method?	☐ Yes ☐ No ¹
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all No responses to Questions A through E)?	☒ Yes ☐ No ¹

A response to questions G, H and I below is required for "Presumptive Certainty" status

G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	☒ Yes ☐ No ¹

Data User Note: Data that achieve "Presumptive Certainty" status may not necessarily meet the data usability and representativeness requirements described in 310 CMR 40. 1056 (2)(k) and WSC-07-350.

H	Were all QC performance standards specified in the CAM protocol(s) achieved?	☒ Yes ☐ No ¹
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	☒ Yes ☐ No ¹

¹ All Negative responses must be addressed in an attached Environmental Laboratory case narrative.

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

Signature: 

Position: Laboratory Director

Printed Name: Michael A. Erickson

Date: 01/25/13



ANALYTICAL REPORT

Lab Number:	L1725746
Client:	Ransom Consulting, Inc. 60 Valley Street Building F, Suite 106 Providence, RI 02909
ATTN:	Tracey Costa
Phone:	(401) 433-2160
Project Name:	ADW SITE SEEKONK, MA
Project Number:	161.02023.001
Report Date:	08/02/17

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), NJ NELAP (MA935), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-14-00197).

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com



Project Name: ADW SITE SEEKONK, MA
Project Number: 161.02023.001

Lab Number: L1725746
Report Date: 08/02/17

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1725746-01	MW406-W1-072617	WATER	36 MAPLE AVE., SEEKONK, MA	07/26/17 08:45	07/26/17
L1725746-02	MW407-W1-072617	WATER	36 MAPLE AVE., SEEKONK, MA	07/26/17 09:45	07/26/17
L1725746-03	MW408-W1-072617	WATER	36 MAPLE AVE., SEEKONK, MA	07/26/17 12:30	07/26/17
L1725746-04	MW409-W1-072617	WATER	36 MAPLE AVE., SEEKONK, MA	07/26/17 14:10	07/26/17

Project Name: ADW SITE SEEKONK, MA

Lab Number: L1725746

Project Number: 161.02023.001

Report Date: 08/02/17

MADEP MCP Response Action Analytical Report Certification

This form provides certifications for all samples performed by MCP methods. Please refer to the Sample Results and Container Information sections of this report for specification of MCP methods used for each analysis. The following questions pertain only to MCP Analytical Methods.

An affirmative response to questions A through F is required for "Presumptive Certainty" status		
A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?	YES
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	YES
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	YES
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data?"	YES
E a.	VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications).	YES
E b.	APH and TO-15 Methods only: Was the complete analyte list reported for each method?	N/A
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?	YES
A response to questions G, H and I is required for "Presumptive Certainty" status		
G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	NO
H	Were all QC performance standards specified in the CAM protocol(s) achieved?	NO
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	NO
For any questions answered "No", please refer to the case narrative section on the following page(s).		

Please note that sample matrix information is located in the Sample Results section of this report.



Project Name: ADW SITE SEEKONK, MA
Project Number: 161.02023.001

Lab Number: L1725746
Report Date: 08/02/17

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. All specific QC information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

HOLD POLICY

For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Client Service Representative and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Client Services at 800-624-9220 with any questions.

Project Name: ADW SITE SEEKONK, MA
Project Number: 161.02023.001

Lab Number: L1725746
Report Date: 08/02/17

Case Narrative (continued)

MCP Related Narratives

Volatile Organics

In reference to question H:

The initial calibration, associated with L1725746-01 and -02, did not meet the method required minimum response factor on the lowest calibration standard for 1,4-dioxane (0.001), as well as the average response factor for 1,4-dioxane. In addition, a quadratic fit was utilized for bromomethane. The initial calibration verification is outside acceptance criteria for ethyl ether (142%)

The continuing calibration standard, associated with L1725746-01 and -02, is outside the acceptance criteria for several compounds; however, it is within overall method allowances. A copy of the continuing calibration standard is included as an addendum to this report.

Metals

In reference to question G:

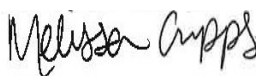
L1725746-02, -03 and -04: One or more of the target analytes did not achieve the requested CAM reporting limits.

In reference to question I:

All samples were analyzed for a subset of MCP analytes per the Chain of Custody.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:

 Melissa Cripps

Title: Technical Director/Representative

Date: 08/02/17

ORGANICS

VOLATILES

Project Name: ADW SITE SEEKONK, MA**Lab Number:** L1725746**Project Number:** 161.02023.001**Report Date:** 08/02/17**SAMPLE RESULTS**

Lab ID: L1725746-01
 Client ID: MW406-W1-072617
 Sample Location: 36 MAPLE AVE., SEEKONK, MA

Date Collected: 07/26/17 08:45
 Date Received: 07/26/17
 Field Prep: Not Specified

Matrix: Water
 Analytical Method: 97,8260C
 Analytical Date: 07/31/17 20:01
 Analyst: MM

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Methylene chloride	ND		ug/l	2.0	--	1
1,1-Dichloroethane	ND		ug/l	1.0	--	1
Chloroform	ND		ug/l	1.0	--	1
Carbon tetrachloride	ND		ug/l	1.0	--	1
1,2-Dichloropropane	ND		ug/l	1.0	--	1
Dibromochloromethane	ND		ug/l	1.0	--	1
1,1,2-Trichloroethane	ND		ug/l	1.0	--	1
Tetrachloroethene	ND		ug/l	1.0	--	1
Chlorobenzene	7.1		ug/l	1.0	--	1
Trichlorofluoromethane	ND		ug/l	2.0	--	1
1,2-Dichloroethane	ND		ug/l	1.0	--	1
1,1,1-Trichloroethane	ND		ug/l	1.0	--	1
Bromodichloromethane	ND		ug/l	1.0	--	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	--	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	--	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	--	1
1,1-Dichloropropene	ND		ug/l	2.0	--	1
Bromoform	ND		ug/l	2.0	--	1
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Benzene	ND		ug/l	0.50	--	1
Toluene	ND		ug/l	1.0	--	1
Ethylbenzene	ND		ug/l	1.0	--	1
Chloromethane	ND		ug/l	2.0	--	1
Bromomethane	ND		ug/l	2.0	--	1
Vinyl chloride	ND		ug/l	1.0	--	1
Chloroethane	ND		ug/l	2.0	--	1
1,1-Dichloroethene	ND		ug/l	1.0	--	1
trans-1,2-Dichloroethene	ND		ug/l	1.0	--	1
Trichloroethene	ND		ug/l	1.0	--	1
1,2-Dichlorobenzene	ND		ug/l	1.0	--	1

Project Name: ADW SITE SEEKONK, MA**Lab Number:** L1725746**Project Number:** 161.02023.001**Report Date:** 08/02/17**SAMPLE RESULTS****Lab ID:** L1725746-01**Date Collected:** 07/26/17 08:45**Client ID:** MW406-W1-072617**Date Received:** 07/26/17**Sample Location:** 36 MAPLE AVE., SEEKONK, MA**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/l	1.0	--	1
1,4-Dichlorobenzene	ND		ug/l	1.0	--	1
Methyl tert butyl ether	ND		ug/l	2.0	--	1
p/m-Xylene	ND		ug/l	2.0	--	1
o-Xylene	ND		ug/l	1.0	--	1
Xylene (Total)	ND		ug/l	1.0	--	1
cis-1,2-Dichloroethene	ND		ug/l	1.0	--	1
1,2-Dichloroethene (total)	ND		ug/l	1.0	--	1
Dibromomethane	ND		ug/l	2.0	--	1
1,2,3-Trichloropropane	ND		ug/l	2.0	--	1
Styrene	ND		ug/l	1.0	--	1
Dichlorodifluoromethane	ND		ug/l	2.0	--	1
Acetone	ND		ug/l	5.0	--	1
Carbon disulfide	ND		ug/l	2.0	--	1
2-Butanone	ND		ug/l	5.0	--	1
4-Methyl-2-pentanone	ND		ug/l	5.0	--	1
2-Hexanone	ND		ug/l	5.0	--	1
Bromochloromethane	ND		ug/l	2.0	--	1
Tetrahydrofuran	ND		ug/l	2.0	--	1
2,2-Dichloropropane	ND		ug/l	2.0	--	1
1,2-Dibromoethane	ND		ug/l	2.0	--	1
1,3-Dichloropropane	ND		ug/l	2.0	--	1
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Bromobenzene	ND		ug/l	2.0	--	1
n-Butylbenzene	ND		ug/l	2.0	--	1
sec-Butylbenzene	ND		ug/l	2.0	--	1
tert-Butylbenzene	ND		ug/l	2.0	--	1
o-Chlorotoluene	ND		ug/l	2.0	--	1
p-Chlorotoluene	ND		ug/l	2.0	--	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.0	--	1
Hexachlorobutadiene	ND		ug/l	0.60	--	1
Isopropylbenzene	ND		ug/l	2.0	--	1
p-Isopropyltoluene	ND		ug/l	2.0	--	1
Naphthalene	ND		ug/l	2.0	--	1
n-Propylbenzene	ND		ug/l	2.0	--	1
1,2,3-Trichlorobenzene	ND		ug/l	2.0	--	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	--	1
1,3,5-Trimethylbenzene	ND		ug/l	2.0	--	1
1,2,4-Trimethylbenzene	ND		ug/l	2.0	--	1

Project Name: ADW SITE SEEKONK, MA**Lab Number:** L1725746**Project Number:** 161.02023.001**Report Date:** 08/02/17**SAMPLE RESULTS****Lab ID:** L1725746-01**Date Collected:** 07/26/17 08:45**Client ID:** MW406-W1-072617**Date Received:** 07/26/17**Sample Location:** 36 MAPLE AVE., SEEKONK, MA**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Ethyl ether	ND		ug/l	2.0	--	1
Isopropyl Ether	ND		ug/l	2.0	--	1
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0	--	1
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	--	1
1,4-Dioxane	ND		ug/l	250	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	120		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	96		70-130
Dibromofluoromethane	118		70-130

Project Name: ADW SITE SEEKONK, MA**Lab Number:** L1725746**Project Number:** 161.02023.001**Report Date:** 08/02/17**SAMPLE RESULTS**

Lab ID: L1725746-02
 Client ID: MW407-W1-072617
 Sample Location: 36 MAPLE AVE., SEEKONK, MA

Date Collected: 07/26/17 09:45
 Date Received: 07/26/17
 Field Prep: Not Specified

Matrix: Water
 Analytical Method: 97,8260C
 Analytical Date: 07/31/17 20:27
 Analyst: MM

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Methylene chloride	ND		ug/l	2.0	--	1
1,1-Dichloroethane	ND		ug/l	1.0	--	1
Chloroform	ND		ug/l	1.0	--	1
Carbon tetrachloride	ND		ug/l	1.0	--	1
1,2-Dichloropropane	ND		ug/l	1.0	--	1
Dibromochloromethane	ND		ug/l	1.0	--	1
1,1,2-Trichloroethane	ND		ug/l	1.0	--	1
Tetrachloroethene	ND		ug/l	1.0	--	1
Chlorobenzene	ND		ug/l	1.0	--	1
Trichlorofluoromethane	ND		ug/l	2.0	--	1
1,2-Dichloroethane	ND		ug/l	1.0	--	1
1,1,1-Trichloroethane	ND		ug/l	1.0	--	1
Bromodichloromethane	ND		ug/l	1.0	--	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	--	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	--	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	--	1
1,1-Dichloropropene	ND		ug/l	2.0	--	1
Bromoform	ND		ug/l	2.0	--	1
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Benzene	ND		ug/l	0.50	--	1
Toluene	ND		ug/l	1.0	--	1
Ethylbenzene	ND		ug/l	1.0	--	1
Chloromethane	ND		ug/l	2.0	--	1
Bromomethane	ND		ug/l	2.0	--	1
Vinyl chloride	ND		ug/l	1.0	--	1
Chloroethane	ND		ug/l	2.0	--	1
1,1-Dichloroethene	ND		ug/l	1.0	--	1
trans-1,2-Dichloroethene	ND		ug/l	1.0	--	1
Trichloroethene	ND		ug/l	1.0	--	1
1,2-Dichlorobenzene	ND		ug/l	1.0	--	1

Project Name: ADW SITE SEEKONK, MA

Lab Number: L1725746

Project Number: 161.02023.001

Report Date: 08/02/17

SAMPLE RESULTS

Lab ID: L1725746-02
 Client ID: MW407-W1-072617
 Sample Location: 36 MAPLE AVE., SEEKONK, MA

Date Collected: 07/26/17 09:45
 Date Received: 07/26/17
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/l	1.0	--	1
1,4-Dichlorobenzene	ND		ug/l	1.0	--	1
Methyl tert butyl ether	ND		ug/l	2.0	--	1
p/m-Xylene	ND		ug/l	2.0	--	1
o-Xylene	ND		ug/l	1.0	--	1
Xylene (Total)	ND		ug/l	1.0	--	1
cis-1,2-Dichloroethene	ND		ug/l	1.0	--	1
1,2-Dichloroethene (total)	ND		ug/l	1.0	--	1
Dibromomethane	ND		ug/l	2.0	--	1
1,2,3-Trichloropropane	ND		ug/l	2.0	--	1
Styrene	ND		ug/l	1.0	--	1
Dichlorodifluoromethane	ND		ug/l	2.0	--	1
Acetone	ND		ug/l	5.0	--	1
Carbon disulfide	ND		ug/l	2.0	--	1
2-Butanone	ND		ug/l	5.0	--	1
4-Methyl-2-pentanone	ND		ug/l	5.0	--	1
2-Hexanone	ND		ug/l	5.0	--	1
Bromochloromethane	ND		ug/l	2.0	--	1
Tetrahydrofuran	ND		ug/l	2.0	--	1
2,2-Dichloropropane	ND		ug/l	2.0	--	1
1,2-Dibromoethane	ND		ug/l	2.0	--	1
1,3-Dichloropropane	ND		ug/l	2.0	--	1
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Bromobenzene	ND		ug/l	2.0	--	1
n-Butylbenzene	ND		ug/l	2.0	--	1
sec-Butylbenzene	ND		ug/l	2.0	--	1
tert-Butylbenzene	ND		ug/l	2.0	--	1
o-Chlorotoluene	ND		ug/l	2.0	--	1
p-Chlorotoluene	ND		ug/l	2.0	--	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.0	--	1
Hexachlorobutadiene	ND		ug/l	0.60	--	1
Isopropylbenzene	ND		ug/l	2.0	--	1
p-Isopropyltoluene	ND		ug/l	2.0	--	1
Naphthalene	ND		ug/l	2.0	--	1
n-Propylbenzene	ND		ug/l	2.0	--	1
1,2,3-Trichlorobenzene	ND		ug/l	2.0	--	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	--	1
1,3,5-Trimethylbenzene	ND		ug/l	2.0	--	1
1,2,4-Trimethylbenzene	ND		ug/l	2.0	--	1

Project Name: ADW SITE SEEKONK, MA**Lab Number:** L1725746**Project Number:** 161.02023.001**Report Date:** 08/02/17**SAMPLE RESULTS****Lab ID:** L1725746-02**Date Collected:** 07/26/17 09:45**Client ID:** MW407-W1-072617**Date Received:** 07/26/17**Sample Location:** 36 MAPLE AVE., SEEKONK, MA**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Ethyl ether	ND		ug/l	2.0	--	1
Isopropyl Ether	ND		ug/l	2.0	--	1
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0	--	1
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	--	1
1,4-Dioxane	ND		ug/l	250	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	114		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	92		70-130
Dibromofluoromethane	113		70-130

Project Name: ADW SITE SEEKONK, MA

Lab Number: L1725746

Project Number: 161.02023.001

Report Date: 08/02/17

Method Blank Analysis Batch Quality Control

Analytical Method: 97,8260C
 Analytical Date: 07/31/17 17:29
 Analyst: PK

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics - Westborough Lab for sample(s): 01-02 Batch: WG1027544-5					
Methylene chloride	ND		ug/l	2.0	--
1,1-Dichloroethane	ND		ug/l	1.0	--
Chloroform	ND		ug/l	1.0	--
Carbon tetrachloride	ND		ug/l	1.0	--
1,2-Dichloropropane	ND		ug/l	1.0	--
Dibromochloromethane	ND		ug/l	1.0	--
1,1,2-Trichloroethane	ND		ug/l	1.0	--
Tetrachloroethene	ND		ug/l	1.0	--
Chlorobenzene	ND		ug/l	1.0	--
Trichlorofluoromethane	ND		ug/l	2.0	--
1,2-Dichloroethane	ND		ug/l	1.0	--
1,1,1-Trichloroethane	ND		ug/l	1.0	--
Bromodichloromethane	ND		ug/l	1.0	--
trans-1,3-Dichloropropene	ND		ug/l	0.50	--
cis-1,3-Dichloropropene	ND		ug/l	0.50	--
1,3-Dichloropropene, Total	ND		ug/l	0.50	--
1,1-Dichloropropene	ND		ug/l	2.0	--
Bromoform	ND		ug/l	2.0	--
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	--
Benzene	ND		ug/l	0.50	--
Toluene	ND		ug/l	1.0	--
Ethylbenzene	ND		ug/l	1.0	--
Chloromethane	ND		ug/l	2.0	--
Bromomethane	ND		ug/l	2.0	--
Vinyl chloride	ND		ug/l	1.0	--
Chloroethane	ND		ug/l	2.0	--
1,1-Dichloroethene	ND		ug/l	1.0	--
trans-1,2-Dichloroethene	ND		ug/l	1.0	--
Trichloroethene	ND		ug/l	1.0	--

Project Name: ADW SITE SEEKONK, MA

Lab Number: L1725746

Project Number: 161.02023.001

Report Date: 08/02/17

Method Blank Analysis Batch Quality Control

Analytical Method: 97,8260C
 Analytical Date: 07/31/17 17:29
 Analyst: PK

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics - Westborough Lab for sample(s): 01-02 Batch: WG1027544-5					
1,2-Dichlorobenzene	ND		ug/l	1.0	--
1,3-Dichlorobenzene	ND		ug/l	1.0	--
1,4-Dichlorobenzene	ND		ug/l	1.0	--
Methyl tert butyl ether	ND		ug/l	2.0	--
p/m-Xylene	ND		ug/l	2.0	--
o-Xylene	ND		ug/l	1.0	--
Xylene (Total)	ND		ug/l	1.0	--
cis-1,2-Dichloroethene	ND		ug/l	1.0	--
1,2-Dichloroethene (total)	ND		ug/l	1.0	--
Dibromomethane	ND		ug/l	2.0	--
1,2,3-Trichloropropane	ND		ug/l	2.0	--
Styrene	ND		ug/l	1.0	--
Dichlorodifluoromethane	ND		ug/l	2.0	--
Acetone	ND		ug/l	5.0	--
Carbon disulfide	ND		ug/l	2.0	--
2-Butanone	ND		ug/l	5.0	--
4-Methyl-2-pentanone	ND		ug/l	5.0	--
2-Hexanone	ND		ug/l	5.0	--
Bromochloromethane	ND		ug/l	2.0	--
Tetrahydrofuran	ND		ug/l	2.0	--
2,2-Dichloropropane	ND		ug/l	2.0	--
1,2-Dibromoethane	ND		ug/l	2.0	--
1,3-Dichloropropane	ND		ug/l	2.0	--
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	--
Bromobenzene	ND		ug/l	2.0	--
n-Butylbenzene	ND		ug/l	2.0	--
sec-Butylbenzene	ND		ug/l	2.0	--
tert-Butylbenzene	ND		ug/l	2.0	--
o-Chlorotoluene	ND		ug/l	2.0	--

Project Name: ADW SITE SEEKONK, MA

Lab Number: L1725746

Project Number: 161.02023.001

Report Date: 08/02/17

Method Blank Analysis Batch Quality Control

Analytical Method: 97,8260C
 Analytical Date: 07/31/17 17:29
 Analyst: PK

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics - Westborough Lab for sample(s): 01-02 Batch: WG1027544-5					
p-Chlorotoluene	ND		ug/l	2.0	--
1,2-Dibromo-3-chloropropane	ND		ug/l	2.0	--
Hexachlorobutadiene	ND		ug/l	0.60	--
Isopropylbenzene	ND		ug/l	2.0	--
p-Isopropyltoluene	ND		ug/l	2.0	--
Naphthalene	ND		ug/l	2.0	--
n-Propylbenzene	ND		ug/l	2.0	--
1,2,3-Trichlorobenzene	ND		ug/l	2.0	--
1,2,4-Trichlorobenzene	ND		ug/l	2.0	--
1,3,5-Trimethylbenzene	ND		ug/l	2.0	--
1,2,4-Trimethylbenzene	ND		ug/l	2.0	--
Ethyl ether	ND		ug/l	2.0	--
Isopropyl Ether	ND		ug/l	2.0	--
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0	--
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	--
1,4-Dioxane	ND		ug/l	250	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	110		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	98		70-130
Dibromofluoromethane	108		70-130

Lab Control Sample Analysis **Batch Quality Control**

Project Name: ADW SITE SEEKONK, MA

Lab Number: L1725746

Project Number: 161.02023.001

Report Date: 08/02/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 01-02 Batch: WG1027544-3 WG1027544-4								
Methylene chloride	100		98		70-130	2		20
1,1-Dichloroethane	110		110		70-130	0		20
Chloroform	110		110		70-130	0		20
Carbon tetrachloride	120		120		70-130	0		20
1,2-Dichloropropane	93		91		70-130	2		20
Dibromochloromethane	110		100		70-130	10		20
1,1,2-Trichloroethane	100		100		70-130	0		20
Tetrachloroethene	120		120		70-130	0		20
Chlorobenzene	100		97		70-130	3		20
Trichlorofluoromethane	120		120		70-130	0		20
1,2-Dichloroethane	110		100		70-130	10		20
1,1,1-Trichloroethane	120		120		70-130	0		20
Bromodichloromethane	120		97		70-130	21	Q	20
trans-1,3-Dichloropropene	94		96		70-130	2		20
cis-1,3-Dichloropropene	100		100		70-130	0		20
1,1-Dichloropropene	99		100		70-130	1		20
Bromoform	110		100		70-130	10		20
1,1,2,2-Tetrachloroethane	90		85		70-130	6		20
Benzene	100		100		70-130	0		20
Toluene	99		99		70-130	0		20
Ethylbenzene	100		100		70-130	0		20
Chloromethane	94		95		70-130	1		20
Bromomethane	100		100		70-130	0		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: ADW SITE SEEKONK, MA

Project Number: 161.02023.001

Lab Number: L1725746

Report Date: 08/02/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 01-02 Batch: WG1027544-3 WG1027544-4								
Vinyl chloride	80		80		70-130	0		20
Chloroethane	100		95		70-130	5		20
1,1-Dichloroethene	110		93		70-130	17		20
trans-1,2-Dichloroethene	110		100		70-130	10		20
Trichloroethene	110		110		70-130	0		20
1,2-Dichlorobenzene	100		100		70-130	0		20
1,3-Dichlorobenzene	110		100		70-130	10		20
1,4-Dichlorobenzene	100		100		70-130	0		20
Methyl tert butyl ether	90		89		70-130	1		20
p/m-Xylene	110		105		70-130	5		20
o-Xylene	100		100		70-130	0		20
cis-1,2-Dichloroethene	110		110		70-130	0		20
Dibromomethane	110		100		70-130	10		20
1,2,3-Trichloropropane	88		88		70-130	0		20
Styrene	105		105		70-130	0		20
Dichlorodifluoromethane	110		110		70-130	0		20
Acetone	97		92		70-130	5		20
Carbon disulfide	110		98		70-130	12		20
2-Butanone	90		77		70-130	16		20
4-Methyl-2-pentanone	70		71		70-130	1		20
2-Hexanone	70		70		70-130	0		20
Bromochloromethane	120		110		70-130	9		20
Tetrahydrofuran	93		84		70-130	10		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: ADW SITE SEEKONK, MA

Project Number: 161.02023.001

Lab Number: L1725746

Report Date: 08/02/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 01-02 Batch: WG1027544-3 WG1027544-4								
2,2-Dichloropropane	120		120		70-130	0		20
1,2-Dibromoethane	97		100		70-130	3		20
1,3-Dichloropropane	98		96		70-130	2		20
1,1,1,2-Tetrachloroethane	110		120		70-130	9		20
Bromobenzene	110		110		70-130	0		20
n-Butylbenzene	100		100		70-130	0		20
sec-Butylbenzene	100		100		70-130	0		20
tert-Butylbenzene	100		100		70-130	0		20
o-Chlorotoluene	100		100		70-130	0		20
p-Chlorotoluene	100		97		70-130	3		20
1,2-Dibromo-3-chloropropane	89		92		70-130	3		20
Hexachlorobutadiene	110		110		70-130	0		20
Isopropylbenzene	99		98		70-130	1		20
p-Isopropyltoluene	100		100		70-130	0		20
Naphthalene	83		84		70-130	1		20
n-Propylbenzene	100		100		70-130	0		20
1,2,3-Trichlorobenzene	96		94		70-130	2		20
1,2,4-Trichlorobenzene	96		96		70-130	0		20
1,3,5-Trimethylbenzene	100		100		70-130	0		20
1,2,4-Trimethylbenzene	100		100		70-130	0		20
Ethyl ether	96		95		70-130	1		20
Isopropyl Ether	86		87		70-130	1		20
Ethyl-Tert-Butyl-Ether	89		92		70-130	3		20

Lab Control Sample Analysis**Batch Quality Control****Project Name:** ADW SITE SEEKONK, MA**Lab Number:** L1725746**Project Number:** 161.02023.001**Report Date:** 08/02/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 01-02 Batch: WG1027544-3 WG1027544-4								
Tertiary-Amyl Methyl Ether	98		100		70-130	2		20
1,4-Dioxane	84		84		70-130	0		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	105		101		70-130
Toluene-d8	98		100		70-130
4-Bromofluorobenzene	90		92		70-130
Dibromofluoromethane	110		104		70-130

PETROLEUM HYDROCARBONS

Project Name: ADW SITE SEEKONK, MA**Lab Number:** L1725746**Project Number:** 161.02023.001**Report Date:** 08/02/17**SAMPLE RESULTS**

Lab ID: L1725746-01
Client ID: MW406-W1-072617
Sample Location: 36 MAPLE AVE., SEEKONK, MA
Matrix: Water
Analytical Method: 100, VPH-04-1.1
Analytical Date: 08/01/17 18:43
Analyst: JM

Date Collected: 07/26/17 08:45
Date Received: 07/26/17
Field Prep: Not Specified

Quality Control Information

Condition of sample received:

Satisfactory

Aqueous Preservative:

Laboratory Provided Preserved
Container

Sample Temperature upon receipt:

Received on Ice

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Petroleum Hydrocarbons - Westborough Lab						
C5-C8 Aliphatics	ND		ug/l	50.0	--	1
C9-C12 Aliphatics	ND		ug/l	50.0	--	1
C9-C10 Aromatics	ND		ug/l	50.0	--	1
C5-C8 Aliphatics, Adjusted	ND		ug/l	50.0	--	1
C9-C12 Aliphatics, Adjusted	ND		ug/l	50.0	--	1
Benzene	ND		ug/l	2.00	--	1
Toluene	ND		ug/l	2.00	--	1
Ethylbenzene	ND		ug/l	2.00	--	1
p/m-Xylene	ND		ug/l	2.00	--	1
o-Xylene	ND		ug/l	2.00	--	1
Methyl tert butyl ether	ND		ug/l	3.00	--	1
Naphthalene	ND		ug/l	4.00	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,5-Dibromotoluene-PID	88		70-130
2,5-Dibromotoluene-FID	100		70-130

Project Name: ADW SITE SEEKONK, MA**Lab Number:** L1725746**Project Number:** 161.02023.001**Report Date:** 08/02/17**SAMPLE RESULTS**

Lab ID: L1725746-01

Client ID: MW406-W1-072617

Sample Location: 36 MAPLE AVE., SEEKONK, MA

Matrix: Water

Analytical Method: 98,EPH-04-1.1

Analytical Date: 07/31/17 20:33

Analyst: DG

M.S. Analytical Date: 07/31/17 10:43

M.S. Analyst: KL

Date Collected: 07/26/17 08:45

Date Received: 07/26/17

Field Prep: Not Specified

Extraction Method: EPA 3510C

Extraction Date: 07/28/17 18:33

Cleanup Method1: EPH-04-1

Cleanup Date1: 07/29/17

Quality Control Information

Condition of sample received:

Satisfactory

Aqueous Preservative:

Laboratory Provided Preserved

Sample Temperature upon receipt:

Container Received on Ice

Sample Extraction method:

Extracted Per the Method

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
EPH w/MS Targets - Westborough Lab						
C9-C18 Aliphatics	ND		ug/l	100	--	1
C19-C36 Aliphatics	ND		ug/l	100	--	1
C11-C22 Aromatics	ND		ug/l	100	--	1
C11-C22 Aromatics, Adjusted	ND		ug/l	100	--	1
Naphthalene	ND		ug/l	0.400	--	1
2-Methylnaphthalene	ND		ug/l	0.400	--	1
Acenaphthylene	ND		ug/l	0.400	--	1
Acenaphthene	ND		ug/l	0.400	--	1
Fluorene	ND		ug/l	0.400	--	1
Phenanthrene	ND		ug/l	0.400	--	1
Anthracene	ND		ug/l	0.400	--	1
Fluoranthene	ND		ug/l	0.400	--	1
Pyrene	ND		ug/l	0.400	--	1
Benzo(a)anthracene	ND		ug/l	0.400	--	1
Chrysene	ND		ug/l	0.400	--	1
Benzo(b)fluoranthene	ND		ug/l	0.400	--	1
Benzo(k)fluoranthene	ND		ug/l	0.400	--	1
Benzo(a)pyrene	ND		ug/l	0.200	--	1
Indeno(1,2,3-cd)Pyrene	ND		ug/l	0.400	--	1
Dibenzo(a,h)anthracene	ND		ug/l	0.400	--	1
Benzo(ghi)perylene	ND		ug/l	0.400	--	1

Project Name: ADW SITE SEEKONK, MA**Lab Number:** L1725746**Project Number:** 161.02023.001**Report Date:** 08/02/17**SAMPLE RESULTS**

Lab ID: L1725746-01

Date Collected: 07/26/17 08:45

Client ID: MW406-W1-072617

Date Received: 07/26/17

Sample Location: 36 MAPLE AVE., SEEKONK, MA

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

EPH w/MS Targets - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Chloro-Octadecane	56		40-140
o-Terphenyl	82		40-140
2-Fluorobiphenyl	75		40-140
2-Bromonaphthalene	75		40-140
O-Terphenyl-MS	88		40-140

Project Name: ADW SITE SEEKONK, MA**Lab Number:** L1725746**Project Number:** 161.02023.001**Report Date:** 08/02/17**SAMPLE RESULTS**

Lab ID: L1725746-02
Client ID: MW407-W1-072617
Sample Location: 36 MAPLE AVE., SEEKONK, MA
Matrix: Water
Analytical Method: 100, VPH-04-1.1
Analytical Date: 08/01/17 19:24
Analyst: JM

Date Collected: 07/26/17 09:45
Date Received: 07/26/17
Field Prep: Not Specified

Quality Control Information

Condition of sample received:

Satisfactory

Aqueous Preservative:

Laboratory Provided Preserved
Container

Sample Temperature upon receipt:

Received on Ice

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Petroleum Hydrocarbons - Westborough Lab						
C5-C8 Aliphatics	ND		ug/l	50.0	--	1
C9-C12 Aliphatics	ND		ug/l	50.0	--	1
C9-C10 Aromatics	ND		ug/l	50.0	--	1
C5-C8 Aliphatics, Adjusted	ND		ug/l	50.0	--	1
C9-C12 Aliphatics, Adjusted	ND		ug/l	50.0	--	1
Benzene	ND		ug/l	2.00	--	1
Toluene	ND		ug/l	2.00	--	1
Ethylbenzene	ND		ug/l	2.00	--	1
p/m-Xylene	ND		ug/l	2.00	--	1
o-Xylene	ND		ug/l	2.00	--	1
Methyl tert butyl ether	ND		ug/l	3.00	--	1
Naphthalene	ND		ug/l	4.00	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,5-Dibromotoluene-PID	89		70-130
2,5-Dibromotoluene-FID	100		70-130

Project Name: ADW SITE SEEKONK, MA**Lab Number:** L1725746**Project Number:** 161.02023.001**Report Date:** 08/02/17**SAMPLE RESULTS**

Lab ID: L1725746-02
 Client ID: MW407-W1-072617
 Sample Location: 36 MAPLE AVE., SEEKONK, MA
 Matrix: Water
 Analytical Method: 98,EPH-04-1.1
 Analytical Date: 07/31/17 21:12
 Analyst: DG

M.S. Analytical Date: 07/31/17 11:07
 M.S. Analyst: KL

Date Collected: 07/26/17 09:45
 Date Received: 07/26/17
 Field Prep: Not Specified
 Extraction Method: EPA 3510C
 Extraction Date: 07/28/17 18:33
 Cleanup Method1: EPH-04-1
 Cleanup Date1: 07/29/17

Quality Control Information

Condition of sample received:

Satisfactory

Aqueous Preservative:

Laboratory Provided Preserved
Container

Sample Temperature upon receipt:

Received on Ice

Sample Extraction method:

Extracted Per the Method

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
EPH w/MS Targets - Westborough Lab						
C9-C18 Aliphatics	ND		ug/l	100	--	1
C19-C36 Aliphatics	ND		ug/l	100	--	1
C11-C22 Aromatics	ND		ug/l	100	--	1
C11-C22 Aromatics, Adjusted	ND		ug/l	100	--	1
Naphthalene	ND		ug/l	0.400	--	1
2-Methylnaphthalene	ND		ug/l	0.400	--	1
Acenaphthylene	ND		ug/l	0.400	--	1
Acenaphthene	ND		ug/l	0.400	--	1
Fluorene	ND		ug/l	0.400	--	1
Phenanthrene	ND		ug/l	0.400	--	1
Anthracene	ND		ug/l	0.400	--	1
Fluoranthene	ND		ug/l	0.400	--	1
Pyrene	ND		ug/l	0.400	--	1
Benzo(a)anthracene	ND		ug/l	0.400	--	1
Chrysene	ND		ug/l	0.400	--	1
Benzo(b)fluoranthene	ND		ug/l	0.400	--	1
Benzo(k)fluoranthene	ND		ug/l	0.400	--	1
Benzo(a)pyrene	ND		ug/l	0.200	--	1
Indeno(1,2,3-cd)Pyrene	ND		ug/l	0.400	--	1
Dibenzo(a,h)anthracene	ND		ug/l	0.400	--	1
Benzo(ghi)perylene	ND		ug/l	0.400	--	1

Project Name: ADW SITE SEEKONK, MA**Lab Number:** L1725746**Project Number:** 161.02023.001**Report Date:** 08/02/17**SAMPLE RESULTS**

Lab ID: L1725746-02

Date Collected: 07/26/17 09:45

Client ID: MW407-W1-072617

Date Received: 07/26/17

Sample Location: 36 MAPLE AVE., SEEKONK, MA

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

EPH w/MS Targets - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Chloro-Octadecane	55		40-140
o-Terphenyl	88		40-140
2-Fluorobiphenyl	81		40-140
2-Bromonaphthalene	81		40-140
O-Terphenyl-MS	86		40-140

Project Name: ADW SITE SEEKONK, MA**Lab Number:** L1725746**Project Number:** 161.02023.001**Report Date:** 08/02/17**SAMPLE RESULTS**

Lab ID: L1725746-03
Client ID: MW408-W1-072617
Sample Location: 36 MAPLE AVE., SEEKONK, MA
Matrix: Water
Analytical Method: 100, VPH-04-1.1
Analytical Date: 08/01/17 20:04
Analyst: JM

Date Collected: 07/26/17 12:30
Date Received: 07/26/17
Field Prep: Not Specified

Quality Control Information

Condition of sample received:

Satisfactory

Aqueous Preservative:

Laboratory Provided Preserved
Container

Sample Temperature upon receipt:

Received on Ice

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Petroleum Hydrocarbons - Westborough Lab						
C5-C8 Aliphatics	ND		ug/l	50.0	--	1
C9-C12 Aliphatics	ND		ug/l	50.0	--	1
C9-C10 Aromatics	ND		ug/l	50.0	--	1
C5-C8 Aliphatics, Adjusted	ND		ug/l	50.0	--	1
C9-C12 Aliphatics, Adjusted	ND		ug/l	50.0	--	1
Benzene	ND		ug/l	2.00	--	1
Toluene	ND		ug/l	2.00	--	1
Ethylbenzene	ND		ug/l	2.00	--	1
p/m-Xylene	ND		ug/l	2.00	--	1
o-Xylene	ND		ug/l	2.00	--	1
Methyl tert butyl ether	ND		ug/l	3.00	--	1
Naphthalene	ND		ug/l	4.00	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,5-Dibromotoluene-PID	86		70-130
2,5-Dibromotoluene-FID	96		70-130

Project Name: ADW SITE SEEKONK, MA**Lab Number:** L1725746**Project Number:** 161.02023.001**Report Date:** 08/02/17**SAMPLE RESULTS**

Lab ID:	L1725746-03	Date Collected:	07/26/17 12:30
Client ID:	MW408-W1-072617	Date Received:	07/26/17
Sample Location:	36 MAPLE AVE., SEEKONK, MA	Field Prep:	Not Specified
Matrix:	Water	Extraction Method:	EPA 3510C
Analytical Method:	98,EPH-04-1.1	Extraction Date:	07/28/17 18:33
Analytical Date:	07/31/17 21:50	M.S. Analytical Date:	07/31/17 11:32
Analytical Date:	07/31/17 21:50	Cleanup Method1:	EPH-04-1
Analyst:	DG	M.S. Analyst:	KL
		Cleanup Date1:	07/29/17

Quality Control Information

Condition of sample received:	Satisfactory
Aqueous Preservative:	Laboratory Provided Preserved Container
Sample Temperature upon receipt:	Received on Ice
Sample Extraction method:	Extracted Per the Method

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
EPH w/MS Targets - Westborough Lab						
C9-C18 Aliphatics	ND		ug/l	100	--	1
C19-C36 Aliphatics	ND		ug/l	100	--	1
C11-C22 Aromatics	ND		ug/l	100	--	1
C11-C22 Aromatics, Adjusted	ND		ug/l	100	--	1
Naphthalene	ND		ug/l	0.400	--	1
2-Methylnaphthalene	ND		ug/l	0.400	--	1
Acenaphthylene	ND		ug/l	0.400	--	1
Acenaphthene	ND		ug/l	0.400	--	1
Fluorene	ND		ug/l	0.400	--	1
Phenanthrene	ND		ug/l	0.400	--	1
Anthracene	ND		ug/l	0.400	--	1
Fluoranthene	ND		ug/l	0.400	--	1
Pyrene	ND		ug/l	0.400	--	1
Benzo(a)anthracene	ND		ug/l	0.400	--	1
Chrysene	ND		ug/l	0.400	--	1
Benzo(b)fluoranthene	ND		ug/l	0.400	--	1
Benzo(k)fluoranthene	ND		ug/l	0.400	--	1
Benzo(a)pyrene	ND		ug/l	0.200	--	1
Indeno(1,2,3-cd)Pyrene	ND		ug/l	0.400	--	1
Dibenzo(a,h)anthracene	ND		ug/l	0.400	--	1
Benzo(ghi)perylene	ND		ug/l	0.400	--	1

Project Name: ADW SITE SEEKONK, MA**Lab Number:** L1725746**Project Number:** 161.02023.001**Report Date:** 08/02/17**SAMPLE RESULTS**

Lab ID: L1725746-03

Date Collected: 07/26/17 12:30

Client ID: MW408-W1-072617

Date Received: 07/26/17

Sample Location: 36 MAPLE AVE., SEEKONK, MA

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

EPH w/MS Targets - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Chloro-Octadecane	53		40-140
o-Terphenyl	94		40-140
2-Fluorobiphenyl	94		40-140
2-Bromonaphthalene	94		40-140
O-Terphenyl-MS	86		40-140

Project Name: ADW SITE SEEKONK, MA**Lab Number:** L1725746**Project Number:** 161.02023.001**Report Date:** 08/02/17**SAMPLE RESULTS**

Lab ID: L1725746-04
Client ID: MW409-W1-072617
Sample Location: 36 MAPLE AVE., SEEKONK, MA
Matrix: Water
Analytical Method: 100, VPH-04-1.1
Analytical Date: 08/01/17 20:44
Analyst: JM

Date Collected: 07/26/17 14:10
Date Received: 07/26/17
Field Prep: Not Specified

Quality Control Information

Condition of sample received:

Satisfactory

Aqueous Preservative:

Laboratory Provided Preserved
Container

Sample Temperature upon receipt:

Received on Ice

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Petroleum Hydrocarbons - Westborough Lab						
C5-C8 Aliphatics	ND		ug/l	50.0	--	1
C9-C12 Aliphatics	ND		ug/l	50.0	--	1
C9-C10 Aromatics	ND		ug/l	50.0	--	1
C5-C8 Aliphatics, Adjusted	ND		ug/l	50.0	--	1
C9-C12 Aliphatics, Adjusted	ND		ug/l	50.0	--	1
Benzene	ND		ug/l	2.00	--	1
Toluene	ND		ug/l	2.00	--	1
Ethylbenzene	ND		ug/l	2.00	--	1
p/m-Xylene	ND		ug/l	2.00	--	1
o-Xylene	ND		ug/l	2.00	--	1
Methyl tert butyl ether	ND		ug/l	3.00	--	1
Naphthalene	ND		ug/l	4.00	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,5-Dibromotoluene-PID	87		70-130
2,5-Dibromotoluene-FID	96		70-130

Project Name: ADW SITE SEEKONK, MA**Lab Number:** L1725746**Project Number:** 161.02023.001**Report Date:** 08/02/17**SAMPLE RESULTS**

Lab ID: L1725746-04
 Client ID: MW409-W1-072617
 Sample Location: 36 MAPLE AVE., SEEKONK, MA
 Matrix: Water
 Analytical Method: 98,EPH-04-1.1
 Analytical Date: 07/31/17 22:28
 Analyst: DG

M.S. Analytical Date: 07/31/17 11:56
 M.S. Analyst: KL

Date Collected: 07/26/17 14:10
 Date Received: 07/26/17
 Field Prep: Not Specified
 Extraction Method: EPA 3510C
 Extraction Date: 07/28/17 18:33
 Cleanup Method1: EPH-04-1
 Cleanup Date1: 07/29/17

Quality Control Information

Condition of sample received:

Satisfactory

Aqueous Preservative:

Laboratory Provided Preserved
Container

Sample Temperature upon receipt:

Received on Ice

Sample Extraction method:

Extracted Per the Method

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
EPH w/MS Targets - Westborough Lab						
C9-C18 Aliphatics	ND		ug/l	100	--	1
C19-C36 Aliphatics	ND		ug/l	100	--	1
C11-C22 Aromatics	ND		ug/l	100	--	1
C11-C22 Aromatics, Adjusted	ND		ug/l	100	--	1
Naphthalene	ND		ug/l	0.400	--	1
2-Methylnaphthalene	ND		ug/l	0.400	--	1
Acenaphthylene	ND		ug/l	0.400	--	1
Acenaphthene	ND		ug/l	0.400	--	1
Fluorene	ND		ug/l	0.400	--	1
Phenanthrene	ND		ug/l	0.400	--	1
Anthracene	ND		ug/l	0.400	--	1
Fluoranthene	ND		ug/l	0.400	--	1
Pyrene	ND		ug/l	0.400	--	1
Benzo(a)anthracene	ND		ug/l	0.400	--	1
Chrysene	ND		ug/l	0.400	--	1
Benzo(b)fluoranthene	ND		ug/l	0.400	--	1
Benzo(k)fluoranthene	ND		ug/l	0.400	--	1
Benzo(a)pyrene	ND		ug/l	0.200	--	1
Indeno(1,2,3-cd)Pyrene	ND		ug/l	0.400	--	1
Dibenzo(a,h)anthracene	ND		ug/l	0.400	--	1
Benzo(ghi)perylene	ND		ug/l	0.400	--	1

Project Name: ADW SITE SEEKONK, MA**Lab Number:** L1725746**Project Number:** 161.02023.001**Report Date:** 08/02/17**SAMPLE RESULTS**

Lab ID: L1725746-04

Date Collected: 07/26/17 14:10

Client ID: MW409-W1-072617

Date Received: 07/26/17

Sample Location: 36 MAPLE AVE., SEEKONK, MA

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

EPH w/MS Targets - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Chloro-Octadecane	53		40-140
o-Terphenyl	92		40-140
2-Fluorobiphenyl	90		40-140
2-Bromonaphthalene	88		40-140
O-Terphenyl-MS	86		40-140

Project Name: ADW SITE SEEKONK, MA

Lab Number: L1725746

Project Number: 161.02023.001

Report Date: 08/02/17

Method Blank Analysis Batch Quality Control

Analytical Method: 98,EPH-04-1.1

Analytical Date: 07/31/17 18:00

Analyst: DG

M.S. Analytical Date: 07/31/17 09:04

M.S. Analyst: KL

Extraction Method: EPA 3510C

Extraction Date: 07/28/17 20:36

Cleanup Method: EPH-04-1

Cleanup Date: 07/29/17

Parameter	Result	Qualifier	Units	RL	MDL
EPH w/MS Targets - Westborough Lab for sample(s): 01-04 Batch: WG1026905-1					
C9-C18 Aliphatics	ND		ug/l	100	--
C19-C36 Aliphatics	ND		ug/l	100	--
C11-C22 Aromatics	ND		ug/l	100	--
C11-C22 Aromatics, Adjusted	ND		ug/l	100	--
Naphthalene	ND		ug/l	0.400	--
2-Methylnaphthalene	ND		ug/l	0.400	--
Acenaphthylene	ND		ug/l	0.400	--
Acenaphthene	ND		ug/l	0.400	--
Fluorene	ND		ug/l	0.400	--
Phenanthrene	ND		ug/l	0.400	--
Anthracene	ND		ug/l	0.400	--
Fluoranthene	ND		ug/l	0.400	--
Pyrene	ND		ug/l	0.400	--
Benzo(a)anthracene	ND		ug/l	0.400	--
Chrysene	ND		ug/l	0.400	--
Benzo(b)fluoranthene	ND		ug/l	0.400	--
Benzo(k)fluoranthene	ND		ug/l	0.400	--
Benzo(a)pyrene	ND		ug/l	0.200	--
Indeno(1,2,3-cd)Pyrene	ND		ug/l	0.400	--
Dibenzo(a,h)anthracene	ND		ug/l	0.400	--
Benzo(ghi)perylene	ND		ug/l	0.400	--

Project Name: ADW SITE SEEKONK, MA**Lab Number:** L1725746**Project Number:** 161.02023.001**Report Date:** 08/02/17**Method Blank Analysis
Batch Quality Control**

Analytical Method: 98,EPH-04-1.1

Analytical Date: 07/31/17 18:00

Analyst: DG

07/31/17 09:04

KL

Extraction Method: EPA 3510C

Extraction Date: 07/28/17 20:36

Cleanup Method: EPH-04-1

Cleanup Date: 07/29/17

Parameter	Result	Qualifier	Units	RL	MDL
EPH w/MS Targets - Westborough Lab for sample(s): 01-04 Batch: WG1026905-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
Chloro-Octadecane	55		40-140
o-Terphenyl	94		40-140
2-Fluorobiphenyl	91		40-140
2-Bromonaphthalene	91		40-140
O-Terphenyl-MS	87		40-140

Project Name: ADW SITE SEEKONK, MA

Lab Number: L1725746

Project Number: 161.02023.001

Report Date: 08/02/17

Method Blank Analysis Batch Quality Control

Analytical Method: 100, VPH-04-1.1

Analytical Date: 08/01/17 10:06

Analyst: JM

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Petroleum Hydrocarbons - Westborough Lab for sample(s): 01-04 Batch: WG1028092-3					
C5-C8 Aliphatics	ND		ug/l	50.0	--
C9-C12 Aliphatics	ND		ug/l	50.0	--
C9-C10 Aromatics	ND		ug/l	50.0	--
C5-C8 Aliphatics, Adjusted	ND		ug/l	50.0	--
C9-C12 Aliphatics, Adjusted	ND		ug/l	50.0	--
Benzene	ND		ug/l	2.00	--
Toluene	ND		ug/l	2.00	--
Ethylbenzene	ND		ug/l	2.00	--
p/m-Xylene	ND		ug/l	2.00	--
o-Xylene	ND		ug/l	2.00	--
Methyl tert butyl ether	ND		ug/l	3.00	--
Naphthalene	ND		ug/l	4.00	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2,5-Dibromotoluene-PID	88		70-130
2,5-Dibromotoluene-FID	98		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: ADW SITE SEEKONK, MA

Lab Number: L1725746

Project Number: 161.02023.001

Report Date: 08/02/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
EPH w/MS Targets - Westborough Lab Associated sample(s): 01-04 Batch: WG1026905-2 WG1026905-3								
C9-C18 Aliphatics	67		68		40-140	1		25
C19-C36 Aliphatics	71		72		40-140	1		25
C11-C22 Aromatics	86		80		40-140	7		25
Naphthalene	70		75		40-140	7		25
2-Methylnaphthalene	75		80		40-140	6		25
Acenaphthylene	92		97		40-140	5		25
Acenaphthene	83		87		40-140	5		25
Fluorene	87		91		40-140	4		25
Phenanthrene	80		84		40-140	5		25
Anthracene	91		95		40-140	4		25
Fluoranthene	93		98		40-140	5		25
Pyrene	95		100		40-140	5		25
Benzo(a)anthracene	86		89		40-140	3		25
Chrysene	87		91		40-140	4		25
Benzo(b)fluoranthene	89		89		40-140	0		25
Benzo(k)fluoranthene	84		90		40-140	7		25
Benzo(a)pyrene	87		90		40-140	3		25
Indeno(1,2,3-cd)Pyrene	87		88		40-140	1		25
Dibenzo(a,h)anthracene	86		88		40-140	2		25
Benzo(ghi)perylene	81		82		40-140	1		25
Nonane (C9)	54		51		30-140	6		25
Decane (C10)	61		60		40-140	2		25
Dodecane (C12)	66		66		40-140	0		25

Lab Control Sample Analysis

Batch Quality Control

Project Name: ADW SITE SEEKONK, MA

Project Number: 161.02023.001

Lab Number: L1725746

Report Date: 08/02/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
EPH w/MS Targets - Westborough Lab Associated sample(s): 01-04 Batch: WG1026905-2 WG1026905-3								
Tetradecane (C14)	68		70		40-140	3		25
Hexadecane (C16)	69		72		40-140	4		25
Octadecane (C18)	70		72		40-140	3		25
Nonadecane (C19)	70		72		40-140	3		25
Eicosane (C20)	69		71		40-140	3		25
Docosane (C22)	69		71		40-140	3		25
Tetracosane (C24)	68		70		40-140	3		25
Hexacosane (C26)	67		69		40-140	3		25
Octacosane (C28)	67		69		40-140	3		25
triacontane (C30)	67		69		40-140	3		25
Hexatriacontane (C36)	68		70		40-140	3		25

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
Chloro-Octadecane	58		60		40-140
o-Terphenyl	94		87		40-140
2-Fluorobiphenyl	85		80		40-140
2-Bromonaphthalene	87		79		40-140
O-Terphenyl-MS	108		113		40-140
% Naphthalene Breakthrough	0		0		
% 2-Methylnaphthalene Breakthrough	0		0		

Lab Control Sample Analysis

Batch Quality Control

Project Name: ADW SITE SEEKONK, MA

Lab Number: L1725746

Project Number: 161.02023.001

Report Date: 08/02/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Petroleum Hydrocarbons - Westborough Lab Associated sample(s): 01-04 Batch: WG1028092-1 WG1028092-2								
C5-C8 Aliphatics	103		103		70-130	0		25
C9-C12 Aliphatics	108		108		70-130	0		25
C9-C10 Aromatics	96		97		70-130	1		25
Benzene	97		98		70-130	1		25
Toluene	97		98		70-130	1		25
Ethylbenzene	98		99		70-130	1		25
p/m-Xylene	97		98		70-130	1		25
o-Xylene	96		97		70-130	1		25
Methyl tert butyl ether	94		96		70-130	2		25
Naphthalene	94		96		70-130	2		25
1,2,4-Trimethylbenzene	96		97		70-130	1		25
Pentane	100		100		70-130	0		25
2-Methylpentane	104		104		70-130	0		25
2,2,4-Trimethylpentane	103		104		70-130	1		25
n-Nonane	107		107		30-130	0		25
n-Decane	110		110		70-130	0		25
n-Butylcyclohexane	109		110		70-130	1		25

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2,5-Dibromotoluene-PID	91		91		70-130
2,5-Dibromotoluene-FID	102		100		70-130

PCBS

Project Name: ADW SITE SEEKONK, MA**Lab Number:** L1725746**Project Number:** 161.02023.001**Report Date:** 08/02/17**SAMPLE RESULTS**

Lab ID: L1725746-01
 Client ID: MW406-W1-072617
 Sample Location: 36 MAPLE AVE., SEEKONK, MA

Date Collected: 07/26/17 08:45
 Date Received: 07/26/17
 Field Prep: Not Specified
 Extraction Method: EPA 3510C
 Extraction Date: 07/28/17 07:31
 Cleanup Method: EPA 3665A
 Cleanup Date: 07/28/17
 Cleanup Method: EPA 3660B
 Cleanup Date: 07/28/17

Matrix: Water
 Analytical Method: 97,8082A
 Analytical Date: 07/28/17 16:35
 Analyst: JA

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
MCP Polychlorinated Biphenyls - Westborough Lab							
Aroclor 1016	ND		ug/l	0.250	--	1	A
Aroclor 1221	ND		ug/l	0.250	--	1	A
Aroclor 1232	ND		ug/l	0.250	--	1	A
Aroclor 1242	ND		ug/l	0.250	--	1	A
Aroclor 1248	ND		ug/l	0.250	--	1	A
Aroclor 1254	ND		ug/l	0.250	--	1	A
Aroclor 1260	ND		ug/l	0.250	--	1	A
Aroclor 1262	ND		ug/l	0.250	--	1	A
Aroclor 1268	ND		ug/l	0.250	--	1	A
PCBs, Total	ND		ug/l	0.250	--	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	92		30-150	A
Decachlorobiphenyl	62		30-150	A
2,4,5,6-Tetrachloro-m-xylene	93		30-150	B
Decachlorobiphenyl	63		30-150	B

Project Name: ADW SITE SEEKONK, MA**Lab Number:** L1725746**Project Number:** 161.02023.001**Report Date:** 08/02/17**SAMPLE RESULTS**

Lab ID: L1725746-03
 Client ID: MW408-W1-072617
 Sample Location: 36 MAPLE AVE., SEEKONK, MA

Date Collected: 07/26/17 12:30
 Date Received: 07/26/17
 Field Prep: Not Specified
 Extraction Method: EPA 3510C
 Extraction Date: 07/28/17 07:31
 Cleanup Method: EPA 3665A
 Cleanup Date: 07/28/17
 Cleanup Method: EPA 3660B
 Cleanup Date: 07/28/17

Matrix: Water
 Analytical Method: 97,8082A
 Analytical Date: 07/28/17 16:49
 Analyst: JA

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
MCP Polychlorinated Biphenyls - Westborough Lab							
Aroclor 1016	ND		ug/l	0.250	--	1	A
Aroclor 1221	ND		ug/l	0.250	--	1	A
Aroclor 1232	ND		ug/l	0.250	--	1	A
Aroclor 1242	ND		ug/l	0.250	--	1	A
Aroclor 1248	ND		ug/l	0.250	--	1	A
Aroclor 1254	ND		ug/l	0.250	--	1	A
Aroclor 1260	ND		ug/l	0.250	--	1	A
Aroclor 1262	ND		ug/l	0.250	--	1	A
Aroclor 1268	ND		ug/l	0.250	--	1	A
PCBs, Total	ND		ug/l	0.250	--	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	93		30-150	A
Decachlorobiphenyl	64		30-150	A
2,4,5,6-Tetrachloro-m-xylene	95		30-150	B
Decachlorobiphenyl	64		30-150	B

Project Name: ADW SITE SEEKONK, MA

Lab Number: L1725746

Project Number: 161.02023.001

Report Date: 08/02/17

Method Blank Analysis Batch Quality Control

Analytical Method: 97,8082A
 Analytical Date: 07/28/17 14:43
 Analyst: HT

Extraction Method: EPA 3510C
 Extraction Date: 07/28/17 07:31
 Cleanup Method: EPA 3665A
 Cleanup Date: 07/28/17
 Cleanup Method: EPA 3660B
 Cleanup Date: 07/28/17

Parameter	Result	Qualifier	Units	RL	MDL	Column
MCP Polychlorinated Biphenyls - Westborough Lab for sample(s): 01,03 Batch: WG1026638-1						
Aroclor 1016	ND		ug/l	0.250	--	A
Aroclor 1221	ND		ug/l	0.250	--	A
Aroclor 1232	ND		ug/l	0.250	--	A
Aroclor 1242	ND		ug/l	0.250	--	A
Aroclor 1248	ND		ug/l	0.250	--	A
Aroclor 1254	ND		ug/l	0.250	--	A
Aroclor 1260	ND		ug/l	0.250	--	A
Aroclor 1262	ND		ug/l	0.250	--	A
Aroclor 1268	ND		ug/l	0.250	--	A
PCBs, Total	ND		ug/l	0.250	--	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	98		30-150	A
Decachlorobiphenyl	89		30-150	A
2,4,5,6-Tetrachloro-m-xylene	99		30-150	B
Decachlorobiphenyl	90		30-150	B

Lab Control Sample Analysis

Batch Quality Control

Project Name: ADW SITE SEEKONK, MA

Lab Number: L1725746

Project Number: 161.02023.001

Report Date: 08/02/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
MCP Polychlorinated Biphenyls - Westborough Lab Associated sample(s): 01,03 Batch: WG1026638-2 WG1026638-3									
Aroclor 1016	103		103		40-140	0		20	A
Aroclor 1260	101		101		40-140	0		20	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	98		99		30-150	A
Decachlorobiphenyl	85		84		30-150	A
2,4,5,6-Tetrachloro-m-xylene	99		100		30-150	B
Decachlorobiphenyl	86		85		30-150	B

METALS

Project Name: ADW SITE SEEKONK, MA

Lab Number: L1725746

Project Number: 161.02023.001

Report Date: 08/02/17

SAMPLE RESULTS

Lab ID: L1725746-01

Date Collected: 07/26/17 08:45

Client ID: MW406-W1-072617

Date Received: 07/26/17

Sample Location: 36 MAPLE AVE., SEEKONK, MA

Field Prep: Not Specified

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
MCP Total Metals - Mansfield Lab											
Antimony, Total	0.0048		mg/l	0.0040	--	1	07/28/17 13:30	08/01/17 12:21	EPA 3005A	97,6020A	AM
Arsenic, Total	ND		mg/l	0.005	--	1	07/28/17 13:30	07/31/17 18:17	EPA 3005A	97,6010C	AB
Beryllium, Total	ND		mg/l	0.0005	--	1	07/28/17 13:30	08/01/17 12:21	EPA 3005A	97,6020A	AM
Cadmium, Total	ND		mg/l	0.004	--	1	07/28/17 13:30	07/31/17 18:17	EPA 3005A	97,6010C	AB
Chromium, Total	ND		mg/l	0.010	--	1	07/28/17 13:30	07/31/17 18:17	EPA 3005A	97,6010C	AB
Copper, Total	ND		mg/l	0.010	--	1	07/28/17 13:30	07/31/17 18:17	EPA 3005A	97,6010C	AB
Lead, Total	ND		mg/l	0.010	--	1	07/28/17 13:30	07/31/17 18:17	EPA 3005A	97,6010C	AB
Mercury, Total	ND		mg/l	0.0002	--	1	07/27/17 11:25	07/27/17 19:28	EPA 7470A	97,7470A	EA
Nickel, Total	ND		mg/l	0.025	--	1	07/28/17 13:30	07/31/17 18:17	EPA 3005A	97,6010C	AB
Selenium, Total	ND		mg/l	0.010	--	1	07/28/17 13:30	07/31/17 18:17	EPA 3005A	97,6010C	AB
Silver, Total	ND		mg/l	0.007	--	1	07/28/17 13:30	07/31/17 18:17	EPA 3005A	97,6010C	AB
Thallium, Total	ND		mg/l	0.0005	--	1	07/28/17 13:30	08/01/17 12:21	EPA 3005A	97,6020A	AM
Zinc, Total	ND		mg/l	0.050	--	1	07/28/17 13:30	07/31/17 18:17	EPA 3005A	97,6010C	AB



Project Name: ADW SITE SEEKONK, MA

Lab Number: L1725746

Project Number: 161.02023.001

Report Date: 08/02/17

SAMPLE RESULTS

Lab ID: L1725746-02

Date Collected: 07/26/17 09:45

Client ID: MW407-W1-072617

Date Received: 07/26/17

Sample Location: 36 MAPLE AVE., SEEKONK, MA

Field Prep: Not Specified

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
MCP Total Metals - Mansfield Lab											
Antimony, Total	ND		mg/l	0.0040	--	1	07/28/17 13:30	08/01/17 12:24	EPA 3005A	97,6020A	AM
Arsenic, Total	ND		mg/l	0.005	--	1	07/28/17 13:30	07/31/17 18:21	EPA 3005A	97,6010C	AB
Beryllium, Total	ND		mg/l	0.0005	--	1	07/28/17 13:30	08/01/17 12:24	EPA 3005A	97,6020A	AM
Cadmium, Total	ND		mg/l	0.004	--	1	07/28/17 13:30	07/31/17 18:21	EPA 3005A	97,6010C	AB
Chromium, Total	ND		mg/l	0.010	--	1	07/28/17 13:30	07/31/17 18:21	EPA 3005A	97,6010C	AB
Copper, Total	ND		mg/l	0.010	--	1	07/28/17 13:30	07/31/17 18:21	EPA 3005A	97,6010C	AB
Lead, Total	ND		mg/l	0.010	--	1	07/28/17 13:30	07/31/17 18:21	EPA 3005A	97,6010C	AB
Mercury, Total	ND		mg/l	0.0002	--	1	07/27/17 11:25	07/27/17 19:30	EPA 7470A	97,7470A	EA
Nickel, Total	ND		mg/l	0.025	--	1	07/28/17 13:30	07/31/17 18:21	EPA 3005A	97,6010C	AB
Selenium, Total	ND		mg/l	0.010	--	1	07/28/17 13:30	07/31/17 18:21	EPA 3005A	97,6010C	AB
Silver, Total	ND		mg/l	0.007	--	1	07/28/17 13:30	07/31/17 18:21	EPA 3005A	97,6010C	AB
Thallium, Total	ND		mg/l	0.0005	--	1	07/28/17 13:30	08/01/17 12:24	EPA 3005A	97,6020A	AM
Zinc, Total	ND		mg/l	0.050	--	1	07/28/17 13:30	07/31/17 18:21	EPA 3005A	97,6010C	AB



Project Name: ADW SITE SEEKONK, MA

Lab Number: L1725746

Project Number: 161.02023.001

Report Date: 08/02/17

SAMPLE RESULTS

Lab ID: L1725746-03

Date Collected: 07/26/17 12:30

Client ID: MW408-W1-072617

Date Received: 07/26/17

Sample Location: 36 MAPLE AVE., SEEKONK, MA

Field Prep: Not Specified

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
MCP Total Metals - Mansfield Lab											
Antimony, Total	ND		mg/l	0.0040	--	1	07/28/17 13:30	08/01/17 12:28	EPA 3005A	97,6020A	AM
Arsenic, Total	ND		mg/l	0.005	--	1	07/28/17 13:30	07/31/17 18:26	EPA 3005A	97,6010C	AB
Beryllium, Total	ND		mg/l	0.0005	--	1	07/28/17 13:30	08/01/17 12:28	EPA 3005A	97,6020A	AM
Cadmium, Total	ND		mg/l	0.004	--	1	07/28/17 13:30	07/31/17 18:26	EPA 3005A	97,6010C	AB
Chromium, Total	ND		mg/l	0.010	--	1	07/28/17 13:30	07/31/17 18:26	EPA 3005A	97,6010C	AB
Copper, Total	ND		mg/l	0.010	--	1	07/28/17 13:30	07/31/17 18:26	EPA 3005A	97,6010C	AB
Lead, Total	ND		mg/l	0.010	--	1	07/28/17 13:30	07/31/17 18:26	EPA 3005A	97,6010C	AB
Mercury, Total	ND		mg/l	0.0002	--	1	07/27/17 11:25	07/27/17 19:31	EPA 7470A	97,7470A	EA
Nickel, Total	ND		mg/l	0.025	--	1	07/28/17 13:30	07/31/17 18:26	EPA 3005A	97,6010C	AB
Selenium, Total	ND		mg/l	0.010	--	1	07/28/17 13:30	07/31/17 18:26	EPA 3005A	97,6010C	AB
Silver, Total	ND		mg/l	0.007	--	1	07/28/17 13:30	07/31/17 18:26	EPA 3005A	97,6010C	AB
Thallium, Total	ND		mg/l	0.0005	--	1	07/28/17 13:30	08/01/17 12:28	EPA 3005A	97,6020A	AM
Zinc, Total	ND		mg/l	0.050	--	1	07/28/17 13:30	07/31/17 18:26	EPA 3005A	97,6010C	AB



Project Name: ADW SITE SEEKONK, MA

Lab Number: L1725746

Project Number: 161.02023.001

Report Date: 08/02/17

SAMPLE RESULTS

Lab ID: L1725746-04

Date Collected: 07/26/17 14:10

Client ID: MW409-W1-072617

Date Received: 07/26/17

Sample Location: 36 MAPLE AVE., SEEKONK, MA

Field Prep: Not Specified

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
MCP Total Metals - Mansfield Lab											
Antimony, Total	ND		mg/l	0.0040	--	1	07/28/17 13:30	08/01/17 12:31	EPA 3005A	97,6020A	AM
Arsenic, Total	0.005		mg/l	0.005	--	1	07/28/17 13:30	07/31/17 18:47	EPA 3005A	97,6010C	AB
Beryllium, Total	ND		mg/l	0.0005	--	1	07/28/17 13:30	08/01/17 12:31	EPA 3005A	97,6020A	AM
Cadmium, Total	ND		mg/l	0.004	--	1	07/28/17 13:30	07/31/17 18:47	EPA 3005A	97,6010C	AB
Chromium, Total	ND		mg/l	0.010	--	1	07/28/17 13:30	07/31/17 18:47	EPA 3005A	97,6010C	AB
Copper, Total	ND		mg/l	0.010	--	1	07/28/17 13:30	07/31/17 18:47	EPA 3005A	97,6010C	AB
Lead, Total	ND		mg/l	0.010	--	1	07/28/17 13:30	07/31/17 18:47	EPA 3005A	97,6010C	AB
Mercury, Total	ND		mg/l	0.0002	--	1	07/27/17 11:25	07/27/17 19:33	EPA 7470A	97,7470A	EA
Nickel, Total	ND		mg/l	0.025	--	1	07/28/17 13:30	07/31/17 18:47	EPA 3005A	97,6010C	AB
Selenium, Total	ND		mg/l	0.010	--	1	07/28/17 13:30	07/31/17 18:47	EPA 3005A	97,6010C	AB
Silver, Total	ND		mg/l	0.007	--	1	07/28/17 13:30	07/31/17 18:47	EPA 3005A	97,6010C	AB
Thallium, Total	ND		mg/l	0.0005	--	1	07/28/17 13:30	08/01/17 12:31	EPA 3005A	97,6020A	AM
Zinc, Total	ND		mg/l	0.050	--	1	07/28/17 13:30	07/31/17 18:47	EPA 3005A	97,6010C	AB



Project Name: ADW SITE SEEKONK, MA

Lab Number: L1725746

Project Number: 161.02023.001

Report Date: 08/02/17

Method Blank Analysis Batch Quality Control

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
MCP Total Metals - Mansfield Lab for sample(s): 01-04 Batch: WG1026299-1									
Mercury, Total	ND	mg/l	0.0002	--	1	07/27/17 11:25	07/27/17 19:22	97,7470A	EA

Prep Information

Digestion Method: EPA 7470A

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
MCP Total Metals - Mansfield Lab for sample(s): 01-04 Batch: WG1026798-1									
Arsenic, Total	ND	mg/l	0.005	--	1	07/28/17 13:30	07/31/17 17:51	97,6010C	AB
Cadmium, Total	ND	mg/l	0.004	--	1	07/28/17 13:30	07/31/17 17:51	97,6010C	AB
Chromium, Total	ND	mg/l	0.010	--	1	07/28/17 13:30	07/31/17 17:51	97,6010C	AB
Copper, Total	ND	mg/l	0.010	--	1	07/28/17 13:30	07/31/17 17:51	97,6010C	AB
Lead, Total	ND	mg/l	0.010	--	1	07/28/17 13:30	07/31/17 17:51	97,6010C	AB
Nickel, Total	ND	mg/l	0.025	--	1	07/28/17 13:30	07/31/17 17:51	97,6010C	AB
Selenium, Total	ND	mg/l	0.010	--	1	07/28/17 13:30	07/31/17 17:51	97,6010C	AB
Silver, Total	ND	mg/l	0.007	--	1	07/28/17 13:30	07/31/17 17:51	97,6010C	AB
Zinc, Total	ND	mg/l	0.050	--	1	07/28/17 13:30	07/31/17 17:51	97,6010C	AB

Prep Information

Digestion Method: EPA 3005A

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
MCP Total Metals - Mansfield Lab for sample(s): 01-04 Batch: WG1026799-1									
Antimony, Total	ND	mg/l	0.0040	--	1	07/28/17 13:30	08/01/17 12:03	97,6020A	AM
Beryllium, Total	ND	mg/l	0.0005	--	1	07/28/17 13:30	08/01/17 12:03	97,6020A	AM
Thallium, Total	ND	mg/l	0.0005	--	1	07/28/17 13:30	08/01/17 12:03	97,6020A	AM

Prep Information

Digestion Method: EPA 3005A



Lab Control Sample Analysis

Batch Quality Control

Project Name: ADW SITE SEEKONK, MA

Project Number: 161.02023.001

Lab Number: L1725746

Report Date: 08/02/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Total Metals - Mansfield Lab Associated sample(s): 01-04 Batch: WG1026299-2 WG1026299-3								
Mercury, Total	106		105		80-120	1		20
MCP Total Metals - Mansfield Lab Associated sample(s): 01-04 Batch: WG1026798-2 WG1026798-3								
Arsenic, Total	113		112		80-120	1		20
Cadmium, Total	117		114		80-120	3		20
Chromium, Total	111		108		80-120	3		20
Copper, Total	110		107		80-120	3		20
Lead, Total	106		106		80-120	0		20
Nickel, Total	106		101		80-120	5		20
Selenium, Total	112		112		80-120	0		20
Silver, Total	110		112		80-120	2		20
Zinc, Total	112		109		80-120	3		20
MCP Total Metals - Mansfield Lab Associated sample(s): 01-04 Batch: WG1026799-2 WG1026799-3								
Antimony, Total	106		93		80-120	13		20
Beryllium, Total	105		109		80-120	4		20
Thallium, Total	93		83		80-120	11		20

INORGANICS & MISCELLANEOUS

Project Name: ADW SITE SEEKONK, MA
Project Number: 161.02023.001

Lab Number: L1725746
Report Date: 08/02/17

SAMPLE RESULTS

Lab ID: L1725746-01
Client ID: MW406-W1-072617
Sample Location: 36 MAPLE AVE., SEEKONK, MA
Matrix: Water

Date Collected: 07/26/17 08:45
Date Received: 07/26/17
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
MCP General Chemistry - Westborough Lab										
Chromium, Hexavalent	ND		mg/l	0.010	--	1	07/27/17 01:05	07/27/17 01:37	97,7196A	VB



Project Name: ADW SITE SEEKONK, MA
Project Number: 161.02023.001

Lab Number: L1725746
Report Date: 08/02/17

SAMPLE RESULTS

Lab ID: L1725746-03
Client ID: MW408-W1-072617
Sample Location: 36 MAPLE AVE., SEEKONK, MA
Matrix: Water

Date Collected: 07/26/17 12:30
Date Received: 07/26/17
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
MCP General Chemistry - Westborough Lab										
Chromium, Hexavalent	ND		mg/l	0.010	--	1	07/27/17 01:05	07/27/17 01:39	97,7196A	VB



Project Name: ADW SITE SEEKONK, MA**Lab Number:** L1725746**Project Number:** 161.02023.001**Report Date:** 08/02/17**Method Blank Analysis**
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
MCP General Chemistry - Westborough Lab for sample(s): 01,03 Batch: WG1026136-1										
Chromium, Hexavalent	ND		mg/l	0.010	--	1	07/27/17 01:05	07/27/17 01:36	97,7196A	VB

Lab Control Sample Analysis**Batch Quality Control****Project Name:** ADW SITE SEEKONK, MA**Lab Number:** L1725746**Project Number:** 161.02023.001**Report Date:** 08/02/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP General Chemistry - Westborough Lab Associated sample(s): 01,03 Batch: WG1026136-2 WG1026136-3								
Chromium, Hexavalent	103		101		49-151	2		20

Project Name: ADW SITE SEEKONK, MA
Project Number: 161.02023.001

Serial_No: 08021714:48
Lab Number: L1725746
Report Date: 08/02/17

Sample Receipt and Container Information

Were project specific reporting limits specified?

YES

Cooler Information

Cooler	Custody Seal
A	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1725746-01A	Vial HCl preserved	A	NA		3.5	Y	Absent		MCP-8260-10(14)
L1725746-01B	Vial HCl preserved	A	NA		3.5	Y	Absent		MCP-8260-10(14)
L1725746-01C	Vial HCl preserved	A	NA		3.5	Y	Absent		MCP-8260-10(14)
L1725746-01D	Vial HCl preserved	A	NA		3.5	Y	Absent		VPH-DELUX-10(14)
L1725746-01E	Vial HCl preserved	A	NA		3.5	Y	Absent		VPH-DELUX-10(14)
L1725746-01F	Vial HCl preserved	A	NA		3.5	Y	Absent		VPH-DELUX-10(14)
L1725746-01G	Plastic 250ml unpreserved	A	7	7	3.5	Y	Absent		MCP-HEXCR7196-10(1)
L1725746-01H	Plastic 250ml HNO3 preserved	A	<2	<2	3.5	Y	Absent		MCP-CR-6010T-10(180),MCP-BE-6020T-10(180),MCP-7470T-10(28),MCP-AS-6010T-10(180),MCP-TL-6020T-10(180),MCP-CD-6010T-10(180),MCP-AG-6010T-10(180),MCP-CU-6010T-10(180),MCP-ZN-6010T-10(180),MCP-SE-6010T-10(180),MCP-SB-6020T-10(180),MCP-NI-6010T-10(180),MCP-PB-6010T-10(180)
L1725746-01I	Amber 1000ml unpreserved	A	7	7	3.5	Y	Absent		MCP-8082-10(365)
L1725746-01J	Amber 1000ml unpreserved	A	7	7	3.5	Y	Absent		MCP-8082-10(365)
L1725746-01K	Amber 1000ml HCl preserved	A	<2	<2	3.5	Y	Absent		EPH-MS-10(14),EPHD-GC-10(14)
L1725746-01L	Amber 1000ml HCl preserved	A	<2	<2	3.5	Y	Absent		EPH-MS-10(14),EPHD-GC-10(14)
L1725746-02A	Vial HCl preserved	A	NA		3.5	Y	Absent		MCP-8260-10(14)
L1725746-02B	Vial HCl preserved	A	NA		3.5	Y	Absent		MCP-8260-10(14)
L1725746-02C	Vial HCl preserved	A	NA		3.5	Y	Absent		MCP-8260-10(14)
L1725746-02D	Vial HCl preserved	A	NA		3.5	Y	Absent		VPH-DELUX-10(14)
L1725746-02E	Vial HCl preserved	A	NA		3.5	Y	Absent		VPH-DELUX-10(14)
L1725746-02F	Vial HCl preserved	A	NA		3.5	Y	Absent		VPH-DELUX-10(14)

Project Name: ADW SITE SEEKONK, MA
Project Number: 161.02023.001

Serial_No: 08021714:48
Lab Number: L1725746
Report Date: 08/02/17

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1725746-02G	Plastic 250ml HNO3 preserved	A	<2	<2	3.5	Y	Absent		MCP-CR-6010T-10(180),MCP-7470T-10(28),MCP-AS-6010T-10(180),MCP-TL-6020T-10(180),MCP-CD-6010T-10(180),MCP-AG-6010T-10(180),MCP-CU-6010T-10(180),MCP-ZN-6010T-10(180),MCP-SE-6010T-10(180),MCP-SB-6020T-10(180),MCP-NI-6010T-10(180),MCP-PB-6010T-10(180)
L1725746-02H	Amber 1000ml HCl preserved	A	<2	<2	3.5	Y	Absent		MCP-BE-6020T-10(180),EPH-MS-10(14),EPHD-GC-10(14)
L1725746-02I	Amber 1000ml HCl preserved	A	<2	<2	3.5	Y	Absent		EPH-MS-10(14),EPHD-GC-10(14)
L1725746-03A	Vial HCl preserved	A	NA		3.5	Y	Absent		VPH-DELUX-10(14)
L1725746-03B	Vial HCl preserved	A	NA		3.5	Y	Absent		VPH-DELUX-10(14)
L1725746-03C	Vial HCl preserved	A	NA		3.5	Y	Absent		VPH-DELUX-10(14)
L1725746-03D	Plastic 250ml unpreserved	A	7	7	3.5	Y	Absent		MCP-HEXCR7196-10(1)
L1725746-03E	Plastic 250ml HNO3 preserved	A	<2	<2	3.5	Y	Absent		MCP-CR-6010T-10(180),MCP-BE-6020T-10(180),MCP-7470T-10(28),MCP-AS-6010T-10(180),MCP-TL-6020T-10(180),MCP-CD-6010T-10(180),MCP-AG-6010T-10(180),MCP-CU-6010T-10(180),MCP-ZN-6010T-10(180),MCP-SE-6010T-10(180),MCP-SB-6020T-10(180),MCP-NI-6010T-10(180),MCP-PB-6010T-10(180)
L1725746-03F	Amber 1000ml unpreserved	A	7	7	3.5	Y	Absent		MCP-8082-10(365)
L1725746-03G	Amber 1000ml unpreserved	A	7	7	3.5	Y	Absent		MCP-8082-10(365)
L1725746-03H	Amber 1000ml HCl preserved	A	<2	<2	3.5	Y	Absent		EPH-MS-10(14),EPHD-GC-10(14)
L1725746-03I	Amber 1000ml HCl preserved	A	<2	<2	3.5	Y	Absent		EPH-MS-10(14),EPHD-GC-10(14)
L1725746-04A	Vial HCl preserved	A	NA		3.5	Y	Absent		VPH-DELUX-10(14)
L1725746-04B	Vial HCl preserved	A	NA		3.5	Y	Absent		VPH-DELUX-10(14)
L1725746-04C	Vial HCl preserved	A	NA		3.5	Y	Absent		VPH-DELUX-10(14)
L1725746-04D	Plastic 250ml HNO3 preserved	A	<2	<2	3.5	Y	Absent		MCP-CR-6010T-10(180),MCP-BE-6020T-10(180),MCP-7470T-10(28),MCP-AS-6010T-10(180),MCP-TL-6020T-10(180),MCP-CD-6010T-10(180),MCP-AG-6010T-10(180),MCP-CU-6010T-10(180),MCP-ZN-6010T-10(180),MCP-SE-6010T-10(180),MCP-SB-6020T-10(180),MCP-NI-6010T-10(180),MCP-PB-6010T-10(180)
L1725746-04E	Amber 1000ml HCl preserved	A	<2	<2	3.5	Y	Absent		EPH-MS-10(14),EPHD-GC-10(14)
L1725746-04F	Amber 1000ml HCl preserved	A	<2	<2	3.5	Y	Absent		EPH-MS-10(14),EPHD-GC-10(14)

Project Name: ADW SITE SEEKONK, MA
Project Number: 161.02023.001

Serial_No:08021714:48
Lab Number: L1725746
Report Date: 08/02/17

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1725746-04H	Plastic 500ml HNO3 preserved	A	NA		3.5	Y	Absent		-

Project Name: ADW SITE SEEKONK, MA
Project Number: 161.02023.001

Lab Number: L1725746
Report Date: 08/02/17

GLOSSARY

Acronyms

EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Footnotes

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

- A** - Spectra identified as "Aldol Condensation Product".
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related

Report Format: Data Usability Report



Project Name: ADW SITE SEEKONK, MA
Project Number: 161.02023.001

Lab Number: L1725746
Report Date: 08/02/17

Data Qualifiers

projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.
- J** - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- ND** - Not detected at the reporting limit (RL) for the sample.

Project Name: ADW SITE SEEKONK, MA
Project Number: 161.02023.001

Lab Number: L1725746
Report Date: 08/02/17

REFERENCES

- 97 EPA Test Methods (SW-846) with QC Requirements & Performance Standards for the Analysis of EPA SW-846 Methods under the Massachusetts Contingency Plan, WSC-CAM-IIA, IIB, IIIA, IIIB, IIIC, IIID, VA, VB, VC, VIA, VIB, VIIIA and VIIIB, July 2010.
- 98 Method for the Determination of Extractable Petroleum Hydrocarbons (EPH), MassDEP, May 2004, Revision 1.1 with QC Requirements & Performance Standards for the Analysis of EPH under the Massachusetts Contingency Plan, WSC-CAM-IVB, July 2010.
- 100 Method for the Determination of Volatile Petroleum Hydrocarbons (VPH), MassDEP, May 2004, Revision 1.1 with QC Requirements & Performance Standards for the Analysis of VPH under the Massachusetts Contingency Plan, WSC-CAM-IVA, July 2010.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Alpha Analytical, Inc.

ID No.:17873

Facility: **Company-wide**

Revision 10

Department: **Quality Assurance**

Published Date: 1/16/2017 11:00:05 AM

Title: **Certificate/Approval Program Summary**

Page 1 of 1

Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility**EPA 624:** m/p-xylene, o-xylene**EPA 8260C:** NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), Methyl methacrylate, 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.**EPA 8270D:** NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.**EPA 300:** DW: Bromide**EPA 6860:** NPW and SCM: Perchlorate**EPA 9010:** NPW and SCM: Amenable Cyanide Distillation**EPA 9012B:** NPW: Total Cyanide**EPA 9050A:** NPW: Specific Conductance**SM3500:** NPW: Ferrous Iron**SM4500:** NPW: Amenable Cyanide, Dissolved Oxygen; SCM: Total Phosphorus, TKN, NO₂, NO₃.**SM5310C:** DW: Dissolved Organic Carbon**Mansfield Facility****SM 2540D:** TSS**EPA 3005A** NPW**EPA 8082A:** NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.**EPA TO-15:** Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:**Drinking Water****EPA 300.0:** Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500CI-D, SM2320B, SM2540C, SM4500H-B****EPA 332:** Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.**Microbiology:** **SM9215B; SM9223-P/A, SM9223B-Colilert-QT, SM9222D.****Non-Potable Water****SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH, EPA 350.1:** Ammonia-N, **LACHAT 10-107-06-1-B:** Ammonia-N, **SM4500NO3-F, EPA 353.2:** Nitrate-N, **EPA 351.1, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D.****EPA 624:** Volatile Halocarbons & Aromatics,**EPA 608:** Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs**EPA 625:** SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045:** PCB-Oil.**Microbiology:** **SM9223B-Colilert-QT; Enterolert-QT, SM9221E.****Mansfield Facility:****Drinking Water****EPA 200.7:** Ba, Be, Cd, Cr, Cu, Ni, Na, Ca. **EPA 200.8:** Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Ni, Se, TL. **EPA 245.1 Hg.****Non-Potable Water****EPA 200.7:** Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.**EPA 200.8:** Al, Sb, As, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn.**EPA 245.1 Hg.****SM2340B**

For a complete listing of analytes and methods, please contact your Alpha Project Manager.



CHAIN OF CUSTODY

PAGE 1 OF 1

8 Walkup Drive
Westboro, MA 01581
Tel: 508-898-9220

320 Forbes Blvd
Mansfield, MA 02048
Tel: 508-822-9300

Client Information

Client: Ransom Consulting, Inc.
Address: 60 Valley Street, Suite 106
Providence, RI 02909
Phone: 401-433-2160

Email: Tracey.costa@ransomenv.com

Additional Project Information:

★ Analyze hexavalent chromium on 24-hour TAT ★
★ All other analytes on standard TAT ★

Project Information

Project Name: ADW Site Seekonk, MA
Project Location: 36 Maple Ave Seekonk, MA
Project #: 161.02.023.001
Project Manager: Tracey Costa
ALPHA Quote #:

Turn-Around Time

☒ Standard ☒ RUSH (only confirmed if pre-approved!)
Date Due:

Date Rec'd in Lab: 7-26-17ALPHA Job #: C1725716

Report Information - Data Deliverables

☒ ADEx ☒ EMAIL

Billing Information

☒ Same as Client info PO #:

Regulatory Requirements & Project Information Requirements

☒ Yes ☐ No MA MCP Analytical Methods ☐ Yes ☒ No CT RCP Analytical Methods
☐ Yes ☒ No Matrix Spike Required on this SDG? (Required for MCP Inorganics)
☒ Yes ☐ No GW1 Standards (Info Required for Metals & EPH with Targets)
☐ Yes ☒ No NPDES RGP
☐ Other State /Fed Program Criteria GW-1,2,3

ANALYSIS		SAMPLE INFO				TOTAL # BOTTLES
		Filtration	Field	Lab to do	Preservation	
VOC: ☒ 8260	☐ 624 ☐ 524.2		☒			
SVOC: ☐ ABN	☐ PAH		☒			
METALS: ☐ MCP 13	☐ MCP 14 ☐ RCP 15					
METALS: ☐ RCRA5 ☐ RCRA8	☒ PPH13					
EPH: ☒ Ranges & Targets	☐ Ranges Only					
VPH: ☒ Ranges & Targets	☐ Ranges Only					
☒ PCB	☐ PEST					
TPH: ☐ Quant Only	☐ Fingerprint					
Hexavalent Chromium						

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection		Sample Matrix	Sampler Initials											Sample Comments	T L E S	
		Date	Time			VOC:	SVOC:	METALS	METALS	EPH:	VPH:	PCB	TPH:	Hex				
25746-01	MW406-W1-072617	7-26-17	0845	GW	AR	X				X	X	X	X	X				10
-02	MW407-W1-072617	↓	0945	↓	↓	X				X	X	X						9
-03	MW408-W1-072617	↓	1230	↓	↓					X	X	X	X	X				9
-04	MW409-W1-072617	↓	1410	↓	↓					X	X	X						6

Container Type
P= Plastic
A= Amber glass
V= Vial
G= Glass
B= Bacteria cup
C= Cube
O= Other
E= Encore
D= BOD Bottle

Preservative
A= None
B= HCl
C= HNO₃
D= H₂SO₄
E= NaOH
F= MeOH
G= NaHSO₄
H= Na₂S₂O₃
I= Ascorbic Acid
J= NH₄Cl
K= Zn Acetate
O= Other

Container Type

Preservative

U

P

A

V

A

P

B

C

B

B

A

A

Relinquished By:

Date/Time

Received By:

Date/Time

All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.

FORM NO: 01-01 (rev. 12-Mar-2012)

Method Blank Summary Form 4

Client	: Ransom Consulting, Inc.	Lab Number	: L1725746
Project Name	: ADW SITE SEEKONK, MA	Project Number	: 161.02023.001
Lab Sample ID	: WG1027544-5	Lab File ID	: V16170730N05
Instrument ID	: VOA116		
Matrix	: WATER	Analysis Date	: 07/31/17 17:29

Client Sample No.	Lab Sample ID	Analysis Date
WG1027544-3LCS	WG1027544-3	07/31/17 15:47
WG1027544-4LCSD	WG1027544-4	07/31/17 16:12
MW406-W1-072617	L1725746-01	07/31/17 20:01
MW407-W1-072617	L1725746-02	07/31/17 20:27

Continuing Calibration Form 7

Client : Ransom Consulting, Inc.
 Project Name : ADW SITE SEEKONK, MA
 Instrument ID : VOA116
 Lab File ID : V16170730N01
 Sample No : WG1027544-2
 Channel :

Lab Number : L1725746
 Project Number : 161.02023.001
 Calibration Date : 07/31/17 15:47
 Init. Calib. Date(s) : 07/28/17 07/28/17
 Init. Calib. Times : 01:17 06:54

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Fluorobenzene	1	1	-	0	20	60	0
Dichlorodifluoromethane	0.313	0.349	-	-11.5	20	65	0
Chloromethane	0.164	0.155	-	5.5	20	58	0
Vinyl chloride	10	7.967	-	20.3*	20	57	.01
Bromomethane	10	10.317	-	-3.2	20	75	0
Chloroethane	0.126	0.126	-	0	20	59	0
Trichlorofluoromethane	0.491	0.615	-	-25.3*	20	69	0
Ethyl ether	0.085	0.082	-	3.5	20	56	0
1,1-Dichloroethene	0.187	0.212	-	-13.4	20	58	0
Carbon disulfide	0.545	0.587	-	-7.7	20	49	0
Methylene chloride	0.233	0.246	-	-5.6	20	59	0
Acetone	10	9.712	-	2.9	20	51	-.01
trans-1,2-Dichloroethene	0.236	0.254	-	-7.6	20	60	0
Methyl tert-butyl ether	0.595	0.538	-	9.6	20	55	0
Diisopropyl ether	0.503	0.432	-	14.1	20	52	0
1,1-Dichloroethane	0.404	0.441	-	-9.2	20	59	0
Ethyl tert-butyl ether	0.549	0.491	-	10.6	20	54	0
cis-1,2-Dichloroethene	0.247	0.281	-	-13.8	20	60	0
2,2-Dichloropropane	0.432	0.524	-	-21.3*	20	67	0
Bromochloromethane	0.116	0.146	-	-25.9*	20	64	-.01
Chloroform	0.521	0.571	-	-9.6	20	62	-.01
Carbon tetrachloride	10	12.562	-	-25.6*	20	68	-.01
Tetrahydrofuran	10	9.285	-	7.1	20	51	0
Dibromofluoromethane	0.329	0.361	-	-9.7	20	64	-.01
1,1,1-Trichloroethane	0.525	0.622	-	-18.5	20	67	0
2-Butanone	10	8.981	-	10.2	20	47	0
1,1-Dichloropropene	0.331	0.329	-	0.6	20	58	0
Benzene	0.895	0.932	-	-4.1	20	59	-.01
tert-Amyl methyl ether	0.571	0.559	-	2.1	20	54	-.01
1,2-Dichloroethane-d4	0.414	0.437	-	-5.6	20	63	0
1,2-Dichloroethane	0.387	0.439	-	-13.4	20	63	0
Trichloroethene	0.262	0.293	-	-11.8	20	61	0
Dibromomethane	0.151	0.164	-	-8.6	20	60	0
1,2-Dichloropropane	0.194	0.181	-	6.7	20	54	0
Bromodichloromethane	0.422	0.492	-	-16.6	20	62	0
1,4-Dioxane	0.00119	0.001*	-	16	20	48	-.02
cis-1,3-Dichloropropene	0.383	0.393	-	-2.6	20	59	0
Chlorobenzene-d5	1	1	-	0	20	63	0
Toluene-d8	1.291	1.262	-	2.2	20	61	0
Toluene	0.76	0.754	-	0.8	20	59	0
4-Methyl-2-pentanone	10	6.964	-	30.4*	20	43	0
Tetrachloroethene	0.344	0.408	-	-18.6	20	64	0
trans-1,3-Dichloropropene	0.449	0.423	-	5.8	20	57	0
1,1,2-Trichloroethane	0.183	0.192	-	-4.9	20	56	0
Chlorodibromomethane	0.355	0.384	-	-8.2	20	61	0

* Value outside of QC limits.



Continuing Calibration Form 7

Client : Ransom Consulting, Inc.
 Project Name : ADW SITE SEEKONK, MA
 Instrument ID : VOA116
 Lab File ID : V16170730N01
 Sample No : WG1027544-2
 Channel :

Lab Number : L1725746
 Project Number : 161.02023.001
 Calibration Date : 07/31/17 15:47
 Init. Calib. Date(s) : 07/28/17 07/28/17
 Init. Calib. Times : 01:17 06:54

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
1,3-Dichloropropane	0.379	0.372	-	1.8	20	56	0
1,2-Dibromoethane	0.226	0.22	-	2.7	20	55	0
2-Hexanone	10	6.993	-	30.1*	20	47	0
Chlorobenzene	0.928	0.924	-	0.4	20	62	0
Ethylbenzene	1.783	1.811	-	-1.6	20	61	0
1,1,1,2-Tetrachloroethane	0.325	0.367	-	-12.9	20	64	0
p/m Xylene	0.569	0.626	-	-10	20	63	0
o Xylene	0.519	0.526	-	-1.3	20	61	0
Styrene	0.889	0.953	-	-7.2	20	62	0
1,4-Dichlorobenzene-d4	1	1	-	0	20	63	0
Bromoform	0.387	0.416	-	-7.5	20	61	0
Isopropylbenzene	2.816	2.798	-	0.6	20	64	0
4-Bromofluorobenzene	0.856	0.769	-	10.2	20	61	0
Bromobenzene	0.64	0.685	-	-7	20	64	-.01
n-Propylbenzene	3.432	3.419	-	0.4	20	61	0
1,1,2,2-Tetrachloroethane	0.485	0.436	-	10.1	20	52	0
2-Chlorotoluene	2.345	2.423	-	-3.3	20	62	0
1,3,5-Trimethylbenzene	2.386	2.434	-	-2	20	61	0
1,2,3-Trichloropropane	0.431	0.38	-	11.8	20	52	0
4-Chlorotoluene	2.023	2.015	-	0.4	20	61	0
tert-Butylbenzene	2.058	2.073	-	-0.7	20	63	0
1,2,4-Trimethylbenzene	2.336	2.428	-	-3.9	20	62	-.01
sec-Butylbenzene	3.681	3.801	-	-3.3	20	61	0
p-Isopropyltoluene	2.519	2.554	-	-1.4	20	62	0
1,3-Dichlorobenzene	1.356	1.454	-	-7.2	20	61	0
1,4-Dichlorobenzene	1.36	1.413	-	-3.9	20	62	0
n-Butylbenzene	2.415	2.427	-	-0.5	20	61	0
1,2-Dichlorobenzene	1.213	1.248	-	-2.9	20	60	0
1,2-Dibromo-3-chloropropan	0.079	0.071	-	10.1	20	52	0
Hexachlorobutadiene	0.338	0.373	-	-10.4	20	67	0
1,2,4-Trichlorobenzene	0.737	0.707	-	4.1	20	60	0
Naphthalene	1.549	1.28	-	17.4	20	55	0
1,2,3-Trichlorobenzene	0.664	0.637	-	4.1	20	59	0

* Value outside of QC limits.





ANALYTICAL REPORT

Lab Number:	L1725905
Client:	Ransom Consulting, Inc. 60 Valley Street Building F, Suite 106 Providence, RI 02909
ATTN:	Tracey Costa
Phone:	(401) 433-2160
Project Name:	ADW SITE SEEKONK, MA
Project Number:	161.02023.001
Report Date:	08/03/17

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Certifications & Approvals: MA (M-MA086), NH NELAP (2064), NJ NELAP (MA935), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-14-00197).

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com



Project Name: ADW SITE SEEKONK, MA
Project Number: 161.02023.001

Lab Number: L1725905
Report Date: 08/03/17

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1725905-01	MW410-W1-072717	WATER	36 MAPLE AVE., SEEKONK, MA	07/27/17 08:30	07/27/17
L1725905-02	TRIP BLANK	WATER	36 MAPLE AVE., SEEKONK, MA	07/27/17 00:00	07/27/17

Project Name: ADW SITE SEEKONK, MA

Lab Number: L1725905

Project Number: 161.02023.001

Report Date: 08/03/17

MADEP MCP Response Action Analytical Report Certification

This form provides certifications for all samples performed by MCP methods. Please refer to the Sample Results and Container Information sections of this report for specification of MCP methods used for each analysis. The following questions pertain only to MCP Analytical Methods.

An affirmative response to questions A through F is required for "Presumptive Certainty" status		
A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?	YES
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	YES
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	YES
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data?"	YES
E a.	VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications).	YES
E b.	APH and TO-15 Methods only: Was the complete analyte list reported for each method?	N/A
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?	YES
A response to questions G, H and I is required for "Presumptive Certainty" status		
G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	YES
H	Were all QC performance standards specified in the CAM protocol(s) achieved?	NO
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	NO
For any questions answered "No", please refer to the case narrative section on the following page(s).		

Please note that sample matrix information is located in the Sample Results section of this report.



Project Name: ADW SITE SEEKONK, MA
Project Number: 161.02023.001

Lab Number: L1725905
Report Date: 08/03/17

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. All specific QC information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

HOLD POLICY

For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Client Service Representative and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Client Services at 800-624-9220 with any questions.

Project Name: ADW SITE SEEKONK, MA
Project Number: 161.02023.001

Lab Number: L1725905
Report Date: 08/03/17

Case Narrative (continued)

MCP Related Narratives

Volatile Organics

In reference to question H:

The initial calibration, associated with L1725905-01, did not meet the method required minimum response factor on the lowest calibration standard for acetone (0.0774), 4-methyl-2-pentanone (0.0623), and 1,4-dioxane (0.0015), as well as the average response factor for acetone, 2-butanone, 4-methyl-2-pentanone, and 1,4-dioxane. The initial calibration verification is outside acceptance criteria for carbon disulfide (69%) and 2,2-dichloropropane (66%), but within overall method criteria.

The continuing calibration standard, associated with L1725905-01, is outside the acceptance criteria for several compounds; however, it is within overall method allowances. A copy of the continuing calibration standard is included as an addendum to this report.

Metals

In reference to question I:

All samples were analyzed for a subset of MCP analytes per the Chain of Custody.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:

 Cristin Walker

Title: Technical Director/Representative

Date: 08/03/17

ORGANICS

VOLATILES

Project Name: ADW SITE SEEKONK, MA**Lab Number:** L1725905**Project Number:** 161.02023.001**Report Date:** 08/03/17**SAMPLE RESULTS**

Lab ID: L1725905-01
 Client ID: MW410-W1-072717
 Sample Location: 36 MAPLE AVE., SEEKONK, MA

Date Collected: 07/27/17 08:30
 Date Received: 07/27/17
 Field Prep: Not Specified

Matrix: Water
 Analytical Method: 97,8260C
 Analytical Date: 08/03/17 07:22
 Analyst: MM

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Methylene chloride	ND		ug/l	2.0	--	1
1,1-Dichloroethane	ND		ug/l	1.0	--	1
Chloroform	ND		ug/l	1.0	--	1
Carbon tetrachloride	ND		ug/l	1.0	--	1
1,2-Dichloropropane	ND		ug/l	1.0	--	1
Dibromochloromethane	ND		ug/l	1.0	--	1
1,1,2-Trichloroethane	ND		ug/l	1.0	--	1
Tetrachloroethene	ND		ug/l	1.0	--	1
Chlorobenzene	ND		ug/l	1.0	--	1
Trichlorofluoromethane	ND		ug/l	2.0	--	1
1,2-Dichloroethane	ND		ug/l	1.0	--	1
1,1,1-Trichloroethane	ND		ug/l	1.0	--	1
Bromodichloromethane	ND		ug/l	1.0	--	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	--	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	--	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	--	1
1,1-Dichloropropene	ND		ug/l	2.0	--	1
Bromoform	ND		ug/l	2.0	--	1
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Benzene	ND		ug/l	0.50	--	1
Toluene	ND		ug/l	1.0	--	1
Ethylbenzene	ND		ug/l	1.0	--	1
Chloromethane	ND		ug/l	2.0	--	1
Bromomethane	ND		ug/l	2.0	--	1
Vinyl chloride	ND		ug/l	1.0	--	1
Chloroethane	ND		ug/l	2.0	--	1
1,1-Dichloroethene	ND		ug/l	1.0	--	1
trans-1,2-Dichloroethene	ND		ug/l	1.0	--	1
Trichloroethene	ND		ug/l	1.0	--	1
1,2-Dichlorobenzene	ND		ug/l	1.0	--	1

Project Name: ADW SITE SEEKONK, MA

Lab Number: L1725905

Project Number: 161.02023.001

Report Date: 08/03/17

SAMPLE RESULTS

Lab ID: L1725905-01

Date Collected: 07/27/17 08:30

Client ID: MW410-W1-072717

Date Received: 07/27/17

Sample Location: 36 MAPLE AVE., SEEKONK, MA

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/l	1.0	--	1
1,4-Dichlorobenzene	ND		ug/l	1.0	--	1
Methyl tert butyl ether	ND		ug/l	2.0	--	1
p/m-Xylene	ND		ug/l	2.0	--	1
o-Xylene	ND		ug/l	1.0	--	1
Xylene (Total)	ND		ug/l	1.0	--	1
cis-1,2-Dichloroethene	ND		ug/l	1.0	--	1
1,2-Dichloroethene (total)	ND		ug/l	1.0	--	1
Dibromomethane	ND		ug/l	2.0	--	1
1,2,3-Trichloropropane	ND		ug/l	2.0	--	1
Styrene	ND		ug/l	1.0	--	1
Dichlorodifluoromethane	ND		ug/l	2.0	--	1
Acetone	ND		ug/l	5.0	--	1
Carbon disulfide	ND		ug/l	2.0	--	1
2-Butanone	ND		ug/l	5.0	--	1
4-Methyl-2-pentanone	ND		ug/l	5.0	--	1
2-Hexanone	ND		ug/l	5.0	--	1
Bromochloromethane	ND		ug/l	2.0	--	1
Tetrahydrofuran	ND		ug/l	2.0	--	1
2,2-Dichloropropane	ND		ug/l	2.0	--	1
1,2-Dibromoethane	ND		ug/l	2.0	--	1
1,3-Dichloropropane	ND		ug/l	2.0	--	1
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Bromobenzene	ND		ug/l	2.0	--	1
n-Butylbenzene	ND		ug/l	2.0	--	1
sec-Butylbenzene	ND		ug/l	2.0	--	1
tert-Butylbenzene	ND		ug/l	2.0	--	1
o-Chlorotoluene	ND		ug/l	2.0	--	1
p-Chlorotoluene	ND		ug/l	2.0	--	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.0	--	1
Hexachlorobutadiene	ND		ug/l	0.60	--	1
Isopropylbenzene	ND		ug/l	2.0	--	1
p-Isopropyltoluene	ND		ug/l	2.0	--	1
Naphthalene	ND		ug/l	2.0	--	1
n-Propylbenzene	ND		ug/l	2.0	--	1
1,2,3-Trichlorobenzene	ND		ug/l	2.0	--	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	--	1
1,3,5-Trimethylbenzene	ND		ug/l	2.0	--	1
1,2,4-Trimethylbenzene	ND		ug/l	2.0	--	1

Project Name: ADW SITE SEEKONK, MA**Lab Number:** L1725905**Project Number:** 161.02023.001**Report Date:** 08/03/17**SAMPLE RESULTS****Lab ID:** L1725905-01**Date Collected:** 07/27/17 08:30**Client ID:** MW410-W1-072717**Date Received:** 07/27/17**Sample Location:** 36 MAPLE AVE., SEEKONK, MA**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Ethyl ether	ND		ug/l	2.0	--	1
Isopropyl Ether	ND		ug/l	2.0	--	1
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0	--	1
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	--	1
1,4-Dioxane	ND		ug/l	250	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	111		70-130
Toluene-d8	95		70-130
4-Bromofluorobenzene	100		70-130
Dibromofluoromethane	107		70-130

Project Name: ADW SITE SEEKONK, MA

Lab Number: L1725905

Project Number: 161.02023.001

Report Date: 08/03/17

Method Blank Analysis Batch Quality Control

Analytical Method: 97,8260C
 Analytical Date: 08/03/17 05:47
 Analyst: MM

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics - Westborough Lab for sample(s): 01 Batch: WG1028407-5					
Methylene chloride	ND		ug/l	2.0	--
1,1-Dichloroethane	ND		ug/l	1.0	--
Chloroform	ND		ug/l	1.0	--
Carbon tetrachloride	ND		ug/l	1.0	--
1,2-Dichloropropane	ND		ug/l	1.0	--
Dibromochloromethane	ND		ug/l	1.0	--
1,1,2-Trichloroethane	ND		ug/l	1.0	--
Tetrachloroethene	ND		ug/l	1.0	--
Chlorobenzene	ND		ug/l	1.0	--
Trichlorofluoromethane	ND		ug/l	2.0	--
1,2-Dichloroethane	ND		ug/l	1.0	--
1,1,1-Trichloroethane	ND		ug/l	1.0	--
Bromodichloromethane	ND		ug/l	1.0	--
trans-1,3-Dichloropropene	ND		ug/l	0.50	--
cis-1,3-Dichloropropene	ND		ug/l	0.50	--
1,3-Dichloropropene, Total	ND		ug/l	0.50	--
1,1-Dichloropropene	ND		ug/l	2.0	--
Bromoform	ND		ug/l	2.0	--
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	--
Benzene	ND		ug/l	0.50	--
Toluene	ND		ug/l	1.0	--
Ethylbenzene	ND		ug/l	1.0	--
Chloromethane	ND		ug/l	2.0	--
Bromomethane	ND		ug/l	2.0	--
Vinyl chloride	ND		ug/l	1.0	--
Chloroethane	ND		ug/l	2.0	--
1,1-Dichloroethene	ND		ug/l	1.0	--
trans-1,2-Dichloroethene	ND		ug/l	1.0	--
Trichloroethene	ND		ug/l	1.0	--

Project Name: ADW SITE SEEKONK, MA

Lab Number: L1725905

Project Number: 161.02023.001

Report Date: 08/03/17

Method Blank Analysis Batch Quality Control

Analytical Method: 97,8260C
 Analytical Date: 08/03/17 05:47
 Analyst: MM

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics - Westborough Lab for sample(s): 01 Batch: WG1028407-5					
1,2-Dichlorobenzene	ND		ug/l	1.0	--
1,3-Dichlorobenzene	ND		ug/l	1.0	--
1,4-Dichlorobenzene	ND		ug/l	1.0	--
Methyl tert butyl ether	ND		ug/l	2.0	--
p/m-Xylene	ND		ug/l	2.0	--
o-Xylene	ND		ug/l	1.0	--
Xylene (Total)	ND		ug/l	1.0	--
cis-1,2-Dichloroethene	ND		ug/l	1.0	--
1,2-Dichloroethene (total)	ND		ug/l	1.0	--
Dibromomethane	ND		ug/l	2.0	--
1,2,3-Trichloropropane	ND		ug/l	2.0	--
Styrene	ND		ug/l	1.0	--
Dichlorodifluoromethane	ND		ug/l	2.0	--
Acetone	ND		ug/l	5.0	--
Carbon disulfide	ND		ug/l	2.0	--
2-Butanone	ND		ug/l	5.0	--
4-Methyl-2-pentanone	ND		ug/l	5.0	--
2-Hexanone	ND		ug/l	5.0	--
Bromochloromethane	ND		ug/l	2.0	--
Tetrahydrofuran	ND		ug/l	2.0	--
2,2-Dichloropropane	ND		ug/l	2.0	--
1,2-Dibromoethane	ND		ug/l	2.0	--
1,3-Dichloropropane	ND		ug/l	2.0	--
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	--
Bromobenzene	ND		ug/l	2.0	--
n-Butylbenzene	ND		ug/l	2.0	--
sec-Butylbenzene	ND		ug/l	2.0	--
tert-Butylbenzene	ND		ug/l	2.0	--
o-Chlorotoluene	ND		ug/l	2.0	--

Project Name: ADW SITE SEEKONK, MA

Lab Number: L1725905

Project Number: 161.02023.001

Report Date: 08/03/17

Method Blank Analysis Batch Quality Control

Analytical Method: 97,8260C
 Analytical Date: 08/03/17 05:47
 Analyst: MM

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics - Westborough Lab for sample(s): 01 Batch: WG1028407-5					
p-Chlorotoluene	ND		ug/l	2.0	--
1,2-Dibromo-3-chloropropane	ND		ug/l	2.0	--
Hexachlorobutadiene	ND		ug/l	0.60	--
Isopropylbenzene	ND		ug/l	2.0	--
p-Isopropyltoluene	ND		ug/l	2.0	--
Naphthalene	ND		ug/l	2.0	--
n-Propylbenzene	ND		ug/l	2.0	--
1,2,3-Trichlorobenzene	ND		ug/l	2.0	--
1,2,4-Trichlorobenzene	ND		ug/l	2.0	--
1,3,5-Trimethylbenzene	ND		ug/l	2.0	--
1,2,4-Trimethylbenzene	ND		ug/l	2.0	--
Ethyl ether	ND		ug/l	2.0	--
Isopropyl Ether	ND		ug/l	2.0	--
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0	--
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	--
1,4-Dioxane	ND		ug/l	250	--
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		ug/l	2.0	--
tert-Butyl Alcohol	ND		ug/l	10	--
2-Chloroethylvinyl ether	ND		ug/l	10	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	108		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	106		70-130
Dibromofluoromethane	105		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: ADW SITE SEEKONK, MA

Project Number: 161.02023.001

Lab Number: L1725905

Report Date: 08/03/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 01 Batch: WG1028407-3 WG1028407-4								
Methylene chloride	110		100		70-130	10		20
1,1-Dichloroethane	110		110		70-130	0		20
Chloroform	110		100		70-130	10		20
Carbon tetrachloride	98		98		70-130	0		20
1,2-Dichloropropane	110		110		70-130	0		20
Dibromochloromethane	96		94		70-130	2		20
1,1,2-Trichloroethane	110		100		70-130	10		20
Tetrachloroethene	110		100		70-130	10		20
Chlorobenzene	100		100		70-130	0		20
Trichlorofluoromethane	110		110		70-130	0		20
1,2-Dichloroethane	110		110		70-130	0		20
1,1,1-Trichloroethane	110		110		70-130	0		20
Bromodichloromethane	100		100		70-130	0		20
trans-1,3-Dichloropropene	94		95		70-130	1		20
cis-1,3-Dichloropropene	93		91		70-130	2		20
1,1-Dichloropropene	110		110		70-130	0		20
Bromoform	73		75		70-130	3		20
1,1,2,2-Tetrachloroethane	99		96		70-130	3		20
Benzene	120		110		70-130	9		20
Toluene	110		100		70-130	10		20
Ethylbenzene	110		100		70-130	10		20
Chloromethane	84		79		70-130	6		20
Bromomethane	76		71		70-130	7		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: ADW SITE SEEKONK, MA

Project Number: 161.02023.001

Lab Number: L1725905

Report Date: 08/03/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 01 Batch: WG1028407-3 WG1028407-4								
Vinyl chloride	110		110		70-130	0		20
Chloroethane	110		110		70-130	0		20
1,1-Dichloroethene	110		110		70-130	0		20
trans-1,2-Dichloroethene	110		110		70-130	0		20
Trichloroethene	110		100		70-130	10		20
1,2-Dichlorobenzene	97		94		70-130	3		20
1,3-Dichlorobenzene	98		95		70-130	3		20
1,4-Dichlorobenzene	99		95		70-130	4		20
Methyl tert butyl ether	100		98		70-130	2		20
p/m-Xylene	105		100		70-130	5		20
o-Xylene	105		100		70-130	5		20
cis-1,2-Dichloroethene	110		110		70-130	0		20
Dibromomethane	110		100		70-130	10		20
1,2,3-Trichloropropane	92		93		70-130	1		20
Styrene	105		100		70-130	5		20
Dichlorodifluoromethane	92		86		70-130	7		20
Acetone	100		100		70-130	0		20
Carbon disulfide	97		96		70-130	1		20
2-Butanone	91		95		70-130	4		20
4-Methyl-2-pentanone	100		99		70-130	1		20
2-Hexanone	93		93		70-130	0		20
Bromochloromethane	110		100		70-130	10		20
Tetrahydrofuran	96		92		70-130	4		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: ADW SITE SEEKONK, MA

Project Number: 161.02023.001

Lab Number: L1725905

Report Date: 08/03/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 01 Batch: WG1028407-3 WG1028407-4								
2,2-Dichloropropane	100		100		70-130	0		20
1,2-Dibromoethane	100		100		70-130	0		20
1,3-Dichloropropane	110		100		70-130	10		20
1,1,1,2-Tetrachloroethane	100		100		70-130	0		20
Bromobenzene	97		92		70-130	5		20
n-Butylbenzene	110		100		70-130	10		20
sec-Butylbenzene	100		100		70-130	0		20
tert-Butylbenzene	100		99		70-130	1		20
o-Chlorotoluene	100		95		70-130	5		20
p-Chlorotoluene	100		95		70-130	5		20
1,2-Dibromo-3-chloropropane	74		82		70-130	10		20
Hexachlorobutadiene	83		79		70-130	5		20
Isopropylbenzene	100		100		70-130	0		20
p-Isopropyltoluene	110		100		70-130	10		20
Naphthalene	100		100		70-130	0		20
n-Propylbenzene	100		100		70-130	0		20
1,2,3-Trichlorobenzene	94		91		70-130	3		20
1,2,4-Trichlorobenzene	97		93		70-130	4		20
1,3,5-Trimethylbenzene	100		100		70-130	0		20
1,2,4-Trimethylbenzene	110		100		70-130	10		20
Ethyl ether	110		110		70-130	0		20
Isopropyl Ether	120		110		70-130	9		20
Ethyl-Tert-Butyl-Ether	120		110		70-130	9		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: ADW SITE SEEKONK, MA

Lab Number: L1725905

Project Number: 161.02023.001

Report Date: 08/03/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 01 Batch: WG1028407-3 WG1028407-4								
Tertiary-Amyl Methyl Ether	100		100		70-130	0		20
1,4-Dioxane	84		86		70-130	2		20
1,1,2-Trichloro-1,2,2-Trifluoroethane	120		110		70-130	9		20
tert-Butyl Alcohol	82		84		70-130	2		20
2-Chloroethylvinyl ether	120		120		70-130	0		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	101		103		70-130
Toluene-d8	93		100		70-130
4-Bromofluorobenzene	97		99		70-130
Dibromofluoromethane	101		102		70-130

PETROLEUM HYDROCARBONS

Project Name: ADW SITE SEEKONK, MA**Lab Number:** L1725905**Project Number:** 161.02023.001**Report Date:** 08/03/17**SAMPLE RESULTS**

Lab ID: L1725905-01
Client ID: MW410-W1-072717
Sample Location: 36 MAPLE AVE., SEEKONK, MA
Matrix: Water
Analytical Method: 100, VPH-04-1.1
Analytical Date: 08/02/17 13:37
Analyst: JM

Date Collected: 07/27/17 08:30
Date Received: 07/27/17
Field Prep: Not Specified

Quality Control Information

Condition of sample received:

Satisfactory

Aqueous Preservative:

Laboratory Provided Preserved
Container

Sample Temperature upon receipt:

Received on Ice

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Petroleum Hydrocarbons - Westborough Lab						
C5-C8 Aliphatics	ND		ug/l	50.0	--	1
C9-C12 Aliphatics	ND		ug/l	50.0	--	1
C9-C10 Aromatics	ND		ug/l	50.0	--	1
C5-C8 Aliphatics, Adjusted	ND		ug/l	50.0	--	1
C9-C12 Aliphatics, Adjusted	ND		ug/l	50.0	--	1
Benzene	ND		ug/l	2.00	--	1
Toluene	ND		ug/l	2.00	--	1
Ethylbenzene	ND		ug/l	2.00	--	1
p/m-Xylene	ND		ug/l	2.00	--	1
o-Xylene	ND		ug/l	2.00	--	1
Methyl tert butyl ether	ND		ug/l	3.00	--	1
Naphthalene	ND		ug/l	4.00	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,5-Dibromotoluene-PID	91		70-130
2,5-Dibromotoluene-FID	102		70-130

Project Name: ADW SITE SEEKONK, MA**Lab Number:** L1725905**Project Number:** 161.02023.001**Report Date:** 08/03/17**SAMPLE RESULTS**

Lab ID:	L1725905-01	Date Collected:	07/27/17 08:30
Client ID:	MW410-W1-072717	Date Received:	07/27/17
Sample Location:	36 MAPLE AVE., SEEKONK, MA	Field Prep:	Not Specified
Matrix:	Water	Extraction Method:	EPA 3510C
Analytical Method:	98,EPH-04-1.1	Extraction Date:	07/28/17 20:36
Analytical Date:	07/31/17 23:06	M.S. Analytical Date:	07/31/17 12:21
Analytical Date:	07/31/17 23:06	Cleanup Method1:	EPH-04-1
Analyst:	DG	M.S. Analyst:	KL
		Cleanup Date1:	07/29/17

Quality Control Information

Condition of sample received:	Satisfactory
Aqueous Preservative:	Laboratory Provided Preserved Container
Sample Temperature upon receipt:	Received on Ice
Sample Extraction method:	Extracted Per the Method

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
EPH w/MS Targets - Westborough Lab						
C9-C18 Aliphatics	ND		ug/l	100	--	1
C19-C36 Aliphatics	ND		ug/l	100	--	1
C11-C22 Aromatics	ND		ug/l	100	--	1
C11-C22 Aromatics, Adjusted	ND		ug/l	100	--	1
Naphthalene	ND		ug/l	0.400	--	1
2-Methylnaphthalene	ND		ug/l	0.400	--	1
Acenaphthylene	ND		ug/l	0.400	--	1
Acenaphthene	ND		ug/l	0.400	--	1
Fluorene	ND		ug/l	0.400	--	1
Phenanthrene	ND		ug/l	0.400	--	1
Anthracene	ND		ug/l	0.400	--	1
Fluoranthene	ND		ug/l	0.400	--	1
Pyrene	ND		ug/l	0.400	--	1
Benzo(a)anthracene	ND		ug/l	0.400	--	1
Chrysene	ND		ug/l	0.400	--	1
Benzo(b)fluoranthene	ND		ug/l	0.400	--	1
Benzo(k)fluoranthene	ND		ug/l	0.400	--	1
Benzo(a)pyrene	ND		ug/l	0.200	--	1
Indeno(1,2,3-cd)Pyrene	ND		ug/l	0.400	--	1
Dibenzo(a,h)anthracene	ND		ug/l	0.400	--	1
Benzo(ghi)perylene	ND		ug/l	0.400	--	1

Project Name: ADW SITE SEEKONK, MA**Lab Number:** L1725905**Project Number:** 161.02023.001**Report Date:** 08/03/17**SAMPLE RESULTS**

Lab ID: L1725905-01

Date Collected: 07/27/17 08:30

Client ID: MW410-W1-072717

Date Received: 07/27/17

Sample Location: 36 MAPLE AVE., SEEKONK, MA

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

EPH w/MS Targets - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Chloro-Octadecane	53		40-140
o-Terphenyl	100		40-140
2-Fluorobiphenyl	99		40-140
2-Bromonaphthalene	100		40-140
O-Terphenyl-MS	86		40-140

Project Name: ADW SITE SEEKONK, MA

Lab Number: L1725905

Project Number: 161.02023.001

Report Date: 08/03/17

Method Blank Analysis Batch Quality Control

Analytical Method: 98,EPH-04-1.1

Analytical Date: 07/31/17 18:00

Analyst: DG

M.S. Analytical Date: 07/31/17 09:04

M.S. Analyst: KL

Extraction Method: EPA 3510C

Extraction Date: 07/28/17 20:36

Cleanup Method: EPH-04-1

Cleanup Date: 07/29/17

Parameter	Result	Qualifier	Units	RL	MDL
EPH w/MS Targets - Westborough Lab for sample(s): 01 Batch: WG1026905-1					
C9-C18 Aliphatics	ND		ug/l	100	--
C19-C36 Aliphatics	ND		ug/l	100	--
C11-C22 Aromatics	ND		ug/l	100	--
C11-C22 Aromatics, Adjusted	ND		ug/l	100	--
Naphthalene	ND		ug/l	0.400	--
2-Methylnaphthalene	ND		ug/l	0.400	--
Acenaphthylene	ND		ug/l	0.400	--
Acenaphthene	ND		ug/l	0.400	--
Fluorene	ND		ug/l	0.400	--
Phenanthrene	ND		ug/l	0.400	--
Anthracene	ND		ug/l	0.400	--
Fluoranthene	ND		ug/l	0.400	--
Pyrene	ND		ug/l	0.400	--
Benzo(a)anthracene	ND		ug/l	0.400	--
Chrysene	ND		ug/l	0.400	--
Benzo(b)fluoranthene	ND		ug/l	0.400	--
Benzo(k)fluoranthene	ND		ug/l	0.400	--
Benzo(a)pyrene	ND		ug/l	0.200	--
Indeno(1,2,3-cd)Pyrene	ND		ug/l	0.400	--
Dibenzo(a,h)anthracene	ND		ug/l	0.400	--
Benzo(ghi)perylene	ND		ug/l	0.400	--

Project Name: ADW SITE SEEKONK, MA**Lab Number:** L1725905**Project Number:** 161.02023.001**Report Date:** 08/03/17**Method Blank Analysis
Batch Quality Control**

Analytical Method: 98,EPH-04-1.1

Analytical Date: 07/31/17 18:00

Analyst: DG

07/31/17 09:04

KL

Extraction Method: EPA 3510C

Extraction Date: 07/28/17 20:36

Cleanup Method: EPH-04-1

Cleanup Date: 07/29/17

Parameter	Result	Qualifier	Units	RL	MDL
EPH w/MS Targets - Westborough Lab for sample(s): 01 Batch: WG1026905-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
Chloro-Octadecane	55		40-140
o-Terphenyl	94		40-140
2-Fluorobiphenyl	91		40-140
2-Bromonaphthalene	91		40-140
O-Terphenyl-MS	87		40-140

Project Name: ADW SITE SEEKONK, MA

Lab Number: L1725905

Project Number: 161.02023.001

Report Date: 08/03/17

Method Blank Analysis Batch Quality Control

Analytical Method: 100, VPH-04-1.1

Analytical Date: 08/02/17 09:33

Analyst: JM

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Petroleum Hydrocarbons - Westborough Lab for sample(s): 01 Batch: WG1028452-3					
C5-C8 Aliphatics	ND		ug/l	50.0	--
C9-C12 Aliphatics	ND		ug/l	50.0	--
C9-C10 Aromatics	ND		ug/l	50.0	--
C5-C8 Aliphatics, Adjusted	ND		ug/l	50.0	--
C9-C12 Aliphatics, Adjusted	ND		ug/l	50.0	--
Benzene	ND		ug/l	2.00	--
Toluene	ND		ug/l	2.00	--
Ethylbenzene	ND		ug/l	2.00	--
p/m-Xylene	ND		ug/l	2.00	--
o-Xylene	ND		ug/l	2.00	--
Methyl tert butyl ether	ND		ug/l	3.00	--
Naphthalene	ND		ug/l	4.00	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2,5-Dibromotoluene-PID	86		70-130
2,5-Dibromotoluene-FID	95		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: ADW SITE SEEKONK, MA

Lab Number: L1725905

Project Number: 161.02023.001

Report Date: 08/03/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
EPH w/MS Targets - Westborough Lab Associated sample(s): 01 Batch: WG1026905-2 WG1026905-3								
C9-C18 Aliphatics	67		68		40-140	1		25
C19-C36 Aliphatics	71		72		40-140	1		25
C11-C22 Aromatics	86		80		40-140	7		25
Naphthalene	70		75		40-140	7		25
2-Methylnaphthalene	75		80		40-140	6		25
Acenaphthylene	92		97		40-140	5		25
Acenaphthene	83		87		40-140	5		25
Fluorene	87		91		40-140	4		25
Phenanthrene	80		84		40-140	5		25
Anthracene	91		95		40-140	4		25
Fluoranthene	93		98		40-140	5		25
Pyrene	95		100		40-140	5		25
Benzo(a)anthracene	86		89		40-140	3		25
Chrysene	87		91		40-140	4		25
Benzo(b)fluoranthene	89		89		40-140	0		25
Benzo(k)fluoranthene	84		90		40-140	7		25
Benzo(a)pyrene	87		90		40-140	3		25
Indeno(1,2,3-cd)Pyrene	87		88		40-140	1		25
Dibenzo(a,h)anthracene	86		88		40-140	2		25
Benzo(ghi)perylene	81		82		40-140	1		25
Nonane (C9)	54		51		30-140	6		25
Decane (C10)	61		60		40-140	2		25
Dodecane (C12)	66		66		40-140	0		25

Lab Control Sample Analysis

Batch Quality Control

Project Name: ADW SITE SEEKONK, MA

Project Number: 161.02023.001

Lab Number: L1725905

Report Date: 08/03/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
EPH w/MS Targets - Westborough Lab Associated sample(s): 01 Batch: WG1026905-2 WG1026905-3								
Tetradecane (C14)	68		70		40-140	3		25
Hexadecane (C16)	69		72		40-140	4		25
Octadecane (C18)	70		72		40-140	3		25
Nonadecane (C19)	70		72		40-140	3		25
Eicosane (C20)	69		71		40-140	3		25
Docosane (C22)	69		71		40-140	3		25
Tetracosane (C24)	68		70		40-140	3		25
Hexacosane (C26)	67		69		40-140	3		25
Octacosane (C28)	67		69		40-140	3		25
triacontane (C30)	67		69		40-140	3		25
Hexatriacontane (C36)	68		70		40-140	3		25

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
Chloro-Octadecane	58		60		40-140
o-Terphenyl	94		87		40-140
2-Fluorobiphenyl	85		80		40-140
2-Bromonaphthalene	87		79		40-140
O-Terphenyl-MS	108		113		40-140
% Naphthalene Breakthrough	0		0		
% 2-Methylnaphthalene Breakthrough	0		0		

Lab Control Sample Analysis

Batch Quality Control

Project Name: ADW SITE SEEKONK, MA

Lab Number: L1725905

Project Number: 161.02023.001

Report Date: 08/03/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Petroleum Hydrocarbons - Westborough Lab Associated sample(s): 01 Batch: WG1028452-1 WG1028452-2								
C5-C8 Aliphatics	103		101		70-130	2		25
C9-C12 Aliphatics	109		107		70-130	2		25
C9-C10 Aromatics	99		97		70-130	2		25
Benzene	97		97		70-130	0		25
Toluene	98		97		70-130	1		25
Ethylbenzene	100		99		70-130	1		25
p/m-Xylene	99		98		70-130	1		25
o-Xylene	98		97		70-130	2		25
Methyl tert butyl ether	96		96		70-130	0		25
Naphthalene	97		99		70-130	2		25
1,2,4-Trimethylbenzene	99		97		70-130	2		25
Pentane	99		98		70-130	2		25
2-Methylpentane	105		103		70-130	2		25
2,2,4-Trimethylpentane	104		102		70-130	2		25
n-Nonane	108		106		30-130	2		25
n-Decane	110		106		70-130	4		25
n-Butylcyclohexane	110		109		70-130	1		25

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2,5-Dibromotoluene-PID	94		94		70-130
2,5-Dibromotoluene-FID	103		104		70-130

PCBS

Project Name: ADW SITE SEEKONK, MA**Lab Number:** L1725905**Project Number:** 161.02023.001**Report Date:** 08/03/17**SAMPLE RESULTS**

Lab ID: L1725905-01
 Client ID: MW410-W1-072717
 Sample Location: 36 MAPLE AVE., SEEKONK, MA

Date Collected: 07/27/17 08:30
 Date Received: 07/27/17
 Field Prep: Not Specified
 Extraction Method: EPA 3510C
 Extraction Date: 07/28/17 07:31
 Cleanup Method: EPA 3665A
 Cleanup Date: 07/28/17
 Cleanup Method: EPA 3660B
 Cleanup Date: 07/28/17

Matrix: Water
 Analytical Method: 97,8082A
 Analytical Date: 07/28/17 17:03
 Analyst: JA

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
MCP Polychlorinated Biphenyls - Westborough Lab							
Aroclor 1016	ND		ug/l	0.250	--	1	A
Aroclor 1221	ND		ug/l	0.250	--	1	A
Aroclor 1232	ND		ug/l	0.250	--	1	A
Aroclor 1242	ND		ug/l	0.250	--	1	A
Aroclor 1248	ND		ug/l	0.250	--	1	A
Aroclor 1254	ND		ug/l	0.250	--	1	A
Aroclor 1260	ND		ug/l	0.250	--	1	A
Aroclor 1262	ND		ug/l	0.250	--	1	A
Aroclor 1268	ND		ug/l	0.250	--	1	A
PCBs, Total	ND		ug/l	0.250	--	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	95		30-150	A
Decachlorobiphenyl	73		30-150	A
2,4,5,6-Tetrachloro-m-xylene	96		30-150	B
Decachlorobiphenyl	75		30-150	B

Project Name: ADW SITE SEEKONK, MA

Lab Number: L1725905

Project Number: 161.02023.001

Report Date: 08/03/17

Method Blank Analysis Batch Quality Control

Analytical Method: 97,8082A
 Analytical Date: 07/28/17 14:43
 Analyst: HT

Extraction Method: EPA 3510C
 Extraction Date: 07/28/17 07:31
 Cleanup Method: EPA 3665A
 Cleanup Date: 07/28/17
 Cleanup Method: EPA 3660B
 Cleanup Date: 07/28/17

Parameter	Result	Qualifier	Units	RL	MDL	Column
MCP Polychlorinated Biphenyls - Westborough Lab for sample(s): 01 Batch: WG1026638-1						
Aroclor 1016	ND		ug/l	0.250	--	A
Aroclor 1221	ND		ug/l	0.250	--	A
Aroclor 1232	ND		ug/l	0.250	--	A
Aroclor 1242	ND		ug/l	0.250	--	A
Aroclor 1248	ND		ug/l	0.250	--	A
Aroclor 1254	ND		ug/l	0.250	--	A
Aroclor 1260	ND		ug/l	0.250	--	A
Aroclor 1262	ND		ug/l	0.250	--	A
Aroclor 1268	ND		ug/l	0.250	--	A
PCBs, Total	ND		ug/l	0.250	--	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	98		30-150	A
Decachlorobiphenyl	89		30-150	A
2,4,5,6-Tetrachloro-m-xylene	99		30-150	B
Decachlorobiphenyl	90		30-150	B

Lab Control Sample Analysis

Batch Quality Control

Project Name: ADW SITE SEEKONK, MA

Lab Number: L1725905

Project Number: 161.02023.001

Report Date: 08/03/17

Parameter	LCS %Recovery	Qual	LCS %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
MCP Polychlorinated Biphenyls - Westborough Lab Associated sample(s): 01 Batch: WG1026638-2 WG1026638-3									
Aroclor 1016	103		103		40-140	0		20	A
Aroclor 1260	101		101		40-140	0		20	A

Surrogate	LCS %Recovery	Qual	LCS %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	98		99		30-150	A
Decachlorobiphenyl	85		84		30-150	A
2,4,5,6-Tetrachloro-m-xylene	99		100		30-150	B
Decachlorobiphenyl	86		85		30-150	B

METALS

Project Name: ADW SITE SEEKONK, MA

Lab Number: L1725905

Project Number: 161.02023.001

Report Date: 08/03/17

SAMPLE RESULTS

Lab ID: L1725905-01

Date Collected: 07/27/17 08:30

Client ID: MW410-W1-072717

Date Received: 07/27/17

Sample Location: 36 MAPLE AVE., SEEKONK, MA

Field Prep: Not Specified

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
MCP Total Metals - Mansfield Lab											
Antimony, Total	ND		mg/l	0.0040	--	1	07/28/17 13:30	08/01/17 12:35	EPA 3005A	97,6020A	AM
Arsenic, Total	ND		mg/l	0.005	--	1	07/28/17 13:30	07/31/17 19:09	EPA 3005A	97,6010C	AB
Beryllium, Total	ND		mg/l	0.0005	--	1	07/28/17 13:30	08/01/17 12:35	EPA 3005A	97,6020A	AM
Cadmium, Total	ND		mg/l	0.004	--	1	07/28/17 13:30	07/31/17 19:09	EPA 3005A	97,6010C	AB
Chromium, Total	ND		mg/l	0.010	--	1	07/28/17 13:30	07/31/17 19:09	EPA 3005A	97,6010C	AB
Copper, Total	ND		mg/l	0.010	--	1	07/28/17 13:30	07/31/17 19:09	EPA 3005A	97,6010C	AB
Lead, Total	ND		mg/l	0.010	--	1	07/28/17 13:30	07/31/17 19:09	EPA 3005A	97,6010C	AB
Mercury, Total	ND		mg/l	0.0002	--	1	07/28/17 12:05	07/28/17 18:36	EPA 7470A	97,7470A	EA
Nickel, Total	ND		mg/l	0.025	--	1	07/28/17 13:30	07/31/17 19:09	EPA 3005A	97,6010C	AB
Selenium, Total	ND		mg/l	0.010	--	1	07/28/17 13:30	07/31/17 19:09	EPA 3005A	97,6010C	AB
Silver, Total	ND		mg/l	0.007	--	1	07/28/17 13:30	07/31/17 19:09	EPA 3005A	97,6010C	AB
Thallium, Total	ND		mg/l	0.0005	--	1	07/28/17 13:30	08/01/17 12:35	EPA 3005A	97,6020A	AM
Zinc, Total	ND		mg/l	0.050	--	1	07/28/17 13:30	07/31/17 19:09	EPA 3005A	97,6010C	AB



Project Name: ADW SITE SEEKONK, MA
Project Number: 161.02023.001

Lab Number: L1725905
Report Date: 08/03/17

Method Blank Analysis Batch Quality Control

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
MCP Total Metals - Mansfield Lab for sample(s): 01 Batch: WG1026754-1									
Mercury, Total	ND	mg/l	0.0002	--	1	07/28/17 12:05	07/28/17 18:27	97,7470A	EA

Prep Information

Digestion Method: EPA 7470A

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
MCP Total Metals - Mansfield Lab for sample(s): 01 Batch: WG1026798-1									
Arsenic, Total	ND	mg/l	0.005	--	1	07/28/17 13:30	07/31/17 17:51	97,6010C	AB
Cadmium, Total	ND	mg/l	0.004	--	1	07/28/17 13:30	07/31/17 17:51	97,6010C	AB
Chromium, Total	ND	mg/l	0.010	--	1	07/28/17 13:30	07/31/17 17:51	97,6010C	AB
Copper, Total	ND	mg/l	0.010	--	1	07/28/17 13:30	07/31/17 17:51	97,6010C	AB
Lead, Total	ND	mg/l	0.010	--	1	07/28/17 13:30	07/31/17 17:51	97,6010C	AB
Nickel, Total	ND	mg/l	0.025	--	1	07/28/17 13:30	07/31/17 17:51	97,6010C	AB
Selenium, Total	ND	mg/l	0.010	--	1	07/28/17 13:30	07/31/17 17:51	97,6010C	AB
Silver, Total	ND	mg/l	0.007	--	1	07/28/17 13:30	07/31/17 17:51	97,6010C	AB
Zinc, Total	ND	mg/l	0.050	--	1	07/28/17 13:30	07/31/17 17:51	97,6010C	AB

Prep Information

Digestion Method: EPA 3005A

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
MCP Total Metals - Mansfield Lab for sample(s): 01 Batch: WG1026799-1									
Antimony, Total	ND	mg/l	0.0040	--	1	07/28/17 13:30	08/01/17 12:03	97,6020A	AM
Beryllium, Total	ND	mg/l	0.0005	--	1	07/28/17 13:30	08/01/17 12:03	97,6020A	AM
Thallium, Total	ND	mg/l	0.0005	--	1	07/28/17 13:30	08/01/17 12:03	97,6020A	AM

Prep Information

Digestion Method: EPA 3005A



Lab Control Sample Analysis

Batch Quality Control

Project Name: ADW SITE SEEKONK, MA

Project Number: 161.02023.001

Lab Number: L1725905

Report Date: 08/03/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Total Metals - Mansfield Lab Associated sample(s): 01 Batch: WG1026754-2 WG1026754-3								
Mercury, Total	105		108		80-120	3		20
MCP Total Metals - Mansfield Lab Associated sample(s): 01 Batch: WG1026798-2 WG1026798-3								
Arsenic, Total	113		112		80-120	1		20
Cadmium, Total	117		114		80-120	3		20
Chromium, Total	111		108		80-120	3		20
Copper, Total	110		107		80-120	3		20
Lead, Total	106		106		80-120	0		20
Nickel, Total	106		101		80-120	5		20
Selenium, Total	112		112		80-120	0		20
Silver, Total	110		112		80-120	2		20
Zinc, Total	112		109		80-120	3		20
MCP Total Metals - Mansfield Lab Associated sample(s): 01 Batch: WG1026799-2 WG1026799-3								
Antimony, Total	106		93		80-120	13		20
Beryllium, Total	105		109		80-120	4		20
Thallium, Total	93		83		80-120	11		20

INORGANICS & MISCELLANEOUS

Project Name: ADW SITE SEEKONK, MA
Project Number: 161.02023.001

Lab Number: L1725905
Report Date: 08/03/17

SAMPLE RESULTS

Lab ID: L1725905-01
Client ID: MW410-W1-072717
Sample Location: 36 MAPLE AVE., SEEKONK, MA
Matrix: Water

Date Collected: 07/27/17 08:30
Date Received: 07/27/17
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
MCP General Chemistry - Westborough Lab										
Chromium, Hexavalent	ND		mg/l	0.010	--	1	07/28/17 02:00	07/28/17 03:13	97,7196A	KA



Project Name: ADW SITE SEEKONK, MA**Lab Number:** L1725905**Project Number:** 161.02023.001**Report Date:** 08/03/17**Method Blank Analysis**
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
MCP General Chemistry - Westborough Lab for sample(s): 01 Batch: WG1026566-1										
Chromium, Hexavalent	ND		mg/l	0.010	--	1	07/28/17 02:00	07/28/17 03:11	97,7196A	KA

Lab Control Sample Analysis
Batch Quality Control**Project Name:** ADW SITE SEEKONK, MA**Project Number:** 161.02023.001**Lab Number:** L1725905**Report Date:** 08/03/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG1026566-2 WG1026566-3								
Chromium, Hexavalent	101		101		49-151	0		20

Project Name: ADW SITE SEEKONK, MA
Project Number: 161.02023.001

Serial_No: 08031712:03
Lab Number: L1725905
Report Date: 08/03/17

Sample Receipt and Container Information

Were project specific reporting limits specified?

YES

Cooler Information

Cooler **Custody Seal**
A Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1725905-01A	Vial HCl preserved	A	NA		4.1	Y	Absent		MCP-8260-10(14)
L1725905-01B	Vial HCl preserved	A	NA		4.1	Y	Absent		MCP-8260-10(14)
L1725905-01C	Vial HCl preserved	A	NA		4.1	Y	Absent		MCP-8260-10(14)
L1725905-01D	Vial HCl preserved	A	NA		4.1	Y	Absent		VPH-DELUX-10(14)
L1725905-01E	Vial HCl preserved	A	NA		4.1	Y	Absent		VPH-DELUX-10(14)
L1725905-01F	Vial HCl preserved	A	NA		4.1	Y	Absent		VPH-DELUX-10(14)
L1725905-01G	Plastic 250ml unpreserved	A	7	7	4.1	Y	Absent		MCP-HEXCR7196-10(1)
L1725905-01H	Plastic 250ml HNO3 preserved	A	<2	<2	4.1	Y	Absent		MCP-CR-6010T-10(180),MCP-BE-6020T-10(180),MCP-7470T-10(28),MCP-AS-6010T-10(180),MCP-TL-6020T-10(180),MCP-CD-6010T-10(180),MCP-AG-6010T-10(180),MCP-CU-6010T-10(180),MCP-ZN-6010T-10(180),MCP-SE-6010T-10(180),MCP-SB-6020T-10(180),MCP-NI-6010T-10(180),MCP-PB-6010T-10(180)
L1725905-01I	Amber 1000ml unpreserved	A	7	7	4.1	Y	Absent		MCP-8082-10(365)
L1725905-01J	Amber 1000ml unpreserved	A	7	7	4.1	Y	Absent		MCP-8082-10(365)
L1725905-01K	Amber 1000ml HCl preserved	A	<2	<2	4.1	Y	Absent		EPH-MS-10(14),EPHD-GC-10(14)
L1725905-01L	Amber 1000ml HCl preserved	A	<2	<2	4.1	Y	Absent		EPH-MS-10(14),EPHD-GC-10(14)
L1725905-02A	Vial HCl preserved	A	NA		4.1	Y	Absent		HOLD-8260(14)
L1725905-02B	Vial HCl preserved	A	NA		4.1	Y	Absent		HOLD-8260(14)
L1725905-02C	Vial HCl preserved	A	NA		4.1	Y	Absent		HOLD-VPH(14)
L1725905-02D	Vial HCl preserved	A	NA		4.1	Y	Absent		HOLD-VPH(14)

Project Name: ADW SITE SEEKONK, MA
Project Number: 161.02023.001

Lab Number: L1725905
Report Date: 08/03/17

GLOSSARY

Acronyms

EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Footnotes

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

- A** - Spectra identified as "Aldol Condensation Product".
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related

Report Format: Data Usability Report



Project Name: ADW SITE SEEKONK, MA
Project Number: 161.02023.001

Lab Number: L1725905
Report Date: 08/03/17

Data Qualifiers

projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.
- J** - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- ND** - Not detected at the reporting limit (RL) for the sample.

Project Name: ADW SITE SEEKONK, MA
Project Number: 161.02023.001

Lab Number: L1725905
Report Date: 08/03/17

REFERENCES

- 97 EPA Test Methods (SW-846) with QC Requirements & Performance Standards for the Analysis of EPA SW-846 Methods under the Massachusetts Contingency Plan, WSC-CAM-IIA, IIB, IIIA, IIIB, IIIC, IIID, VA, VB, VC, VIA, VIB, VIIIA and VIIIB, July 2010.
- 98 Method for the Determination of Extractable Petroleum Hydrocarbons (EPH), MassDEP, May 2004, Revision 1.1 with QC Requirements & Performance Standards for the Analysis of EPH under the Massachusetts Contingency Plan, WSC-CAM-IVB, July 2010.
- 100 Method for the Determination of Volatile Petroleum Hydrocarbons (VPH), MassDEP, May 2004, Revision 1.1 with QC Requirements & Performance Standards for the Analysis of VPH under the Massachusetts Contingency Plan, WSC-CAM-IVA, July 2010.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Alpha Analytical, Inc.

ID No.:17873

Facility: **Company-wide**

Revision 10

Department: **Quality Assurance**

Published Date: 1/16/2017 11:00:05 AM

Title: **Certificate/Approval Program Summary**

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Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility**EPA 624:** m/p-xylene, o-xylene**EPA 8260C:** NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), Methyl methacrylate, 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.**EPA 8270D:** NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.**EPA 300:** DW: Bromide**EPA 6860:** NPW and SCM: Perchlorate**EPA 9010:** NPW and SCM: Amenable Cyanide Distillation**EPA 9012B:** NPW: Total Cyanide**EPA 9050A:** NPW: Specific Conductance**SM3500:** NPW: Ferrous Iron**SM4500:** NPW: Amenable Cyanide, Dissolved Oxygen; SCM: Total Phosphorus, TKN, NO₂, NO₃.**SM5310C:** DW: Dissolved Organic Carbon**Mansfield Facility****SM 2540D:** TSS**EPA 3005A** NPW**EPA 8082A:** NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.**EPA TO-15:** Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:**Drinking Water****EPA 300.0:** Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500CI-D, SM2320B, SM2540C, SM4500H-B****EPA 332:** Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.**Microbiology:** **SM9215B; SM9223-P/A, SM9223B-Colilert-QT, SM9222D.****Non-Potable Water****SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH, EPA 350.1:** Ammonia-N, **LACHAT 10-107-06-1-B:** Ammonia-N, **SM4500NO3-F, EPA 353.2:** Nitrate-N, **EPA 351.1, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D.****EPA 624:** Volatile Halocarbons & Aromatics,**EPA 608:** Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs**EPA 625:** SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045:** PCB-Oil.**Microbiology:** **SM9223B-Colilert-QT; Enterolert-QT, SM9221E.****Mansfield Facility:****Drinking Water****EPA 200.7:** Ba, Be, Cd, Cr, Cu, Ni, Na, Ca. **EPA 200.8:** Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Ni, Se, TL. **EPA 245.1** Hg.**Non-Potable Water****EPA 200.7:** Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.**EPA 200.8:** Al, Sb, As, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn.**EPA 245.1** Hg.**SM2340B**

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

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7/27/17

ALPHA Job #: 21725905

320 Forbes Blvd
Mansfield, MA 02048
Tel: 508-822-9300

Project Name: ADW Site Seelyville, MA

Project Location: 36 Maple Ave Seelock, MA

Project #: 161.02023.001

Project Manager: Tracey Costa

ALPHA Quote #:

 Standard RUSH (only confirmed if pre-approved!)

Date Due:

☐ ADEx ☐ EMAIL

☒ Same as Client info PO #: 12094

☒ Yes ☐ No MA MCP Analytical Methods ☐ Yes ☒ No CT RCP Analytical Methods
☐ Yes ☒ No Matrix Spike Required on this SDG? (Required for MCP Inorganics)
☒ Yes ☐ No GW1 Standards (Info Required for Metals & EPH with Targets)
☐ Yes ☒ No NPDES RGP
☐ Other State /Fed Program Criteria **GW-1,2,3**

Criteria GW-1, 2, 3

Client: Ransom Consulting, Inc.

Address: 60 Valley Street, Suite 106
Providence, RI 02909

Phone: 401-433-2160

Email: Tracey.castro@ransomenv.com

Additional Project Information:

- ★ Analyze hexavalent chromium on 24-hour TAT ★
- ★ All other analytes on standard TAT ★

ANALYSIS		SAMPLE INFO	
VOC: ☒ 8260	☐ 624 ☐ 524.2	Filtration	
SVOC: ☐ ABN	☐ PAH	☐ Field	
METALS: ☐ MCP 13	☐ MCP 14 ☐ RCP 15	☐ Lab to do	
METALS: ☐ RCRA 5	☐ RCRA 8 ☒ APP13	Preservation	
EPH: ☒ Ranges & Targets	☐ Ranges Only	☐ Lab to do	
VPH: ☒ Ranges & Targets	☐ Ranges Only		
☒ PCB	☐ PEST		
TPH: ☐ Quant Only	☐ Fingerprint		
Hexavalent Chromium			
		Sample Comments	

	TOTAL # OF TITLES
1990	10
1991	10
1992	10
1993	10
1994	10
1995	10
1996	10
1997	10
1998	10
1999	10
2000	10
2001	10
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2147	10
2148	10
2149	10
2150	10
2151	10
2	

Sample Comments

[illegible]

25905-01	MW410-W1-072717	7-27-17	0830	GW	AR

02	Trip Blank

Hold

10

Preservative
 A = None
 B = HCl
 C = HNO₃
 D = H₂SO₄
 E = NaOH
 F = MeOH
 G = NaHSO₄
 H = Na₂S₂O₃
 I = Ascorbic Acid
 J = NH₄Cl
 K = Zn Acetate
 O = Other

Container Type

Preservative

Received By:

Date/Time

Relinquished By:

Date/Time

All samples submitted are subject to Alpha's Terms and Conditions.
See reverse side.

FORM NO: 01-01 (rev. 12-Mar-2012)

Method Blank Summary Form 4

Client	: Ransom Consulting, Inc.	Lab Number	: L1725905
Project Name	: ADW SITE SEEKONK, MA	Project Number	: 161.02023.001
Lab Sample ID	: WG1028407-5	Lab File ID	: VQ170803A04
Instrument ID	: QUIMBY		
Matrix	: WATER	Analysis Date	: 08/03/17 05:47

Client Sample No.	Lab Sample ID	Analysis Date
WG1028407-3LCS	WG1028407-3	08/03/17 04:13
WG1028407-4LCSD	WG1028407-4	08/03/17 04:45
MW410-W1-072717	L1725905-01	08/03/17 07:22

Continuing Calibration Form 7

Client : Ransom Consulting, Inc.
 Project Name : ADW SITE SEEKONK, MA
 Instrument ID : QUIMBY
 Lab File ID : VQ170803A01
 Sample No : WG1028407-2
 Channel :

Lab Number : L1725905
 Project Number : 161.02023.001
 Calibration Date : 08/03/17 04:13
 Init. Calib. Date(s) : 06/23/17 06/24/17
 Init. Calib. Times : 20:16 00:58

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Fluorobenzene	1	1	-	0	20	101	0
Dichlorodifluoromethane	0.466	0.431	-	7.5	20	85	0
Chloromethane	0.528	0.446	-	15.5	20	83	0
Vinyl chloride	0.388	0.445	-	-14.7	20	106	0
Bromomethane	0.242	0.183	-	24.4*	20	85	0
Chloroethane	0.317	0.359	-	-13.2	20	109	0
Trichlorofluoromethane	0.626	0.708	-	-13.1	20	107	0
Ethyl ether	0.172	0.195	-	-13.4	20	112	0
1,1-Dichloroethene	0.356	0.396	-	-11.2	20	110	0
Carbon disulfide	1.055	1.024	-	2.9	20	94	0
Freon-113	0.304	0.37	-	-21.7*	20	117	0
Methylene chloride	0.476	0.505	-	-6.1	20	105	0
Acetone	0.058	0.06*	-	-3.4	20	108	0
trans-1,2-Dichloroethene	0.423	0.474	-	-12.1	20	110	0
Methyl tert-butyl ether	0.793	0.809	-	-2	20	105	0
tert-Butyl alcohol	0.01131	0.00922*	-	18.5	20	93	0
Diisopropyl ether	1.265	1.462	-	-15.6	20	112	0
1,1-Dichloroethane	0.813	0.934	-	-14.9	20	108	0
Ethyl tert-butyl ether	0.939	1.101	-	-17.3	20	124	0
cis-1,2-Dichloroethene	0.454	0.521	-	-14.8	20	109	0
2,2-Dichloropropane	10	10.15	-	-1.5	20	132	0
Bromochloromethane	0.164	0.181	-	-10.4	20	106	0
Chloroform	0.782	0.879	-	-12.4	20	106	0
Carbon tetrachloride	10	9.801	-	2	20	110	0
Tetrahydrofuran	0.062	0.059	-	4.8	20	101	0
Dibromofluoromethane	0.201	0.203	-	-1	20	102	0
1,1,1-Trichloroethane	0.688	0.742	-	-7.8	20	107	0
2-Butanone	0.091	0.082*	-	9.9	20	90	0
1,1-Dichloropropene	0.653	0.729	-	-11.6	20	105	0
Benzene	1.807	2.149	-	-18.9	20	110	0
tert-Amyl methyl ether	0.794	0.831	-	-4.7	20	112	0
1,2-Dichloroethane-d4	0.259	0.261	-	-0.8	20	99	0
1,2-Dichloroethane	0.56	0.612	-	-9.3	20	103	0
Trichloroethene	0.48	0.527	-	-9.8	20	105	0
Dibromomethane	0.201	0.217	-	-8	20	108	0
1,2-Dichloropropane	0.454	0.508	-	-11.9	20	110	0
2-Chloroethyl vinyl ether	0.152	0.188	-	-23.7*	20	99	0
Bromodichloromethane	0.571	0.571	-	0	20	98	0
1,4-Dioxane	0.00186	0.00157*	-	15.6	20	81	0
cis-1,3-Dichloropropene	10	9.273	-	7.3	20	105	0
Chlorobenzene-d5	1	1	-	0	20	103	0
Toluene-d8	1.36	1.261	-	7.3	20	94	0
Toluene	1.628	1.8	-	-10.6	20	104	0
4-Methyl-2-pentanone	0.097	0.097*	-	0	20	98	0
Tetrachloroethene	0.612	0.664	-	-8.5	20	104	0

* Value outside of QC limits.



Continuing Calibration Form 7

Client : Ransom Consulting, Inc.
 Project Name : ADW SITE SEEKONK, MA
 Instrument ID : QUIMBY
 Lab File ID : VQ170803A01
 Sample No : WG1028407-2
 Channel :

Lab Number : L1725905
 Project Number : 161.02023.001
 Calibration Date : 08/03/17 04:13
 Init. Calib. Date(s) : 06/23/17 06/24/17
 Init. Calib. Times : 20:16 00:58

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
trans-1,3-Dichloropropene	10	9.446	-	5.5	20	109	0
1,1,2-Trichloroethane	0.298	0.323	-	-8.4	20	105	0
Chlorodibromomethane	0.376	0.36	-	4.3	20	96	0
1,3-Dichloropropane	0.663	0.726	-	-9.5	20	106	0
1,2-Dibromoethane	0.318	0.327	-	-2.8	20	102	0
2-Hexanone	0.176	0.163	-	7.4	20	96	0
Chlorobenzene	1.73	1.83	-	-5.8	20	101	0
Ethylbenzene	3.154	3.383	-	-7.3	20	100	0
1,1,1,2-Tetrachloroethane	0.476	0.485	-	-1.9	20	103	0
p/m Xylene	0.982	1.044	-	-6.3	20	100	0
o Xylene	0.893	0.949	-	-6.3	20	99	0
Styrene	1.447	1.544	-	-6.7	20	97	0
1,4-Dichlorobenzene-d4	1	1	-	0	20	101	0
Bromoform	10	7.338	-	26.6*	20	90	0
Isopropylbenzene	6.684	6.893	-	-3.1	20	96	0
4-Bromofluorobenzene	1.211	1.175	-	3	20	101	0
Bromobenzene	1.467	1.421	-	3.1	20	96	0
n-Propylbenzene	7.634	8.033	-	-5.2	20	96	0
1,1,2,2-Tetrachloroethane	1.02	1.007	-	1.3	20	100	0
2-Chlorotoluene	5.252	5.324	-	-1.4	20	97	0
1,3,5-Trimethylbenzene	4.405	4.663	-	-5.9	20	97	0
1,2,3-Trichloropropane	0.892	0.818	-	8.3	20	95	0
4-Chlorotoluene	4.746	4.781	-	-0.7	20	97	0
tert-Butylbenzene	4.434	4.504	-	-1.6	20	93	0
1,2,4-Trimethylbenzene	4.363	4.632	-	-6.2	20	96	0
sec-Butylbenzene	6.296	6.542	-	-3.9	20	93	0
p-Isopropyltoluene	4.919	5.294	-	-7.6	20	94	0
1,3-Dichlorobenzene	2.67	2.63	-	1.5	20	94	0
1,4-Dichlorobenzene	2.554	2.533	-	0.8	20	96	0
n-Butylbenzene	5.68	6.312	-	-11.1	20	95	0
1,2-Dichlorobenzene	2.364	2.293	-	3	20	92	0
1,2-Dibromo-3-chloropropan	10	7.413	-	25.9*	20	78	0
Hexachlorobutadiene	0.807	0.671	-	16.9	20	80	0
1,2,4-Trichlorobenzene	1.307	1.269	-	2.9	20	83	0
Naphthalene	2.325	2.354	-	-1.2	20	82	0
1,2,3-Trichlorobenzene	1.152	1.08	-	6.2	20	80	0

* Value outside of QC limits.





ANALYTICAL REPORT

Lab Number:	L1901070
Client:	Ransom Consulting, Inc. 60 Valley Street Building F, Suite 106 Providence, RI 02909
ATTN:	Tracey Costa
Phone:	(401) 433-2160
Project Name:	ADW SEEKONK, MA
Project Number:	171.02038.001
Report Date:	01/16/19

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-17-00196).

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com



Project Name: ADW SEEKONK, MA
Project Number: 171.02038.001

Lab Number: L1901070
Report Date: 01/16/19

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1901070-01	MW704-W1-010819	WATER	SEEKONK, MA	01/08/19 07:40	01/09/19
L1901070-02	MW705-W1-010819	WATER	SEEKONK, MA	01/08/19 08:55	01/09/19
L1901070-03	MW706-W1-010819	WATER	SEEKONK, MA	01/08/19 10:10	01/09/19
L1901070-04	MW707-W1-010819	WATER	SEEKONK, MA	01/08/19 11:25	01/09/19
L1901070-05	MW708-W1-010819	WATER	SEEKONK, MA	01/08/19 12:45	01/09/19
L1901070-06	MW713-W1-010919	WATER	SEEKONK, MA	01/09/19 07:50	01/09/19
L1901070-07	MW714-W1-010919	WATER	SEEKONK, MA	01/09/19 09:00	01/09/19
L1901070-08	MW715-W1-010919	WATER	SEEKONK, MA	01/09/19 10:00	01/09/19

Project Name: ADW SEEKONK, MA

Lab Number: L1901070

Project Number: 171.02038.001

Report Date: 01/16/19

MADEP MCP Response Action Analytical Report Certification

This form provides certifications for all samples performed by MCP methods. Please refer to the Sample Results and Container Information sections of this report for specification of MCP methods used for each analysis. The following questions pertain only to MCP Analytical Methods.

An affirmative response to questions A through F is required for "Presumptive Certainty" status		
A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?	YES
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	YES
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	YES
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data?"	YES
E a.	VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications).	YES
E b.	APH and TO-15 Methods only: Was the complete analyte list reported for each method?	N/A
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?	YES
A response to questions G, H and I is required for "Presumptive Certainty" status		
G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	NO
H	Were all QC performance standards specified in the CAM protocol(s) achieved?	NO
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	NO
For any questions answered "No", please refer to the case narrative section on the following page(s).		

Please note that sample matrix information is located in the Sample Results section of this report.



Project Name: ADW SEEKONK, MA
Project Number: 171.02038.001

Lab Number: L1901070
Report Date: 01/16/19

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. All specific QC information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

HOLD POLICY

For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Client Service Representative and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Client Services at 800-624-9220 with any questions.

Project Name: ADW SEEKONK, MA
Project Number: 171.02038.001

Lab Number: L1901070
Report Date: 01/16/19

Case Narrative (continued)

MCP Related Narratives

Sample Receipt

L1901070-08: The collection date and time on the chain of custody was 09-JAN-19 09:35; however, the collection date/time on the container label was 09-JAN-19 10:00. At the client's request, the collection date/time is reported as 09-JAN-19 10:00.

Volatile Organics

The continuing calibration standard, associated with L1901070-03, -06, -07, and -08, is included as an addendum to this report.

In reference to question H:

The initial calibration, associated with L1901070-03, -06, -07, and -08, did not meet the method required minimum response factor on the lowest calibration standard for 2-butanone (0.0851), 4-methyl-2-pentanone (0.0666), and 1,4-dioxane (0.0016), as well as the average response factor for 2-butanone, 4-methyl-2-pentanone, and 1,4-dioxane.

EPH

In reference to question G:

L1901070-03, -06, -07, and -08: One or more of the target analytes did not achieve the requested CAM reporting limits.

In reference to question I:

All samples were analyzed for a subset of MCP analytes per client request.

Metals

In reference to question G:

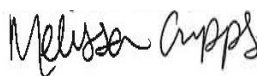
L1901070-02 through -08: One or more of the target analytes did not achieve the requested CAM reporting limits.

In reference to question I:

All samples were analyzed for a subset of MCP analytes per client request.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:

 Melissa Cripps

Title: Technical Director/Representative

Date: 01/16/19

ORGANICS

VOLATILES

Project Name: ADW SEEKONK, MA
Project Number: 171.02038.001

Lab Number: L1901070
Report Date: 01/16/19

SAMPLE RESULTS

Lab ID: L1901070-03
Client ID: MW706-W1-010819
Sample Location: SEEKONK, MA

Date Collected: 01/08/19 10:10
Date Received: 01/09/19
Field Prep: Refer to COC

Sample Depth:

Matrix: Water
Analytical Method: 97,8260C
Analytical Date: 01/15/19 06:23
Analyst: MM

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Methylene chloride	ND		ug/l	2.0	--	1
1,1-Dichloroethane	ND		ug/l	1.0	--	1
Chloroform	ND		ug/l	1.0	--	1
Carbon tetrachloride	ND		ug/l	1.0	--	1
1,2-Dichloropropane	ND		ug/l	1.0	--	1
Dibromochloromethane	ND		ug/l	1.0	--	1
1,1,2-Trichloroethane	ND		ug/l	1.0	--	1
Tetrachloroethene	ND		ug/l	1.0	--	1
Chlorobenzene	ND		ug/l	1.0	--	1
Trichlorofluoromethane	ND		ug/l	2.0	--	1
1,2-Dichloroethane	ND		ug/l	1.0	--	1
1,1,1-Trichloroethane	ND		ug/l	1.0	--	1
Bromodichloromethane	ND		ug/l	1.0	--	1
trans-1,3-Dichloropropene	ND		ug/l	0.40	--	1
cis-1,3-Dichloropropene	ND		ug/l	0.40	--	1
1,3-Dichloropropene, Total	ND		ug/l	0.40	--	1
1,1-Dichloropropene	ND		ug/l	2.0	--	1
Bromoform	ND		ug/l	2.0	--	1
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Benzene	ND		ug/l	0.50	--	1
Toluene	ND		ug/l	1.0	--	1
Ethylbenzene	ND		ug/l	1.0	--	1
Chloromethane	ND		ug/l	2.0	--	1
Bromomethane	ND		ug/l	2.0	--	1
Vinyl chloride	ND		ug/l	1.0	--	1
Chloroethane	ND		ug/l	2.0	--	1
1,1-Dichloroethene	ND		ug/l	1.0	--	1
trans-1,2-Dichloroethene	ND		ug/l	1.0	--	1

Project Name: ADW SEEKONK, MA
Project Number: 171.02038.001

Lab Number: L1901070
Report Date: 01/16/19

SAMPLE RESULTS

Lab ID: L1901070-03
Client ID: MW706-W1-010819
Sample Location: SEEKONK, MA

Date Collected: 01/08/19 10:10
Date Received: 01/09/19
Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Trichloroethene	ND		ug/l	1.0	--	1
1,2-Dichlorobenzene	ND		ug/l	1.0	--	1
1,3-Dichlorobenzene	ND		ug/l	1.0	--	1
1,4-Dichlorobenzene	ND		ug/l	1.0	--	1
Methyl tert butyl ether	ND		ug/l	2.0	--	1
p/m-Xylene	ND		ug/l	2.0	--	1
o-Xylene	ND		ug/l	1.0	--	1
Xylenes, Total	ND		ug/l	1.0	--	1
cis-1,2-Dichloroethene	ND		ug/l	1.0	--	1
1,2-Dichloroethene, Total	ND		ug/l	1.0	--	1
Dibromomethane	ND		ug/l	2.0	--	1
1,2,3-Trichloropropane	ND		ug/l	2.0	--	1
Styrene	ND		ug/l	1.0	--	1
Dichlorodifluoromethane	ND		ug/l	2.0	--	1
Acetone	ND		ug/l	5.0	--	1
Carbon disulfide	ND		ug/l	2.0	--	1
Methyl ethyl ketone	ND		ug/l	5.0	--	1
Methyl isobutyl ketone	ND		ug/l	5.0	--	1
2-Hexanone	ND		ug/l	5.0	--	1
Bromochloromethane	ND		ug/l	2.0	--	1
Tetrahydrofuran	ND		ug/l	2.0	--	1
2,2-Dichloropropane	ND		ug/l	2.0	--	1
1,2-Dibromoethane	ND		ug/l	2.0	--	1
1,3-Dichloropropane	ND		ug/l	2.0	--	1
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Bromobenzene	ND		ug/l	2.0	--	1
n-Butylbenzene	ND		ug/l	2.0	--	1
sec-Butylbenzene	ND		ug/l	2.0	--	1
tert-Butylbenzene	ND		ug/l	2.0	--	1
o-Chlorotoluene	ND		ug/l	2.0	--	1
p-Chlorotoluene	ND		ug/l	2.0	--	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.0	--	1
Hexachlorobutadiene	ND		ug/l	0.60	--	1
Isopropylbenzene	ND		ug/l	2.0	--	1
p-Isopropyltoluene	ND		ug/l	2.0	--	1
Naphthalene	ND		ug/l	2.0	--	1
n-Propylbenzene	ND		ug/l	2.0	--	1

Project Name: ADW SEEKONK, MA
Project Number: 171.02038.001

Lab Number: L1901070
Report Date: 01/16/19

SAMPLE RESULTS

Lab ID: L1901070-03
Client ID: MW706-W1-010819
Sample Location: SEEKONK, MA

Date Collected: 01/08/19 10:10
Date Received: 01/09/19
Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
1,2,3-Trichlorobenzene	ND		ug/l	2.0	--	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	--	1
1,3,5-Trimethylbenzene	ND		ug/l	2.0	--	1
1,2,4-Trimethylbenzene	ND		ug/l	2.0	--	1
Diethyl ether	ND		ug/l	2.0	--	1
Diisopropyl Ether	ND		ug/l	2.0	--	1
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0	--	1
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	--	1
1,4-Dioxane	ND		ug/l	250	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	104		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	102		70-130
Dibromofluoromethane	103		70-130

Project Name: ADW SEEKONK, MA
Project Number: 171.02038.001

Lab Number: L1901070
Report Date: 01/16/19

SAMPLE RESULTS

Lab ID: L1901070-06
Client ID: MW713-W1-010919
Sample Location: SEEKONK, MA

Date Collected: 01/09/19 07:50
Date Received: 01/09/19
Field Prep: Refer to COC

Sample Depth:

Matrix: Water
Analytical Method: 97,8260C
Analytical Date: 01/15/19 07:40
Analyst: MM

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Methylene chloride	ND		ug/l	2.0	--	1
1,1-Dichloroethane	ND		ug/l	1.0	--	1
Chloroform	ND		ug/l	1.0	--	1
Carbon tetrachloride	ND		ug/l	1.0	--	1
1,2-Dichloropropane	ND		ug/l	1.0	--	1
Dibromochloromethane	ND		ug/l	1.0	--	1
1,1,2-Trichloroethane	ND		ug/l	1.0	--	1
Tetrachloroethene	ND		ug/l	1.0	--	1
Chlorobenzene	ND		ug/l	1.0	--	1
Trichlorofluoromethane	ND		ug/l	2.0	--	1
1,2-Dichloroethane	ND		ug/l	1.0	--	1
1,1,1-Trichloroethane	ND		ug/l	1.0	--	1
Bromodichloromethane	ND		ug/l	1.0	--	1
trans-1,3-Dichloropropene	ND		ug/l	0.40	--	1
cis-1,3-Dichloropropene	ND		ug/l	0.40	--	1
1,3-Dichloropropene, Total	ND		ug/l	0.40	--	1
1,1-Dichloropropene	ND		ug/l	2.0	--	1
Bromoform	ND		ug/l	2.0	--	1
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Benzene	ND		ug/l	0.50	--	1
Toluene	ND		ug/l	1.0	--	1
Ethylbenzene	ND		ug/l	1.0	--	1
Chloromethane	ND		ug/l	2.0	--	1
Bromomethane	ND		ug/l	2.0	--	1
Vinyl chloride	ND		ug/l	1.0	--	1
Chloroethane	ND		ug/l	2.0	--	1
1,1-Dichloroethene	ND		ug/l	1.0	--	1
trans-1,2-Dichloroethene	ND		ug/l	1.0	--	1

Project Name: ADW SEEKONK, MA
Project Number: 171.02038.001

Lab Number: L1901070
Report Date: 01/16/19

SAMPLE RESULTS

Lab ID: L1901070-06
Client ID: MW713-W1-010919
Sample Location: SEEKONK, MA

Date Collected: 01/09/19 07:50
Date Received: 01/09/19
Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Trichloroethene	ND		ug/l	1.0	--	1
1,2-Dichlorobenzene	ND		ug/l	1.0	--	1
1,3-Dichlorobenzene	ND		ug/l	1.0	--	1
1,4-Dichlorobenzene	ND		ug/l	1.0	--	1
Methyl tert butyl ether	ND		ug/l	2.0	--	1
p/m-Xylene	ND		ug/l	2.0	--	1
o-Xylene	ND		ug/l	1.0	--	1
Xylenes, Total	ND		ug/l	1.0	--	1
cis-1,2-Dichloroethene	ND		ug/l	1.0	--	1
1,2-Dichloroethene, Total	ND		ug/l	1.0	--	1
Dibromomethane	ND		ug/l	2.0	--	1
1,2,3-Trichloropropane	ND		ug/l	2.0	--	1
Styrene	ND		ug/l	1.0	--	1
Dichlorodifluoromethane	ND		ug/l	2.0	--	1
Acetone	ND		ug/l	5.0	--	1
Carbon disulfide	ND		ug/l	2.0	--	1
Methyl ethyl ketone	ND		ug/l	5.0	--	1
Methyl isobutyl ketone	ND		ug/l	5.0	--	1
2-Hexanone	ND		ug/l	5.0	--	1
Bromochloromethane	ND		ug/l	2.0	--	1
Tetrahydrofuran	ND		ug/l	2.0	--	1
2,2-Dichloropropane	ND		ug/l	2.0	--	1
1,2-Dibromoethane	ND		ug/l	2.0	--	1
1,3-Dichloropropane	ND		ug/l	2.0	--	1
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Bromobenzene	ND		ug/l	2.0	--	1
n-Butylbenzene	ND		ug/l	2.0	--	1
sec-Butylbenzene	ND		ug/l	2.0	--	1
tert-Butylbenzene	ND		ug/l	2.0	--	1
o-Chlorotoluene	ND		ug/l	2.0	--	1
p-Chlorotoluene	ND		ug/l	2.0	--	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.0	--	1
Hexachlorobutadiene	ND		ug/l	0.60	--	1
Isopropylbenzene	ND		ug/l	2.0	--	1
p-Isopropyltoluene	ND		ug/l	2.0	--	1
Naphthalene	ND		ug/l	2.0	--	1
n-Propylbenzene	ND		ug/l	2.0	--	1

Project Name: ADW SEEKONK, MA
Project Number: 171.02038.001

Lab Number: L1901070
Report Date: 01/16/19

SAMPLE RESULTS

Lab ID: L1901070-06
Client ID: MW713-W1-010919
Sample Location: SEEKONK, MA

Date Collected: 01/09/19 07:50
Date Received: 01/09/19
Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
1,2,3-Trichlorobenzene	ND		ug/l	2.0	--	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	--	1
1,3,5-Trimethylbenzene	ND		ug/l	2.0	--	1
1,2,4-Trimethylbenzene	ND		ug/l	2.0	--	1
Diethyl ether	ND		ug/l	2.0	--	1
Diisopropyl Ether	ND		ug/l	2.0	--	1
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0	--	1
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	--	1
1,4-Dioxane	ND		ug/l	250	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	111		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	106		70-130

Project Name: ADW SEEKONK, MA
Project Number: 171.02038.001

Lab Number: L1901070
Report Date: 01/16/19

SAMPLE RESULTS

Lab ID: L1901070-07
Client ID: MW714-W1-010919
Sample Location: SEEKONK, MA

Date Collected: 01/09/19 09:00
Date Received: 01/09/19
Field Prep: Refer to COC

Sample Depth:

Matrix: Water
Analytical Method: 97,8260C
Analytical Date: 01/15/19 06:49
Analyst: MM

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Methylene chloride	ND		ug/l	2.0	--	1
1,1-Dichloroethane	ND		ug/l	1.0	--	1
Chloroform	ND		ug/l	1.0	--	1
Carbon tetrachloride	ND		ug/l	1.0	--	1
1,2-Dichloropropane	ND		ug/l	1.0	--	1
Dibromochloromethane	ND		ug/l	1.0	--	1
1,1,2-Trichloroethane	ND		ug/l	1.0	--	1
Tetrachloroethene	ND		ug/l	1.0	--	1
Chlorobenzene	ND		ug/l	1.0	--	1
Trichlorofluoromethane	ND		ug/l	2.0	--	1
1,2-Dichloroethane	ND		ug/l	1.0	--	1
1,1,1-Trichloroethane	ND		ug/l	1.0	--	1
Bromodichloromethane	ND		ug/l	1.0	--	1
trans-1,3-Dichloropropene	ND		ug/l	0.40	--	1
cis-1,3-Dichloropropene	ND		ug/l	0.40	--	1
1,3-Dichloropropene, Total	ND		ug/l	0.40	--	1
1,1-Dichloropropene	ND		ug/l	2.0	--	1
Bromoform	ND		ug/l	2.0	--	1
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Benzene	ND		ug/l	0.50	--	1
Toluene	ND		ug/l	1.0	--	1
Ethylbenzene	ND		ug/l	1.0	--	1
Chloromethane	ND		ug/l	2.0	--	1
Bromomethane	ND		ug/l	2.0	--	1
Vinyl chloride	ND		ug/l	1.0	--	1
Chloroethane	ND		ug/l	2.0	--	1
1,1-Dichloroethene	ND		ug/l	1.0	--	1
trans-1,2-Dichloroethene	ND		ug/l	1.0	--	1

Project Name: ADW SEEKONK, MA
Project Number: 171.02038.001

Lab Number: L1901070
Report Date: 01/16/19

SAMPLE RESULTS

Lab ID: L1901070-07
Client ID: MW714-W1-010919
Sample Location: SEEKONK, MA

Date Collected: 01/09/19 09:00
Date Received: 01/09/19
Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Trichloroethene	ND		ug/l	1.0	--	1
1,2-Dichlorobenzene	ND		ug/l	1.0	--	1
1,3-Dichlorobenzene	ND		ug/l	1.0	--	1
1,4-Dichlorobenzene	ND		ug/l	1.0	--	1
Methyl tert butyl ether	ND		ug/l	2.0	--	1
p/m-Xylene	ND		ug/l	2.0	--	1
o-Xylene	ND		ug/l	1.0	--	1
Xylenes, Total	ND		ug/l	1.0	--	1
cis-1,2-Dichloroethene	ND		ug/l	1.0	--	1
1,2-Dichloroethene, Total	ND		ug/l	1.0	--	1
Dibromomethane	ND		ug/l	2.0	--	1
1,2,3-Trichloropropane	ND		ug/l	2.0	--	1
Styrene	ND		ug/l	1.0	--	1
Dichlorodifluoromethane	ND		ug/l	2.0	--	1
Acetone	ND		ug/l	5.0	--	1
Carbon disulfide	ND		ug/l	2.0	--	1
Methyl ethyl ketone	ND		ug/l	5.0	--	1
Methyl isobutyl ketone	ND		ug/l	5.0	--	1
2-Hexanone	ND		ug/l	5.0	--	1
Bromochloromethane	ND		ug/l	2.0	--	1
Tetrahydrofuran	ND		ug/l	2.0	--	1
2,2-Dichloropropane	ND		ug/l	2.0	--	1
1,2-Dibromoethane	ND		ug/l	2.0	--	1
1,3-Dichloropropane	ND		ug/l	2.0	--	1
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Bromobenzene	ND		ug/l	2.0	--	1
n-Butylbenzene	ND		ug/l	2.0	--	1
sec-Butylbenzene	ND		ug/l	2.0	--	1
tert-Butylbenzene	ND		ug/l	2.0	--	1
o-Chlorotoluene	ND		ug/l	2.0	--	1
p-Chlorotoluene	ND		ug/l	2.0	--	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.0	--	1
Hexachlorobutadiene	ND		ug/l	0.60	--	1
Isopropylbenzene	ND		ug/l	2.0	--	1
p-Isopropyltoluene	ND		ug/l	2.0	--	1
Naphthalene	ND		ug/l	2.0	--	1
n-Propylbenzene	ND		ug/l	2.0	--	1

Project Name: ADW SEEKONK, MA
Project Number: 171.02038.001

Lab Number: L1901070
Report Date: 01/16/19

SAMPLE RESULTS

Lab ID: L1901070-07
Client ID: MW714-W1-010919
Sample Location: SEEKONK, MA

Date Collected: 01/09/19 09:00
Date Received: 01/09/19
Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
1,2,3-Trichlorobenzene	ND		ug/l	2.0	--	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	--	1
1,3,5-Trimethylbenzene	ND		ug/l	2.0	--	1
1,2,4-Trimethylbenzene	ND		ug/l	2.0	--	1
Diethyl ether	ND		ug/l	2.0	--	1
Diisopropyl Ether	ND		ug/l	2.0	--	1
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0	--	1
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	--	1
1,4-Dioxane	ND		ug/l	250	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	105		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	105		70-130

Project Name: ADW SEEKONK, MA
Project Number: 171.02038.001

Lab Number: L1901070
Report Date: 01/16/19

SAMPLE RESULTS

Lab ID: L1901070-08
Client ID: MW715-W1-010919
Sample Location: SEEKONK, MA

Date Collected: 01/09/19 10:00
Date Received: 01/09/19
Field Prep: Refer to COC

Sample Depth:

Matrix: Water
Analytical Method: 97,8260C
Analytical Date: 01/15/19 07:15
Analyst: MM

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Methylene chloride	ND		ug/l	2.0	--	1
1,1-Dichloroethane	ND		ug/l	1.0	--	1
Chloroform	ND		ug/l	1.0	--	1
Carbon tetrachloride	ND		ug/l	1.0	--	1
1,2-Dichloropropane	ND		ug/l	1.0	--	1
Dibromochloromethane	ND		ug/l	1.0	--	1
1,1,2-Trichloroethane	ND		ug/l	1.0	--	1
Tetrachloroethene	ND		ug/l	1.0	--	1
Chlorobenzene	ND		ug/l	1.0	--	1
Trichlorofluoromethane	ND		ug/l	2.0	--	1
1,2-Dichloroethane	ND		ug/l	1.0	--	1
1,1,1-Trichloroethane	ND		ug/l	1.0	--	1
Bromodichloromethane	ND		ug/l	1.0	--	1
trans-1,3-Dichloropropene	ND		ug/l	0.40	--	1
cis-1,3-Dichloropropene	ND		ug/l	0.40	--	1
1,3-Dichloropropene, Total	ND		ug/l	0.40	--	1
1,1-Dichloropropene	ND		ug/l	2.0	--	1
Bromoform	ND		ug/l	2.0	--	1
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Benzene	ND		ug/l	0.50	--	1
Toluene	ND		ug/l	1.0	--	1
Ethylbenzene	ND		ug/l	1.0	--	1
Chloromethane	ND		ug/l	2.0	--	1
Bromomethane	ND		ug/l	2.0	--	1
Vinyl chloride	ND		ug/l	1.0	--	1
Chloroethane	ND		ug/l	2.0	--	1
1,1-Dichloroethene	ND		ug/l	1.0	--	1
trans-1,2-Dichloroethene	ND		ug/l	1.0	--	1

Project Name: ADW SEEKONK, MA
Project Number: 171.02038.001

Lab Number: L1901070
Report Date: 01/16/19

SAMPLE RESULTS

Lab ID: L1901070-08
Client ID: MW715-W1-010919
Sample Location: SEEKONK, MA

Date Collected: 01/09/19 10:00
Date Received: 01/09/19
Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Trichloroethene	ND		ug/l	1.0	--	1
1,2-Dichlorobenzene	ND		ug/l	1.0	--	1
1,3-Dichlorobenzene	ND		ug/l	1.0	--	1
1,4-Dichlorobenzene	ND		ug/l	1.0	--	1
Methyl tert butyl ether	ND		ug/l	2.0	--	1
p/m-Xylene	ND		ug/l	2.0	--	1
o-Xylene	ND		ug/l	1.0	--	1
Xylenes, Total	ND		ug/l	1.0	--	1
cis-1,2-Dichloroethene	ND		ug/l	1.0	--	1
1,2-Dichloroethene, Total	ND		ug/l	1.0	--	1
Dibromomethane	ND		ug/l	2.0	--	1
1,2,3-Trichloropropane	ND		ug/l	2.0	--	1
Styrene	ND		ug/l	1.0	--	1
Dichlorodifluoromethane	ND		ug/l	2.0	--	1
Acetone	ND		ug/l	5.0	--	1
Carbon disulfide	ND		ug/l	2.0	--	1
Methyl ethyl ketone	ND		ug/l	5.0	--	1
Methyl isobutyl ketone	ND		ug/l	5.0	--	1
2-Hexanone	ND		ug/l	5.0	--	1
Bromochloromethane	ND		ug/l	2.0	--	1
Tetrahydrofuran	ND		ug/l	2.0	--	1
2,2-Dichloropropane	ND		ug/l	2.0	--	1
1,2-Dibromoethane	ND		ug/l	2.0	--	1
1,3-Dichloropropane	ND		ug/l	2.0	--	1
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Bromobenzene	ND		ug/l	2.0	--	1
n-Butylbenzene	ND		ug/l	2.0	--	1
sec-Butylbenzene	ND		ug/l	2.0	--	1
tert-Butylbenzene	ND		ug/l	2.0	--	1
o-Chlorotoluene	ND		ug/l	2.0	--	1
p-Chlorotoluene	ND		ug/l	2.0	--	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.0	--	1
Hexachlorobutadiene	ND		ug/l	0.60	--	1
Isopropylbenzene	ND		ug/l	2.0	--	1
p-Isopropyltoluene	ND		ug/l	2.0	--	1
Naphthalene	ND		ug/l	2.0	--	1
n-Propylbenzene	ND		ug/l	2.0	--	1

Project Name: ADW SEEKONK, MA
Project Number: 171.02038.001

Lab Number: L1901070
Report Date: 01/16/19

SAMPLE RESULTS

Lab ID: L1901070-08
Client ID: MW715-W1-010919
Sample Location: SEEKONK, MA

Date Collected: 01/09/19 10:00
Date Received: 01/09/19
Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
1,2,3-Trichlorobenzene	ND		ug/l	2.0	--	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	--	1
1,3,5-Trimethylbenzene	ND		ug/l	2.0	--	1
1,2,4-Trimethylbenzene	ND		ug/l	2.0	--	1
Diethyl ether	ND		ug/l	2.0	--	1
Diisopropyl Ether	ND		ug/l	2.0	--	1
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0	--	1
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	--	1
1,4-Dioxane	ND		ug/l	250	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	109		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	99		70-130
Dibromofluoromethane	105		70-130

Project Name: ADW SEEKONK, MA

Lab Number: L1901070

Project Number: 171.02038.001

Report Date: 01/16/19

Method Blank Analysis Batch Quality Control

Analytical Method: 97,8260C
 Analytical Date: 01/15/19 05:07
 Analyst: MM

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics - Westborough Lab for sample(s): 03,06-08 Batch: WG1197694-5					
Methylene chloride	ND		ug/l	2.0	--
1,1-Dichloroethane	ND		ug/l	1.0	--
Chloroform	ND		ug/l	1.0	--
Carbon tetrachloride	ND		ug/l	1.0	--
1,2-Dichloropropane	ND		ug/l	1.0	--
Dibromochloromethane	ND		ug/l	1.0	--
1,1,2-Trichloroethane	ND		ug/l	1.0	--
Tetrachloroethene	ND		ug/l	1.0	--
Chlorobenzene	ND		ug/l	1.0	--
Trichlorofluoromethane	ND		ug/l	2.0	--
1,2-Dichloroethane	ND		ug/l	1.0	--
1,1,1-Trichloroethane	ND		ug/l	1.0	--
Bromodichloromethane	ND		ug/l	1.0	--
trans-1,3-Dichloropropene	ND		ug/l	0.40	--
cis-1,3-Dichloropropene	ND		ug/l	0.40	--
1,3-Dichloropropene, Total	ND		ug/l	0.40	--
1,1-Dichloropropene	ND		ug/l	2.0	--
Bromoform	ND		ug/l	2.0	--
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	--
Benzene	ND		ug/l	0.50	--
Toluene	ND		ug/l	1.0	--
Ethylbenzene	ND		ug/l	1.0	--
Chloromethane	ND		ug/l	2.0	--
Bromomethane	ND		ug/l	2.0	--
Vinyl chloride	ND		ug/l	1.0	--
Chloroethane	ND		ug/l	2.0	--
1,1-Dichloroethene	ND		ug/l	1.0	--
trans-1,2-Dichloroethene	ND		ug/l	1.0	--
Trichloroethene	ND		ug/l	1.0	--

Project Name: ADW SEEKONK, MA

Lab Number: L1901070

Project Number: 171.02038.001

Report Date: 01/16/19

Method Blank Analysis Batch Quality Control

Analytical Method: 97,8260C
 Analytical Date: 01/15/19 05:07
 Analyst: MM

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics - Westborough Lab for sample(s): 03,06-08 Batch: WG1197694-5					
1,2-Dichlorobenzene	ND		ug/l	1.0	--
1,3-Dichlorobenzene	ND		ug/l	1.0	--
1,4-Dichlorobenzene	ND		ug/l	1.0	--
Methyl tert butyl ether	ND		ug/l	2.0	--
p/m-Xylene	ND		ug/l	2.0	--
o-Xylene	ND		ug/l	1.0	--
Xylenes, Total	ND		ug/l	1.0	--
cis-1,2-Dichloroethene	ND		ug/l	1.0	--
1,2-Dichloroethene, Total	ND		ug/l	1.0	--
Dibromomethane	ND		ug/l	2.0	--
1,2,3-Trichloropropane	ND		ug/l	2.0	--
Styrene	ND		ug/l	1.0	--
Dichlorodifluoromethane	ND		ug/l	2.0	--
Acetone	ND		ug/l	5.0	--
Carbon disulfide	ND		ug/l	2.0	--
Methyl ethyl ketone	ND		ug/l	5.0	--
Methyl isobutyl ketone	ND		ug/l	5.0	--
2-Hexanone	ND		ug/l	5.0	--
Bromochloromethane	ND		ug/l	2.0	--
Tetrahydrofuran	ND		ug/l	2.0	--
2,2-Dichloropropane	ND		ug/l	2.0	--
1,2-Dibromoethane	ND		ug/l	2.0	--
1,3-Dichloropropane	ND		ug/l	2.0	--
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	--
Bromobenzene	ND		ug/l	2.0	--
n-Butylbenzene	ND		ug/l	2.0	--
sec-Butylbenzene	ND		ug/l	2.0	--
tert-Butylbenzene	ND		ug/l	2.0	--
o-Chlorotoluene	ND		ug/l	2.0	--

Project Name: ADW SEEKONK, MA

Lab Number: L1901070

Project Number: 171.02038.001

Report Date: 01/16/19

Method Blank Analysis Batch Quality Control

Analytical Method: 97,8260C
 Analytical Date: 01/15/19 05:07
 Analyst: MM

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics - Westborough Lab for sample(s): 03,06-08 Batch: WG1197694-5					
p-Chlorotoluene	ND		ug/l	2.0	--
1,2-Dibromo-3-chloropropane	ND		ug/l	2.0	--
Hexachlorobutadiene	ND		ug/l	0.60	--
Isopropylbenzene	ND		ug/l	2.0	--
p-Isopropyltoluene	ND		ug/l	2.0	--
Naphthalene	ND		ug/l	2.0	--
n-Propylbenzene	ND		ug/l	2.0	--
1,2,3-Trichlorobenzene	ND		ug/l	2.0	--
1,2,4-Trichlorobenzene	ND		ug/l	2.0	--
1,3,5-Trimethylbenzene	ND		ug/l	2.0	--
1,2,4-Trimethylbenzene	ND		ug/l	2.0	--
Diethyl ether	ND		ug/l	2.0	--
Diisopropyl Ether	ND		ug/l	2.0	--
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0	--
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	--
1,4-Dioxane	ND		ug/l	250	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	99		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	104		70-130
Dibromofluoromethane	101		70-130

Lab Control Sample Analysis **Batch Quality Control**

Project Name: ADW SEEKONK, MA

Lab Number: L1901070

Project Number: 171.02038.001

Report Date: 01/16/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 03,06-08 Batch: WG1197694-3 WG1197694-4								
Methylene chloride	95		97		70-130	2		20
1,1-Dichloroethane	100		100		70-130	0		20
Chloroform	98		95		70-130	3		20
Carbon tetrachloride	94		95		70-130	1		20
1,2-Dichloropropane	94		94		70-130	0		20
Dibromochloromethane	98		96		70-130	2		20
1,1,2-Trichloroethane	100		100		70-130	0		20
Tetrachloroethene	99		94		70-130	5		20
Chlorobenzene	100		98		70-130	2		20
Trichlorofluoromethane	94		94		70-130	0		20
1,2-Dichloroethane	100		98		70-130	2		20
1,1,1-Trichloroethane	99		98		70-130	1		20
Bromodichloromethane	97		96		70-130	1		20
trans-1,3-Dichloropropene	99		97		70-130	2		20
cis-1,3-Dichloropropene	100		98		70-130	2		20
1,1-Dichloropropene	99		98		70-130	1		20
Bromoform	94		96		70-130	2		20
1,1,2,2-Tetrachloroethane	99		100		70-130	1		20
Benzene	96		94		70-130	2		20
Toluene	97		96		70-130	1		20
Ethylbenzene	98		99		70-130	1		20
Chloromethane	96		98		70-130	2		20
Bromomethane	96		95		70-130	1		20

Lab Control Sample Analysis **Batch Quality Control**

Project Name: ADW SEEKONK, MA

Project Number: 171.02038.001

Lab Number: L1901070

Report Date: 01/16/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 03,06-08 Batch: WG1197694-3 WG1197694-4								
Vinyl chloride	96		100		70-130	4		20
Chloroethane	100		100		70-130	0		20
1,1-Dichloroethene	98		96		70-130	2		20
trans-1,2-Dichloroethene	96		96		70-130	0		20
Trichloroethene	99		95		70-130	4		20
1,2-Dichlorobenzene	99		100		70-130	1		20
1,3-Dichlorobenzene	100		100		70-130	0		20
1,4-Dichlorobenzene	97		96		70-130	1		20
Methyl tert butyl ether	98		100		70-130	2		20
p/m-Xylene	100		100		70-130	0		20
o-Xylene	95		100		70-130	5		20
cis-1,2-Dichloroethene	100		97		70-130	3		20
Dibromomethane	99		100		70-130	1		20
1,2,3-Trichloropropane	99		97		70-130	2		20
Styrene	95		90		70-130	5		20
Dichlorodifluoromethane	93		94		70-130	1		20
Acetone	100		100		70-130	0		20
Carbon disulfide	100		100		70-130	0		20
Methyl ethyl ketone	94		100		70-130	6		20
Methyl isobutyl ketone	110		98		70-130	12		20
2-Hexanone	96		97		70-130	1		20
Bromochloromethane	110		110		70-130	0		20
Tetrahydrofuran	91		120		70-130	27	Q	20

Lab Control Sample Analysis **Batch Quality Control**

Project Name: ADW SEEKONK, MA

Lab Number: L1901070

Project Number: 171.02038.001

Report Date: 01/16/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 03,06-08 Batch: WG1197694-3 WG1197694-4								
2,2-Dichloropropane	94		93		70-130	1		20
1,2-Dibromoethane	100		100		70-130	0		20
1,3-Dichloropropane	100		99		70-130	1		20
1,1,1,2-Tetrachloroethane	98		97		70-130	1		20
Bromobenzene	99		97		70-130	2		20
n-Butylbenzene	94		98		70-130	4		20
sec-Butylbenzene	96		100		70-130	4		20
tert-Butylbenzene	97		99		70-130	2		20
o-Chlorotoluene	98		100		70-130	2		20
p-Chlorotoluene	99		100		70-130	1		20
1,2-Dibromo-3-chloropropane	97		110		70-130	13		20
Hexachlorobutadiene	98		98		70-130	0		20
Isopropylbenzene	97		100		70-130	3		20
p-Isopropyltoluene	97		99		70-130	2		20
Naphthalene	96		98		70-130	2		20
n-Propylbenzene	99		100		70-130	1		20
1,2,3-Trichlorobenzene	95		93		70-130	2		20
1,2,4-Trichlorobenzene	95		99		70-130	4		20
1,3,5-Trimethylbenzene	97		100		70-130	3		20
1,2,4-Trimethylbenzene	98		100		70-130	2		20
Diethyl ether	97		98		70-130	1		20
Diisopropyl Ether	100		100		70-130	0		20
Ethyl-Tert-Butyl-Ether	100		100		70-130	0		20

Lab Control Sample Analysis**Batch Quality Control****Project Name:** ADW SEEKONK, MA**Lab Number:** L1901070**Project Number:** 171.02038.001**Report Date:** 01/16/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 03,06-08 Batch: WG1197694-3 WG1197694-4								
Tertiary-Amyl Methyl Ether	96		96		70-130	0		20
1,4-Dioxane	100		94		70-130	6		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	100		99		70-130
Toluene-d8	101		100		70-130
4-Bromofluorobenzene	103		103		70-130
Dibromofluoromethane	99		99		70-130

PETROLEUM HYDROCARBONS

Project Name: ADW SEEKONK, MA**Lab Number:** L1901070**Project Number:** 171.02038.001**Report Date:** 01/16/19**SAMPLE RESULTS**

Lab ID: L1901070-03

Date Collected: 01/08/19 10:10

Client ID: MW706-W1-010819

Date Received: 01/09/19

Sample Location: SEEKONK, MA

Field Prep: Refer to COC

Sample Depth:

Matrix: Water

Analytical Method: 131, VPH-18-2.1

Analytical Date: 01/11/19 19:30

Analyst: MZ

Trap: EST, Carboxen 1000&1001

Analytical Column: Restek, RTX-502.2,
105m, 0.53ID, 3um**Quality Control Information**

Condition of sample received:

Satisfactory

Aqueous Preservative:

Laboratory Provided Preserved
Container

Sample Temperature upon receipt:

Received on Ice

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Petroleum Hydrocarbons - Westborough Lab						
C5-C8 Aliphatics	ND		ug/l	50.0	--	1
C9-C12 Aliphatics	ND		ug/l	50.0	--	1
C9-C10 Aromatics	ND		ug/l	50.0	--	1
C5-C8 Aliphatics, Adjusted	ND		ug/l	50.0	--	1
C9-C12 Aliphatics, Adjusted	ND		ug/l	50.0	--	1
Benzene	ND		ug/l	2.00	--	1
Toluene	ND		ug/l	2.00	--	1
Ethylbenzene	ND		ug/l	2.00	--	1
p/m-Xylene	ND		ug/l	2.00	--	1
o-Xylene	ND		ug/l	2.00	--	1
Methyl tert butyl ether	ND		ug/l	3.00	--	1
Naphthalene	ND		ug/l	4.00	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,5-Dibromotoluene-PID	104		70-130
2,5-Dibromotoluene-FID	105		70-130

Project Name: ADW SEEKONK, MA
Project Number: 171.02038.001

Lab Number: L1901070
Report Date: 01/16/19

SAMPLE RESULTS

Lab ID: L1901070-03
Client ID: MW706-W1-010819
Sample Location: SEEKONK, MA

Date Collected: 01/08/19 10:10
Date Received: 01/09/19
Field Prep: Refer to COC

Sample Depth:
Matrix: Water
Analytical Method: 98,EPH-04-1.1
Analytical Date: 01/16/19 14:01
Analyst: MEO

Extraction Method: EPA 3510C
Extraction Date: 01/12/19 12:59
Cleanup Method1: EPH-04-1
Cleanup Date1: 01/15/19

Quality Control Information

Condition of sample received:	Satisfactory
Aqueous Preservative:	Laboratory Provided Preserved Container
Sample Temperature upon receipt:	Received on Ice
Sample Extraction method:	Extracted Per the Method

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Extractable Petroleum Hydrocarbons - Westborough Lab						
C9-C18 Aliphatics	ND		ug/l	100	--	1
C19-C36 Aliphatics	ND		ug/l	100	--	1
C11-C22 Aromatics	ND		ug/l	100	--	1
C11-C22 Aromatics, Adjusted	ND		ug/l	100	--	1
Naphthalene	ND		ug/l	10.0	--	1
2-Methylnaphthalene	ND		ug/l	10.0	--	1
Acenaphthene	ND		ug/l	10.0	--	1
Phenanthrene	ND		ug/l	10.0	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Chloro-Octadecane	69		40-140
o-Terphenyl	87		40-140
2-Fluorobiphenyl	90		40-140
2-Bromonaphthalene	81		40-140

Project Name: ADW SEEKONK, MA**Lab Number:** L1901070**Project Number:** 171.02038.001**Report Date:** 01/16/19**SAMPLE RESULTS**

Lab ID: L1901070-06

Date Collected: 01/09/19 07:50

Client ID: MW713-W1-010919

Date Received: 01/09/19

Sample Location: SEEKONK, MA

Field Prep: Refer to COC

Sample Depth:

Matrix: Water

Analytical Method: 131, VPH-18-2.1

Analytical Date: 01/11/19 20:10

Analyst: MZ

Trap: EST, Carboxen 1000&1001

Analytical Column: Restek, RTX-502.2,
105m, 0.53ID, 3um**Quality Control Information**

Condition of sample received:

Satisfactory

Aqueous Preservative:

Laboratory Provided Preserved
Container

Sample Temperature upon receipt:

Received on Ice

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Petroleum Hydrocarbons - Westborough Lab						
C5-C8 Aliphatics	ND		ug/l	50.0	--	1
C9-C12 Aliphatics	ND		ug/l	50.0	--	1
C9-C10 Aromatics	ND		ug/l	50.0	--	1
C5-C8 Aliphatics, Adjusted	ND		ug/l	50.0	--	1
C9-C12 Aliphatics, Adjusted	ND		ug/l	50.0	--	1
Benzene	ND		ug/l	2.00	--	1
Toluene	ND		ug/l	2.00	--	1
Ethylbenzene	ND		ug/l	2.00	--	1
p/m-Xylene	ND		ug/l	2.00	--	1
o-Xylene	ND		ug/l	2.00	--	1
Methyl tert butyl ether	ND		ug/l	3.00	--	1
Naphthalene	ND		ug/l	4.00	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,5-Dibromotoluene-PID	103		70-130
2,5-Dibromotoluene-FID	104		70-130

Project Name: ADW SEEKONK, MA**Lab Number:** L1901070**Project Number:** 171.02038.001**Report Date:** 01/16/19**SAMPLE RESULTS**

Lab ID: L1901070-06

Client ID: MW713-W1-010919

Sample Location: SEEKONK, MA

Date Collected: 01/09/19 07:50

Date Received: 01/09/19

Field Prep: Refer to COC

Sample Depth:

Matrix: Water

Analytical Method: 98,EPH-04-1.1

Analytical Date: 01/16/19 13:16

Analyst: MEO

Extraction Method: EPA 3510C

Extraction Date: 01/12/19 12:59

Cleanup Method1: EPH-04-1

Cleanup Date1: 01/15/19

Quality Control Information

Condition of sample received:

Satisfactory

Aqueous Preservative:

Laboratory Provided Preserved
Container

Sample Temperature upon receipt:

Received on Ice

Sample Extraction method:

Extracted Per the Method

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

Extractable Petroleum Hydrocarbons - Westborough Lab

C9-C18 Aliphatics	ND		ug/l	100	--	1
C19-C36 Aliphatics	ND		ug/l	100	--	1
C11-C22 Aromatics	ND		ug/l	100	--	1
C11-C22 Aromatics, Adjusted	ND		ug/l	100	--	1
Naphthalene	ND		ug/l	10.0	--	1
2-Methylnaphthalene	ND		ug/l	10.0	--	1
Acenaphthene	ND		ug/l	10.0	--	1
Phenanthrene	ND		ug/l	10.0	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Chloro-Octadecane	75		40-140
o-Terphenyl	94		40-140
2-Fluorobiphenyl	97		40-140
2-Bromonaphthalene	89		40-140

Project Name: ADW SEEKONK, MA**Lab Number:** L1901070**Project Number:** 171.02038.001**Report Date:** 01/16/19**SAMPLE RESULTS**

Lab ID: L1901070-07

Date Collected: 01/09/19 09:00

Client ID: MW714-W1-010919

Date Received: 01/09/19

Sample Location: SEEKONK, MA

Field Prep: Refer to COC

Sample Depth:

Matrix: Water

Analytical Method: 131, VPH-18-2.1

Analytical Date: 01/11/19 20:51

Analyst: MZ

Trap: EST, Carboxen B/Carboxen 1000&1001

Analytical Column: Restek, RTX-502.2,
105m, 0.53ID, 3um**Quality Control Information**

Condition of sample received:

Satisfactory

Aqueous Preservative:

Laboratory Provided Preserved
Container

Sample Temperature upon receipt:

Received on Ice

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Petroleum Hydrocarbons - Westborough Lab						
C5-C8 Aliphatics	ND		ug/l	50.0	--	1
C9-C12 Aliphatics	ND		ug/l	50.0	--	1
C9-C10 Aromatics	ND		ug/l	50.0	--	1
C5-C8 Aliphatics, Adjusted	ND		ug/l	50.0	--	1
C9-C12 Aliphatics, Adjusted	ND		ug/l	50.0	--	1
Benzene	ND		ug/l	2.00	--	1
Toluene	ND		ug/l	2.00	--	1
Ethylbenzene	ND		ug/l	2.00	--	1
p/m-Xylene	ND		ug/l	2.00	--	1
o-Xylene	ND		ug/l	2.00	--	1
Methyl tert butyl ether	ND		ug/l	3.00	--	1
Naphthalene	ND		ug/l	4.00	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,5-Dibromotoluene-PID	102		70-130
2,5-Dibromotoluene-FID	104		70-130

Project Name: ADW SEEKONK, MA**Lab Number:** L1901070**Project Number:** 171.02038.001**Report Date:** 01/16/19**SAMPLE RESULTS**

Lab ID: L1901070-07
 Client ID: MW714-W1-010919
 Sample Location: SEEKONK, MA

Date Collected: 01/09/19 09:00
 Date Received: 01/09/19
 Field Prep: Refer to COC

Sample Depth:
 Matrix: Water
 Analytical Method: 98,EPH-04-1.1
 Analytical Date: 01/16/19 12:30
 Analyst: MEO

Extraction Method: EPA 3510C
 Extraction Date: 01/12/19 12:59
 Cleanup Method1: EPH-04-1
 Cleanup Date1: 01/15/19

Quality Control Information

Condition of sample received:	Satisfactory
Aqueous Preservative:	Laboratory Provided Preserved Container
Sample Temperature upon receipt:	Received on Ice
Sample Extraction method:	Extracted Per the Method

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Extractable Petroleum Hydrocarbons - Westborough Lab						
C9-C18 Aliphatics	ND		ug/l	100	--	1
C19-C36 Aliphatics	ND		ug/l	100	--	1
C11-C22 Aromatics	ND		ug/l	100	--	1
C11-C22 Aromatics, Adjusted	ND		ug/l	100	--	1
Naphthalene	ND		ug/l	10.0	--	1
2-Methylnaphthalene	ND		ug/l	10.0	--	1
Acenaphthene	ND		ug/l	10.0	--	1
Phenanthrene	ND		ug/l	10.0	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Chloro-Octadecane	76		40-140
o-Terphenyl	97		40-140
2-Fluorobiphenyl	104		40-140
2-Bromonaphthalene	97		40-140

Project Name: ADW SEEKONK, MA**Lab Number:** L1901070**Project Number:** 171.02038.001**Report Date:** 01/16/19**SAMPLE RESULTS**

Lab ID: L1901070-08

Date Collected: 01/09/19 10:00

Client ID: MW715-W1-010919

Date Received: 01/09/19

Sample Location: SEEKONK, MA

Field Prep: Refer to COC

Sample Depth:

Matrix: Water

Analytical Method: 131, VPH-18-2.1

Analytical Date: 01/11/19 21:31

Analyst: MZ

Trap: EST, Carboxen B/Carboxen 1000&1001

Analytical Column: Restek, RTX-502.2,
105m, 0.53ID, 3um**Quality Control Information**

Condition of sample received:

Satisfactory

Aqueous Preservative:

Laboratory Provided Preserved
Container

Sample Temperature upon receipt:

Received on Ice

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Petroleum Hydrocarbons - Westborough Lab						
C5-C8 Aliphatics	ND		ug/l	50.0	--	1
C9-C12 Aliphatics	ND		ug/l	50.0	--	1
C9-C10 Aromatics	ND		ug/l	50.0	--	1
C5-C8 Aliphatics, Adjusted	ND		ug/l	50.0	--	1
C9-C12 Aliphatics, Adjusted	ND		ug/l	50.0	--	1
Benzene	ND		ug/l	2.00	--	1
Toluene	ND		ug/l	2.00	--	1
Ethylbenzene	ND		ug/l	2.00	--	1
p/m-Xylene	ND		ug/l	2.00	--	1
o-Xylene	ND		ug/l	2.00	--	1
Methyl tert butyl ether	ND		ug/l	3.00	--	1
Naphthalene	ND		ug/l	4.00	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,5-Dibromotoluene-PID	101		70-130
2,5-Dibromotoluene-FID	102		70-130

Project Name: ADW SEEKONK, MA**Lab Number:** L1901070**Project Number:** 171.02038.001**Report Date:** 01/16/19**SAMPLE RESULTS**

Lab ID: L1901070-08

Client ID: MW715-W1-010919

Sample Location: SEEKONK, MA

Date Collected: 01/09/19 10:00

Date Received: 01/09/19

Field Prep: Refer to COC

Sample Depth:

Matrix: Water

Analytical Method: 98,EPH-04-1.1

Analytical Date: 01/16/19 11:45

Analyst: MEO

Extraction Method: EPA 3510C

Extraction Date: 01/12/19 12:59

Cleanup Method1: EPH-04-1

Cleanup Date1: 01/15/19

Quality Control Information

Condition of sample received:

Satisfactory

Aqueous Preservative:

Laboratory Provided Preserved
Container

Sample Temperature upon receipt:

Received on Ice

Sample Extraction method:

Extracted Per the Method

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Extractable Petroleum Hydrocarbons - Westborough Lab						
C9-C18 Aliphatics	ND		ug/l	100	--	1
C19-C36 Aliphatics	ND		ug/l	100	--	1
C11-C22 Aromatics	ND		ug/l	100	--	1
C11-C22 Aromatics, Adjusted	ND		ug/l	100	--	1
Naphthalene	ND		ug/l	10.0	--	1
2-Methylnaphthalene	ND		ug/l	10.0	--	1
Acenaphthene	ND		ug/l	10.0	--	1
Phenanthrene	ND		ug/l	10.0	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Chloro-Octadecane	69		40-140
o-Terphenyl	90		40-140
2-Fluorobiphenyl	100		40-140
2-Bromonaphthalene	96		40-140

Project Name: ADW SEEKONK, MA
Project Number: 171.02038.001

Lab Number: L1901070
Report Date: 01/16/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 98,EPH-04-1.1
Analytical Date: 01/13/19 11:16
Analyst: DG

Extraction Method: EPA 3510C
Extraction Date: 01/12/19 07:29
Cleanup Method: EPH-04-1
Cleanup Date: 01/12/19

Parameter	Result	Qualifier	Units	RL	MDL
Extractable Petroleum Hydrocarbons - Westborough Lab for sample(s): 03,06-08 Batch: WG1196993-1					
C9-C18 Aliphatics	ND		ug/l	100	--
C19-C36 Aliphatics	ND		ug/l	100	--
C11-C22 Aromatics	ND		ug/l	100	--
C11-C22 Aromatics, Adjusted	ND		ug/l	100	--
Naphthalene	ND		ug/l	10.0	--
2-Methylnaphthalene	ND		ug/l	10.0	--
Acenaphthene	ND		ug/l	10.0	--
Phenanthrene	ND		ug/l	10.0	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
Chloro-Octadecane	93		40-140
o-Terphenyl	68		40-140
2-Fluorobiphenyl	67		40-140
2-Bromonaphthalene	62		40-140

Project Name: ADW SEEKONK, MA

Lab Number: L1901070

Project Number: 171.02038.001

Report Date: 01/16/19

Method Blank Analysis Batch Quality Control

Analytical Method: 131, VPH-18-2.1

Analytical Date: 01/11/19 15:29

Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Petroleum Hydrocarbons - Westborough Lab for sample(s): 03,06-08 Batch: WG1197034-4					
C5-C8 Aliphatics	ND		ug/l	50.0	--
C9-C12 Aliphatics	ND		ug/l	50.0	--
C9-C10 Aromatics	ND		ug/l	50.0	--
C5-C8 Aliphatics, Adjusted	ND		ug/l	50.0	--
C9-C12 Aliphatics, Adjusted	ND		ug/l	50.0	--
Benzene	ND		ug/l	2.00	--
Toluene	ND		ug/l	2.00	--
Ethylbenzene	ND		ug/l	2.00	--
p/m-Xylene	ND		ug/l	2.00	--
o-Xylene	ND		ug/l	2.00	--
Methyl tert butyl ether	ND		ug/l	3.00	--
Naphthalene	ND		ug/l	4.00	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2,5-Dibromotoluene-PID	104		70-130
2,5-Dibromotoluene-FID	106		70-130

Lab Control Sample Analysis **Batch Quality Control**

Project Name: ADW SEEKONK, MA

Lab Number: L1901070

Project Number: 171.02038.001

Report Date: 01/16/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Extractable Petroleum Hydrocarbons - Westborough Lab Associated sample(s): 03,06-08 Batch: WG1196993-2 WG1196993-3								
C9-C18 Aliphatics	85		112		40-140	27	Q	25
C19-C36 Aliphatics	90		95		40-140	5		25
C11-C22 Aromatics	86		70		40-140	21		25
Naphthalene	64		58		40-140	10		25
2-Methylnaphthalene	65		58		40-140	11		25
Acenaphthylene	74		63		40-140	16		25
Acenaphthene	77		65		40-140	17		25
Fluorene	80		66		40-140	19		25
Phenanthrene	84		68		40-140	21		25
Anthracene	84		69		40-140	20		25
Fluoranthene	85		69		40-140	21		25
Pyrene	88		72		40-140	20		25
Benzo(a)anthracene	85		69		40-140	21		25
Chrysene	86		70		40-140	21		25
Benzo(b)fluoranthene	87		71		40-140	20		25
Benzo(k)fluoranthene	86		69		40-140	22		25
Benzo(a)pyrene	82		66		40-140	22		25
Indeno(1,2,3-cd)Pyrene	80		64		40-140	22		25
Dibenzo(a,h)anthracene	82		66		40-140	22		25
Benzo(ghi)perylene	76		60		40-140	24		25
Nonane (C9)	60		72		30-140	18		25
Decane (C10)	67		80		40-140	18		25
Dodecane (C12)	72		86		40-140	18		25

Lab Control Sample Analysis

Batch Quality Control

Project Name: ADW SEEKONK, MA

Lab Number: L1901070

Project Number: 171.02038.001

Report Date: 01/16/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Extractable Petroleum Hydrocarbons - Westborough Lab Associated sample(s): 03,06-08 Batch: WG1196993-2 WG1196993-3								
Tetradecane (C14)	81		91		40-140	12		25
Hexadecane (C16)	89		97		40-140	9		25
Octadecane (C18)	93		102		40-140	9		25
Nonadecane (C19)	94		103		40-140	9		25
Eicosane (C20)	96		104		40-140	8		25
Docosane (C22)	96		105		40-140	9		25
Tetracosane (C24)	96		104		40-140	8		25
Hexacosane (C26)	97		105		40-140	8		25
Octacosane (C28)	96		105		40-140	9		25
triacontane (C30)	97		105		40-140	8		25
Hexatriacontane (C36)	104		112		40-140	7		25

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
Chloro-Octadecane	89		98		40-140
o-Terphenyl	84		68		40-140
2-Fluorobiphenyl	81		67		40-140
2-Bromonaphthalene	76		62		40-140
% Naphthalene Breakthrough	0		0		
% 2-Methylnaphthalene Breakthrough	0		0		

Lab Control Sample Analysis

Batch Quality Control

Project Name: ADW SEEKONK, MA

Lab Number: L1901070

Project Number: 171.02038.001

Report Date: 01/16/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Petroleum Hydrocarbons - Westborough Lab Associated sample(s): 03,06-08 Batch: WG1197034-2 WG1197034-3								
C5-C8 Aliphatics	105		105		70-130	0		25
C9-C12 Aliphatics	105		105		70-130	0		25
C9-C10 Aromatics	103		103		70-130	0		25
Benzene	103		103		70-130	0		25
Toluene	91		91		70-130	0		25
Ethylbenzene	105		106		70-130	1		25
p/m-Xylene	105		105		70-130	0		25
o-Xylene	104		104		70-130	0		25
Methyl tert butyl ether	103		103		70-130	0		25
Naphthalene	107		107		70-130	0		25
1,2,4-Trimethylbenzene	103		103		70-130	0		25
Pentane	101		102		70-130	1		25
2-Methylpentane	104		106		70-130	2		25
2,2,4-Trimethylpentane	108		108		70-130	0		25
n-Nonane	102		102		30-130	0		25
n-Decane	109		109		70-130	0		25
n-Butylcyclohexane	103		104		70-130	1		25

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2,5-Dibromotoluene-PID	109		108		70-130
2,5-Dibromotoluene-FID	110		108		70-130

PCBS

Project Name: ADW SEEKONK, MA
Project Number: 171.02038.001

Lab Number: L1901070
Report Date: 01/16/19

SAMPLE RESULTS

Lab ID: L1901070-06
Client ID: MW713-W1-010919
Sample Location: SEEKONK, MA

Date Collected: 01/09/19 07:50
Date Received: 01/09/19
Field Prep: Refer to COC

Sample Depth:

Matrix: Water
Analytical Method: 97,8082A
Analytical Date: 01/14/19 16:20
Analyst: HT

Extraction Method: EPA 3510C
Extraction Date: 01/12/19 18:07
Cleanup Method: EPA 3665A
Cleanup Date: 01/13/19
Cleanup Method: EPA 3660B
Cleanup Date: 01/13/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
MCP Polychlorinated Biphenyls - Westborough Lab							
Aroclor 1016	ND		ug/l	0.250	--	1	A
Aroclor 1221	ND		ug/l	0.250	--	1	A
Aroclor 1232	ND		ug/l	0.250	--	1	A
Aroclor 1242	ND		ug/l	0.250	--	1	A
Aroclor 1248	ND		ug/l	0.250	--	1	A
Aroclor 1254	ND		ug/l	0.250	--	1	A
Aroclor 1260	ND		ug/l	0.250	--	1	A
Aroclor 1262	ND		ug/l	0.250	--	1	A
Aroclor 1268	ND		ug/l	0.250	--	1	A
PCBs, Total	ND		ug/l	0.250	--	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	71		30-150	A
Decachlorobiphenyl	61		30-150	A
2,4,5,6-Tetrachloro-m-xylene	73		30-150	B
Decachlorobiphenyl	76		30-150	B

Project Name: ADW SEEKONK, MA
Project Number: 171.02038.001

Lab Number: L1901070
Report Date: 01/16/19

SAMPLE RESULTS

Lab ID: L1901070-07
Client ID: MW714-W1-010919
Sample Location: SEEKONK, MA

Date Collected: 01/09/19 09:00
Date Received: 01/09/19
Field Prep: Refer to COC

Sample Depth:

Matrix: Water
Analytical Method: 97,8082A
Analytical Date: 01/14/19 16:32
Analyst: HT

Extraction Method: EPA 3510C
Extraction Date: 01/12/19 18:07
Cleanup Method: EPA 3665A
Cleanup Date: 01/13/19
Cleanup Method: EPA 3660B
Cleanup Date: 01/13/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
MCP Polychlorinated Biphenyls - Westborough Lab							
Aroclor 1016	ND		ug/l	0.250	--	1	A
Aroclor 1221	ND		ug/l	0.250	--	1	A
Aroclor 1232	ND		ug/l	0.250	--	1	A
Aroclor 1242	ND		ug/l	0.250	--	1	A
Aroclor 1248	ND		ug/l	0.250	--	1	A
Aroclor 1254	ND		ug/l	0.250	--	1	A
Aroclor 1260	ND		ug/l	0.250	--	1	A
Aroclor 1262	ND		ug/l	0.250	--	1	A
Aroclor 1268	ND		ug/l	0.250	--	1	A
PCBs, Total	ND		ug/l	0.250	--	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	68		30-150	A
Decachlorobiphenyl	49		30-150	A
2,4,5,6-Tetrachloro-m-xylene	71		30-150	B
Decachlorobiphenyl	61		30-150	B

Project Name: ADW SEEKONK, MA
Project Number: 171.02038.001

Lab Number: L1901070
Report Date: 01/16/19

SAMPLE RESULTS

Lab ID: L1901070-08
Client ID: MW715-W1-010919
Sample Location: SEEKONK, MA

Date Collected: 01/09/19 10:00
Date Received: 01/09/19
Field Prep: Refer to COC

Sample Depth:

Matrix: Water
Analytical Method: 97,8082A
Analytical Date: 01/14/19 17:35
Analyst: HT

Extraction Method: EPA 3510C
Extraction Date: 01/12/19 18:07
Cleanup Method: EPA 3665A
Cleanup Date: 01/13/19
Cleanup Method: EPA 3660B
Cleanup Date: 01/13/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
MCP Polychlorinated Biphenyls - Westborough Lab							
Aroclor 1016	ND		ug/l	0.250	--	1	A
Aroclor 1221	ND		ug/l	0.250	--	1	A
Aroclor 1232	ND		ug/l	0.250	--	1	A
Aroclor 1242	ND		ug/l	0.250	--	1	A
Aroclor 1248	ND		ug/l	0.250	--	1	A
Aroclor 1254	ND		ug/l	0.250	--	1	A
Aroclor 1260	ND		ug/l	0.250	--	1	A
Aroclor 1262	ND		ug/l	0.250	--	1	A
Aroclor 1268	ND		ug/l	0.250	--	1	A
PCBs, Total	ND		ug/l	0.250	--	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	70		30-150	A
Decachlorobiphenyl	56		30-150	A
2,4,5,6-Tetrachloro-m-xylene	72		30-150	B
Decachlorobiphenyl	65		30-150	B

Project Name: ADW SEEKONK, MA

Lab Number: L1901070

Project Number: 171.02038.001

Report Date: 01/16/19

Method Blank Analysis Batch Quality Control

Analytical Method: 97,8082A
 Analytical Date: 01/14/19 16:45
 Analyst: HT

Extraction Method: EPA 3510C
 Extraction Date: 01/12/19 18:07
 Cleanup Method: EPA 3665A
 Cleanup Date: 01/13/19
 Cleanup Method: EPA 3660B
 Cleanup Date: 01/13/19

Parameter	Result	Qualifier	Units	RL	MDL	Column
MCP Polychlorinated Biphenyls - Westborough Lab for sample(s): 06-08 Batch: WG1197117-1						
Aroclor 1016	ND		ug/l	0.250	--	A
Aroclor 1221	ND		ug/l	0.250	--	A
Aroclor 1232	ND		ug/l	0.250	--	A
Aroclor 1242	ND		ug/l	0.250	--	A
Aroclor 1248	ND		ug/l	0.250	--	A
Aroclor 1254	ND		ug/l	0.250	--	A
Aroclor 1260	ND		ug/l	0.250	--	A
Aroclor 1262	ND		ug/l	0.250	--	A
Aroclor 1268	ND		ug/l	0.250	--	A
PCBs, Total	ND		ug/l	0.250	--	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	59		30-150	A
Decachlorobiphenyl	65		30-150	A
2,4,5,6-Tetrachloro-m-xylene	62		30-150	B
Decachlorobiphenyl	80		30-150	B

Lab Control Sample Analysis Batch Quality Control

Project Name: ADW SEEKONK, MA

Lab Number: L1901070

Project Number: 171.02038.001

Report Date: 01/16/19

Parameter	LCS %Recovery	Qual	LCS %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
MCP Polychlorinated Biphenyls - Westborough Lab Associated sample(s): 06-08 Batch: WG1197117-2 WG1197117-3									
Aroclor 1016	88		88		40-140	0		20	A
Aroclor 1260	75		74		40-140	1		20	A

Surrogate	LCS %Recovery	Qual	LCS %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	67		77		30-150	A
Decachlorobiphenyl	68		60		30-150	A
2,4,5,6-Tetrachloro-m-xylene	69		81		30-150	B
Decachlorobiphenyl	87		74		30-150	B

METALS

Project Name: ADW SEEKONK, MA**Lab Number:** L1901070**Project Number:** 171.02038.001**Report Date:** 01/16/19**SAMPLE RESULTS**

Lab ID: L1901070-01

Date Collected: 01/08/19 07:40

Client ID: MW704-W1-010819

Date Received: 01/09/19

Sample Location: SEEKONK, MA

Field Prep: Refer to COC

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
MCP Dissolved Metals - Mansfield Lab											
Antimony, Dissolved	0.0083		mg/l	0.0040	--	1	01/11/19 09:25	01/11/19 16:48	EPA 3005A	97,6020B	AM
Arsenic, Dissolved	ND		mg/l	0.005	--	1	01/11/19 09:25	01/11/19 14:59	EPA 3005A	97,6010D	AB
Beryllium, Dissolved	ND		mg/l	0.0005	--	1	01/11/19 09:25	01/11/19 16:48	EPA 3005A	97,6020B	AM
Cadmium, Dissolved	ND		mg/l	0.004	--	1	01/11/19 09:25	01/11/19 14:59	EPA 3005A	97,6010D	AB
Chromium, Dissolved	ND		mg/l	0.010	--	1	01/11/19 09:25	01/11/19 14:59	EPA 3005A	97,6010D	AB
Copper, Dissolved	0.014		mg/l	0.010	--	1	01/11/19 09:25	01/11/19 14:59	EPA 3005A	97,6010D	AB
Lead, Dissolved	ND		mg/l	0.010	--	1	01/11/19 09:25	01/11/19 14:59	EPA 3005A	97,6010D	AB
Mercury, Dissolved	ND		mg/l	0.0002	--	1	01/11/19 11:00	01/11/19 21:01	EPA 7470A	97,7470A	EA
Nickel, Dissolved	ND		mg/l	0.025	--	1	01/11/19 09:25	01/11/19 14:59	EPA 3005A	97,6010D	AB
Selenium, Dissolved	ND		mg/l	0.010	--	1	01/11/19 09:25	01/11/19 14:59	EPA 3005A	97,6010D	AB
Silver, Dissolved	ND		mg/l	0.007	--	1	01/11/19 09:25	01/11/19 14:59	EPA 3005A	97,6010D	AB
Thallium, Dissolved	ND		mg/l	0.0005	--	1	01/11/19 09:25	01/11/19 16:48	EPA 3005A	97,6020B	AM
Zinc, Dissolved	0.086		mg/l	0.050	--	1	01/11/19 09:25	01/11/19 14:59	EPA 3005A	97,6010D	AB



Project Name: ADW SEEKONK, MA**Lab Number:** L1901070**Project Number:** 171.02038.001**Report Date:** 01/16/19**SAMPLE RESULTS**

Lab ID: L1901070-02

Date Collected: 01/08/19 08:55

Client ID: MW705-W1-010819

Date Received: 01/09/19

Sample Location: SEEKONK, MA

Field Prep: Refer to COC

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
MCP Dissolved Metals - Mansfield Lab											
Antimony, Dissolved	ND		mg/l	0.0040	--	1	01/11/19 09:25	01/11/19 16:52	EPA 3005A	97,6020B	AM
Arsenic, Dissolved	ND		mg/l	0.005	--	1	01/11/19 09:25	01/11/19 15:04	EPA 3005A	97,6010D	AB
Beryllium, Dissolved	ND		mg/l	0.0005	--	1	01/11/19 09:25	01/11/19 16:52	EPA 3005A	97,6020B	AM
Cadmium, Dissolved	ND		mg/l	0.004	--	1	01/11/19 09:25	01/11/19 15:04	EPA 3005A	97,6010D	AB
Chromium, Dissolved	ND		mg/l	0.010	--	1	01/11/19 09:25	01/11/19 15:04	EPA 3005A	97,6010D	AB
Copper, Dissolved	ND		mg/l	0.010	--	1	01/11/19 09:25	01/11/19 15:04	EPA 3005A	97,6010D	AB
Lead, Dissolved	ND		mg/l	0.010	--	1	01/11/19 09:25	01/11/19 15:04	EPA 3005A	97,6010D	AB
Mercury, Dissolved	ND		mg/l	0.0002	--	1	01/11/19 11:00	01/11/19 21:03	EPA 7470A	97,7470A	EA
Nickel, Dissolved	ND		mg/l	0.025	--	1	01/11/19 09:25	01/11/19 15:04	EPA 3005A	97,6010D	AB
Selenium, Dissolved	ND		mg/l	0.010	--	1	01/11/19 09:25	01/11/19 15:04	EPA 3005A	97,6010D	AB
Silver, Dissolved	ND		mg/l	0.007	--	1	01/11/19 09:25	01/11/19 15:04	EPA 3005A	97,6010D	AB
Thallium, Dissolved	ND		mg/l	0.0005	--	1	01/11/19 09:25	01/11/19 16:52	EPA 3005A	97,6020B	AM
Zinc, Dissolved	ND		mg/l	0.050	--	1	01/11/19 09:25	01/11/19 15:04	EPA 3005A	97,6010D	AB



Project Name: ADW SEEKONK, MA**Lab Number:** L1901070**Project Number:** 171.02038.001**Report Date:** 01/16/19**SAMPLE RESULTS**

Lab ID: L1901070-03

Date Collected: 01/08/19 10:10

Client ID: MW706-W1-010819

Date Received: 01/09/19

Sample Location: SEEKONK, MA

Field Prep: Refer to COC

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
MCP Dissolved Metals - Mansfield Lab											
Antimony, Dissolved	ND		mg/l	0.0040	--	1	01/11/19 09:25	01/11/19 16:56	EPA 3005A	97,6020B	AM
Arsenic, Dissolved	ND		mg/l	0.005	--	1	01/11/19 09:25	01/11/19 15:09	EPA 3005A	97,6010D	AB
Beryllium, Dissolved	ND		mg/l	0.0005	--	1	01/11/19 09:25	01/11/19 16:56	EPA 3005A	97,6020B	AM
Cadmium, Dissolved	ND		mg/l	0.004	--	1	01/11/19 09:25	01/11/19 15:09	EPA 3005A	97,6010D	AB
Chromium, Dissolved	ND		mg/l	0.010	--	1	01/11/19 09:25	01/11/19 15:09	EPA 3005A	97,6010D	AB
Copper, Dissolved	ND		mg/l	0.010	--	1	01/11/19 09:25	01/11/19 15:09	EPA 3005A	97,6010D	AB
Lead, Dissolved	ND		mg/l	0.010	--	1	01/11/19 09:25	01/11/19 15:09	EPA 3005A	97,6010D	AB
Mercury, Dissolved	ND		mg/l	0.0002	--	1	01/11/19 11:00	01/11/19 21:05	EPA 7470A	97,7470A	EA
Nickel, Dissolved	ND		mg/l	0.025	--	1	01/11/19 09:25	01/11/19 15:09	EPA 3005A	97,6010D	AB
Selenium, Dissolved	ND		mg/l	0.010	--	1	01/11/19 09:25	01/11/19 15:09	EPA 3005A	97,6010D	AB
Silver, Dissolved	ND		mg/l	0.007	--	1	01/11/19 09:25	01/11/19 15:09	EPA 3005A	97,6010D	AB
Thallium, Dissolved	ND		mg/l	0.0005	--	1	01/11/19 09:25	01/11/19 16:56	EPA 3005A	97,6020B	AM
Zinc, Dissolved	ND		mg/l	0.050	--	1	01/11/19 09:25	01/11/19 15:09	EPA 3005A	97,6010D	AB

Project Name: ADW SEEKONK, MA**Lab Number:** L1901070**Project Number:** 171.02038.001**Report Date:** 01/16/19**SAMPLE RESULTS**

Lab ID: L1901070-04

Date Collected: 01/08/19 11:25

Client ID: MW707-W1-010819

Date Received: 01/09/19

Sample Location: SEEKONK, MA

Field Prep: Refer to COC

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
MCP Dissolved Metals - Mansfield Lab											
Antimony, Dissolved	ND		mg/l	0.0040	--	1	01/11/19 09:25	01/11/19 17:13	EPA 3005A	97,6020B	AM
Arsenic, Dissolved	ND		mg/l	0.005	--	1	01/11/19 09:25	01/11/19 15:14	EPA 3005A	97,6010D	AB
Beryllium, Dissolved	ND		mg/l	0.0005	--	1	01/11/19 09:25	01/11/19 17:13	EPA 3005A	97,6020B	AM
Cadmium, Dissolved	ND		mg/l	0.004	--	1	01/11/19 09:25	01/11/19 15:14	EPA 3005A	97,6010D	AB
Chromium, Dissolved	ND		mg/l	0.010	--	1	01/11/19 09:25	01/11/19 15:14	EPA 3005A	97,6010D	AB
Copper, Dissolved	ND		mg/l	0.010	--	1	01/11/19 09:25	01/11/19 15:14	EPA 3005A	97,6010D	AB
Lead, Dissolved	ND		mg/l	0.010	--	1	01/11/19 09:25	01/11/19 15:14	EPA 3005A	97,6010D	AB
Mercury, Dissolved	ND		mg/l	0.0002	--	1	01/11/19 11:00	01/11/19 21:07	EPA 7470A	97,7470A	EA
Nickel, Dissolved	0.070		mg/l	0.025	--	1	01/11/19 09:25	01/11/19 15:14	EPA 3005A	97,6010D	AB
Selenium, Dissolved	ND		mg/l	0.010	--	1	01/11/19 09:25	01/11/19 15:14	EPA 3005A	97,6010D	AB
Silver, Dissolved	ND		mg/l	0.007	--	1	01/11/19 09:25	01/11/19 15:14	EPA 3005A	97,6010D	AB
Thallium, Dissolved	ND		mg/l	0.0005	--	1	01/11/19 09:25	01/11/19 17:13	EPA 3005A	97,6020B	AM
Zinc, Dissolved	0.156		mg/l	0.050	--	1	01/11/19 09:25	01/11/19 15:14	EPA 3005A	97,6010D	AB



Project Name: ADW SEEKONK, MA**Lab Number:** L1901070**Project Number:** 171.02038.001**Report Date:** 01/16/19**SAMPLE RESULTS**

Lab ID: L1901070-05

Date Collected: 01/08/19 12:45

Client ID: MW708-W1-010819

Date Received: 01/09/19

Sample Location: SEEKONK, MA

Field Prep: Refer to COC

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
MCP Dissolved Metals - Mansfield Lab											
Antimony, Dissolved	ND		mg/l	0.0040	--	1	01/11/19 09:25	01/11/19 17:17	EPA 3005A	97,6020B	AM
Arsenic, Dissolved	ND		mg/l	0.005	--	1	01/11/19 09:25	01/11/19 15:19	EPA 3005A	97,6010D	AB
Beryllium, Dissolved	ND		mg/l	0.0005	--	1	01/11/19 09:25	01/11/19 17:17	EPA 3005A	97,6020B	AM
Cadmium, Dissolved	ND		mg/l	0.004	--	1	01/11/19 09:25	01/11/19 15:19	EPA 3005A	97,6010D	AB
Chromium, Dissolved	ND		mg/l	0.010	--	1	01/11/19 09:25	01/11/19 15:19	EPA 3005A	97,6010D	AB
Copper, Dissolved	ND		mg/l	0.010	--	1	01/11/19 09:25	01/11/19 15:19	EPA 3005A	97,6010D	AB
Lead, Dissolved	ND		mg/l	0.010	--	1	01/11/19 09:25	01/11/19 15:19	EPA 3005A	97,6010D	AB
Mercury, Dissolved	ND		mg/l	0.0002	--	1	01/11/19 11:00	01/11/19 21:12	EPA 7470A	97,7470A	EA
Nickel, Dissolved	ND		mg/l	0.025	--	1	01/11/19 09:25	01/11/19 15:19	EPA 3005A	97,6010D	AB
Selenium, Dissolved	ND		mg/l	0.010	--	1	01/11/19 09:25	01/11/19 15:19	EPA 3005A	97,6010D	AB
Silver, Dissolved	ND		mg/l	0.007	--	1	01/11/19 09:25	01/11/19 15:19	EPA 3005A	97,6010D	AB
Thallium, Dissolved	ND		mg/l	0.0005	--	1	01/11/19 09:25	01/11/19 17:17	EPA 3005A	97,6020B	AM
Zinc, Dissolved	ND		mg/l	0.050	--	1	01/11/19 09:25	01/11/19 15:19	EPA 3005A	97,6010D	AB



Project Name: ADW SEEKONK, MA**Lab Number:** L1901070**Project Number:** 171.02038.001**Report Date:** 01/16/19**SAMPLE RESULTS**

Lab ID: L1901070-06

Date Collected: 01/09/19 07:50

Client ID: MW713-W1-010919

Date Received: 01/09/19

Sample Location: SEEKONK, MA

Field Prep: Refer to COC

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
MCP Dissolved Metals - Mansfield Lab											
Antimony, Dissolved	ND		mg/l	0.0040	--	1	01/11/19 09:25	01/11/19 17:21	EPA 3005A	97,6020B	AM
Arsenic, Dissolved	ND		mg/l	0.005	--	1	01/11/19 09:25	01/11/19 15:24	EPA 3005A	97,6010D	AB
Beryllium, Dissolved	ND		mg/l	0.0005	--	1	01/11/19 09:25	01/11/19 17:21	EPA 3005A	97,6020B	AM
Cadmium, Dissolved	ND		mg/l	0.004	--	1	01/11/19 09:25	01/11/19 15:24	EPA 3005A	97,6010D	AB
Chromium, Dissolved	ND		mg/l	0.010	--	1	01/11/19 09:25	01/11/19 15:24	EPA 3005A	97,6010D	AB
Copper, Dissolved	ND		mg/l	0.010	--	1	01/11/19 09:25	01/11/19 15:24	EPA 3005A	97,6010D	AB
Lead, Dissolved	ND		mg/l	0.010	--	1	01/11/19 09:25	01/11/19 15:24	EPA 3005A	97,6010D	AB
Mercury, Dissolved	ND		mg/l	0.0002	--	1	01/11/19 11:00	01/11/19 21:14	EPA 7470A	97,7470A	EA
Nickel, Dissolved	ND		mg/l	0.025	--	1	01/11/19 09:25	01/11/19 15:24	EPA 3005A	97,6010D	AB
Selenium, Dissolved	ND		mg/l	0.010	--	1	01/11/19 09:25	01/11/19 15:24	EPA 3005A	97,6010D	AB
Silver, Dissolved	ND		mg/l	0.007	--	1	01/11/19 09:25	01/11/19 15:24	EPA 3005A	97,6010D	AB
Thallium, Dissolved	ND		mg/l	0.0005	--	1	01/11/19 09:25	01/11/19 17:21	EPA 3005A	97,6020B	AM
Zinc, Dissolved	ND		mg/l	0.050	--	1	01/11/19 09:25	01/11/19 15:24	EPA 3005A	97,6010D	AB



Project Name: ADW SEEKONK, MA**Lab Number:** L1901070**Project Number:** 171.02038.001**Report Date:** 01/16/19**SAMPLE RESULTS**

Lab ID: L1901070-07

Date Collected: 01/09/19 09:00

Client ID: MW714-W1-010919

Date Received: 01/09/19

Sample Location: SEEKONK, MA

Field Prep: Refer to COC

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
MCP Dissolved Metals - Mansfield Lab											
Antimony, Dissolved	ND		mg/l	0.0040	--	1	01/11/19 09:25	01/11/19 17:26	EPA 3005A	97,6020B	AM
Arsenic, Dissolved	0.008		mg/l	0.005	--	1	01/11/19 09:25	01/11/19 15:29	EPA 3005A	97,6010D	AB
Beryllium, Dissolved	ND		mg/l	0.0005	--	1	01/11/19 09:25	01/11/19 17:26	EPA 3005A	97,6020B	AM
Cadmium, Dissolved	ND		mg/l	0.004	--	1	01/11/19 09:25	01/11/19 15:29	EPA 3005A	97,6010D	AB
Chromium, Dissolved	ND		mg/l	0.010	--	1	01/11/19 09:25	01/11/19 15:29	EPA 3005A	97,6010D	AB
Copper, Dissolved	ND		mg/l	0.010	--	1	01/11/19 09:25	01/11/19 15:29	EPA 3005A	97,6010D	AB
Lead, Dissolved	ND		mg/l	0.010	--	1	01/11/19 09:25	01/11/19 15:29	EPA 3005A	97,6010D	AB
Mercury, Dissolved	ND		mg/l	0.0002	--	1	01/11/19 11:00	01/11/19 21:15	EPA 7470A	97,7470A	EA
Nickel, Dissolved	ND		mg/l	0.025	--	1	01/11/19 09:25	01/11/19 15:29	EPA 3005A	97,6010D	AB
Selenium, Dissolved	ND		mg/l	0.010	--	1	01/11/19 09:25	01/11/19 15:29	EPA 3005A	97,6010D	AB
Silver, Dissolved	ND		mg/l	0.007	--	1	01/11/19 09:25	01/11/19 15:29	EPA 3005A	97,6010D	AB
Thallium, Dissolved	ND		mg/l	0.0005	--	1	01/11/19 09:25	01/11/19 17:26	EPA 3005A	97,6020B	AM
Zinc, Dissolved	ND		mg/l	0.050	--	1	01/11/19 09:25	01/11/19 15:29	EPA 3005A	97,6010D	AB



Project Name: ADW SEEKONK, MA**Lab Number:** L1901070**Project Number:** 171.02038.001**Report Date:** 01/16/19**SAMPLE RESULTS**

Lab ID: L1901070-08

Date Collected: 01/09/19 10:00

Client ID: MW715-W1-010919

Date Received: 01/09/19

Sample Location: SEEKONK, MA

Field Prep: Refer to COC

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
MCP Dissolved Metals - Mansfield Lab											
Antimony, Dissolved	ND		mg/l	0.0040	--	1	01/11/19 09:25	01/11/19 17:30	EPA 3005A	97,6020B	AM
Arsenic, Dissolved	ND		mg/l	0.005	--	1	01/11/19 09:25	01/11/19 15:44	EPA 3005A	97,6010D	AB
Beryllium, Dissolved	ND		mg/l	0.0005	--	1	01/11/19 09:25	01/11/19 17:30	EPA 3005A	97,6020B	AM
Cadmium, Dissolved	ND		mg/l	0.004	--	1	01/11/19 09:25	01/11/19 15:44	EPA 3005A	97,6010D	AB
Chromium, Dissolved	ND		mg/l	0.010	--	1	01/11/19 09:25	01/11/19 15:44	EPA 3005A	97,6010D	AB
Copper, Dissolved	ND		mg/l	0.010	--	1	01/11/19 09:25	01/11/19 15:44	EPA 3005A	97,6010D	AB
Lead, Dissolved	ND		mg/l	0.010	--	1	01/11/19 09:25	01/11/19 15:44	EPA 3005A	97,6010D	AB
Mercury, Dissolved	ND		mg/l	0.0002	--	1	01/11/19 11:00	01/11/19 21:17	EPA 7470A	97,7470A	EA
Nickel, Dissolved	ND		mg/l	0.025	--	1	01/11/19 09:25	01/11/19 15:44	EPA 3005A	97,6010D	AB
Selenium, Dissolved	ND		mg/l	0.010	--	1	01/11/19 09:25	01/11/19 15:44	EPA 3005A	97,6010D	AB
Silver, Dissolved	ND		mg/l	0.007	--	1	01/11/19 09:25	01/11/19 15:44	EPA 3005A	97,6010D	AB
Thallium, Dissolved	ND		mg/l	0.0005	--	1	01/11/19 09:25	01/11/19 17:30	EPA 3005A	97,6020B	AM
Zinc, Dissolved	ND		mg/l	0.050	--	1	01/11/19 09:25	01/11/19 15:44	EPA 3005A	97,6010D	AB



Project Name: ADW SEEKONK, MA

Lab Number: L1901070

Project Number: 171.02038.001

Report Date: 01/16/19

Method Blank Analysis Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
MCP Dissolved Metals - Mansfield Lab for sample(s): 01-08 Batch: WG1196722-1										
Arsenic, Dissolved	ND		mg/l	0.005	--	1	01/11/19 09:25	01/11/19 14:45	97,6010D	AB
Cadmium, Dissolved	ND		mg/l	0.004	--	1	01/11/19 09:25	01/11/19 14:45	97,6010D	AB
Chromium, Dissolved	ND		mg/l	0.010	--	1	01/11/19 09:25	01/11/19 14:45	97,6010D	AB
Copper, Dissolved	ND		mg/l	0.010	--	1	01/11/19 09:25	01/11/19 14:45	97,6010D	AB
Lead, Dissolved	ND		mg/l	0.010	--	1	01/11/19 09:25	01/11/19 14:45	97,6010D	AB
Nickel, Dissolved	ND		mg/l	0.025	--	1	01/11/19 09:25	01/11/19 14:45	97,6010D	AB
Selenium, Dissolved	ND		mg/l	0.010	--	1	01/11/19 09:25	01/11/19 14:45	97,6010D	AB
Silver, Dissolved	ND		mg/l	0.007	--	1	01/11/19 09:25	01/11/19 14:45	97,6010D	AB
Zinc, Dissolved	ND		mg/l	0.050	--	1	01/11/19 09:25	01/11/19 14:45	97,6010D	AB

Prep Information

Digestion Method: EPA 3005A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
MCP Dissolved Metals - Mansfield Lab for sample(s): 01-08 Batch: WG1196724-1										
Antimony, Dissolved	ND		mg/l	0.0040	--	1	01/11/19 09:25	01/11/19 17:01	97,6020B	AM
Beryllium, Dissolved	ND		mg/l	0.0005	--	1	01/11/19 09:25	01/11/19 17:01	97,6020B	AM
Thallium, Dissolved	ND		mg/l	0.0005	--	1	01/11/19 09:25	01/11/19 17:01	97,6020B	AM

Prep Information

Digestion Method: EPA 3005A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
MCP Dissolved Metals - Mansfield Lab for sample(s): 01-08 Batch: WG1196770-1										
Mercury, Dissolved	ND		mg/l	0.0002	--	1	01/11/19 11:00	01/11/19 20:56	97,7470A	EA

Prep Information

Digestion Method: EPA 7470A



Lab Control Sample Analysis

Batch Quality Control

Project Name: ADW SEEKONK, MA

Project Number: 171.02038.001

Lab Number: L1901070

Report Date: 01/16/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Dissolved Metals - Mansfield Lab Associated sample(s): 01-08 Batch: WG1196722-2 WG1196722-3								
Arsenic, Dissolved	115		115		80-120	0		20
Cadmium, Dissolved	108		107		80-120	1		20
Chromium, Dissolved	107		107		80-120	0		20
Copper, Dissolved	104		104		80-120	0		20
Lead, Dissolved	109		108		80-120	1		20
Nickel, Dissolved	100		99		80-120	1		20
Selenium, Dissolved	117		116		80-120	1		20
Silver, Dissolved	99		98		80-120	1		20
Zinc, Dissolved	105		104		80-120	1		20
MCP Dissolved Metals - Mansfield Lab Associated sample(s): 01-08 Batch: WG1196724-2 WG1196724-3								
Antimony, Dissolved	88		103		80-120	16		20
Beryllium, Dissolved	111		113		80-120	2		20
Thallium, Dissolved	100		105		80-120	5		20
MCP Dissolved Metals - Mansfield Lab Associated sample(s): 01-08 Batch: WG1196770-2 WG1196770-3								
Mercury, Dissolved	98		96		80-120	2		20

Project Name: ADW SEEKONK, MA
Project Number: 171.02038.001

Serial_No:01161916:47
Lab Number: L1901070
Report Date: 01/16/19

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent
B	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1901070-01G	Plastic 250ml HNO3 preserved	B	<2	<2	4.2	Y	Absent		MCP-BE-6020S-10(180),MCP-CD-6010S-10(180),MCP-7470S-10(28),MCP-AG-6010S-10(180),MCP-SB-6020S-10(180),MCP-ZN-6010S-10(180),MCP-AS-6010S-10(180),MCP-CR-6010S-10(180),MCP-TL-6020S-10(180),MCP-PB-6010S-10(180),MCP-CU-6010S-10(180),MCP-NI-6010S-10(180),MCP-SE-6010S-10(180)
L1901070-02G	Plastic 250ml HNO3 preserved	B	<2	<2	4.2	Y	Absent		MCP-BE-6020S-10(180),MCP-CD-6010S-10(180),MCP-7470S-10(28),MCP-AG-6010S-10(180),MCP-SB-6020S-10(180),MCP-ZN-6010S-10(180),MCP-AS-6010S-10(180),MCP-CR-6010S-10(180),MCP-TL-6020S-10(180),MCP-PB-6010S-10(180),MCP-CU-6010S-10(180),MCP-NI-6010S-10(180),MCP-SE-6010S-10(180)
L1901070-03A	Vial HCl preserved	B	NA		4.2	Y	Absent		MCP-8260-10(14)
L1901070-03B	Vial HCl preserved	B	NA		4.2	Y	Absent		MCP-8260-10(14)
L1901070-03C	Vial HCl preserved	B	NA		4.2	Y	Absent		MCP-8260-10(14)
L1901070-03D	Vial HCl preserved	B	NA		4.2	Y	Absent		VPH-DELUX-18(14)
L1901070-03E	Vial HCl preserved	B	NA		4.2	Y	Absent		VPH-DELUX-18(14)
L1901070-03F	Vial HCl preserved	B	NA		4.2	Y	Absent		VPH-DELUX-18(14)
L1901070-03G	Plastic 250ml HNO3 preserved	B	<2	<2	4.2	Y	Absent		MCP-BE-6020S-10(180),MCP-CD-6010S-10(180),MCP-7470S-10(28),MCP-AG-6010S-10(180),MCP-SB-6020S-10(180),MCP-ZN-6010S-10(180),MCP-AS-6010S-10(180),MCP-CR-6010S-10(180),MCP-TL-6020S-10(180),MCP-PB-6010S-10(180),MCP-CU-6010S-10(180),MCP-NI-6010S-10(180),MCP-SE-6010S-10(180)
L1901070-03J	Amber 1000ml HCl preserved	B	<2	<2	4.2	Y	Absent		EPH-DELUX-10(14)
L1901070-03K	Amber 1000ml HCl preserved	B	<2	<2	4.2	Y	Absent		EPH-DELUX-10(14)

Project Name: ADW SEEKONK, MA
Project Number: 171.02038.001

Serial_No: 01161916:47
Lab Number: L1901070
Report Date: 01/16/19

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1901070-04G	Plastic 250ml HNO3 preserved	B	<2	<2	4.2	Y	Absent		MCP-BE-6020S-10(180),MCP-CD-6010S-10(180),MCP-7470S-10(28),MCP-AG-6010S-10(180),MCP-SB-6020S-10(180),MCP-ZN-6010S-10(180),MCP-AS-6010S-10(180),MCP-CR-6010S-10(180),MCP-TL-6020S-10(180),MCP-PB-6010S-10(180),MCP-CU-6010S-10(180),MCP-NI-6010S-10(180),MCP-SE-6010S-10(180)
L1901070-05G	Plastic 250ml HNO3 preserved	B	<2	<2	4.2	Y	Absent		MCP-BE-6020S-10(180),MCP-CD-6010S-10(180),MCP-7470S-10(28),MCP-AG-6010S-10(180),MCP-SB-6020S-10(180),MCP-ZN-6010S-10(180),MCP-AS-6010S-10(180),MCP-CR-6010S-10(180),MCP-TL-6020S-10(180),MCP-PB-6010S-10(180),MCP-CU-6010S-10(180),MCP-NI-6010S-10(180),MCP-SE-6010S-10(180)
L1901070-06A	Vial HCl preserved	B	NA		4.2	Y	Absent		MCP-8260-10(14)
L1901070-06B	Vial HCl preserved	B	NA		4.2	Y	Absent		MCP-8260-10(14)
L1901070-06C	Vial HCl preserved	B	NA		4.2	Y	Absent		MCP-8260-10(14)
L1901070-06D	Vial HCl preserved	B	NA		4.2	Y	Absent		VPH-DELUX-18(14)
L1901070-06E	Vial HCl preserved	B	NA		4.2	Y	Absent		VPH-DELUX-18(14)
L1901070-06F	Vial HCl preserved	B	NA		4.2	Y	Absent		VPH-DELUX-18(14)
L1901070-06G	Plastic 250ml HNO3 preserved	B	<2	<2	4.2	Y	Absent		MCP-BE-6020S-10(180),MCP-CD-6010S-10(180),MCP-7470S-10(28),MCP-AG-6010S-10(180),MCP-SB-6020S-10(180),MCP-ZN-6010S-10(180),MCP-AS-6010S-10(180),MCP-CR-6010S-10(180),MCP-TL-6020S-10(180),MCP-PB-6010S-10(180),MCP-CU-6010S-10(180),MCP-NI-6010S-10(180),MCP-SE-6010S-10(180)
L1901070-06H	Amber 1000ml unpreserved	B	7	7	4.2	Y	Absent		MCP-8082-10(365)
L1901070-06I	Amber 1000ml unpreserved	B	7	7	4.2	Y	Absent		MCP-8082-10(365)
L1901070-06J	Amber 1000ml HCl preserved	B	<2	<2	4.2	Y	Absent		EPH-DELUX-10(14)
L1901070-06K	Amber 1000ml HCl preserved	B	<2	<2	4.2	Y	Absent		EPH-DELUX-10(14)
L1901070-07A	Vial HCl preserved	A	NA		3.7	Y	Absent		MCP-8260-10(14)
L1901070-07B	Vial HCl preserved	A	NA		3.7	Y	Absent		MCP-8260-10(14)
L1901070-07C	Vial HCl preserved	A	NA		3.7	Y	Absent		MCP-8260-10(14)
L1901070-07D	Vial HCl preserved	A	NA		3.7	Y	Absent		VPH-DELUX-18(14)
L1901070-07E	Vial HCl preserved	A	NA		3.7	Y	Absent		VPH-DELUX-18(14)

Project Name: ADW SEEKONK, MA
Project Number: 171.02038.001

Serial_No: 01161916:47
Lab Number: L1901070
Report Date: 01/16/19

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1901070-07F	Vial HCl preserved	A	NA		3.7	Y	Absent		VPH-DELUX-18(14)
L1901070-07G	Plastic 250ml HNO3 preserved	A	<2	<2	3.7	Y	Absent		MCP-BE-6020S-10(180),MCP-CD-6010S-10(180),MCP-7470S-10(28),MCP-AG-6010S-10(180),MCP-SB-6020S-10(180),MCP-ZN-6010S-10(180),MCP-AS-6010S-10(180),MCP-CR-6010S-10(180),MCP-TL-6020S-10(180),MCP-PB-6010S-10(180),MCP-CU-6010S-10(180),MCP-NI-6010S-10(180),MCP-SE-6010S-10(180)
L1901070-07H	Amber 1000ml unpreserved	A	7	7	3.7	Y	Absent		MCP-8082-10(365)
L1901070-07I	Amber 1000ml unpreserved	A	7	7	3.7	Y	Absent		MCP-8082-10(365)
L1901070-07J	Amber 1000ml HCl preserved	A	<2	<2	3.7	Y	Absent		EPH-DELUX-10(14)
L1901070-07K	Amber 1000ml HCl preserved	A	<2	<2	3.7	Y	Absent		EPH-DELUX-10(14)
L1901070-08A	Vial HCl preserved	A	NA		3.7	Y	Absent		MCP-8260-10(14)
L1901070-08B	Vial HCl preserved	A	NA		3.7	Y	Absent		MCP-8260-10(14)
L1901070-08C	Vial HCl preserved	A	NA		3.7	Y	Absent		MCP-8260-10(14)
L1901070-08D	Vial HCl preserved	A	NA		3.7	Y	Absent		VPH-DELUX-18(14)
L1901070-08E	Vial HCl preserved	A	NA		3.7	Y	Absent		VPH-DELUX-18(14)
L1901070-08F	Vial HCl preserved	A	NA		3.7	Y	Absent		VPH-DELUX-18(14)
L1901070-08G	Plastic 250ml HNO3 preserved	A	<2	<2	3.7	Y	Absent		MCP-BE-6020S-10(180),MCP-CD-6010S-10(180),MCP-7470S-10(28),MCP-AG-6010S-10(180),MCP-SB-6020S-10(180),MCP-ZN-6010S-10(180),MCP-AS-6010S-10(180),MCP-CR-6010S-10(180),MCP-TL-6020S-10(180),MCP-PB-6010S-10(180),MCP-CU-6010S-10(180),MCP-NI-6010S-10(180),MCP-SE-6010S-10(180)
L1901070-08H	Amber 1000ml unpreserved	A	7	7	3.7	Y	Absent		MCP-8082-10(365)
L1901070-08I	Amber 1000ml unpreserved	A	7	7	3.7	Y	Absent		MCP-8082-10(365)
L1901070-08J	Amber 1000ml HCl preserved	A	<2	<2	3.7	Y	Absent		EPH-DELUX-10(14)
L1901070-08K	Amber 1000ml HCl preserved	A	<2	<2	3.7	Y	Absent		EPH-DELUX-10(14)

Project Name: ADW SEEKONK, MA
Project Number: 171.02038.001

Lab Number: L1901070
Report Date: 01/16/19

GLOSSARY

Acronyms

EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Footnotes

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Report Format: Data Usability Report



Project Name: ADW SEEKONK, MA
Project Number: 171.02038.001

Lab Number: L1901070
Report Date: 01/16/19

Data Qualifiers

- A** - Spectra identified as "Aldol Condensation Product".
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.
- J** - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- ND** - Not detected at the reporting limit (RL) for the sample.

Project Name: ADW SEEKONK, MA
Project Number: 171.02038.001

Lab Number: L1901070
Report Date: 01/16/19

REFERENCES

- 97 EPA Test Methods (SW-846) with QC Requirements & Performance Standards for the Analysis of EPA SW-846 Methods under the Massachusetts Contingency Plan, WSC-CAM-IIA, IIB, IIIA, IIIB, IIIC, IIID, VA, VB, VC, VIA, VIB, VIIIA and VIIIB, July 2010.
- 98 Method for the Determination of Extractable Petroleum Hydrocarbons (EPH), MassDEP, May 2004, Revision 1.1 with QC Requirements & Performance Standards for the Analysis of EPH under the Massachusetts Contingency Plan, WSC-CAM-IVB, July 2010.
- 131 Method for the Determination of Volatile Petroleum Hydrocarbons (VPH), MassDEP, February 2018, Revision 2.1 with QC Requirements & Performance Standards for the Analysis of VPH under the Massachusetts Contingency Plan, WSC-CAM-IVA, June 1, 2018.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Alpha Analytical, Inc.Facility: **Company-wide**Department: **Quality Assurance**Title: **Certificate/Approval Program Summary**ID No.: **17873**

Revision 12

Published Date: 10/9/2018 4:58:19 PM

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Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility**EPA 624/624.1:** m/p-xylene, o-xylene**EPA 8260C:** NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), Methyl methacrylate, 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.**EPA 8270D:** NPW: Dimethylnaphthalene, 1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene, 1,4-Diphenylhydrazine.**EPA 6860:** SCM: Perchlorate**SM4500:** NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO₂, NO₃.**Mansfield Facility****SM 2540D:** TSS**EPA 8082A:** NPW: PCB: 1, 5, 31, 87, 101, 110, 141, 151, 153, 180, 183, 187.**EPA TO-15:** Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.**Biological Tissue Matrix:** EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:**Drinking Water****EPA 300.0:** Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE,****EPA 180.1, SM2130B, SM4500CI-D, SM2320B, SM2540C, SM4500H-B****EPA 332:** Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.**Microbiology:** **SM9215B; SM9223-P/A, SM9223B-Colilert-QT, SM9222D.****Non-Potable Water****SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH:** Ammonia-N and Kjeldahl-N, **EPA 350.1:** Ammonia-N, **LACHAT 10-107-06-1-B:** Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2:** Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300:** Chloride, Sulfate, Nitrate.**EPA 624.1:** Volatile Halocarbons & Aromatics,**EPA 608.3:** Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs**EPA 625.1:** SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045:** PCB-Oil.**Microbiology:** **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603.****Mansfield Facility:****Drinking Water****EPA 200.7:** Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1 Hg. EPA 522.****Non-Potable Water****EPA 200.7:** Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.**EPA 200.8:** Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.**EPA 245.1 Hg.****SM2340B**

For a complete listing of analytes and methods, please contact your Alpha Project Manager.



8 Walkup Drive
Westboro, MA 01581
Tel: 508-898-9220

320 Forbes Blvd
Mansfield, MA 02048
Tel: 508-822-9300

CHAIN OF CUSTODY

PAGE 1 OF 1

Date Rec'd in Lab: 1-9-19

ALPHA Job #: L1901070

Project Information

Project Name: ADW Seekonk, MA

Project Location: Seekonk, MA

Project #: 171.02038.001

Project Manager: Tracey Costa

ALPHA Quote #:

Report Information - Data Deliverables

☒ ADEX ☒ EMAIL

Billing Information

☒ Same as Client info PO #: 11058

Client Information

Client: Ransom Consulting, Inc.

Address: 60 Valley Street, Suite 106
Providence, RI 02909

Phone: 401-433-2160

Email: tracey.costa@ransomenv.com

Additional Project Information:

Turn-Around Time

☒ Standard ☐ RUSH (only confirmed if pre-approved)

Date Due:

Regulatory Requirements & Project Information Requirements

☒ Yes ☐ No MA MCP Analytical Methods ☐ Yes ☒ No CT RCP Analytical Methods
☐ Yes ☐ No Matrix Spike Required on this SDG? (Required for MCP Inorganics)
☒ Yes ☐ No GW1 Standards (Info Required for Metals & EPH with Targets)
☐ Yes ☒ No NPDES RGP
☐ Other State /Fed Program MCI Criteria GW1/GW2/GW3

ANALYSIS		SAMPLE INFO		TOTAL # BOTTLES
		Filtration		
VOC: ☒ 8260 ☐ 624 ☐ 524.2	SVOC: ☐ ABN ☐ PAH	☐ Field		
METALS: ☐ MCP 13 ☐ MCP 14 ☐ RCP 15		☐ Lab to do		
METALS: ☐ RCRA5 ☐ RCRA8 ☐ PP13		Preservation		
EPH: ☐ Ranges & Targets ☐ Ranges Only		☐ Lab to do		
VPH: ☒ Ranges & Targets ☐ Ranges Only				
☒ PCB ☐ PEST				
TPH: ☐ Quant Only ☐ Fingerprint				
Dissolved 113 Metals				
EPA w/ 4 Fuel Oil PAHs				
		Sample Comments		

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection		Sample Matrix	Sampler Initials	VOC:	SVOC:	METAL	METAL	EPH: L	VPH: L	PCB	TPH: L	Disco	E/H							Sample Comments	S	M	T
		Date	Time																						
01070-01	MW704-W1-010819	1-8-19	0740	GW	AR									X											1
02	MW705-W1-010819		0855											X											1
03	MW706-W1-010819		1010			X					X			X	X										9
04	MW707-W1-010819		1125											X											1
05	MW708-W1-010819		1245											X											1
06	MW713-W1-010919	1-9-19	0750			X					X	X		X	X										11
07	MW714-W1-010919		0900			X					X	X		X	X										11
08	MW715-W1-010919		0935			X					X	X		X	X										11

Container Type

P= Plastic
A= Amber glass
V= Vial
G= Glass
B= Bacteria cup
C= Cube
E= Other
En= Encore
D= BOD Bottle

Preservative

A= None
B= HCl
C= HNO₃
D= H₂SO₄
E= NaOH
F= MeOH
G= NaHSO₄
H= Na₂S₂O₈
I= Ascorbic Acid
J= NH₄Cl
K= Zn Acetate
O= Other

Container Type V

Preservative B

V

A

P

A

C

B

Relinquished By:

Date/Time

Received By:

Date/Time

ADW
ARL

1-9-19 1540
1/9/19 1717

ADW
ARL

1/9/19 1540
1/9/19 1717

All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.

FORM NO: 01-01 (rev. 12-Mar-2012)

Method Blank Summary
Form 4
VOLATILES

Client	: Ransom Consulting, Inc.	Lab Number	: L1901070
Project Name	: ADW SEEKONK, MA	Project Number	: 171.02038.001
Lab Sample ID	: WG1197694-5	Lab File ID	: V16190115A04
Instrument ID	: VOA116		
Matrix	: WATER	Analysis Date	: 01/15/19 05:07

Client Sample No.	Lab Sample ID	Analysis Date
WG1197694-3LCS	WG1197694-3	01/15/19 03:51
WG1197694-4LCSD	WG1197694-4	01/15/19 04:16
MW706-W1-010819	L1901070-03	01/15/19 06:23
MW714-W1-010919	L1901070-07	01/15/19 06:49
MW715-W1-010919	L1901070-08	01/15/19 07:15
MW713-W1-010919	L1901070-06	01/15/19 07:40

Continuing Calibration Form 7

Client : Ransom Consulting, Inc.
 Project Name : ADW SEEKONK, MA
 Instrument ID : VOA116
 Lab File ID : V16190115A01
 Sample No : WG1197694-2
 Channel :

Lab Number : L1901070
 Project Number : 171.02038.001
 Calibration Date : 01/15/19 03:51
 Init. Calib. Date(s) : 01/14/19 01/14/19
 Init. Calib. Times : 05:29 08:28

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Fluorobenzene	1	1	-	0	20	101	0
Dichlorodifluoromethane	0.293	0.273	-	6.8	20	92	0
Chloromethane	0.357	0.344	-	3.6	20	102	0
Vinyl chloride	0.296	0.284	-	4.1	20	101	0
Bromomethane	0.153	0.148	-	3.3	20	115	0
Chloroethane	0.145	0.149	-	-2.8	20	106	0
Trichlorofluoromethane	0.386	0.364	-	5.7	20	92	0
Ethyl ether	0.097	0.094	-	3.1	20	100	0
1,1-Dichloroethene	0.182	0.179	-	1.6	20	97	0
Carbon disulfide	0.553	0.554	-	-0.2	20	103	0
Methylene chloride	0.198	0.188	-	5.1	20	102	0
Acetone	10	10.468	-	-4.7	20	97	0
trans-1,2-Dichloroethene	0.205	0.197	-	3.9	20	101	0
Methyl tert-butyl ether	0.494	0.486	-	1.6	20	98	0
Diisopropyl ether	0.756	0.755	-	0.1	20	101	0
1,1-Dichloroethane	0.423	0.43	-	-1.7	20	100	0
Ethyl tert-butyl ether	0.678	0.679	-	-0.1	20	99	0
cis-1,2-Dichloroethene	0.223	0.223	-	0	20	101	0
2,2-Dichloropropane	0.367	0.344	-	6.3	20	95	0
Bromochloromethane	0.086	0.093	-	-8.1	20	100	0
Chloroform	0.412	0.405	-	1.7	20	102	0
Carbon tetrachloride	0.361	0.34	-	5.8	20	94	.01
Tetrahydrofuran	10	9.099	-	9	20	92	0
Dibromofluoromethane	0.259	0.257	-	0.8	20	98	0
1,1,1-Trichloroethane	0.387	0.384	-	0.8	20	96	0
2-Butanone	0.074	0.069*	-	6.8	20	94	0
1,1-Dichloropropene	0.319	0.315	-	1.3	20	100	0
Benzene	0.87	0.831	-	4.5	20	101	0
tert-Amyl methyl ether	0.559	0.537	-	3.9	20	102	0
1,2-Dichloroethane-d4	0.357	0.357	-	0	20	98	.01
1,2-Dichloroethane	0.322	0.322	-	0	20	100	0
Trichloroethene	0.225	0.223	-	0.9	20	102	0
Dibromomethane	0.11	0.109	-	0.9	20	100	0
1,2-Dichloropropane	0.231	0.216	-	6.5	20	100	0
Bromodichloromethane	0.314	0.305	-	2.9	20	99	0
1,4-Dioxane	0.00153	0.00154*	-	-0.7	20	98	0
cis-1,3-Dichloropropene	0.366	0.366	-	0	20	105	0
Chlorobenzene-d5	1	1	-	0	20	101	0
Toluene-d8	1.27	1.285	-	-1.2	20	102	0
Toluene	0.689	0.671	-	2.6	20	101	0
4-Methyl-2-pentanone	0.079	0.084*	-	-6.3	20	111	0
Tetrachloroethene	0.29	0.287	-	1	20	101	0
trans-1,3-Dichloropropene	0.451	0.447	-	0.9	20	101	0
1,1,2-Trichloroethane	0.175	0.181	-	-3.4	20	101	0
Chlorodibromomethane	0.271	0.266	-	1.8	20	100	0

* Value outside of QC limits.



Continuing Calibration Form 7

Client : Ransom Consulting, Inc.
 Project Name : ADW SEEKONK, MA
 Instrument ID : VOA116
 Lab File ID : V16190115A01
 Sample No : WG1197694-2
 Channel :

Lab Number : L1901070
 Project Number : 171.02038.001
 Calibration Date : 01/15/19 03:51
 Init. Calib. Date(s) : 01/14/19 01/14/19
 Init. Calib. Times : 05:29 08:28

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
1,3-Dichloropropane	0.395	0.404	-	-2.3	20	100	0
1,2-Dibromoethane	0.209	0.213	-	-1.9	20	102	0
2-Hexanone	0.149	0.143	-	4	20	97	0
Chlorobenzene	0.726	0.728	-	-0.3	20	102	0
Ethylbenzene	1.344	1.323	-	1.6	20	100	0
1,1,1,2-Tetrachloroethane	0.274	0.269	-	1.8	20	97	0
p/m Xylene	0.511	0.505	-	1.2	20	101	0
o Xylene	0.492	0.468	-	4.9	20	98	0
Styrene	0.82	0.765	-	6.7	20	99	0
1,4-Dichlorobenzene-d4	1	1	-	0	20	99	0
Bromoform	0.319	0.301	-	5.6	20	98	0
Isopropylbenzene	2.917	2.843	-	2.5	20	99	0
4-Bromofluorobenzene	1.083	1.112	-	-2.7	20	103	0
Bromobenzene	0.599	0.594	-	0.8	20	102	.01
n-Propylbenzene	3.334	3.294	-	1.2	20	101	0
1,1,2,2-Tetrachloroethane	0.48	0.477	-	0.6	20	98	0
2-Chlorotoluene	2.203	2.168	-	1.6	20	100	0
1,3,5-Trimethylbenzene	2.286	2.217	-	3	20	98	0
1,2,3-Trichloropropane	0.446	0.443	-	0.7	20	101	0
4-Chlorotoluene	2.021	2.001	-	1	20	99	0
tert-Butylbenzene	1.989	1.925	-	3.2	20	97	0
1,2,4-Trimethylbenzene	2.267	2.222	-	2	20	99	0
sec-Butylbenzene	2.789	2.689	-	3.6	20	95	0
p-Isopropyltoluene	2.434	2.368	-	2.7	20	99	0
1,3-Dichlorobenzene	1.141	1.149	-	-0.7	20	101	0
1,4-Dichlorobenzene	1.111	1.081	-	2.7	20	100	0
n-Butylbenzene	2.132	1.998	-	6.3	20	98	0
1,2-Dichlorobenzene	1.024	1.012	-	1.2	20	99	0
1,2-Dibromo-3-chloropropan	0.073	0.071	-	2.7	20	94	0
Hexachlorobutadiene	0.237	0.232	-	2.1	20	101	0
1,2,4-Trichlorobenzene	0.624	0.591	-	5.3	20	99	0
Naphthalene	1.496	1.441	-	3.7	20	98	0
1,2,3-Trichlorobenzene	0.557	0.53	-	4.8	20	100	0

* Value outside of QC limits.



June 28, 2017

Tracey Costa
Ransom Consulting, Inc.
60 Valley Street, Building F, Suite 106
Providence, RI 02909

Project Location: ADW Seekonk, MA
Client Job Number:
Project Number: 161.02023.001
Laboratory Work Order Number: 17F0761

Enclosed are results of analyses for samples received by the laboratory on June 14, 2017. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink, reading "Meghan E. Kelley". The signature is written in a cursive style with a large, flowing "M" and "K".

Meghan E. Kelley
Project Manager

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

Ransom Consulting, Inc.
60 Valley Street, Building F, Suite 106
Providence, RI 02909
ATTN: Tracey Costa

REPORT DATE: 6/28/2017

PURCHASE ORDER NUMBER: 10093

PROJECT NUMBER: 161.02023.001

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 17F0761

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

PROJECT LOCATION: ADW Seekonk, MA

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
SW602-W1-061417	17F0761-01	Surface Water		MADEP-EPH-04-1.1	
				MADEP-VPH-04-1.1	
				SM21-22 2340C	
				SM21-22 3500 Cr B	
				SW-846 6020A-B	
				SW-846 7470A	
				SW-846 8082A	
				SW-846 8260C	
SW605-W1-061417	17F0761-02	Surface Water		SW-846 8270D	
				MADEP-EPH-04-1.1	
				MADEP-VPH-04-1.1	
				SM21-22 2340C	
				SM21-22 3500 Cr B	
				SW-846 6020A-B	
				SW-846 7470A	
				SW-846 8082A	
SED506-S1-061417	17F0761-03	Sediment		SW-846 8260C	
				SW-846 8270D	
				MADEP-EPH-04-1.1	
				MADEP-VPH-04-1.1	
				SM 2540G	
				SM2580 A	
				SW 846 9060	
				SW-846 6010C-D	
				SW-846 7196A	
				SW-846 7471B	
				SW-846 8082A	
				SW-846 8260C	
				SW-846 8270D	
				SW-846 9045C	

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Ransom Consulting, Inc.
60 Valley Street, Building F, Suite 106
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ATTN: Tracey Costa

REPORT DATE: 6/28/2017

PURCHASE ORDER NUMBER: 10093

PROJECT NUMBER: 161.02023.001

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 17F0761

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

PROJECT LOCATION: ADW Seekonk, MA

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
SED505-S1-061417	17F0761-04	Sediment		MADEP-EPH-04-1.1	
				MADEP-VPH-04-1.1	
				SM 2540G	
				SM2580 A	
				SW 846 9060	
				SW-846 6010C-D	
				SW-846 7196A	
				SW-846 7471B	
				SW-846 8082A	
				SW-846 8260C	
				SW-846 8270D	
				SW-846 9045C	
SED504-S1-061417	17F0761-05	Sediment		MADEP-EPH-04-1.1	
				MADEP-VPH-04-1.1	
				SM 2540G	
				SM2580 A	
				SW 846 9060	
				SW-846 6010C-D	
				SW-846 7196A	
				SW-846 7471B	
				SW-846 8082A	
				SW-846 8260C	
				SW-846 8270D	
				SW-846 9045C	
SED503-S1-061417	17F0761-06	Sediment		MADEP-EPH-04-1.1	
				MADEP-VPH-04-1.1	
				SM 2540G	
				SM2580 A	
				SW 846 9060	
				SW-846 6010C-D	
				SW-846 7196A	
				SW-846 7471B	
				SW-846 8082A	
				SW-846 8260C	
				SW-846 8270D	
				SW-846 9045C	

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Ransom Consulting, Inc.
60 Valley Street, Building F, Suite 106
Providence, RI 02909
ATTN: Tracey Costa

REPORT DATE: 6/28/2017

PURCHASE ORDER NUMBER: 10093

PROJECT NUMBER: 161.02023.001

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 17F0761

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

PROJECT LOCATION: ADW Seekonk, MA

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
SED502-S1-061417	17F0761-07	Sediment		Lloyd Kahn Method MADEP-EPH-04-1.1 MADEP-VPH-04-1.1 SM 2540G SM2580 A SW-846 6010C-D SW-846 7196A SW-846 7471B SW-846 8082A SW-846 8260C SW-846 8270D SW-846 9045C	
SED501-S1-061417	17F0761-08	Sediment		Lloyd Kahn Method MADEP-EPH-04-1.1 MADEP-VPH-04-1.1 SM 2540G SM2580 A SW-846 6010C-D SW-846 7196A SW-846 7471B SW-846 8082A SW-846 8260C SW-846 8270D SW-846 9045C	

CASE NARRATIVE SUMMARY

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

REVISED REPORT 06-28-17: Per client request the sample matrix was revised to "sediment" for samples 17F0761-03-06.
For method 6020, only a select list of metals was requested and reported.

For method 6010, only a select list of metals was requested and reported.

For method 8270, only PAHs were requested and reported.

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MADEP-VPH-04-1.1**Qualifications:****O-01**

Soil/methanol ratio does not meet method specifications. Excess amount of soil. Sample was completely covered with methanol, but with less than the method-specified amount.

Analyte & Samples(s) Qualified:

17F0761-03[SED506-S1-061417], 17F0761-05[SED504-S1-061417], 17F0761-06[SED503-S1-061417], 17F0761-07[SED502-S1-061417], 17F0761-08[SED501-S1-061417]

SW 846 9060**Qualifications:****MS-07**

Matrix spike recovery is outside of control limits. Analysis is in control based on laboratory fortified blank recovery. Possibility of sample matrix effects that lead to low bias for reported result or non-homogeneous sample aliquot cannot be eliminated.

Analyte & Samples(s) Qualified:**Total Organic Carbon**

17F0761-06[SED503-S1-061417], B179676-MS1

SW-846 6010C-D**Qualifications:****M-10**

The reporting limit verification for the AIHA lead program is outside of control limits for this element. Any reported result at or near the detection limit may be biased on the high side.

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

17F0761-03[SED506-S1-061417], 17F0761-04[SED505-S1-061417], 17F0761-05[SED504-S1-061417], 17F0761-06[SED503-S1-061417], 17F0761-07[SED502-S1-061417], 17F0761-08[SED501-S1-061417], B179684-MRL1

SW-846 7196A**Qualifications:****MS-16**

For solid method SW846-7196A, the matrix spike is outside of control limits. pH and ORP results were indicative of reducing conditions. Reanalysis is not required. Analysis is in control based on LCS recoveries.

Analyte & Samples(s) Qualified:**Hexavalent Chromium**

17F0761-05[SED504-S1-061417], B179745-MS1

W-06

Elevated method reporting limit due to intense color of sample

Analyte & Samples(s) Qualified:**Hexavalent Chromium**

17F0761-03[SED506-S1-061417], 17F0761-04[SED505-S1-061417], 17F0761-05[SED504-S1-061417], 17F0761-06[SED503-S1-061417], 17F0761-07[SED502-S1-061417], 17F0761-08[SED501-S1-061417]

SW-846 8082A**Qualifications:****O-32**

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

Analyte & Samples(s) Qualified:

17F0761-03[SED506-S1-061417], 17F0761-04[SED505-S1-061417], 17F0761-05[SED504-S1-061417], 17F0761-06[SED503-S1-061417], 17F0761-07[SED502-S1-061417], 17F0761-08[SED501-S1-061417]

SW-846 8260C**Qualifications:****L-02**

Laboratory fortified blank/laboratory control sample recovery and duplicate recoveries outside of control limits. Data validation is not affected since all results are "not detected" for associated samples in this batch and bias is on the high side.

Analyte & Samples(s) Qualified:**Carbon Disulfide**

B179401-BS1, B179401-BSD1

L-04

Laboratory fortified blank/laboratory control sample recovery and duplicate recovery are outside of control limits. Reported value for this compound is likely to be biased on the low side.

Analyte & Samples(s) Qualified:**1,2-Dibromo-3-chloropropane (DB)**

17F0761-05[SED504-S1-061417], 17F0761-06[SED503-S1-061417], 17F0761-07[SED502-S1-061417], 17F0761-08[SED501-S1-061417], B179813-BLK1, B179813-BS1, B179813-BSD1

Bromoform

17F0761-05[SED504-S1-061417], 17F0761-06[SED503-S1-061417], 17F0761-07[SED502-S1-061417], 17F0761-08[SED501-S1-061417], B179813-BLK1, B179813-BS1, B179813-BSD1

L-07

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

Analyte & Samples(s) Qualified:**Carbon Tetrachloride**

B179813-BS1

Vinyl Chloride

B179813-BS1

L-07A

Either laboratory fortified blank/laboratory control sample or duplicate recovery is outside of control limits, but the other is within limits. RPD outside of control limits. Reduced precision anticipated for any reported result for this compound.

Analyte & Samples(s) Qualified:**1,2-Dibromo-3-chloropropane (DB)**

B179689-BSD1

R-05

Laboratory fortified blank duplicate RPD is outside of control limits. Reduced precision is anticipated for any reported value for this compound.

Analyte & Samples(s) Qualified:**1,2-Dibromo-3-chloropropane (DB)**

17F0761-03[SED506-S1-061417], 17F0761-04[SED505-S1-061417], B179689-BLK1, B179689-BS1, B179689-BSD1

Bromomethane

17F0761-05[SED504-S1-061417], 17F0761-06[SED503-S1-061417], 17F0761-07[SED502-S1-061417], 17F0761-08[SED501-S1-061417], B179813-BLK1, B179813-BS1, B179813-BSD1

RL-07

Elevated reporting limit based on lowest point in calibration.

MA CAM reporting limit not met.

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

17F0761-01[SW602-W1-061417], 17F0761-02[SW605-W1-061417]

Carbon Disulfide

17F0761-01[SW602-W1-061417], 17F0761-02[SW605-W1-061417]

Methylene Chloride

17F0761-01[SW602-W1-061417], 17F0761-02[SW605-W1-061417]

Naphthalene

17F0761-01[SW602-W1-061417], 17F0761-02[SW605-W1-061417]

V-05

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

Analyte & Samples(s) Qualified:**1,1,1,2-Tetrachloroethane**

17F0761-05[SED504-S1-061417], 17F0761-06[SED503-S1-061417], 17F0761-07[SED502-S1-061417], 17F0761-08[SED501-S1-061417], B179813-BLK1, B179813-BS1, B179813-BSD1

1,2-Dibromo-3-chloropropane (DB)

17F0761-03[SED506-S1-061417], 17F0761-04[SED505-S1-061417], 17F0761-05[SED504-S1-061417], 17F0761-06[SED503-S1-061417], 17F0761-07[SED502-S1-061417], 17F0761-08[SED501-S1-061417], B179689-BLK1, B179689-BS1, B179689-BSD1, B179813-BLK1, B179813-BS1, B179813-BSD1

2,2-Dichloropropane

17F0761-05[SED504-S1-061417], 17F0761-06[SED503-S1-061417], 17F0761-07[SED502-S1-061417], 17F0761-08[SED501-S1-061417], B179813-BLK1, B179813-BS1, B179813-BSD1

2-Butanone (MEK)

17F0761-01[SW602-W1-061417], 17F0761-02[SW605-W1-061417], 17F0761-05[SED504-S1-061417], 17F0761-06[SED503-S1-061417], 17F0761-07[SED502-S1-061417], 17F0761-08[SED501-S1-061417], B179401-BLK1, B179401-BS1, B179401-BSD1, B179813-BLK1, B179813-BS1, B179813-BSD1

Acetone

17F0761-03[SED506-S1-061417], 17F0761-04[SED505-S1-061417], 17F0761-05[SED504-S1-061417], 17F0761-06[SED503-S1-061417], 17F0761-07[SED502-S1-061417], 17F0761-08[SED501-S1-061417], B179689-BLK1, B179689-BS1, B179689-BSD1, B179813-BLK1, B179813-BS1, B179813-BSD1

Bromoform

17F0761-03[SED506-S1-061417], 17F0761-04[SED505-S1-061417], 17F0761-05[SED504-S1-061417], 17F0761-06[SED503-S1-061417], 17F0761-07[SED502-S1-061417], 17F0761-08[SED501-S1-061417], B179689-BLK1, B179689-BS1, B179689-BSD1, B179813-BLK1, B179813-BS1, B179813-BSD1

Carbon Tetrachloride

17F0761-05[SED504-S1-061417], 17F0761-06[SED503-S1-061417], 17F0761-07[SED502-S1-061417], 17F0761-08[SED501-S1-061417], B179813-BLK1, B179813-BS1, B179813-BSD1

Chlorodibromomethane

17F0761-05[SED504-S1-061417], 17F0761-06[SED503-S1-061417], 17F0761-07[SED502-S1-061417], 17F0761-08[SED501-S1-061417], B179813-BLK1, B179813-BS1, B179813-BSD1

Diisopropyl Ether (DIPE)

17F0761-01[SW602-W1-061417], 17F0761-02[SW605-W1-061417], B179401-BLK1, B179401-BS1, B179401-BSD1

Naphthalene

17F0761-05[SED504-S1-061417], 17F0761-06[SED503-S1-061417], 17F0761-07[SED502-S1-061417], 17F0761-08[SED501-S1-061417], B179813-BLK1, B179813-BS1, B179813-BSD1

V-16

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

Analyte & Samples(s) Qualified:**1,4-Dioxane**

17F0761-01[SW602-W1-061417], 17F0761-02[SW605-W1-061417], 17F0761-03[SED506-S1-061417], 17F0761-04[SED505-S1-061417], 17F0761-05[SED504-S1-061417], 17F0761-06[SED503-S1-061417], 17F0761-07[SED502-S1-061417], 17F0761-08[SED501-S1-061417], B179401-BLK1, B179401-BS1, B179401-BSD1, B179689-BLK1, B179689-BS1, B179689-BSD1, B179813-BLK1, B179813-BS1, B179813-BSD1

SW-846 8270D**Qualifications:****V-05**

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

Analyte & Samples(s) Qualified:**Benzo(g,h,i)perylene**

B179637-BLK1, B179637-BS1, B179637-BSD1

Dibenz(a,h)anthracene

B179637-BLK1, B179637-BS1, B179637-BSD1

Indeno(1,2,3-cd)pyrene

B179637-BLK1, B179637-BS1, B179637-BSD1

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MADEP-EPH-04-1.1

SPE cartridge contamination with non-petroleum compounds, if present, is verified by GC/MS in each method blank per extraction batch and excluded from C11-C22 aromatic range fraction in all samples in the batch. No significant modifications were made to the method.

MADEP-VPH-04-1.1

No significant modifications were made to the method. All VPH samples were received preserved properly at pH <2 in the proper containers as specified on the chain-of-custody form unless specified in this narrative.

No significant modifications were made to the method. All VPH samples were received preserved properly in methanol with a soil/methanol ratio of 1:1 +/- 25% completely covered by methanol in the proper containers specified on the chain-of-custody form unless specified in this narrative.

SW-846 6010C/D SW-846 6020A/B

For NC, Metals methods SW-846 6010D and SW-846 6020B are followed, and for all other states methods SW-846 6010C and SW-846 6020A are followed.

SW-846 8260C

Laboratory control sample recoveries for required MCP Data Enhancement 8260 compounds were all within limits specified by the method except for "difficult analytes" where recovery control limits of 40-160% are used and/or unless otherwise listed in this narrative. Difficult analytes: MIBK, MEK, acetone, 1,4-dioxane, chloromethane, dichlorodifluoromethane, 2-hexanone, and bromomethane.

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

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

A handwritten signature in black ink, appearing to read "Lisa Worthington", is written over a light gray rectangular background.

Lisa A. Worthington
Project Manager

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

Project Location: ADW Seekonk, MA

Sample Description:

Work Order: 17F0761

Date Received: 6/14/2017

Field Sample #: SW602-W1-061417

Sampled: 6/14/2017 10:25

Sample ID: 17F0761-01

Sample Matrix: Surface Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	10	µg/L	1		SW-846 8260C	6/16/17	6/17/17 13:22	EEH
tert-Amyl Methyl Ether (TAME)	ND	1.0	µg/L	1		SW-846 8260C	6/16/17	6/17/17 13:22	EEH
Benzene	ND	1.0	µg/L	1		SW-846 8260C	6/16/17	6/17/17 13:22	EEH
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260C	6/16/17	6/17/17 13:22	EEH
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260C	6/16/17	6/17/17 13:22	EEH
Bromodichloromethane	ND	1.0	µg/L	1		SW-846 8260C	6/16/17	6/17/17 13:22	EEH
Bromoform	ND	2.0	µg/L	1		SW-846 8260C	6/16/17	6/17/17 13:22	EEH
Bromomethane	ND	5.0	µg/L	1	RL-07	SW-846 8260C	6/16/17	6/17/17 13:22	EEH
2-Butanone (MEK)	ND	10	µg/L	1	V-05	SW-846 8260C	6/16/17	6/17/17 13:22	EEH
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	6/16/17	6/17/17 13:22	EEH
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	6/16/17	6/17/17 13:22	EEH
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	6/16/17	6/17/17 13:22	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260C	6/16/17	6/17/17 13:22	EEH
Carbon Disulfide	ND	5.0	µg/L	1	RL-07	SW-846 8260C	6/16/17	6/17/17 13:22	EEH
Carbon Tetrachloride	ND	1.0	µg/L	1		SW-846 8260C	6/16/17	6/17/17 13:22	EEH
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	6/16/17	6/17/17 13:22	EEH
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260C	6/16/17	6/17/17 13:22	EEH
Chloroethane	ND	2.0	µg/L	1		SW-846 8260C	6/16/17	6/17/17 13:22	EEH
Chloroform	ND	2.0	µg/L	1		SW-846 8260C	6/16/17	6/17/17 13:22	EEH
Chloromethane	ND	2.0	µg/L	1		SW-846 8260C	6/16/17	6/17/17 13:22	EEH
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	6/16/17	6/17/17 13:22	EEH
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	6/16/17	6/17/17 13:22	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	2.0	µg/L	1		SW-846 8260C	6/16/17	6/17/17 13:22	EEH
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260C	6/16/17	6/17/17 13:22	EEH
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260C	6/16/17	6/17/17 13:22	EEH
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	6/16/17	6/17/17 13:22	EEH
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	6/16/17	6/17/17 13:22	EEH
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	6/16/17	6/17/17 13:22	EEH
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1		SW-846 8260C	6/16/17	6/17/17 13:22	EEH
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	6/16/17	6/17/17 13:22	EEH
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	6/16/17	6/17/17 13:22	EEH
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	6/16/17	6/17/17 13:22	EEH
cis-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	6/16/17	6/17/17 13:22	EEH
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	6/16/17	6/17/17 13:22	EEH
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	6/16/17	6/17/17 13:22	EEH
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260C	6/16/17	6/17/17 13:22	EEH
2,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	6/16/17	6/17/17 13:22	EEH
1,1-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	6/16/17	6/17/17 13:22	EEH
cis-1,3-Dichloropropene	ND	0.40	µg/L	1		SW-846 8260C	6/16/17	6/17/17 13:22	EEH
trans-1,3-Dichloropropene	ND	0.40	µg/L	1		SW-846 8260C	6/16/17	6/17/17 13:22	EEH
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260C	6/16/17	6/17/17 13:22	EEH
Diisopropyl Ether (DIPE)	ND	0.50	µg/L	1	V-05	SW-846 8260C	6/16/17	6/17/17 13:22	EEH
1,4-Dioxane	ND	50	µg/L	1	V-16	SW-846 8260C	6/16/17	6/17/17 13:22	EEH
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	6/16/17	6/17/17 13:22	EEH

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Project Location: ADW Seekonk, MA

Sample Description:

Work Order: 17F0761

Date Received: 6/14/2017

Field Sample #: SW602-W1-061417

Sampled: 6/14/2017 10:25

Sample ID: 17F0761-01

Sample Matrix: Surface Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Hexachlorobutadiene	ND	0.60	µg/L	1		SW-846 8260C	6/16/17	6/17/17 13:22	EEH
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260C	6/16/17	6/17/17 13:22	EEH
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260C	6/16/17	6/17/17 13:22	EEH
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260C	6/16/17	6/17/17 13:22	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260C	6/16/17	6/17/17 13:22	EEH
Methylene Chloride	ND	5.0	µg/L	1	RL-07	SW-846 8260C	6/16/17	6/17/17 13:22	EEH
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260C	6/16/17	6/17/17 13:22	EEH
Naphthalene	ND	5.0	µg/L	1	RL-07	SW-846 8260C	6/16/17	6/17/17 13:22	EEH
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260C	6/16/17	6/17/17 13:22	EEH
Styrene	ND	1.0	µg/L	1		SW-846 8260C	6/16/17	6/17/17 13:22	EEH
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1		SW-846 8260C	6/16/17	6/17/17 13:22	EEH
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260C	6/16/17	6/17/17 13:22	EEH
Tetrachloroethylene	ND	1.0	µg/L	1		SW-846 8260C	6/16/17	6/17/17 13:22	EEH
Tetrahydrofuran	ND	2.0	µg/L	1		SW-846 8260C	6/16/17	6/17/17 13:22	EEH
Toluene	ND	1.0	µg/L	1		SW-846 8260C	6/16/17	6/17/17 13:22	EEH
1,2,3-Trichlorobenzene	ND	2.0	µg/L	1		SW-846 8260C	6/16/17	6/17/17 13:22	EEH
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	6/16/17	6/17/17 13:22	EEH
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	6/16/17	6/17/17 13:22	EEH
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	6/16/17	6/17/17 13:22	EEH
Trichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	6/16/17	6/17/17 13:22	EEH
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260C	6/16/17	6/17/17 13:22	EEH
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260C	6/16/17	6/17/17 13:22	EEH
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	6/16/17	6/17/17 13:22	EEH
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	6/16/17	6/17/17 13:22	EEH
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260C	6/16/17	6/17/17 13:22	EEH
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260C	6/16/17	6/17/17 13:22	EEH
o-Xylene	ND	1.0	µg/L	1		SW-846 8260C	6/16/17	6/17/17 13:22	EEH

Surrogates	% Recovery	Recovery Limits	Flag/Qual
1,2-Dichloroethane-d4	96.0	70-130	6/17/17 13:22
Toluene-d8	97.2	70-130	6/17/17 13:22
4-Bromofluorobenzene	98.1	70-130	6/17/17 13:22

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Project Location: ADW Seekonk, MA

Sample Description:

Work Order: 17F0761

Date Received: 6/14/2017

Field Sample #: SW602-W1-061417

Sampled: 6/14/2017 10:25

Sample ID: 17F0761-01

Sample Matrix: Surface Water

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acenaphthene (low)	ND	0.30	µg/L	1		SW-846 8270D	6/19/17	6/21/17 12:47	CJM
Acenaphthylene (low)	ND	0.30	µg/L	1		SW-846 8270D	6/19/17	6/21/17 12:47	CJM
Anthracene (low)	ND	0.20	µg/L	1		SW-846 8270D	6/19/17	6/21/17 12:47	CJM
Benzo(a)anthracene (low)	ND	0.050	µg/L	1		SW-846 8270D	6/19/17	6/21/17 12:47	CJM
Benzo(a)pyrene (low)	ND	0.10	µg/L	1		SW-846 8270D	6/19/17	6/21/17 12:47	CJM
Benzo(b)fluoranthene (low)	ND	0.050	µg/L	1		SW-846 8270D	6/19/17	6/21/17 12:47	CJM
Benzo(g,h,i)perylene (low)	ND	0.50	µg/L	1		SW-846 8270D	6/19/17	6/21/17 12:47	CJM
Benzo(k)fluoranthene (low)	ND	0.20	µg/L	1		SW-846 8270D	6/19/17	6/21/17 12:47	CJM
Chrysene (low)	ND	0.20	µg/L	1		SW-846 8270D	6/19/17	6/21/17 12:47	CJM
Dibenz(a,h)anthracene (low)	ND	0.20	µg/L	1		SW-846 8270D	6/19/17	6/21/17 12:47	CJM
Fluoranthene (low)	ND	0.50	µg/L	1		SW-846 8270D	6/19/17	6/21/17 12:47	CJM
Fluorene (low)	ND	1.0	µg/L	1		SW-846 8270D	6/19/17	6/21/17 12:47	CJM
Indeno(1,2,3-cd)pyrene (low)	ND	0.20	µg/L	1		SW-846 8270D	6/19/17	6/21/17 12:47	CJM
2-Methylnaphthalene (low)	ND	1.0	µg/L	1		SW-846 8270D	6/19/17	6/21/17 12:47	CJM
Naphthalene (low)	ND	1.0	µg/L	1		SW-846 8270D	6/19/17	6/21/17 12:47	CJM
Phenanthrene (low)	ND	0.050	µg/L	1		SW-846 8270D	6/19/17	6/21/17 12:47	CJM
Pyrene (low)	ND	1.0	µg/L	1		SW-846 8270D	6/19/17	6/21/17 12:47	CJM
Surrogates	% Recovery	Recovery Limits	Flag/Qual						
Nitrobenzene-d5 (low)	92.7	30-130							
2-Fluorobiphenyl (low)	97.5	30-130							
p-Terphenyl-d14 (low)	90.8	30-130							

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Project Location: ADW Seekonk, MA

Sample Description:

Work Order: 17F0761

Date Received: 6/14/2017

Field Sample #: SW602-W1-061417

Sampled: 6/14/2017 10:25

Sample ID: 17F0761-01

Sample Matrix: Surface Water

Polychlorinated Biphenyls By GC/ECD

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.20	µg/L	1		SW-846 8082A	6/17/17	6/21/17 11:51	PJG
Aroclor-1221 [1]	ND	0.20	µg/L	1		SW-846 8082A	6/17/17	6/21/17 11:51	PJG
Aroclor-1232 [1]	ND	0.20	µg/L	1		SW-846 8082A	6/17/17	6/21/17 11:51	PJG
Aroclor-1242 [1]	ND	0.20	µg/L	1		SW-846 8082A	6/17/17	6/21/17 11:51	PJG
Aroclor-1248 [1]	ND	0.20	µg/L	1		SW-846 8082A	6/17/17	6/21/17 11:51	PJG
Aroclor-1254 [1]	ND	0.20	µg/L	1		SW-846 8082A	6/17/17	6/21/17 11:51	PJG
Aroclor-1260 [1]	ND	0.20	µg/L	1		SW-846 8082A	6/17/17	6/21/17 11:51	PJG
Aroclor-1262 [1]	ND	0.20	µg/L	1		SW-846 8082A	6/17/17	6/21/17 11:51	PJG
Aroclor-1268 [1]	ND	0.20	µg/L	1		SW-846 8082A	6/17/17	6/21/17 11:51	PJG
Surrogates	% Recovery	Recovery Limits	Flag/Qual						
Decachlorobiphenyl [1]	103	30-150							
Decachlorobiphenyl [2]	94.1	30-150							
Tetrachloro-m-xylene [1]	85.7	30-150							
Tetrachloro-m-xylene [2]	78.8	30-150							

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Project Location: ADW Seekonk, MA

Sample Description:

Work Order: 17F0761

Date Received: 6/14/2017

Field Sample #: SW602-W1-061417

Sampled: 6/14/2017 10:25

Sample ID: 17F0761-01

Sample Matrix: Surface Water

Petrolium Hydrocarbons Analyses - EPH

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
C9-C18 Aliphatics	ND	100	µg/L	1		MADEP-EPH-04-1.1	6/19/17	6/21/17 1:12	SCS
C19-C36 Aliphatics	ND	100	µg/L	1		MADEP-EPH-04-1.1	6/19/17	6/21/17 1:12	SCS
Unadjusted C11-C22 Aromatics	ND	100	µg/L	1		MADEP-EPH-04-1.1	6/19/17	6/21/17 1:12	SCS
C11-C22 Aromatics	ND	100	µg/L	1		MADEP-EPH-04-1.1	6/19/17	6/21/17 1:12	SCS
Acenaphthene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	6/19/17	6/21/17 1:12	SCS
Acenaphthylene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	6/19/17	6/21/17 1:12	SCS
Anthracene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	6/19/17	6/21/17 1:12	SCS
Benzo(a)anthracene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	6/19/17	6/21/17 1:12	SCS
Benzo(a)pyrene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	6/19/17	6/21/17 1:12	SCS
Benzo(b)fluoranthene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	6/19/17	6/21/17 1:12	SCS
Benzo(g,h,i)perylene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	6/19/17	6/21/17 1:12	SCS
Benzo(k)fluoranthene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	6/19/17	6/21/17 1:12	SCS
Chrysene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	6/19/17	6/21/17 1:12	SCS
Dibenz(a,h)anthracene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	6/19/17	6/21/17 1:12	SCS
Fluoranthene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	6/19/17	6/21/17 1:12	SCS
Fluorene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	6/19/17	6/21/17 1:12	SCS
Indeno(1,2,3-cd)pyrene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	6/19/17	6/21/17 1:12	SCS
2-Methylnaphthalene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	6/19/17	6/21/17 1:12	SCS
Naphthalene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	6/19/17	6/21/17 1:12	SCS
Phenanthrene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	6/19/17	6/21/17 1:12	SCS
Pyrene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	6/19/17	6/21/17 1:12	SCS
Surrogates	% Recovery	Recovery Limits	Flag/Qual						
Chlorooctadecane (COD)	53.2	40-140							
o-Terphenyl (OTP)	78.5	40-140							
2-Bromonaphthalene	94.8	40-140							
2-Fluorobiphenyl	92.0	40-140							

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Project Location: ADW Seekonk, MA

Sample Description:

Work Order: 17F0761

Date Received: 6/14/2017

Field Sample #: SW602-W1-061417

Sampled: 6/14/2017 10:25

Sample ID: 17F0761-01

Sample Matrix: Surface Water

Petroleum Hydrocarbons Analyses - VPH

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Unadjusted C5-C8 Aliphatics	ND	100	µg/L	1		MADEP-VPH-04-1.1	6/15/17	6/16/17 19:47	EEH
C5-C8 Aliphatics	ND	100	µg/L	1		MADEP-VPH-04-1.1	6/15/17	6/16/17 19:47	EEH
Unadjusted C9-C12 Aliphatics	ND	100	µg/L	1		MADEP-VPH-04-1.1	6/15/17	6/16/17 19:47	EEH
C9-C12 Aliphatics	ND	100	µg/L	1		MADEP-VPH-04-1.1	6/15/17	6/16/17 19:47	EEH
C9-C10 Aromatics	ND	100	µg/L	1		MADEP-VPH-04-1.1	6/15/17	6/16/17 19:47	EEH
Benzene	ND	1.0	µg/L	1		MADEP-VPH-04-1.1	6/15/17	6/16/17 19:47	EEH
Ethylbenzene	ND	1.0	µg/L	1		MADEP-VPH-04-1.1	6/15/17	6/16/17 19:47	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		MADEP-VPH-04-1.1	6/15/17	6/16/17 19:47	EEH
Naphthalene	ND	5.0	µg/L	1		MADEP-VPH-04-1.1	6/15/17	6/16/17 19:47	EEH
Toluene	ND	1.0	µg/L	1		MADEP-VPH-04-1.1	6/15/17	6/16/17 19:47	EEH
m+p Xylene	ND	2.0	µg/L	1		MADEP-VPH-04-1.1	6/15/17	6/16/17 19:47	EEH
o-Xylene	ND	1.0	µg/L	1		MADEP-VPH-04-1.1	6/15/17	6/16/17 19:47	EEH
Surrogates	% Recovery	Recovery Limits	Flag/Qual						
2,5-Dibromotoluene (FID)	88.4	70-130							
2,5-Dibromotoluene (PID)	90.0	70-130							

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

Project Location: ADW Seekonk, MA

Sample Description:

Work Order: 17F0761

Date Received: 6/14/2017

Field Sample #: SW602-W1-061417

Sampled: 6/14/2017 10:25

Sample ID: 17F0761-01

Sample Matrix: Surface Water

Metals Analyses (Dissolved)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Antimony	ND	1.0	µg/L	1		SW-846 6020A-B	6/19/17	6/20/17 13:56	MJH
Arsenic	0.56	0.40	µg/L	1		SW-846 6020A-B	6/19/17	6/20/17 13:56	MJH
Beryllium	ND	0.40	µg/L	1		SW-846 6020A-B	6/19/17	6/20/17 13:56	MJH
Cadmium	ND	0.50	µg/L	1		SW-846 6020A-B	6/19/17	6/20/17 13:56	MJH
Chromium	2.1	1.0	µg/L	1		SW-846 6020A-B	6/19/17	6/20/17 13:56	MJH
Copper	13	5.0	µg/L	1		SW-846 6020A-B	6/19/17	6/20/17 13:56	MJH
Lead	1.7	1.0	µg/L	1		SW-846 6020A-B	6/19/17	6/20/17 13:56	MJH
Mercury	ND	0.00010	mg/L	1		SW-846 7470A	6/16/17	6/19/17 11:17	TJK
Nickel	25	5.0	µg/L	1		SW-846 6020A-B	6/19/17	6/20/17 13:56	MJH
Selenium	ND	5.0	µg/L	1		SW-846 6020A-B	6/19/17	6/20/17 13:56	MJH
Silver	ND	0.50	µg/L	1		SW-846 6020A-B	6/19/17	6/20/17 13:56	MJH
Thallium	ND	0.20	µg/L	1		SW-846 6020A-B	6/19/17	6/20/17 13:56	MJH
Zinc	16	10	µg/L	1		SW-846 6020A-B	6/19/17	6/20/17 13:56	MJH

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Project Location: ADW Seekonk, MA

Sample Description:

Work Order: 17F0761

Date Received: 6/14/2017

Field Sample #: SW602-W1-061417

Sampled: 6/14/2017 10:25

Sample ID: 17F0761-01

Sample Matrix: Surface Water

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

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Hardness	72	2.0	mg/L	1		SM21-22 2340C	6/20/17	6/20/17 16:00	IS
Hexavalent Chromium	ND	0.0040	mg/L	1		SM21-22 3500 Cr B	6/14/17	6/14/17 18:30	IS

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Project Location: ADW Seekonk, MA

Sample Description:

Work Order: 17F0761

Date Received: 6/14/2017

Field Sample #: SW605-W1-061417

Sampled: 6/14/2017 09:45

Sample ID: 17F0761-02

Sample Matrix: Surface Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	10	µg/L	1		SW-846 8260C	6/16/17	6/17/17 13:49	EEH
tert-Amyl Methyl Ether (TAME)	ND	1.0	µg/L	1		SW-846 8260C	6/16/17	6/17/17 13:49	EEH
Benzene	ND	1.0	µg/L	1		SW-846 8260C	6/16/17	6/17/17 13:49	EEH
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260C	6/16/17	6/17/17 13:49	EEH
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260C	6/16/17	6/17/17 13:49	EEH
Bromodichloromethane	ND	1.0	µg/L	1		SW-846 8260C	6/16/17	6/17/17 13:49	EEH
Bromoform	ND	2.0	µg/L	1		SW-846 8260C	6/16/17	6/17/17 13:49	EEH
Bromomethane	ND	5.0	µg/L	1	RL-07	SW-846 8260C	6/16/17	6/17/17 13:49	EEH
2-Butanone (MEK)	ND	10	µg/L	1	V-05	SW-846 8260C	6/16/17	6/17/17 13:49	EEH
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	6/16/17	6/17/17 13:49	EEH
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	6/16/17	6/17/17 13:49	EEH
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	6/16/17	6/17/17 13:49	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260C	6/16/17	6/17/17 13:49	EEH
Carbon Disulfide	ND	5.0	µg/L	1	RL-07	SW-846 8260C	6/16/17	6/17/17 13:49	EEH
Carbon Tetrachloride	ND	1.0	µg/L	1		SW-846 8260C	6/16/17	6/17/17 13:49	EEH
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	6/16/17	6/17/17 13:49	EEH
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260C	6/16/17	6/17/17 13:49	EEH
Chloroethane	ND	2.0	µg/L	1		SW-846 8260C	6/16/17	6/17/17 13:49	EEH
Chloroform	ND	2.0	µg/L	1		SW-846 8260C	6/16/17	6/17/17 13:49	EEH
Chloromethane	ND	2.0	µg/L	1		SW-846 8260C	6/16/17	6/17/17 13:49	EEH
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	6/16/17	6/17/17 13:49	EEH
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	6/16/17	6/17/17 13:49	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	2.0	µg/L	1		SW-846 8260C	6/16/17	6/17/17 13:49	EEH
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260C	6/16/17	6/17/17 13:49	EEH
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260C	6/16/17	6/17/17 13:49	EEH
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	6/16/17	6/17/17 13:49	EEH
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	6/16/17	6/17/17 13:49	EEH
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	6/16/17	6/17/17 13:49	EEH
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1		SW-846 8260C	6/16/17	6/17/17 13:49	EEH
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	6/16/17	6/17/17 13:49	EEH
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	6/16/17	6/17/17 13:49	EEH
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	6/16/17	6/17/17 13:49	EEH
cis-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	6/16/17	6/17/17 13:49	EEH
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	6/16/17	6/17/17 13:49	EEH
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	6/16/17	6/17/17 13:49	EEH
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260C	6/16/17	6/17/17 13:49	EEH
2,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	6/16/17	6/17/17 13:49	EEH
1,1-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	6/16/17	6/17/17 13:49	EEH
cis-1,3-Dichloropropene	ND	0.40	µg/L	1		SW-846 8260C	6/16/17	6/17/17 13:49	EEH
trans-1,3-Dichloropropene	ND	0.40	µg/L	1		SW-846 8260C	6/16/17	6/17/17 13:49	EEH
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260C	6/16/17	6/17/17 13:49	EEH
Diisopropyl Ether (DIPE)	ND	0.50	µg/L	1	V-05	SW-846 8260C	6/16/17	6/17/17 13:49	EEH
1,4-Dioxane	ND	50	µg/L	1	V-16	SW-846 8260C	6/16/17	6/17/17 13:49	EEH
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	6/16/17	6/17/17 13:49	EEH

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Project Location: ADW Seekonk, MA

Sample Description:

Work Order: 17F0761

Date Received: 6/14/2017

Field Sample #: SW605-W1-061417

Sampled: 6/14/2017 09:45

Sample ID: 17F0761-02

Sample Matrix: Surface Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Hexachlorobutadiene	ND	0.60	µg/L	1		SW-846 8260C	6/16/17	6/17/17 13:49	EEH
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260C	6/16/17	6/17/17 13:49	EEH
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260C	6/16/17	6/17/17 13:49	EEH
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260C	6/16/17	6/17/17 13:49	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260C	6/16/17	6/17/17 13:49	EEH
Methylene Chloride	ND	5.0	µg/L	1	RL-07	SW-846 8260C	6/16/17	6/17/17 13:49	EEH
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260C	6/16/17	6/17/17 13:49	EEH
Naphthalene	ND	5.0	µg/L	1	RL-07	SW-846 8260C	6/16/17	6/17/17 13:49	EEH
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260C	6/16/17	6/17/17 13:49	EEH
Styrene	ND	1.0	µg/L	1		SW-846 8260C	6/16/17	6/17/17 13:49	EEH
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1		SW-846 8260C	6/16/17	6/17/17 13:49	EEH
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260C	6/16/17	6/17/17 13:49	EEH
Tetrachloroethylene	ND	1.0	µg/L	1		SW-846 8260C	6/16/17	6/17/17 13:49	EEH
Tetrahydrofuran	ND	2.0	µg/L	1		SW-846 8260C	6/16/17	6/17/17 13:49	EEH
Toluene	ND	1.0	µg/L	1		SW-846 8260C	6/16/17	6/17/17 13:49	EEH
1,2,3-Trichlorobenzene	ND	2.0	µg/L	1		SW-846 8260C	6/16/17	6/17/17 13:49	EEH
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	6/16/17	6/17/17 13:49	EEH
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	6/16/17	6/17/17 13:49	EEH
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	6/16/17	6/17/17 13:49	EEH
Trichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	6/16/17	6/17/17 13:49	EEH
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260C	6/16/17	6/17/17 13:49	EEH
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260C	6/16/17	6/17/17 13:49	EEH
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	6/16/17	6/17/17 13:49	EEH
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	6/16/17	6/17/17 13:49	EEH
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260C	6/16/17	6/17/17 13:49	EEH
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260C	6/16/17	6/17/17 13:49	EEH
o-Xylene	ND	1.0	µg/L	1		SW-846 8260C	6/16/17	6/17/17 13:49	EEH

Surrogates	% Recovery	Recovery Limits	Flag/Qual
1,2-Dichloroethane-d4	93.5	70-130	
Toluene-d8	95.0	70-130	
4-Bromofluorobenzene	101	70-130	

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Project Location: ADW Seekonk, MA

Sample Description:

Work Order: 17F0761

Date Received: 6/14/2017

Field Sample #: SW605-W1-061417

Sampled: 6/14/2017 09:45

Sample ID: 17F0761-02

Sample Matrix: Surface Water

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acenaphthene (low)	ND	0.30	µg/L	1		SW-846 8270D	6/19/17	6/21/17 13:16	CJM
Acenaphthylene (low)	ND	0.30	µg/L	1		SW-846 8270D	6/19/17	6/21/17 13:16	CJM
Anthracene (low)	ND	0.20	µg/L	1		SW-846 8270D	6/19/17	6/21/17 13:16	CJM
Benzo(a)anthracene (low)	ND	0.050	µg/L	1		SW-846 8270D	6/19/17	6/21/17 13:16	CJM
Benzo(a)pyrene (low)	ND	0.10	µg/L	1		SW-846 8270D	6/19/17	6/21/17 13:16	CJM
Benzo(b)fluoranthene (low)	ND	0.050	µg/L	1		SW-846 8270D	6/19/17	6/21/17 13:16	CJM
Benzo(g,h,i)perylene (low)	ND	0.50	µg/L	1		SW-846 8270D	6/19/17	6/21/17 13:16	CJM
Benzo(k)fluoranthene (low)	ND	0.20	µg/L	1		SW-846 8270D	6/19/17	6/21/17 13:16	CJM
Chrysene (low)	ND	0.20	µg/L	1		SW-846 8270D	6/19/17	6/21/17 13:16	CJM
Dibenz(a,h)anthracene (low)	ND	0.20	µg/L	1		SW-846 8270D	6/19/17	6/21/17 13:16	CJM
Fluoranthene (low)	ND	0.50	µg/L	1		SW-846 8270D	6/19/17	6/21/17 13:16	CJM
Fluorene (low)	ND	1.0	µg/L	1		SW-846 8270D	6/19/17	6/21/17 13:16	CJM
Indeno(1,2,3-cd)pyrene (low)	ND	0.20	µg/L	1		SW-846 8270D	6/19/17	6/21/17 13:16	CJM
2-Methylnaphthalene (low)	ND	1.0	µg/L	1		SW-846 8270D	6/19/17	6/21/17 13:16	CJM
Naphthalene (low)	ND	1.0	µg/L	1		SW-846 8270D	6/19/17	6/21/17 13:16	CJM
Phenanthrene (low)	ND	0.050	µg/L	1		SW-846 8270D	6/19/17	6/21/17 13:16	CJM
Pyrene (low)	ND	1.0	µg/L	1		SW-846 8270D	6/19/17	6/21/17 13:16	CJM
Surrogates	% Recovery	Recovery Limits	Flag/Qual						
Nitrobenzene-d5 (low)	97.0	30-130						6/21/17 13:16	
2-Fluorobiphenyl (low)	105	30-130						6/21/17 13:16	
p-Terphenyl-d14 (low)	91.1	30-130						6/21/17 13:16	

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Project Location: ADW Seekonk, MA

Sample Description:

Work Order: 17F0761

Date Received: 6/14/2017

Field Sample #: SW605-W1-061417

Sampled: 6/14/2017 09:45

Sample ID: 17F0761-02

Sample Matrix: Surface Water

Polychlorinated Biphenyls By GC/ECD

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.20	µg/L	1		SW-846 8082A	6/17/17	6/21/17 12:04	PJG
Aroclor-1221 [1]	ND	0.20	µg/L	1		SW-846 8082A	6/17/17	6/21/17 12:04	PJG
Aroclor-1232 [1]	ND	0.20	µg/L	1		SW-846 8082A	6/17/17	6/21/17 12:04	PJG
Aroclor-1242 [1]	ND	0.20	µg/L	1		SW-846 8082A	6/17/17	6/21/17 12:04	PJG
Aroclor-1248 [1]	ND	0.20	µg/L	1		SW-846 8082A	6/17/17	6/21/17 12:04	PJG
Aroclor-1254 [1]	ND	0.20	µg/L	1		SW-846 8082A	6/17/17	6/21/17 12:04	PJG
Aroclor-1260 [1]	ND	0.20	µg/L	1		SW-846 8082A	6/17/17	6/21/17 12:04	PJG
Aroclor-1262 [1]	ND	0.20	µg/L	1		SW-846 8082A	6/17/17	6/21/17 12:04	PJG
Aroclor-1268 [1]	ND	0.20	µg/L	1		SW-846 8082A	6/17/17	6/21/17 12:04	PJG
Surrogates	% Recovery	Recovery Limits	Flag/Qual						
Decachlorobiphenyl [1]	95.1	30-150							
Decachlorobiphenyl [2]	87.7	30-150							
Tetrachloro-m-xylene [1]	83.1	30-150							
Tetrachloro-m-xylene [2]	80.3	30-150							

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Project Location: ADW Seekonk, MA

Sample Description:

Work Order: 17F0761

Date Received: 6/14/2017

Field Sample #: SW605-W1-061417

Sampled: 6/14/2017 09:45

Sample ID: 17F0761-02

Sample Matrix: Surface Water

Petrolium Hydrocarbons Analyses - EPH

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
C9-C18 Aliphatics	ND	100	µg/L	1		MADEP-EPH-04-1.1	6/19/17	6/21/17 1:32	SCS
C19-C36 Aliphatics	ND	100	µg/L	1		MADEP-EPH-04-1.1	6/19/17	6/21/17 1:32	SCS
Unadjusted C11-C22 Aromatics	ND	100	µg/L	1		MADEP-EPH-04-1.1	6/19/17	6/21/17 1:32	SCS
C11-C22 Aromatics	ND	100	µg/L	1		MADEP-EPH-04-1.1	6/19/17	6/21/17 1:32	SCS
Acenaphthene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	6/19/17	6/21/17 1:32	SCS
Acenaphthylene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	6/19/17	6/21/17 1:32	SCS
Anthracene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	6/19/17	6/21/17 1:32	SCS
Benzo(a)anthracene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	6/19/17	6/21/17 1:32	SCS
Benzo(a)pyrene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	6/19/17	6/21/17 1:32	SCS
Benzo(b)fluoranthene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	6/19/17	6/21/17 1:32	SCS
Benzo(g,h,i)perylene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	6/19/17	6/21/17 1:32	SCS
Benzo(k)fluoranthene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	6/19/17	6/21/17 1:32	SCS
Chrysene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	6/19/17	6/21/17 1:32	SCS
Dibenz(a,h)anthracene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	6/19/17	6/21/17 1:32	SCS
Fluoranthene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	6/19/17	6/21/17 1:32	SCS
Fluorene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	6/19/17	6/21/17 1:32	SCS
Indeno(1,2,3-cd)pyrene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	6/19/17	6/21/17 1:32	SCS
2-Methylnaphthalene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	6/19/17	6/21/17 1:32	SCS
Naphthalene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	6/19/17	6/21/17 1:32	SCS
Phenanthrene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	6/19/17	6/21/17 1:32	SCS
Pyrene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	6/19/17	6/21/17 1:32	SCS
Surrogates	% Recovery	Recovery Limits	Flag/Qual						
Chlorooctadecane (COD)	46.8	40-140							
o-Terphenyl (OTP)	76.8	40-140							
2-Bromonaphthalene	110	40-140							
2-Fluorobiphenyl	103	40-140							

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Project Location: ADW Seekonk, MA

Sample Description:

Work Order: 17F0761

Date Received: 6/14/2017

Field Sample #: SW605-W1-061417

Sampled: 6/14/2017 09:45

Sample ID: 17F0761-02

Sample Matrix: Surface Water

Petroleum Hydrocarbons Analyses - VPH

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Unadjusted C5-C8 Aliphatics	ND	100	µg/L	1		MADEP-VPH-04-1.1	6/15/17	6/16/17 20:24	EEH
C5-C8 Aliphatics	ND	100	µg/L	1		MADEP-VPH-04-1.1	6/15/17	6/16/17 20:24	EEH
Unadjusted C9-C12 Aliphatics	ND	100	µg/L	1		MADEP-VPH-04-1.1	6/15/17	6/16/17 20:24	EEH
C9-C12 Aliphatics	ND	100	µg/L	1		MADEP-VPH-04-1.1	6/15/17	6/16/17 20:24	EEH
C9-C10 Aromatics	ND	100	µg/L	1		MADEP-VPH-04-1.1	6/15/17	6/16/17 20:24	EEH
Benzene	ND	1.0	µg/L	1		MADEP-VPH-04-1.1	6/15/17	6/16/17 20:24	EEH
Ethylbenzene	ND	1.0	µg/L	1		MADEP-VPH-04-1.1	6/15/17	6/16/17 20:24	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		MADEP-VPH-04-1.1	6/15/17	6/16/17 20:24	EEH
Naphthalene	ND	5.0	µg/L	1		MADEP-VPH-04-1.1	6/15/17	6/16/17 20:24	EEH
Toluene	ND	1.0	µg/L	1		MADEP-VPH-04-1.1	6/15/17	6/16/17 20:24	EEH
m+p Xylene	ND	2.0	µg/L	1		MADEP-VPH-04-1.1	6/15/17	6/16/17 20:24	EEH
o-Xylene	ND	1.0	µg/L	1		MADEP-VPH-04-1.1	6/15/17	6/16/17 20:24	EEH
Surrogates	% Recovery	Recovery Limits	Flag/Qual						
2,5-Dibromotoluene (FID)	81.6	70-130							
2,5-Dibromotoluene (PID)	84.4	70-130							

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Project Location: ADW Seekonk, MA

Sample Description:

Work Order: 17F0761

Date Received: 6/14/2017

Field Sample #: SW605-W1-061417

Sampled: 6/14/2017 09:45

Sample ID: 17F0761-02

Sample Matrix: Surface Water

Metals Analyses (Dissolved)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Antimony	ND	1.0	µg/L	1		SW-846 6020A-B	6/19/17	6/20/17 13:59	MJH
Arsenic	ND	0.40	µg/L	1		SW-846 6020A-B	6/19/17	6/20/17 13:59	MJH
Beryllium	ND	0.40	µg/L	1		SW-846 6020A-B	6/19/17	6/20/17 13:59	MJH
Cadmium	ND	0.50	µg/L	1		SW-846 6020A-B	6/19/17	6/20/17 13:59	MJH
Chromium	2.2	1.0	µg/L	1		SW-846 6020A-B	6/19/17	6/20/17 13:59	MJH
Copper	10	5.0	µg/L	1		SW-846 6020A-B	6/19/17	6/20/17 13:59	MJH
Lead	1.8	1.0	µg/L	1		SW-846 6020A-B	6/19/17	6/20/17 13:59	MJH
Mercury	ND	0.00010	mg/L	1		SW-846 7470A	6/16/17	6/19/17 11:22	TJK
Nickel	24	5.0	µg/L	1		SW-846 6020A-B	6/19/17	6/20/17 13:59	MJH
Selenium	ND	5.0	µg/L	1		SW-846 6020A-B	6/19/17	6/20/17 13:59	MJH
Silver	ND	0.50	µg/L	1		SW-846 6020A-B	6/19/17	6/20/17 13:59	MJH
Thallium	ND	0.20	µg/L	1		SW-846 6020A-B	6/19/17	6/20/17 13:59	MJH
Zinc	15	10	µg/L	1		SW-846 6020A-B	6/19/17	6/20/17 13:59	MJH

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Project Location: ADW Seekonk, MA

Sample Description:

Work Order: 17F0761

Date Received: 6/14/2017

Field Sample #: SW605-W1-061417

Sampled: 6/14/2017 09:45

Sample ID: 17F0761-02

Sample Matrix: Surface Water

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

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Hardness	76	2.0	mg/L	1		SM21-22 2340C	6/20/17	6/20/17 16:00	IS
Hexavalent Chromium	ND	0.0040	mg/L	1		SM21-22 3500 Cr B	6/14/17	6/14/17 18:30	IS

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Project Location: ADW Seekonk, MA

Sample Description:

Work Order: 17F0761

Date Received: 6/14/2017

Field Sample #: SED506-S1-061417

Sampled: 6/14/2017 11:15

Sample ID: 17F0761-03

Sample Matrix: Sediment

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	0.071	mg/Kg dry	1	V-05	SW-846 8260C	6/20/17	6/21/17 16:13	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.00071	mg/Kg dry	1		SW-846 8260C	6/20/17	6/21/17 16:13	MFF
Benzene	ND	0.0014	mg/Kg dry	1		SW-846 8260C	6/20/17	6/21/17 16:13	MFF
Bromobenzene	ND	0.0014	mg/Kg dry	1		SW-846 8260C	6/20/17	6/21/17 16:13	MFF
Bromochloromethane	ND	0.0014	mg/Kg dry	1		SW-846 8260C	6/20/17	6/21/17 16:13	MFF
Bromodichloromethane	ND	0.0014	mg/Kg dry	1		SW-846 8260C	6/20/17	6/21/17 16:13	MFF
Bromoform	ND	0.0014	mg/Kg dry	1	V-05	SW-846 8260C	6/20/17	6/21/17 16:13	MFF
Bromomethane	ND	0.0071	mg/Kg dry	1		SW-846 8260C	6/20/17	6/21/17 16:13	MFF
2-Butanone (MEK)	ND	0.028	mg/Kg dry	1		SW-846 8260C	6/20/17	6/21/17 16:13	MFF
n-Butylbenzene	ND	0.0014	mg/Kg dry	1		SW-846 8260C	6/20/17	6/21/17 16:13	MFF
sec-Butylbenzene	ND	0.0014	mg/Kg dry	1		SW-846 8260C	6/20/17	6/21/17 16:13	MFF
tert-Butylbenzene	ND	0.0014	mg/Kg dry	1		SW-846 8260C	6/20/17	6/21/17 16:13	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.00071	mg/Kg dry	1		SW-846 8260C	6/20/17	6/21/17 16:13	MFF
Carbon Disulfide	ND	0.0042	mg/Kg dry	1		SW-846 8260C	6/20/17	6/21/17 16:13	MFF
Carbon Tetrachloride	ND	0.0014	mg/Kg dry	1		SW-846 8260C	6/20/17	6/21/17 16:13	MFF
Chlorobenzene	ND	0.0014	mg/Kg dry	1		SW-846 8260C	6/20/17	6/21/17 16:13	MFF
Chlorodibromomethane	ND	0.0014	mg/Kg dry	1		SW-846 8260C	6/20/17	6/21/17 16:13	MFF
Chloroethane	ND	0.0071	mg/Kg dry	1		SW-846 8260C	6/20/17	6/21/17 16:13	MFF
Chloroform	ND	0.0028	mg/Kg dry	1		SW-846 8260C	6/20/17	6/21/17 16:13	MFF
Chloromethane	ND	0.0071	mg/Kg dry	1		SW-846 8260C	6/20/17	6/21/17 16:13	MFF
2-Chlorotoluene	ND	0.0014	mg/Kg dry	1		SW-846 8260C	6/20/17	6/21/17 16:13	MFF
4-Chlorotoluene	ND	0.0014	mg/Kg dry	1		SW-846 8260C	6/20/17	6/21/17 16:13	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0028	mg/Kg dry	1	R-05, V-05	SW-846 8260C	6/20/17	6/21/17 16:13	MFF
1,2-Dibromoethane (EDB)	ND	0.0014	mg/Kg dry	1		SW-846 8260C	6/20/17	6/21/17 16:13	MFF
Dibromomethane	ND	0.0014	mg/Kg dry	1		SW-846 8260C	6/20/17	6/21/17 16:13	MFF
1,2-Dichlorobenzene	ND	0.0014	mg/Kg dry	1		SW-846 8260C	6/20/17	6/21/17 16:13	MFF
1,3-Dichlorobenzene	ND	0.0014	mg/Kg dry	1		SW-846 8260C	6/20/17	6/21/17 16:13	MFF
1,4-Dichlorobenzene	ND	0.0014	mg/Kg dry	1		SW-846 8260C	6/20/17	6/21/17 16:13	MFF
Dichlorodifluoromethane (Freon 12)	ND	0.0071	mg/Kg dry	1		SW-846 8260C	6/20/17	6/21/17 16:13	MFF
1,1-Dichloroethane	ND	0.0014	mg/Kg dry	1		SW-846 8260C	6/20/17	6/21/17 16:13	MFF
1,2-Dichloroethane	ND	0.0014	mg/Kg dry	1		SW-846 8260C	6/20/17	6/21/17 16:13	MFF
1,1-Dichloroethylene	ND	0.0028	mg/Kg dry	1		SW-846 8260C	6/20/17	6/21/17 16:13	MFF
cis-1,2-Dichloroethylene	ND	0.0014	mg/Kg dry	1		SW-846 8260C	6/20/17	6/21/17 16:13	MFF
trans-1,2-Dichloroethylene	ND	0.0014	mg/Kg dry	1		SW-846 8260C	6/20/17	6/21/17 16:13	MFF
1,2-Dichloropropane	ND	0.0014	mg/Kg dry	1		SW-846 8260C	6/20/17	6/21/17 16:13	MFF
1,3-Dichloropropane	ND	0.00071	mg/Kg dry	1		SW-846 8260C	6/20/17	6/21/17 16:13	MFF
2,2-Dichloropropane	ND	0.0014	mg/Kg dry	1		SW-846 8260C	6/20/17	6/21/17 16:13	MFF
1,1-Dichloropropene	ND	0.0014	mg/Kg dry	1		SW-846 8260C	6/20/17	6/21/17 16:13	MFF
cis-1,3-Dichloropropene	ND	0.00071	mg/Kg dry	1		SW-846 8260C	6/20/17	6/21/17 16:13	MFF
trans-1,3-Dichloropropene	ND	0.00071	mg/Kg dry	1		SW-846 8260C	6/20/17	6/21/17 16:13	MFF
Diethyl Ether	ND	0.0071	mg/Kg dry	1		SW-846 8260C	6/20/17	6/21/17 16:13	MFF
Diisopropyl Ether (DIPE)	ND	0.00071	mg/Kg dry	1		SW-846 8260C	6/20/17	6/21/17 16:13	MFF
1,4-Dioxane	ND	0.071	mg/Kg dry	1	V-16	SW-846 8260C	6/20/17	6/21/17 16:13	MFF
Ethylbenzene	ND	0.0014	mg/Kg dry	1		SW-846 8260C	6/20/17	6/21/17 16:13	MFF

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Project Location: ADW Seekonk, MA

Sample Description:

Work Order: 17F0761

Date Received: 6/14/2017

Field Sample #: SED506-S1-061417

Sampled: 6/14/2017 11:15

Sample ID: 17F0761-03

Sample Matrix: Sediment

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Hexachlorobutadiene	ND	0.0014	mg/Kg dry	1		SW-846 8260C	6/20/17	6/21/17 16:13	MFF
2-Hexanone (MBK)	ND	0.014	mg/Kg dry	1		SW-846 8260C	6/20/17	6/21/17 16:13	MFF
Isopropylbenzene (Cumene)	ND	0.0014	mg/Kg dry	1		SW-846 8260C	6/20/17	6/21/17 16:13	MFF
p-Isopropyltoluene (p-Cymene)	ND	0.0014	mg/Kg dry	1		SW-846 8260C	6/20/17	6/21/17 16:13	MFF
Methyl tert-Butyl Ether (MTBE)	ND	0.0028	mg/Kg dry	1		SW-846 8260C	6/20/17	6/21/17 16:13	MFF
Methylene Chloride	ND	0.0071	mg/Kg dry	1		SW-846 8260C	6/20/17	6/21/17 16:13	MFF
4-Methyl-2-pentanone (MIBK)	ND	0.014	mg/Kg dry	1		SW-846 8260C	6/20/17	6/21/17 16:13	MFF
Naphthalene	ND	0.0071	mg/Kg dry	1		SW-846 8260C	6/20/17	6/21/17 16:13	MFF
n-Propylbenzene	ND	0.0014	mg/Kg dry	1		SW-846 8260C	6/20/17	6/21/17 16:13	MFF
Styrene	ND	0.0014	mg/Kg dry	1		SW-846 8260C	6/20/17	6/21/17 16:13	MFF
1,1,1,2-Tetrachloroethane	ND	0.0014	mg/Kg dry	1		SW-846 8260C	6/20/17	6/21/17 16:13	MFF
1,1,2,2-Tetrachloroethane	ND	0.00071	mg/Kg dry	1		SW-846 8260C	6/20/17	6/21/17 16:13	MFF
Tetrachloroethylene	ND	0.0014	mg/Kg dry	1		SW-846 8260C	6/20/17	6/21/17 16:13	MFF
Tetrahydrofuran	ND	0.0071	mg/Kg dry	1		SW-846 8260C	6/20/17	6/21/17 16:13	MFF
Toluene	ND	0.0014	mg/Kg dry	1		SW-846 8260C	6/20/17	6/21/17 16:13	MFF
1,2,3-Trichlorobenzene	ND	0.0071	mg/Kg dry	1		SW-846 8260C	6/20/17	6/21/17 16:13	MFF
1,2,4-Trichlorobenzene	ND	0.035	mg/Kg dry	1		SW-846 8260C	6/20/17	6/21/17 16:13	MFF
1,1,1-Trichloroethane	ND	0.0014	mg/Kg dry	1		SW-846 8260C	6/20/17	6/21/17 16:13	MFF
1,1,2-Trichloroethane	ND	0.0014	mg/Kg dry	1		SW-846 8260C	6/20/17	6/21/17 16:13	MFF
Trichloroethylene	ND	0.0014	mg/Kg dry	1		SW-846 8260C	6/20/17	6/21/17 16:13	MFF
Trichlorofluoromethane (Freon 11)	ND	0.0071	mg/Kg dry	1		SW-846 8260C	6/20/17	6/21/17 16:13	MFF
1,2,3-Trichloropropane	ND	0.0014	mg/Kg dry	1		SW-846 8260C	6/20/17	6/21/17 16:13	MFF
1,2,4-Trimethylbenzene	ND	0.0014	mg/Kg dry	1		SW-846 8260C	6/20/17	6/21/17 16:13	MFF
1,3,5-Trimethylbenzene	ND	0.0014	mg/Kg dry	1		SW-846 8260C	6/20/17	6/21/17 16:13	MFF
Vinyl Chloride	ND	0.0071	mg/Kg dry	1		SW-846 8260C	6/20/17	6/21/17 16:13	MFF
m+p Xylene	ND	0.0028	mg/Kg dry	1		SW-846 8260C	6/20/17	6/21/17 16:13	MFF
o-Xylene	ND	0.0014	mg/Kg dry	1		SW-846 8260C	6/20/17	6/21/17 16:13	MFF

Surrogates	% Recovery	Recovery Limits	Flag/Qual
1,2-Dichloroethane-d4	93.7	70-130	
Toluene-d8	92.0	70-130	
4-Bromofluorobenzene	93.3	70-130	

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Project Location: ADW Seekonk, MA

Sample Description:

Work Order: 17F0761

Date Received: 6/14/2017

Field Sample #: SED506-S1-061417

Sampled: 6/14/2017 11:15

Sample ID: 17F0761-03

Sample Matrix: Sediment

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acenaphthene	ND	0.21	mg/Kg dry	1		SW-846 8270D	6/20/17	6/22/17 23:07	BGL
Acenaphthylene	ND	0.21	mg/Kg dry	1		SW-846 8270D	6/20/17	6/22/17 23:07	BGL
Anthracene	ND	0.21	mg/Kg dry	1		SW-846 8270D	6/20/17	6/22/17 23:07	BGL
Benzo(a)anthracene	ND	0.21	mg/Kg dry	1		SW-846 8270D	6/20/17	6/22/17 23:07	BGL
Benzo(a)pyrene	ND	0.21	mg/Kg dry	1		SW-846 8270D	6/20/17	6/22/17 23:07	BGL
Benzo(b)fluoranthene	ND	0.21	mg/Kg dry	1		SW-846 8270D	6/20/17	6/22/17 23:07	BGL
Benzo(g,h,i)perylene	ND	0.21	mg/Kg dry	1		SW-846 8270D	6/20/17	6/22/17 23:07	BGL
Benzo(k)fluoranthene	ND	0.21	mg/Kg dry	1		SW-846 8270D	6/20/17	6/22/17 23:07	BGL
Chrysene	ND	0.21	mg/Kg dry	1		SW-846 8270D	6/20/17	6/22/17 23:07	BGL
Dibenz(a,h)anthracene	ND	0.21	mg/Kg dry	1		SW-846 8270D	6/20/17	6/22/17 23:07	BGL
Fluoranthene	ND	0.21	mg/Kg dry	1		SW-846 8270D	6/20/17	6/22/17 23:07	BGL
Fluorene	ND	0.21	mg/Kg dry	1		SW-846 8270D	6/20/17	6/22/17 23:07	BGL
Indeno(1,2,3-cd)pyrene	ND	0.21	mg/Kg dry	1		SW-846 8270D	6/20/17	6/22/17 23:07	BGL
2-Methylnaphthalene	ND	0.21	mg/Kg dry	1		SW-846 8270D	6/20/17	6/22/17 23:07	BGL
Naphthalene	ND	0.21	mg/Kg dry	1		SW-846 8270D	6/20/17	6/22/17 23:07	BGL
Phenanthrene	ND	0.21	mg/Kg dry	1		SW-846 8270D	6/20/17	6/22/17 23:07	BGL
Pyrene	ND	0.21	mg/Kg dry	1		SW-846 8270D	6/20/17	6/22/17 23:07	BGL
Surrogates	% Recovery	Recovery Limits	Flag/Qual						
Nitrobenzene-d5	81.7	30-130							
2-Fluorobiphenyl	85.1	30-130							
p-Terphenyl-d14	94.9	30-130							

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Project Location: ADW Seekonk, MA

Sample Description:

Work Order: 17F0761

Date Received: 6/14/2017

Field Sample #: SED506-S1-061417

Sampled: 6/14/2017 11:15

Sample ID: 17F0761-03

Sample Matrix: Sediment

Sample Flags: O-32

Polychlorinated Biphenyls By GC/ECD

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	6/21/17	6/22/17 20:52	KAL
Aroclor-1221 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	6/21/17	6/22/17 20:52	KAL
Aroclor-1232 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	6/21/17	6/22/17 20:52	KAL
Aroclor-1242 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	6/21/17	6/22/17 20:52	KAL
Aroclor-1248 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	6/21/17	6/22/17 20:52	KAL
Aroclor-1254 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	6/21/17	6/22/17 20:52	KAL
Aroclor-1260 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	6/21/17	6/22/17 20:52	KAL
Aroclor-1262 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	6/21/17	6/22/17 20:52	KAL
Aroclor-1268 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	6/21/17	6/22/17 20:52	KAL
Surrogates	% Recovery	Recovery Limits	Flag/Qual						
Decachlorobiphenyl [1]	102	30-150						6/22/17 20:52	
Decachlorobiphenyl [2]	112	30-150						6/22/17 20:52	
Tetrachloro-m-xylene [1]	88.9	30-150						6/22/17 20:52	
Tetrachloro-m-xylene [2]	91.1	30-150						6/22/17 20:52	

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Project Location: ADW Seekonk, MA

Sample Description:

Work Order: 17F0761

Date Received: 6/14/2017

Field Sample #: SED506-S1-061417

Sampled: 6/14/2017 11:15

Sample ID: 17F0761-03

Sample Matrix: Sediment

Petrolium Hydrocarbons Analyses - EPH

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
C9-C18 Aliphatics	ND	12	mg/Kg dry	1		MADEP-EPH-04-1.1	6/21/17	6/22/17 16:46	SCS
C19-C36 Aliphatics	ND	12	mg/Kg dry	1		MADEP-EPH-04-1.1	6/21/17	6/22/17 16:46	SCS
Unadjusted C11-C22 Aromatics	ND	12	mg/Kg dry	1		MADEP-EPH-04-1.1	6/21/17	6/22/17 16:46	SCS
C11-C22 Aromatics	ND	12	mg/Kg dry	1		MADEP-EPH-04-1.1	6/21/17	6/22/17 16:46	SCS
Acenaphthene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	6/21/17	6/22/17 16:46	SCS
Acenaphthylene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	6/21/17	6/22/17 16:46	SCS
Anthracene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	6/21/17	6/22/17 16:46	SCS
Benzo(a)anthracene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	6/21/17	6/22/17 16:46	SCS
Benzo(a)pyrene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	6/21/17	6/22/17 16:46	SCS
Benzo(b)fluoranthene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	6/21/17	6/22/17 16:46	SCS
Benzo(g,h,i)perylene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	6/21/17	6/22/17 16:46	SCS
Benzo(k)fluoranthene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	6/21/17	6/22/17 16:46	SCS
Chrysene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	6/21/17	6/22/17 16:46	SCS
Dibenz(a,h)anthracene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	6/21/17	6/22/17 16:46	SCS
Fluoranthene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	6/21/17	6/22/17 16:46	SCS
Fluorene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	6/21/17	6/22/17 16:46	SCS
Indeno(1,2,3-cd)pyrene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	6/21/17	6/22/17 16:46	SCS
2-Methylnaphthalene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	6/21/17	6/22/17 16:46	SCS
Naphthalene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	6/21/17	6/22/17 16:46	SCS
Phenanthrene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	6/21/17	6/22/17 16:46	SCS
Pyrene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	6/21/17	6/22/17 16:46	SCS
Surrogates	% Recovery	Recovery Limits	Flag/Qual						
Chlorooctadecane (COD)	63.1	40-140							
o-Terphenyl (OTP)	80.0	40-140							
2-Bromonaphthalene	48.6	40-140							
2-Fluorobiphenyl	89.0	40-140							

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Project Location: ADW Seekonk, MA

Sample Description:

Work Order: 17F0761

Date Received: 6/14/2017

Field Sample #: SED506-S1-061417

Sampled: 6/14/2017 11:15

Sample ID: 17F0761-03

Sample Matrix: Sediment

Sample Flags: O-01

Petroleum Hydrocarbons Analyses - VPH

Soil/Methanol Preservation Ratio: 1.53

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Unadjusted C5-C8 Aliphatics	ND	10	mg/Kg dry	1		MADEP-VPH-04-1.1	6/15/17	6/15/17 18:05	EEH
C5-C8 Aliphatics	ND	10	mg/Kg dry	1		MADEP-VPH-04-1.1	6/15/17	6/15/17 18:05	EEH
Unadjusted C9-C12 Aliphatics	ND	10	mg/Kg dry	1		MADEP-VPH-04-1.1	6/15/17	6/15/17 18:05	EEH
C9-C12 Aliphatics	ND	10	mg/Kg dry	1		MADEP-VPH-04-1.1	6/15/17	6/15/17 18:05	EEH
C9-C10 Aromatics	ND	10	mg/Kg dry	1		MADEP-VPH-04-1.1	6/15/17	6/15/17 18:05	EEH
Benzene	ND	0.050	mg/Kg dry	1		MADEP-VPH-04-1.1	6/15/17	6/15/17 18:05	EEH
Ethylbenzene	ND	0.050	mg/Kg dry	1		MADEP-VPH-04-1.1	6/15/17	6/15/17 18:05	EEH
Methyl tert-Butyl Ether (MTBE)	ND	0.050	mg/Kg dry	1		MADEP-VPH-04-1.1	6/15/17	6/15/17 18:05	EEH
Naphthalene	ND	0.25	mg/Kg dry	1		MADEP-VPH-04-1.1	6/15/17	6/15/17 18:05	EEH
Toluene	ND	0.050	mg/Kg dry	1		MADEP-VPH-04-1.1	6/15/17	6/15/17 18:05	EEH
m+p Xylene	ND	0.10	mg/Kg dry	1		MADEP-VPH-04-1.1	6/15/17	6/15/17 18:05	EEH
o-Xylene	ND	0.050	mg/Kg dry	1		MADEP-VPH-04-1.1	6/15/17	6/15/17 18:05	EEH
Surrogates	% Recovery	Recovery Limits	Flag/Qual						
2,5-Dibromotoluene (FID)	107	70-130							
2,5-Dibromotoluene (PID)	106	70-130							

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Project Location: ADW Seekonk, MA

Sample Description:

Work Order: 17F0761

Date Received: 6/14/2017

Field Sample #: SED506-S1-061417

Sampled: 6/14/2017 11:15

Sample ID: 17F0761-03

Sample Matrix: Sediment

Metals Analyses (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Antimony	ND	2.9	mg/Kg dry	1		SW-846 6010C-D	6/20/17	6/22/17 13:24	SHN
Arsenic	ND	2.9	mg/Kg dry	1		SW-846 6010C-D	6/20/17	6/22/17 13:24	SHN
Beryllium	ND	0.29	mg/Kg dry	1		SW-846 6010C-D	6/20/17	6/22/17 13:24	SHN
Cadmium	0.56	0.29	mg/Kg dry	1		SW-846 6010C-D	6/20/17	6/22/17 13:24	SHN
Chromium	10	0.58	mg/Kg dry	1		SW-846 6010C-D	6/20/17	6/22/17 13:24	SHN
Copper	20	0.58	mg/Kg dry	1		SW-846 6010C-D	6/20/17	6/22/17 13:24	SHN
Lead	10	0.87	mg/Kg dry	1	M-10	SW-846 6010C-D	6/20/17	6/22/17 13:24	SHN
Mercury	0.035	0.031	mg/Kg dry	1		SW-846 7471B	6/20/17	6/22/17 11:02	TJK
Nickel	27	0.58	mg/Kg dry	1		SW-846 6010C-D	6/20/17	6/22/17 13:24	SHN
Selenium	ND	5.8	mg/Kg dry	1		SW-846 6010C-D	6/20/17	6/22/17 13:24	SHN
Silver	1.1	0.58	mg/Kg dry	1		SW-846 6010C-D	6/20/17	6/22/17 13:24	SHN
Thallium	ND	2.9	mg/Kg dry	1		SW-846 6010C-D	6/20/17	6/22/17 13:24	SHN
Zinc	41	1.2	mg/Kg dry	1		SW-846 6010C-D	6/20/17	6/22/17 13:24	SHN

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Project Location: ADW Seekonk, MA

Sample Description:

Work Order: 17F0761

Date Received: 6/14/2017

Field Sample #: SED506-S1-061417

Sampled: 6/14/2017 11:15

Sample ID: 17F0761-03

Sample Matrix: Sediment

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

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Hexavalent Chromium	ND	0.96	mg/Kg dry	5	W-06	SW-846 7196A	6/21/17	6/23/17 12:30	LL
Oxidation/Reduction Potential	94		mV	1		SM2580 A	6/14/17	6/14/17 21:15	IS
pH @20.9°C	6.2		pH Units	1		SW-846 9045C	6/14/17	6/14/17 21:15	IS
Total Organic Carbon	2300	100	mg/Kg	1		SW 846 9060	6/19/17	6/19/17 22:32	DJM
% Solids	82.6		% Wt	1		SM 2540G	6/20/17	6/21/17 8:41	MRL

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Project Location: ADW Seekonk, MA

Sample Description:

Work Order: 17F0761

Date Received: 6/14/2017

Field Sample #: SED505-S1-061417

Sampled: 6/14/2017 11:30

Sample ID: 17F0761-04

Sample Matrix: Sediment

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	0.15	mg/Kg dry	1	V-05	SW-846 8260C	6/20/17	6/21/17 16:40	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.0015	mg/Kg dry	1		SW-846 8260C	6/20/17	6/21/17 16:40	MFF
Benzene	ND	0.0030	mg/Kg dry	1		SW-846 8260C	6/20/17	6/21/17 16:40	MFF
Bromobenzene	ND	0.0030	mg/Kg dry	1		SW-846 8260C	6/20/17	6/21/17 16:40	MFF
Bromochloromethane	ND	0.0030	mg/Kg dry	1		SW-846 8260C	6/20/17	6/21/17 16:40	MFF
Bromodichloromethane	ND	0.0030	mg/Kg dry	1		SW-846 8260C	6/20/17	6/21/17 16:40	MFF
Bromoform	ND	0.0030	mg/Kg dry	1	V-05	SW-846 8260C	6/20/17	6/21/17 16:40	MFF
Bromomethane	ND	0.015	mg/Kg dry	1		SW-846 8260C	6/20/17	6/21/17 16:40	MFF
2-Butanone (MEK)	ND	0.060	mg/Kg dry	1		SW-846 8260C	6/20/17	6/21/17 16:40	MFF
n-Butylbenzene	ND	0.0030	mg/Kg dry	1		SW-846 8260C	6/20/17	6/21/17 16:40	MFF
sec-Butylbenzene	ND	0.0030	mg/Kg dry	1		SW-846 8260C	6/20/17	6/21/17 16:40	MFF
tert-Butylbenzene	ND	0.0030	mg/Kg dry	1		SW-846 8260C	6/20/17	6/21/17 16:40	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.0015	mg/Kg dry	1		SW-846 8260C	6/20/17	6/21/17 16:40	MFF
Carbon Disulfide	ND	0.0089	mg/Kg dry	1		SW-846 8260C	6/20/17	6/21/17 16:40	MFF
Carbon Tetrachloride	ND	0.0030	mg/Kg dry	1		SW-846 8260C	6/20/17	6/21/17 16:40	MFF
Chlorobenzene	ND	0.0030	mg/Kg dry	1		SW-846 8260C	6/20/17	6/21/17 16:40	MFF
Chlorodibromomethane	ND	0.0030	mg/Kg dry	1		SW-846 8260C	6/20/17	6/21/17 16:40	MFF
Chloroethane	ND	0.015	mg/Kg dry	1		SW-846 8260C	6/20/17	6/21/17 16:40	MFF
Chloroform	ND	0.0060	mg/Kg dry	1		SW-846 8260C	6/20/17	6/21/17 16:40	MFF
Chloromethane	ND	0.015	mg/Kg dry	1		SW-846 8260C	6/20/17	6/21/17 16:40	MFF
2-Chlorotoluene	ND	0.0030	mg/Kg dry	1		SW-846 8260C	6/20/17	6/21/17 16:40	MFF
4-Chlorotoluene	ND	0.0030	mg/Kg dry	1		SW-846 8260C	6/20/17	6/21/17 16:40	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0060	mg/Kg dry	1	R-05, V-05	SW-846 8260C	6/20/17	6/21/17 16:40	MFF
1,2-Dibromoethane (EDB)	ND	0.0030	mg/Kg dry	1		SW-846 8260C	6/20/17	6/21/17 16:40	MFF
Dibromomethane	ND	0.0030	mg/Kg dry	1		SW-846 8260C	6/20/17	6/21/17 16:40	MFF
1,2-Dichlorobenzene	ND	0.0030	mg/Kg dry	1		SW-846 8260C	6/20/17	6/21/17 16:40	MFF
1,3-Dichlorobenzene	ND	0.0030	mg/Kg dry	1		SW-846 8260C	6/20/17	6/21/17 16:40	MFF
1,4-Dichlorobenzene	ND	0.0030	mg/Kg dry	1		SW-846 8260C	6/20/17	6/21/17 16:40	MFF
Dichlorodifluoromethane (Freon 12)	ND	0.015	mg/Kg dry	1		SW-846 8260C	6/20/17	6/21/17 16:40	MFF
1,1-Dichloroethane	ND	0.0030	mg/Kg dry	1		SW-846 8260C	6/20/17	6/21/17 16:40	MFF
1,2-Dichloroethane	ND	0.0030	mg/Kg dry	1		SW-846 8260C	6/20/17	6/21/17 16:40	MFF
1,1-Dichloroethylene	ND	0.0060	mg/Kg dry	1		SW-846 8260C	6/20/17	6/21/17 16:40	MFF
cis-1,2-Dichloroethylene	ND	0.0030	mg/Kg dry	1		SW-846 8260C	6/20/17	6/21/17 16:40	MFF
trans-1,2-Dichloroethylene	ND	0.0030	mg/Kg dry	1		SW-846 8260C	6/20/17	6/21/17 16:40	MFF
1,2-Dichloropropane	ND	0.0030	mg/Kg dry	1		SW-846 8260C	6/20/17	6/21/17 16:40	MFF
1,3-Dichloropropane	ND	0.0015	mg/Kg dry	1		SW-846 8260C	6/20/17	6/21/17 16:40	MFF
2,2-Dichloropropane	ND	0.0030	mg/Kg dry	1		SW-846 8260C	6/20/17	6/21/17 16:40	MFF
1,1-Dichloropropene	ND	0.0030	mg/Kg dry	1		SW-846 8260C	6/20/17	6/21/17 16:40	MFF
cis-1,3-Dichloropropene	ND	0.0015	mg/Kg dry	1		SW-846 8260C	6/20/17	6/21/17 16:40	MFF
trans-1,3-Dichloropropene	ND	0.0015	mg/Kg dry	1		SW-846 8260C	6/20/17	6/21/17 16:40	MFF
Diethyl Ether	ND	0.015	mg/Kg dry	1		SW-846 8260C	6/20/17	6/21/17 16:40	MFF
Diisopropyl Ether (DIPE)	ND	0.0015	mg/Kg dry	1		SW-846 8260C	6/20/17	6/21/17 16:40	MFF
1,4-Dioxane	ND	0.15	mg/Kg dry	1	V-16	SW-846 8260C	6/20/17	6/21/17 16:40	MFF
Ethylbenzene	ND	0.0030	mg/Kg dry	1		SW-846 8260C	6/20/17	6/21/17 16:40	MFF

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Project Location: ADW Seekonk, MA

Sample Description:

Work Order: 17F0761

Date Received: 6/14/2017

Field Sample #: SED505-S1-061417

Sampled: 6/14/2017 11:30

Sample ID: 17F0761-04

Sample Matrix: Sediment

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Hexachlorobutadiene	ND	0.0030	mg/Kg dry	1		SW-846 8260C	6/20/17	6/21/17 16:40	MFF
2-Hexanone (MBK)	ND	0.030	mg/Kg dry	1		SW-846 8260C	6/20/17	6/21/17 16:40	MFF
Isopropylbenzene (Cumene)	ND	0.0030	mg/Kg dry	1		SW-846 8260C	6/20/17	6/21/17 16:40	MFF
p-Isopropyltoluene (p-Cymene)	ND	0.0030	mg/Kg dry	1		SW-846 8260C	6/20/17	6/21/17 16:40	MFF
Methyl tert-Butyl Ether (MTBE)	ND	0.0060	mg/Kg dry	1		SW-846 8260C	6/20/17	6/21/17 16:40	MFF
Methylene Chloride	ND	0.015	mg/Kg dry	1		SW-846 8260C	6/20/17	6/21/17 16:40	MFF
4-Methyl-2-pentanone (MIBK)	ND	0.030	mg/Kg dry	1		SW-846 8260C	6/20/17	6/21/17 16:40	MFF
Naphthalene	ND	0.015	mg/Kg dry	1		SW-846 8260C	6/20/17	6/21/17 16:40	MFF
n-Propylbenzene	ND	0.0030	mg/Kg dry	1		SW-846 8260C	6/20/17	6/21/17 16:40	MFF
Styrene	ND	0.0030	mg/Kg dry	1		SW-846 8260C	6/20/17	6/21/17 16:40	MFF
1,1,1,2-Tetrachloroethane	ND	0.0030	mg/Kg dry	1		SW-846 8260C	6/20/17	6/21/17 16:40	MFF
1,1,2,2-Tetrachloroethane	ND	0.0015	mg/Kg dry	1		SW-846 8260C	6/20/17	6/21/17 16:40	MFF
Tetrachloroethylene	ND	0.0030	mg/Kg dry	1		SW-846 8260C	6/20/17	6/21/17 16:40	MFF
Tetrahydrofuran	ND	0.015	mg/Kg dry	1		SW-846 8260C	6/20/17	6/21/17 16:40	MFF
Toluene	ND	0.0030	mg/Kg dry	1		SW-846 8260C	6/20/17	6/21/17 16:40	MFF
1,2,3-Trichlorobenzene	ND	0.015	mg/Kg dry	1		SW-846 8260C	6/20/17	6/21/17 16:40	MFF
1,2,4-Trichlorobenzene	ND	0.075	mg/Kg dry	1		SW-846 8260C	6/20/17	6/21/17 16:40	MFF
1,1,1-Trichloroethane	ND	0.0030	mg/Kg dry	1		SW-846 8260C	6/20/17	6/21/17 16:40	MFF
1,1,2-Trichloroethane	ND	0.0030	mg/Kg dry	1		SW-846 8260C	6/20/17	6/21/17 16:40	MFF
Trichloroethylene	ND	0.0030	mg/Kg dry	1		SW-846 8260C	6/20/17	6/21/17 16:40	MFF
Trichlorofluoromethane (Freon 11)	ND	0.015	mg/Kg dry	1		SW-846 8260C	6/20/17	6/21/17 16:40	MFF
1,2,3-Trichloropropane	ND	0.0030	mg/Kg dry	1		SW-846 8260C	6/20/17	6/21/17 16:40	MFF
1,2,4-Trimethylbenzene	ND	0.0030	mg/Kg dry	1		SW-846 8260C	6/20/17	6/21/17 16:40	MFF
1,3,5-Trimethylbenzene	ND	0.0030	mg/Kg dry	1		SW-846 8260C	6/20/17	6/21/17 16:40	MFF
Vinyl Chloride	ND	0.015	mg/Kg dry	1		SW-846 8260C	6/20/17	6/21/17 16:40	MFF
m+p Xylene	ND	0.0060	mg/Kg dry	1		SW-846 8260C	6/20/17	6/21/17 16:40	MFF
o-Xylene	ND	0.0030	mg/Kg dry	1		SW-846 8260C	6/20/17	6/21/17 16:40	MFF
Surrogates	% Recovery	Recovery Limits	Flag/Qual						
1,2-Dichloroethane-d4	94.2	70-130							
Toluene-d8	95.7	70-130							
4-Bromofluorobenzene	93.2	70-130							

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Project Location: ADW Seekonk, MA

Sample Description:

Work Order: 17F0761

Date Received: 6/14/2017

Field Sample #: SED505-S1-061417

Sampled: 6/14/2017 11:30

Sample ID: 17F0761-04

Sample Matrix: Sediment

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acenaphthene	ND	0.38	mg/Kg dry	1		SW-846 8270D	6/20/17	6/22/17 23:29	BGL
Acenaphthylene	ND	0.38	mg/Kg dry	1		SW-846 8270D	6/20/17	6/22/17 23:29	BGL
Anthracene	ND	0.38	mg/Kg dry	1		SW-846 8270D	6/20/17	6/22/17 23:29	BGL
Benzo(a)anthracene	1.1	0.38	mg/Kg dry	1		SW-846 8270D	6/20/17	6/22/17 23:29	BGL
Benzo(a)pyrene	0.93	0.38	mg/Kg dry	1		SW-846 8270D	6/20/17	6/22/17 23:29	BGL
Benzo(b)fluoranthene	1.3	0.38	mg/Kg dry	1		SW-846 8270D	6/20/17	6/22/17 23:29	BGL
Benzo(g,h,i)perylene	0.52	0.38	mg/Kg dry	1		SW-846 8270D	6/20/17	6/22/17 23:29	BGL
Benzo(k)fluoranthene	0.50	0.38	mg/Kg dry	1		SW-846 8270D	6/20/17	6/22/17 23:29	BGL
Chrysene	1.1	0.38	mg/Kg dry	1		SW-846 8270D	6/20/17	6/22/17 23:29	BGL
Dibenz(a,h)anthracene	ND	0.38	mg/Kg dry	1		SW-846 8270D	6/20/17	6/22/17 23:29	BGL
Fluoranthene	2.5	0.38	mg/Kg dry	1		SW-846 8270D	6/20/17	6/22/17 23:29	BGL
Fluorene	ND	0.38	mg/Kg dry	1		SW-846 8270D	6/20/17	6/22/17 23:29	BGL
Indeno(1,2,3-cd)pyrene	0.51	0.38	mg/Kg dry	1		SW-846 8270D	6/20/17	6/22/17 23:29	BGL
2-Methylnaphthalene	ND	0.38	mg/Kg dry	1		SW-846 8270D	6/20/17	6/22/17 23:29	BGL
Naphthalene	ND	0.38	mg/Kg dry	1		SW-846 8270D	6/20/17	6/22/17 23:29	BGL
Phenanthrene	2.2	0.38	mg/Kg dry	1		SW-846 8270D	6/20/17	6/22/17 23:29	BGL
Pyrene	2.9	0.38	mg/Kg dry	1		SW-846 8270D	6/20/17	6/22/17 23:29	BGL
Surrogates	% Recovery	Recovery Limits	Flag/Qual						
Nitrobenzene-d5	75.3	30-130							
2-Fluorobiphenyl	69.7	30-130							
p-Terphenyl-d14	87.9	30-130							

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Project Location: ADW Seekonk, MA

Sample Description:

Work Order: 17F0761

Date Received: 6/14/2017

Field Sample #: SED505-S1-061417

Sampled: 6/14/2017 11:30

Sample ID: 17F0761-04

Sample Matrix: Sediment

Sample Flags: O-32

Polychlorinated Biphenyls By GC/ECD

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.22	mg/Kg dry	5		SW-846 8082A	6/21/17	6/22/17 21:09	KAL
Aroclor-1221 [1]	ND	0.22	mg/Kg dry	5		SW-846 8082A	6/21/17	6/22/17 21:09	KAL
Aroclor-1232 [1]	ND	0.22	mg/Kg dry	5		SW-846 8082A	6/21/17	6/22/17 21:09	KAL
Aroclor-1242 [1]	ND	0.22	mg/Kg dry	5		SW-846 8082A	6/21/17	6/22/17 21:09	KAL
Aroclor-1248 [1]	ND	0.22	mg/Kg dry	5		SW-846 8082A	6/21/17	6/22/17 21:09	KAL
Aroclor-1254 [1]	ND	0.22	mg/Kg dry	5		SW-846 8082A	6/21/17	6/22/17 21:09	KAL
Aroclor-1260 [1]	ND	0.22	mg/Kg dry	5		SW-846 8082A	6/21/17	6/22/17 21:09	KAL
Aroclor-1262 [1]	ND	0.22	mg/Kg dry	5		SW-846 8082A	6/21/17	6/22/17 21:09	KAL
Aroclor-1268 [1]	ND	0.22	mg/Kg dry	5		SW-846 8082A	6/21/17	6/22/17 21:09	KAL
Surrogates	% Recovery	Recovery Limits	Flag/Qual						
Decachlorobiphenyl [1]	88.4	30-150						6/22/17 21:09	
Decachlorobiphenyl [2]	99.3	30-150						6/22/17 21:09	
Tetrachloro-m-xylene [1]	75.2	30-150						6/22/17 21:09	
Tetrachloro-m-xylene [2]	77.6	30-150						6/22/17 21:09	

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Project Location: ADW Seekonk, MA

Sample Description:

Work Order: 17F0761

Date Received: 6/14/2017

Field Sample #: SED505-S1-061417

Sampled: 6/14/2017 11:30

Sample ID: 17F0761-04

Sample Matrix: Sediment

Petroleum Hydrocarbons Analyses - EPH

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
C9-C18 Aliphatics	29	22	mg/Kg dry	1		MADEP-EPH-04-1.1	6/21/17	6/22/17 17:06	SCS
C19-C36 Aliphatics	170	22	mg/Kg dry	1		MADEP-EPH-04-1.1	6/21/17	6/22/17 17:06	SCS
Unadjusted C11-C22 Aromatics	150	22	mg/Kg dry	1		MADEP-EPH-04-1.1	6/21/17	6/22/17 17:06	SCS
C11-C22 Aromatics	140	22	mg/Kg dry	1		MADEP-EPH-04-1.1	6/21/17	6/22/17 17:06	SCS
Acenaphthene	ND	0.22	mg/Kg dry	1		MADEP-EPH-04-1.1	6/21/17	6/22/17 17:06	SCS
Acenaphthylene	ND	0.22	mg/Kg dry	1		MADEP-EPH-04-1.1	6/21/17	6/22/17 17:06	SCS
Anthracene	0.25	0.22	mg/Kg dry	1		MADEP-EPH-04-1.1	6/21/17	6/22/17 17:06	SCS
Benzo(a)anthracene	1.1	0.22	mg/Kg dry	1		MADEP-EPH-04-1.1	6/21/17	6/22/17 17:06	SCS
Benzo(a)pyrene	0.87	0.22	mg/Kg dry	1		MADEP-EPH-04-1.1	6/21/17	6/22/17 17:06	SCS
Benzo(b)fluoranthene	1.4	0.22	mg/Kg dry	1		MADEP-EPH-04-1.1	6/21/17	6/22/17 17:06	SCS
Benzo(g,h,i)perylene	1.1	0.22	mg/Kg dry	1		MADEP-EPH-04-1.1	6/21/17	6/22/17 17:06	SCS
Benzo(k)fluoranthene	0.47	0.22	mg/Kg dry	1		MADEP-EPH-04-1.1	6/21/17	6/22/17 17:06	SCS
Chrysene	1.2	0.22	mg/Kg dry	1		MADEP-EPH-04-1.1	6/21/17	6/22/17 17:06	SCS
Dibenz(a,h)anthracene	ND	0.22	mg/Kg dry	1		MADEP-EPH-04-1.1	6/21/17	6/22/17 17:06	SCS
Fluoranthene	2.0	0.22	mg/Kg dry	1		MADEP-EPH-04-1.1	6/21/17	6/22/17 17:06	SCS
Fluorene	ND	0.22	mg/Kg dry	1		MADEP-EPH-04-1.1	6/21/17	6/22/17 17:06	SCS
Indeno(1,2,3-cd)pyrene	1.4	0.22	mg/Kg dry	1		MADEP-EPH-04-1.1	6/21/17	6/22/17 17:06	SCS
2-Methylnaphthalene	ND	0.22	mg/Kg dry	1		MADEP-EPH-04-1.1	6/21/17	6/22/17 17:06	SCS
Naphthalene	ND	0.22	mg/Kg dry	1		MADEP-EPH-04-1.1	6/21/17	6/22/17 17:06	SCS
Phenanthrene	1.2	0.22	mg/Kg dry	1		MADEP-EPH-04-1.1	6/21/17	6/22/17 17:06	SCS
Pyrene	1.8	0.22	mg/Kg dry	1		MADEP-EPH-04-1.1	6/21/17	6/22/17 17:06	SCS

Surrogates	% Recovery	Recovery Limits	Flag/Qual
Chlorooctadecane (COD)	51.5	40-140	
o-Terphenyl (OTP)	60.6	40-140	
2-Bromonaphthalene	49.4	40-140	
2-Fluorobiphenyl	80.8	40-140	

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Project Location: ADW Seekonk, MA

Sample Description:

Work Order: 17F0761

Date Received: 6/14/2017

Field Sample #: SED505-S1-061417

Sampled: 6/14/2017 11:30

Sample ID: 17F0761-04

Sample Matrix: Sediment

Petroleum Hydrocarbons Analyses - VPH

Soil/Methanol Preservation Ratio: 1.01

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Unadjusted C5-C8 Aliphatics	ND	35	mg/Kg dry	1		MADEP-VPH-04-1.1	6/15/17	6/15/17 18:34	EEH
C5-C8 Aliphatics	ND	35	mg/Kg dry	1		MADEP-VPH-04-1.1	6/15/17	6/15/17 18:34	EEH
Unadjusted C9-C12 Aliphatics	ND	35	mg/Kg dry	1		MADEP-VPH-04-1.1	6/15/17	6/15/17 18:34	EEH
C9-C12 Aliphatics	ND	35	mg/Kg dry	1		MADEP-VPH-04-1.1	6/15/17	6/15/17 18:34	EEH
C9-C10 Aromatics	ND	35	mg/Kg dry	1		MADEP-VPH-04-1.1	6/15/17	6/15/17 18:34	EEH
Benzene	ND	0.17	mg/Kg dry	1		MADEP-VPH-04-1.1	6/15/17	6/15/17 18:34	EEH
Ethylbenzene	ND	0.17	mg/Kg dry	1		MADEP-VPH-04-1.1	6/15/17	6/15/17 18:34	EEH
Methyl tert-Butyl Ether (MTBE)	ND	0.17	mg/Kg dry	1		MADEP-VPH-04-1.1	6/15/17	6/15/17 18:34	EEH
Naphthalene	ND	0.87	mg/Kg dry	1		MADEP-VPH-04-1.1	6/15/17	6/15/17 18:34	EEH
Toluene	ND	0.17	mg/Kg dry	1		MADEP-VPH-04-1.1	6/15/17	6/15/17 18:34	EEH
m+p Xylene	ND	0.35	mg/Kg dry	1		MADEP-VPH-04-1.1	6/15/17	6/15/17 18:34	EEH
o-Xylene	ND	0.17	mg/Kg dry	1		MADEP-VPH-04-1.1	6/15/17	6/15/17 18:34	EEH
Surrogates	% Recovery	Recovery Limits	Flag/Qual						
2,5-Dibromotoluene (FID)	99.7	70-130							
2,5-Dibromotoluene (PID)	98.0	70-130							

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Project Location: ADW Seekonk, MA

Sample Description:

Work Order: 17F0761

Date Received: 6/14/2017

Field Sample #: SED505-S1-061417

Sampled: 6/14/2017 11:30

Sample ID: 17F0761-04

Sample Matrix: Sediment

Metals Analyses (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Antimony	ND	5.6	mg/Kg dry	1		SW-846 6010C-D	6/20/17	6/22/17 13:30	SHN
Arsenic	ND	5.6	mg/Kg dry	1		SW-846 6010C-D	6/20/17	6/22/17 13:30	SHN
Beryllium	ND	0.56	mg/Kg dry	1		SW-846 6010C-D	6/20/17	6/22/17 13:30	SHN
Cadmium	4.2	0.56	mg/Kg dry	1		SW-846 6010C-D	6/20/17	6/22/17 13:30	SHN
Chromium	77	1.1	mg/Kg dry	1		SW-846 6010C-D	6/20/17	6/22/17 13:30	SHN
Copper	240	1.1	mg/Kg dry	1		SW-846 6010C-D	6/20/17	6/22/17 13:30	SHN
Lead	63	1.7	mg/Kg dry	1	M-10	SW-846 6010C-D	6/20/17	6/22/17 13:30	SHN
Mercury	0.44	0.056	mg/Kg dry	1		SW-846 7471B	6/20/17	6/22/17 11:03	TJK
Nickel	93	1.1	mg/Kg dry	1		SW-846 6010C-D	6/20/17	6/22/17 13:30	SHN
Selenium	ND	11	mg/Kg dry	1		SW-846 6010C-D	6/20/17	6/22/17 13:30	SHN
Silver	11	1.1	mg/Kg dry	1		SW-846 6010C-D	6/20/17	6/22/17 13:30	SHN
Thallium	ND	5.6	mg/Kg dry	1		SW-846 6010C-D	6/20/17	6/22/17 13:30	SHN
Zinc	140	2.2	mg/Kg dry	1		SW-846 6010C-D	6/20/17	6/22/17 13:30	SHN

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Project Location: ADW Seekonk, MA

Sample Description:

Work Order: 17F0761

Date Received: 6/14/2017

Field Sample #: SED505-S1-061417

Sampled: 6/14/2017 11:30

Sample ID: 17F0761-04

Sample Matrix: Sediment

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

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Hexavalent Chromium	ND	1.8	mg/Kg dry	5	W-06	SW-846 7196A	6/21/17	6/23/17 12:30	LL
Oxidation/Reduction Potential	97		mV	1		SM2580 A	6/14/17	6/14/17 21:15	IS
pH @19.6°C	5.8		pH Units	1		SW-846 9045C	6/14/17	6/14/17 21:15	IS
Total Organic Carbon	21000	100	mg/Kg	1		SW 846 9060	6/19/17	6/19/17 22:32	DJM
% Solids	44.7		% Wt	1		SM 2540G	6/20/17	6/21/17 8:41	MRL

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Project Location: ADW Seekonk, MA

Sample Description:

Work Order: 17F0761

Date Received: 6/14/2017

Field Sample #: SED504-S1-061417

Sampled: 6/14/2017 12:55

Sample ID: 17F0761-05

Sample Matrix: Sediment

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	0.078	mg/Kg dry	1	V-05	SW-846 8260C	6/21/17	6/21/17 20:16	EEH
tert-Amyl Methyl Ether (TAME)	ND	0.00078	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 20:16	EEH
Benzene	ND	0.0016	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 20:16	EEH
Bromobenzene	ND	0.0016	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 20:16	EEH
Bromochloromethane	ND	0.0016	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 20:16	EEH
Bromodichloromethane	ND	0.0016	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 20:16	EEH
Bromoform	ND	0.0016	mg/Kg dry	1	L-04, V-05	SW-846 8260C	6/21/17	6/21/17 20:16	EEH
Bromomethane	ND	0.0078	mg/Kg dry	1	R-05	SW-846 8260C	6/21/17	6/21/17 20:16	EEH
2-Butanone (MEK)	ND	0.031	mg/Kg dry	1	V-05	SW-846 8260C	6/21/17	6/21/17 20:16	EEH
n-Butylbenzene	ND	0.0016	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 20:16	EEH
sec-Butylbenzene	ND	0.0016	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 20:16	EEH
tert-Butylbenzene	ND	0.0016	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 20:16	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	0.00078	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 20:16	EEH
Carbon Disulfide	ND	0.0047	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 20:16	EEH
Carbon Tetrachloride	ND	0.0016	mg/Kg dry	1	V-05	SW-846 8260C	6/21/17	6/21/17 20:16	EEH
Chlorobenzene	ND	0.0016	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 20:16	EEH
Chlorodibromomethane	ND	0.0016	mg/Kg dry	1	V-05	SW-846 8260C	6/21/17	6/21/17 20:16	EEH
Chloroethane	ND	0.0078	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 20:16	EEH
Chloroform	ND	0.0031	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 20:16	EEH
Chloromethane	ND	0.0078	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 20:16	EEH
2-Chlorotoluene	ND	0.0016	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 20:16	EEH
4-Chlorotoluene	ND	0.0016	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 20:16	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0031	mg/Kg dry	1	L-04, V-05	SW-846 8260C	6/21/17	6/21/17 20:16	EEH
1,2-Dibromoethane (EDB)	ND	0.0016	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 20:16	EEH
Dibromomethane	ND	0.0016	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 20:16	EEH
1,2-Dichlorobenzene	ND	0.0016	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 20:16	EEH
1,3-Dichlorobenzene	ND	0.0016	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 20:16	EEH
1,4-Dichlorobenzene	ND	0.0016	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 20:16	EEH
Dichlorodifluoromethane (Freon 12)	ND	0.0078	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 20:16	EEH
1,1-Dichloroethane	ND	0.0016	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 20:16	EEH
1,2-Dichloroethane	ND	0.0016	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 20:16	EEH
1,1-Dichloroethylene	ND	0.0031	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 20:16	EEH
cis-1,2-Dichloroethylene	ND	0.0016	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 20:16	EEH
trans-1,2-Dichloroethylene	ND	0.0016	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 20:16	EEH
1,2-Dichloropropane	ND	0.0016	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 20:16	EEH
1,3-Dichloropropane	ND	0.00078	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 20:16	EEH
2,2-Dichloropropane	ND	0.0016	mg/Kg dry	1	V-05	SW-846 8260C	6/21/17	6/21/17 20:16	EEH
1,1-Dichloropropene	ND	0.0016	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 20:16	EEH
cis-1,3-Dichloropropene	ND	0.00078	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 20:16	EEH
trans-1,3-Dichloropropene	ND	0.00078	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 20:16	EEH
Diethyl Ether	ND	0.0078	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 20:16	EEH
Diisopropyl Ether (DIPE)	ND	0.00078	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 20:16	EEH
1,4-Dioxane	ND	0.078	mg/Kg dry	1	V-16	SW-846 8260C	6/21/17	6/21/17 20:16	EEH
Ethylbenzene	ND	0.0016	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 20:16	EEH

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Project Location: ADW Seekonk, MA

Sample Description:

Work Order: 17F0761

Date Received: 6/14/2017

Field Sample #: SED504-S1-061417

Sampled: 6/14/2017 12:55

Sample ID: 17F0761-05

Sample Matrix: Sediment

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Hexachlorobutadiene	ND	0.0016	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 20:16	EEH
2-Hexanone (MBK)	ND	0.016	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 20:16	EEH
Isopropylbenzene (Cumene)	ND	0.0016	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 20:16	EEH
p-Isopropyltoluene (p-Cymene)	ND	0.0016	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 20:16	EEH
Methyl tert-Butyl Ether (MTBE)	ND	0.0031	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 20:16	EEH
Methylene Chloride	ND	0.0078	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 20:16	EEH
4-Methyl-2-pentanone (MIBK)	ND	0.016	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 20:16	EEH
Naphthalene	ND	0.0078	mg/Kg dry	1	V-05	SW-846 8260C	6/21/17	6/21/17 20:16	EEH
n-Propylbenzene	ND	0.0016	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 20:16	EEH
Styrene	ND	0.0016	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 20:16	EEH
1,1,1,2-Tetrachloroethane	ND	0.0016	mg/Kg dry	1	V-05	SW-846 8260C	6/21/17	6/21/17 20:16	EEH
1,1,2,2-Tetrachloroethane	ND	0.00078	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 20:16	EEH
Tetrachloroethylene	ND	0.0016	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 20:16	EEH
Tetrahydrofuran	ND	0.0078	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 20:16	EEH
Toluene	ND	0.0016	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 20:16	EEH
1,2,3-Trichlorobenzene	ND	0.0078	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 20:16	EEH
1,2,4-Trichlorobenzene	ND	0.0078	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 20:16	EEH
1,1,1-Trichloroethane	ND	0.0016	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 20:16	EEH
1,1,2-Trichloroethane	ND	0.0016	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 20:16	EEH
Trichloroethylene	ND	0.0016	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 20:16	EEH
Trichlorofluoromethane (Freon 11)	ND	0.0078	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 20:16	EEH
1,2,3-Trichloropropane	ND	0.0016	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 20:16	EEH
1,2,4-Trimethylbenzene	ND	0.0016	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 20:16	EEH
1,3,5-Trimethylbenzene	ND	0.0016	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 20:16	EEH
Vinyl Chloride	ND	0.0078	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 20:16	EEH
m+p Xylene	ND	0.0031	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 20:16	EEH
o-Xylene	ND	0.0016	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 20:16	EEH

Surrogates	% Recovery	Recovery Limits	Flag/Qual
1,2-Dichloroethane-d4	92.9	70-130	
Toluene-d8	95.0	70-130	
4-Bromofluorobenzene	92.6	70-130	

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Project Location: ADW Seekonk, MA

Sample Description:

Work Order: 17F0761

Date Received: 6/14/2017

Field Sample #: SED504-S1-061417

Sampled: 6/14/2017 12:55

Sample ID: 17F0761-05

Sample Matrix: Sediment

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acenaphthene	ND	0.22	mg/Kg dry	1		SW-846 8270D	6/20/17	6/22/17 23:51	BGL
Acenaphthylene	ND	0.22	mg/Kg dry	1		SW-846 8270D	6/20/17	6/22/17 23:51	BGL
Anthracene	ND	0.22	mg/Kg dry	1		SW-846 8270D	6/20/17	6/22/17 23:51	BGL
Benzo(a)anthracene	ND	0.22	mg/Kg dry	1		SW-846 8270D	6/20/17	6/22/17 23:51	BGL
Benzo(a)pyrene	ND	0.22	mg/Kg dry	1		SW-846 8270D	6/20/17	6/22/17 23:51	BGL
Benzo(b)fluoranthene	ND	0.22	mg/Kg dry	1		SW-846 8270D	6/20/17	6/22/17 23:51	BGL
Benzo(g,h,i)perylene	ND	0.22	mg/Kg dry	1		SW-846 8270D	6/20/17	6/22/17 23:51	BGL
Benzo(k)fluoranthene	ND	0.22	mg/Kg dry	1		SW-846 8270D	6/20/17	6/22/17 23:51	BGL
Chrysene	ND	0.22	mg/Kg dry	1		SW-846 8270D	6/20/17	6/22/17 23:51	BGL
Dibenz(a,h)anthracene	ND	0.22	mg/Kg dry	1		SW-846 8270D	6/20/17	6/22/17 23:51	BGL
Fluoranthene	ND	0.22	mg/Kg dry	1		SW-846 8270D	6/20/17	6/22/17 23:51	BGL
Fluorene	ND	0.22	mg/Kg dry	1		SW-846 8270D	6/20/17	6/22/17 23:51	BGL
Indeno(1,2,3-cd)pyrene	ND	0.22	mg/Kg dry	1		SW-846 8270D	6/20/17	6/22/17 23:51	BGL
2-Methylnaphthalene	ND	0.22	mg/Kg dry	1		SW-846 8270D	6/20/17	6/22/17 23:51	BGL
Naphthalene	ND	0.22	mg/Kg dry	1		SW-846 8270D	6/20/17	6/22/17 23:51	BGL
Phenanthrene	ND	0.22	mg/Kg dry	1		SW-846 8270D	6/20/17	6/22/17 23:51	BGL
Pyrene	ND	0.22	mg/Kg dry	1		SW-846 8270D	6/20/17	6/22/17 23:51	BGL
Surrogates	% Recovery	Recovery Limits	Flag/Qual						
Nitrobenzene-d5	73.1	30-130							
2-Fluorobiphenyl	73.3	30-130							
p-Terphenyl-d14	88.8	30-130							

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Project Location: ADW Seekonk, MA

Sample Description:

Work Order: 17F0761

Date Received: 6/14/2017

Field Sample #: SED504-S1-061417

Sampled: 6/14/2017 12:55

Sample ID: 17F0761-05

Sample Matrix: Sediment

Sample Flags: O-32

Polychlorinated Biphenyls By GC/ECD

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.13	mg/Kg dry	5		SW-846 8082A	6/21/17	6/22/17 21:26	KAL
Aroclor-1221 [1]	ND	0.13	mg/Kg dry	5		SW-846 8082A	6/21/17	6/22/17 21:26	KAL
Aroclor-1232 [1]	ND	0.13	mg/Kg dry	5		SW-846 8082A	6/21/17	6/22/17 21:26	KAL
Aroclor-1242 [1]	ND	0.13	mg/Kg dry	5		SW-846 8082A	6/21/17	6/22/17 21:26	KAL
Aroclor-1248 [1]	ND	0.13	mg/Kg dry	5		SW-846 8082A	6/21/17	6/22/17 21:26	KAL
Aroclor-1254 [1]	ND	0.13	mg/Kg dry	5		SW-846 8082A	6/21/17	6/22/17 21:26	KAL
Aroclor-1260 [1]	ND	0.13	mg/Kg dry	5		SW-846 8082A	6/21/17	6/22/17 21:26	KAL
Aroclor-1262 [1]	ND	0.13	mg/Kg dry	5		SW-846 8082A	6/21/17	6/22/17 21:26	KAL
Aroclor-1268 [1]	ND	0.13	mg/Kg dry	5		SW-846 8082A	6/21/17	6/22/17 21:26	KAL
Surrogates	% Recovery	Recovery Limits	Flag/Qual						
Decachlorobiphenyl [1]	103	30-150						6/22/17 21:26	
Decachlorobiphenyl [2]	113	30-150						6/22/17 21:26	
Tetrachloro-m-xylene [1]	88.1	30-150						6/22/17 21:26	
Tetrachloro-m-xylene [2]	89.5	30-150						6/22/17 21:26	

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Project Location: ADW Seekonk, MA

Sample Description:

Work Order: 17F0761

Date Received: 6/14/2017

Field Sample #: SED504-S1-061417

Sampled: 6/14/2017 12:55

Sample ID: 17F0761-05

Sample Matrix: Sediment

Petrolium Hydrocarbons Analyses - EPH

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
C9-C18 Aliphatics	ND	13	mg/Kg dry	1		MADEP-EPH-04-1.1	6/21/17	6/22/17 17:26	SCS
C19-C36 Aliphatics	ND	13	mg/Kg dry	1		MADEP-EPH-04-1.1	6/21/17	6/22/17 17:26	SCS
Unadjusted C11-C22 Aromatics	52	13	mg/Kg dry	1		MADEP-EPH-04-1.1	6/21/17	6/22/17 17:26	SCS
C11-C22 Aromatics	38	13	mg/Kg dry	1		MADEP-EPH-04-1.1	6/21/17	6/22/17 17:26	SCS
Acenaphthene	0.28	0.13	mg/Kg dry	1		MADEP-EPH-04-1.1	6/21/17	6/22/17 17:26	SCS
Acenaphthylene	ND	0.13	mg/Kg dry	1		MADEP-EPH-04-1.1	6/21/17	6/22/17 17:26	SCS
Anthracene	0.69	0.13	mg/Kg dry	1		MADEP-EPH-04-1.1	6/21/17	6/22/17 17:26	SCS
Benzo(a)anthracene	0.94	0.13	mg/Kg dry	1		MADEP-EPH-04-1.1	6/21/17	6/22/17 17:26	SCS
Benzo(a)pyrene	0.92	0.13	mg/Kg dry	1		MADEP-EPH-04-1.1	6/21/17	6/22/17 17:26	SCS
Benzo(b)fluoranthene	1.1	0.13	mg/Kg dry	1		MADEP-EPH-04-1.1	6/21/17	6/22/17 17:26	SCS
Benzo(g,h,i)perylene	0.45	0.13	mg/Kg dry	1		MADEP-EPH-04-1.1	6/21/17	6/22/17 17:26	SCS
Benzo(k)fluoranthene	0.38	0.13	mg/Kg dry	1		MADEP-EPH-04-1.1	6/21/17	6/22/17 17:26	SCS
Chrysene	1.0	0.13	mg/Kg dry	1		MADEP-EPH-04-1.1	6/21/17	6/22/17 17:26	SCS
Dibenz(a,h)anthracene	0.15	0.13	mg/Kg dry	1		MADEP-EPH-04-1.1	6/21/17	6/22/17 17:26	SCS
Fluoranthene	2.2	0.13	mg/Kg dry	1		MADEP-EPH-04-1.1	6/21/17	6/22/17 17:26	SCS
Fluorene	0.38	0.13	mg/Kg dry	1		MADEP-EPH-04-1.1	6/21/17	6/22/17 17:26	SCS
Indeno(1,2,3-cd)pyrene	0.55	0.13	mg/Kg dry	1		MADEP-EPH-04-1.1	6/21/17	6/22/17 17:26	SCS
2-Methylnaphthalene	0.13	0.13	mg/Kg dry	1		MADEP-EPH-04-1.1	6/21/17	6/22/17 17:26	SCS
Naphthalene	0.20	0.13	mg/Kg dry	1		MADEP-EPH-04-1.1	6/21/17	6/22/17 17:26	SCS
Phenanthrene	2.6	0.13	mg/Kg dry	1		MADEP-EPH-04-1.1	6/21/17	6/22/17 17:26	SCS
Pyrene	2.2	0.13	mg/Kg dry	1		MADEP-EPH-04-1.1	6/21/17	6/22/17 17:26	SCS
Surrogates	% Recovery	Recovery Limits	Flag/Qual						
Chlorooctadecane (COD)	55.6	40-140						6/22/17 17:26	
o-Terphenyl (OTP)	66.0	40-140						6/22/17 17:26	
2-Bromonaphthalene	61.6	40-140						6/22/17 17:26	
2-Fluorobiphenyl	79.2	40-140						6/22/17 17:26	

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Project Location: ADW Seekonk, MA

Sample Description:

Work Order: 17F0761

Date Received: 6/14/2017

Field Sample #: SED504-S1-061417

Sampled: 6/14/2017 12:55

Sample ID: 17F0761-05

Sample Matrix: Sediment

Sample Flags: O-01

Petroleum Hydrocarbons Analyses - VPH

Soil/Methanol Preservation Ratio: 1.56

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Unadjusted C5-C8 Aliphatics	ND	11	mg/Kg dry	1		MADEP-VPH-04-1.1	6/15/17	6/15/17 19:03	EEH
C5-C8 Aliphatics	ND	11	mg/Kg dry	1		MADEP-VPH-04-1.1	6/15/17	6/15/17 19:03	EEH
Unadjusted C9-C12 Aliphatics	ND	11	mg/Kg dry	1		MADEP-VPH-04-1.1	6/15/17	6/15/17 19:03	EEH
C9-C12 Aliphatics	ND	11	mg/Kg dry	1		MADEP-VPH-04-1.1	6/15/17	6/15/17 19:03	EEH
C9-C10 Aromatics	ND	11	mg/Kg dry	1		MADEP-VPH-04-1.1	6/15/17	6/15/17 19:03	EEH
Benzene	ND	0.056	mg/Kg dry	1		MADEP-VPH-04-1.1	6/15/17	6/15/17 19:03	EEH
Ethylbenzene	ND	0.056	mg/Kg dry	1		MADEP-VPH-04-1.1	6/15/17	6/15/17 19:03	EEH
Methyl tert-Butyl Ether (MTBE)	ND	0.056	mg/Kg dry	1		MADEP-VPH-04-1.1	6/15/17	6/15/17 19:03	EEH
Naphthalene	ND	0.28	mg/Kg dry	1		MADEP-VPH-04-1.1	6/15/17	6/15/17 19:03	EEH
Toluene	ND	0.056	mg/Kg dry	1		MADEP-VPH-04-1.1	6/15/17	6/15/17 19:03	EEH
m+p Xylene	ND	0.11	mg/Kg dry	1		MADEP-VPH-04-1.1	6/15/17	6/15/17 19:03	EEH
o-Xylene	ND	0.056	mg/Kg dry	1		MADEP-VPH-04-1.1	6/15/17	6/15/17 19:03	EEH
Surrogates	% Recovery	Recovery Limits	Flag/Qual						
2,5-Dibromotoluene (FID)	105	70-130							
2,5-Dibromotoluene (PID)	104	70-130							

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Project Location: ADW Seekonk, MA

Sample Description:

Work Order: 17F0761

Date Received: 6/14/2017

Field Sample #: SED504-S1-061417

Sampled: 6/14/2017 12:55

Sample ID: 17F0761-05

Sample Matrix: Sediment

Metals Analyses (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Antimony	ND	3.3	mg/Kg dry	1		SW-846 6010C-D	6/20/17	6/22/17 13:36	SHN
Arsenic	5.2	3.3	mg/Kg dry	1		SW-846 6010C-D	6/20/17	6/22/17 13:36	SHN
Beryllium	ND	0.33	mg/Kg dry	1		SW-846 6010C-D	6/20/17	6/22/17 13:36	SHN
Cadmium	1.8	0.33	mg/Kg dry	1		SW-846 6010C-D	6/20/17	6/22/17 13:36	SHN
Chromium	16	0.66	mg/Kg dry	1		SW-846 6010C-D	6/20/17	6/22/17 13:36	SHN
Copper	50	0.66	mg/Kg dry	1		SW-846 6010C-D	6/20/17	6/22/17 13:36	SHN
Lead	36	0.98	mg/Kg dry	1	M-10	SW-846 6010C-D	6/20/17	6/22/17 13:36	SHN
Mercury	0.047	0.032	mg/Kg dry	1		SW-846 7471B	6/20/17	6/22/17 11:05	TJK
Nickel	77	0.66	mg/Kg dry	1		SW-846 6010C-D	6/20/17	6/22/17 13:36	SHN
Selenium	ND	6.6	mg/Kg dry	1		SW-846 6010C-D	6/20/17	6/22/17 13:36	SHN
Silver	1.6	0.66	mg/Kg dry	1		SW-846 6010C-D	6/20/17	6/22/17 13:36	SHN
Thallium	ND	3.3	mg/Kg dry	1		SW-846 6010C-D	6/20/17	6/22/17 13:36	SHN
Zinc	120	1.3	mg/Kg dry	1		SW-846 6010C-D	6/20/17	6/22/17 13:36	SHN

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Project Location: ADW Seekonk, MA

Sample Description:

Work Order: 17F0761

Date Received: 6/14/2017

Field Sample #: SED504-S1-061417

Sampled: 6/14/2017 12:55

Sample ID: 17F0761-05

Sample Matrix: Sediment

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

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Hexavalent Chromium	ND	1.0	mg/Kg dry	5	MS-16, W-06	SW-846 7196A	6/21/17	6/23/17 12:30	LL
Oxidation/Reduction Potential	110		mV	1		SM2580 A	6/14/17	6/14/17 21:15	IS
pH @20.4°C	6.2		pH Units	1		SW-846 9045C	6/14/17	6/14/17 21:15	IS
Total Organic Carbon	2500	100	mg/Kg	1		SW 846 9060	6/19/17	6/19/17 22:32	DJM
% Solids	77.5		% Wt	1		SM 2540G	6/20/17	6/21/17 8:41	MRL

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Project Location: ADW Seekonk, MA

Sample Description:

Work Order: 17F0761

Date Received: 6/14/2017

Field Sample #: SED503-S1-061417

Sampled: 6/14/2017 13:15

Sample ID: 17F0761-06

Sample Matrix: Sediment

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	0.072	mg/Kg dry	1	V-05	SW-846 8260C	6/21/17	6/21/17 20:43	EEH
tert-Amyl Methyl Ether (TAME)	ND	0.00072	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 20:43	EEH
Benzene	ND	0.0014	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 20:43	EEH
Bromobenzene	ND	0.0014	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 20:43	EEH
Bromochloromethane	ND	0.0014	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 20:43	EEH
Bromodichloromethane	ND	0.0014	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 20:43	EEH
Bromoform	ND	0.0014	mg/Kg dry	1	L-04, V-05	SW-846 8260C	6/21/17	6/21/17 20:43	EEH
Bromomethane	ND	0.0072	mg/Kg dry	1	R-05	SW-846 8260C	6/21/17	6/21/17 20:43	EEH
2-Butanone (MEK)	ND	0.029	mg/Kg dry	1	V-05	SW-846 8260C	6/21/17	6/21/17 20:43	EEH
n-Butylbenzene	ND	0.0014	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 20:43	EEH
sec-Butylbenzene	ND	0.0014	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 20:43	EEH
tert-Butylbenzene	ND	0.0014	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 20:43	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	0.00072	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 20:43	EEH
Carbon Disulfide	ND	0.0043	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 20:43	EEH
Carbon Tetrachloride	ND	0.0014	mg/Kg dry	1	V-05	SW-846 8260C	6/21/17	6/21/17 20:43	EEH
Chlorobenzene	ND	0.0014	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 20:43	EEH
Chlorodibromomethane	ND	0.0014	mg/Kg dry	1	V-05	SW-846 8260C	6/21/17	6/21/17 20:43	EEH
Chloroethane	ND	0.0072	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 20:43	EEH
Chloroform	ND	0.0029	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 20:43	EEH
Chloromethane	ND	0.0072	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 20:43	EEH
2-Chlorotoluene	ND	0.0014	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 20:43	EEH
4-Chlorotoluene	ND	0.0014	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 20:43	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0029	mg/Kg dry	1	L-04, V-05	SW-846 8260C	6/21/17	6/21/17 20:43	EEH
1,2-Dibromoethane (EDB)	ND	0.0014	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 20:43	EEH
Dibromomethane	ND	0.0014	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 20:43	EEH
1,2-Dichlorobenzene	ND	0.0014	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 20:43	EEH
1,3-Dichlorobenzene	ND	0.0014	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 20:43	EEH
1,4-Dichlorobenzene	ND	0.0014	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 20:43	EEH
Dichlorodifluoromethane (Freon 12)	ND	0.0072	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 20:43	EEH
1,1-Dichloroethane	ND	0.0014	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 20:43	EEH
1,2-Dichloroethane	ND	0.0014	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 20:43	EEH
1,1-Dichloroethylene	ND	0.0029	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 20:43	EEH
cis-1,2-Dichloroethylene	ND	0.0014	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 20:43	EEH
trans-1,2-Dichloroethylene	ND	0.0014	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 20:43	EEH
1,2-Dichloropropane	ND	0.0014	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 20:43	EEH
1,3-Dichloropropane	ND	0.00072	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 20:43	EEH
2,2-Dichloropropane	ND	0.0014	mg/Kg dry	1	V-05	SW-846 8260C	6/21/17	6/21/17 20:43	EEH
1,1-Dichloropropene	ND	0.0014	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 20:43	EEH
cis-1,3-Dichloropropene	ND	0.00072	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 20:43	EEH
trans-1,3-Dichloropropene	ND	0.00072	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 20:43	EEH
Diethyl Ether	ND	0.0072	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 20:43	EEH
Diisopropyl Ether (DIPE)	ND	0.00072	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 20:43	EEH
1,4-Dioxane	ND	0.072	mg/Kg dry	1	V-16	SW-846 8260C	6/21/17	6/21/17 20:43	EEH
Ethylbenzene	ND	0.0014	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 20:43	EEH

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Project Location: ADW Seekonk, MA

Sample Description:

Work Order: 17F0761

Date Received: 6/14/2017

Field Sample #: SED503-S1-061417

Sampled: 6/14/2017 13:15

Sample ID: 17F0761-06

Sample Matrix: Sediment

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Hexachlorobutadiene	ND	0.0014	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 20:43	EEH
2-Hexanone (MBK)	ND	0.014	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 20:43	EEH
Isopropylbenzene (Cumene)	ND	0.0014	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 20:43	EEH
p-Isopropyltoluene (p-Cymene)	ND	0.0014	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 20:43	EEH
Methyl tert-Butyl Ether (MTBE)	ND	0.0029	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 20:43	EEH
Methylene Chloride	ND	0.0072	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 20:43	EEH
4-Methyl-2-pentanone (MIBK)	ND	0.014	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 20:43	EEH
Naphthalene	ND	0.0072	mg/Kg dry	1	V-05	SW-846 8260C	6/21/17	6/21/17 20:43	EEH
n-Propylbenzene	ND	0.0014	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 20:43	EEH
Styrene	ND	0.0014	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 20:43	EEH
1,1,1,2-Tetrachloroethane	ND	0.0014	mg/Kg dry	1	V-05	SW-846 8260C	6/21/17	6/21/17 20:43	EEH
1,1,2,2-Tetrachloroethane	ND	0.00072	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 20:43	EEH
Tetrachloroethylene	ND	0.0014	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 20:43	EEH
Tetrahydrofuran	ND	0.0072	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 20:43	EEH
Toluene	ND	0.0014	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 20:43	EEH
1,2,3-Trichlorobenzene	ND	0.0072	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 20:43	EEH
1,2,4-Trichlorobenzene	ND	0.0072	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 20:43	EEH
1,1,1-Trichloroethane	ND	0.0014	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 20:43	EEH
1,1,2-Trichloroethane	ND	0.0014	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 20:43	EEH
Trichloroethylene	ND	0.0014	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 20:43	EEH
Trichlorofluoromethane (Freon 11)	ND	0.0072	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 20:43	EEH
1,2,3-Trichloropropane	ND	0.0014	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 20:43	EEH
1,2,4-Trimethylbenzene	ND	0.0014	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 20:43	EEH
1,3,5-Trimethylbenzene	ND	0.0014	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 20:43	EEH
Vinyl Chloride	ND	0.0072	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 20:43	EEH
m+p Xylene	ND	0.0029	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 20:43	EEH
o-Xylene	ND	0.0014	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 20:43	EEH

Surrogates	% Recovery	Recovery Limits	Flag/Qual
1,2-Dichloroethane-d4	92.8	70-130	
Toluene-d8	94.6	70-130	
4-Bromofluorobenzene	95.5	70-130	

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Project Location: ADW Seekonk, MA

Sample Description:

Work Order: 17F0761

Date Received: 6/14/2017

Field Sample #: SED503-S1-061417

Sampled: 6/14/2017 13:15

Sample ID: 17F0761-06

Sample Matrix: Sediment

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acenaphthene	ND	0.20	mg/Kg dry	1		SW-846 8270D	6/20/17	6/23/17 0:13	BGL
Acenaphthylene	ND	0.20	mg/Kg dry	1		SW-846 8270D	6/20/17	6/23/17 0:13	BGL
Anthracene	ND	0.20	mg/Kg dry	1		SW-846 8270D	6/20/17	6/23/17 0:13	BGL
Benzo(a)anthracene	ND	0.20	mg/Kg dry	1		SW-846 8270D	6/20/17	6/23/17 0:13	BGL
Benzo(a)pyrene	ND	0.20	mg/Kg dry	1		SW-846 8270D	6/20/17	6/23/17 0:13	BGL
Benzo(b)fluoranthene	ND	0.20	mg/Kg dry	1		SW-846 8270D	6/20/17	6/23/17 0:13	BGL
Benzo(g,h,i)perylene	ND	0.20	mg/Kg dry	1		SW-846 8270D	6/20/17	6/23/17 0:13	BGL
Benzo(k)fluoranthene	ND	0.20	mg/Kg dry	1		SW-846 8270D	6/20/17	6/23/17 0:13	BGL
Chrysene	ND	0.20	mg/Kg dry	1		SW-846 8270D	6/20/17	6/23/17 0:13	BGL
Dibenz(a,h)anthracene	ND	0.20	mg/Kg dry	1		SW-846 8270D	6/20/17	6/23/17 0:13	BGL
Fluoranthene	ND	0.20	mg/Kg dry	1		SW-846 8270D	6/20/17	6/23/17 0:13	BGL
Fluorene	ND	0.20	mg/Kg dry	1		SW-846 8270D	6/20/17	6/23/17 0:13	BGL
Indeno(1,2,3-cd)pyrene	ND	0.20	mg/Kg dry	1		SW-846 8270D	6/20/17	6/23/17 0:13	BGL
2-Methylnaphthalene	ND	0.20	mg/Kg dry	1		SW-846 8270D	6/20/17	6/23/17 0:13	BGL
Naphthalene	ND	0.20	mg/Kg dry	1		SW-846 8270D	6/20/17	6/23/17 0:13	BGL
Phenanthrene	ND	0.20	mg/Kg dry	1		SW-846 8270D	6/20/17	6/23/17 0:13	BGL
Pyrene	ND	0.20	mg/Kg dry	1		SW-846 8270D	6/20/17	6/23/17 0:13	BGL
Surrogates	% Recovery	Recovery Limits	Flag/Qual						
Nitrobenzene-d5	78.0	30-130							
2-Fluorobiphenyl	76.6	30-130							
p-Terphenyl-d14	92.0	30-130							

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Project Location: ADW Seekonk, MA

Sample Description:

Work Order: 17F0761

Date Received: 6/14/2017

Field Sample #: SED503-S1-061417

Sampled: 6/14/2017 13:15

Sample ID: 17F0761-06

Sample Matrix: Sediment

Sample Flags: O-32

Polychlorinated Biphenyls By GC/ECD

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	6/21/17	6/22/17 21:43	KAL
Aroclor-1221 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	6/21/17	6/22/17 21:43	KAL
Aroclor-1232 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	6/21/17	6/22/17 21:43	KAL
Aroclor-1242 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	6/21/17	6/22/17 21:43	KAL
Aroclor-1248 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	6/21/17	6/22/17 21:43	KAL
Aroclor-1254 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	6/21/17	6/22/17 21:43	KAL
Aroclor-1260 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	6/21/17	6/22/17 21:43	KAL
Aroclor-1262 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	6/21/17	6/22/17 21:43	KAL
Aroclor-1268 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	6/21/17	6/22/17 21:43	KAL
Surrogates	% Recovery	Recovery Limits	Flag/Qual						
Decachlorobiphenyl [1]	102	30-150							
Decachlorobiphenyl [2]	111	30-150							
Tetrachloro-m-xylene [1]	84.9	30-150							
Tetrachloro-m-xylene [2]	86.5	30-150							

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Project Location: ADW Seekonk, MA

Sample Description:

Work Order: 17F0761

Date Received: 6/14/2017

Field Sample #: SED503-S1-061417

Sampled: 6/14/2017 13:15

Sample ID: 17F0761-06

Sample Matrix: Sediment

Petrolium Hydrocarbons Analyses - EPH

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
C9-C18 Aliphatics	ND	12	mg/Kg dry	1		MADEP-EPH-04-1.1	6/21/17	6/22/17 17:46	SCS
C19-C36 Aliphatics	ND	12	mg/Kg dry	1		MADEP-EPH-04-1.1	6/21/17	6/22/17 17:46	SCS
Unadjusted C11-C22 Aromatics	ND	12	mg/Kg dry	1		MADEP-EPH-04-1.1	6/21/17	6/22/17 17:46	SCS
C11-C22 Aromatics	ND	12	mg/Kg dry	1		MADEP-EPH-04-1.1	6/21/17	6/22/17 17:46	SCS
Acenaphthene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	6/21/17	6/22/17 17:46	SCS
Acenaphthylene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	6/21/17	6/22/17 17:46	SCS
Anthracene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	6/21/17	6/22/17 17:46	SCS
Benzo(a)anthracene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	6/21/17	6/22/17 17:46	SCS
Benzo(a)pyrene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	6/21/17	6/22/17 17:46	SCS
Benzo(b)fluoranthene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	6/21/17	6/22/17 17:46	SCS
Benzo(g,h,i)perylene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	6/21/17	6/22/17 17:46	SCS
Benzo(k)fluoranthene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	6/21/17	6/22/17 17:46	SCS
Chrysene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	6/21/17	6/22/17 17:46	SCS
Dibenz(a,h)anthracene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	6/21/17	6/22/17 17:46	SCS
Fluoranthene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	6/21/17	6/22/17 17:46	SCS
Fluorene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	6/21/17	6/22/17 17:46	SCS
Indeno(1,2,3-cd)pyrene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	6/21/17	6/22/17 17:46	SCS
2-Methylnaphthalene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	6/21/17	6/22/17 17:46	SCS
Naphthalene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	6/21/17	6/22/17 17:46	SCS
Phenanthrene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	6/21/17	6/22/17 17:46	SCS
Pyrene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	6/21/17	6/22/17 17:46	SCS
Surrogates	% Recovery	Recovery Limits	Flag/Qual						
Chlorooctadecane (COD)	58.8	40-140							
o-Terphenyl (OTP)	66.7	40-140							
2-Bromonaphthalene	65.9	40-140							
2-Fluorobiphenyl	78.6	40-140							

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Project Location: ADW Seekonk, MA

Sample Description:

Work Order: 17F0761

Date Received: 6/14/2017

Field Sample #: SED503-S1-061417

Sampled: 6/14/2017 13:15

Sample ID: 17F0761-06

Sample Matrix: Sediment

Sample Flags: O-01

Petroleum Hydrocarbons Analyses - VPH

Soil/Methanol Preservation Ratio: 1.59

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Unadjusted C5-C8 Aliphatics	ND	9.6	mg/Kg dry	1		MADEP-VPH-04-1.1	6/15/17	6/15/17 19:32	EEH
C5-C8 Aliphatics	ND	9.6	mg/Kg dry	1		MADEP-VPH-04-1.1	6/15/17	6/15/17 19:32	EEH
Unadjusted C9-C12 Aliphatics	ND	9.6	mg/Kg dry	1		MADEP-VPH-04-1.1	6/15/17	6/15/17 19:32	EEH
C9-C12 Aliphatics	ND	9.6	mg/Kg dry	1		MADEP-VPH-04-1.1	6/15/17	6/15/17 19:32	EEH
C9-C10 Aromatics	ND	9.6	mg/Kg dry	1		MADEP-VPH-04-1.1	6/15/17	6/15/17 19:32	EEH
Benzene	ND	0.048	mg/Kg dry	1		MADEP-VPH-04-1.1	6/15/17	6/15/17 19:32	EEH
Ethylbenzene	ND	0.048	mg/Kg dry	1		MADEP-VPH-04-1.1	6/15/17	6/15/17 19:32	EEH
Methyl tert-Butyl Ether (MTBE)	ND	0.048	mg/Kg dry	1		MADEP-VPH-04-1.1	6/15/17	6/15/17 19:32	EEH
Naphthalene	ND	0.24	mg/Kg dry	1		MADEP-VPH-04-1.1	6/15/17	6/15/17 19:32	EEH
Toluene	ND	0.048	mg/Kg dry	1		MADEP-VPH-04-1.1	6/15/17	6/15/17 19:32	EEH
m+p Xylene	ND	0.096	mg/Kg dry	1		MADEP-VPH-04-1.1	6/15/17	6/15/17 19:32	EEH
o-Xylene	ND	0.048	mg/Kg dry	1		MADEP-VPH-04-1.1	6/15/17	6/15/17 19:32	EEH
Surrogates	% Recovery	Recovery Limits	Flag/Qual						
2,5-Dibromotoluene (FID)	108	70-130							
2,5-Dibromotoluene (PID)	106	70-130							

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Project Location: ADW Seekonk, MA

Sample Description:

Work Order: 17F0761

Date Received: 6/14/2017

Field Sample #: SED503-S1-061417

Sampled: 6/14/2017 13:15

Sample ID: 17F0761-06

Sample Matrix: Sediment

Metals Analyses (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Antimony	ND	2.9	mg/Kg dry	1		SW-846 6010C-D	6/20/17	6/22/17 13:41	SHN
Arsenic	ND	2.9	mg/Kg dry	1		SW-846 6010C-D	6/20/17	6/22/17 13:41	SHN
Beryllium	ND	0.29	mg/Kg dry	1		SW-846 6010C-D	6/20/17	6/22/17 13:41	SHN
Cadmium	0.48	0.29	mg/Kg dry	1		SW-846 6010C-D	6/20/17	6/22/17 13:41	SHN
Chromium	11	0.59	mg/Kg dry	1		SW-846 6010C-D	6/20/17	6/22/17 13:41	SHN
Copper	40	0.59	mg/Kg dry	1		SW-846 6010C-D	6/20/17	6/22/17 13:41	SHN
Lead	21	0.88	mg/Kg dry	1	M-10	SW-846 6010C-D	6/20/17	6/22/17 13:41	SHN
Mercury	0.081	0.030	mg/Kg dry	1		SW-846 7471B	6/20/17	6/22/17 11:06	TJK
Nickel	13	0.59	mg/Kg dry	1		SW-846 6010C-D	6/20/17	6/22/17 13:41	SHN
Selenium	ND	5.9	mg/Kg dry	1		SW-846 6010C-D	6/20/17	6/22/17 13:41	SHN
Silver	1.6	0.59	mg/Kg dry	1		SW-846 6010C-D	6/20/17	6/22/17 13:41	SHN
Thallium	ND	2.9	mg/Kg dry	1		SW-846 6010C-D	6/20/17	6/22/17 13:41	SHN
Zinc	34	1.2	mg/Kg dry	1		SW-846 6010C-D	6/20/17	6/22/17 13:41	SHN

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Project Location: ADW Seekonk, MA

Sample Description:

Work Order: 17F0761

Date Received: 6/14/2017

Field Sample #: SED503-S1-061417

Sampled: 6/14/2017 13:15

Sample ID: 17F0761-06

Sample Matrix: Sediment

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

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Hexavalent Chromium	ND	0.93	mg/Kg dry	5	W-06	SW-846 7196A	6/21/17	6/23/17 12:30	LL
Oxidation/Reduction Potential	130		mV	1		SM2580 A	6/14/17	6/14/17 21:15	IS
pH @20.3°C	6.2		pH Units	1		SW-846 9045C	6/14/17	6/14/17 21:15	IS
Total Organic Carbon	1800	100	mg/Kg	1	MS-07	SW 846 9060	6/19/17	6/19/17 22:32	DJM
% Solids	83.3		% Wt	1		SM 2540G	6/20/17	6/21/17 8:41	MRL

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Project Location: ADW Seekonk, MA

Sample Description:

Work Order: 17F0761

Date Received: 6/14/2017

Field Sample #: SED502-S1-061417

Sampled: 6/14/2017 13:40

Sample ID: 17F0761-07

Sample Matrix: Sediment

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	0.11	mg/Kg dry	1	V-05	SW-846 8260C	6/21/17	6/21/17 21:10	EEH
tert-Amyl Methyl Ether (TAME)	ND	0.0011	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 21:10	EEH
Benzene	ND	0.0022	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 21:10	EEH
Bromobenzene	ND	0.0022	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 21:10	EEH
Bromochloromethane	ND	0.0022	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 21:10	EEH
Bromodichloromethane	ND	0.0022	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 21:10	EEH
Bromoform	ND	0.0022	mg/Kg dry	1	L-04, V-05	SW-846 8260C	6/21/17	6/21/17 21:10	EEH
Bromomethane	ND	0.011	mg/Kg dry	1	R-05	SW-846 8260C	6/21/17	6/21/17 21:10	EEH
2-Butanone (MEK)	ND	0.044	mg/Kg dry	1	V-05	SW-846 8260C	6/21/17	6/21/17 21:10	EEH
n-Butylbenzene	ND	0.0022	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 21:10	EEH
sec-Butylbenzene	ND	0.0022	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 21:10	EEH
tert-Butylbenzene	ND	0.0022	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 21:10	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	0.0011	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 21:10	EEH
Carbon Disulfide	ND	0.0066	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 21:10	EEH
Carbon Tetrachloride	ND	0.0022	mg/Kg dry	1	V-05	SW-846 8260C	6/21/17	6/21/17 21:10	EEH
Chlorobenzene	ND	0.0022	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 21:10	EEH
Chlorodibromomethane	ND	0.0022	mg/Kg dry	1	V-05	SW-846 8260C	6/21/17	6/21/17 21:10	EEH
Chloroethane	ND	0.011	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 21:10	EEH
Chloroform	ND	0.0044	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 21:10	EEH
Chloromethane	ND	0.011	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 21:10	EEH
2-Chlorotoluene	ND	0.0022	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 21:10	EEH
4-Chlorotoluene	ND	0.0022	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 21:10	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0044	mg/Kg dry	1	L-04, V-05	SW-846 8260C	6/21/17	6/21/17 21:10	EEH
1,2-Dibromoethane (EDB)	ND	0.0022	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 21:10	EEH
Dibromomethane	ND	0.0022	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 21:10	EEH
1,2-Dichlorobenzene	ND	0.0022	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 21:10	EEH
1,3-Dichlorobenzene	ND	0.0022	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 21:10	EEH
1,4-Dichlorobenzene	ND	0.0022	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 21:10	EEH
Dichlorodifluoromethane (Freon 12)	ND	0.011	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 21:10	EEH
1,1-Dichloroethane	ND	0.0022	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 21:10	EEH
1,2-Dichloroethane	ND	0.0022	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 21:10	EEH
1,1-Dichloroethylene	ND	0.0044	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 21:10	EEH
cis-1,2-Dichloroethylene	ND	0.0022	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 21:10	EEH
trans-1,2-Dichloroethylene	ND	0.0022	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 21:10	EEH
1,2-Dichloropropane	ND	0.0022	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 21:10	EEH
1,3-Dichloropropane	ND	0.0011	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 21:10	EEH
2,2-Dichloropropane	ND	0.0022	mg/Kg dry	1	V-05	SW-846 8260C	6/21/17	6/21/17 21:10	EEH
1,1-Dichloropropene	ND	0.0022	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 21:10	EEH
cis-1,3-Dichloropropene	ND	0.0011	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 21:10	EEH
trans-1,3-Dichloropropene	ND	0.0011	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 21:10	EEH
Diethyl Ether	ND	0.011	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 21:10	EEH
Diisopropyl Ether (DIPE)	ND	0.0011	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 21:10	EEH
1,4-Dioxane	ND	0.11	mg/Kg dry	1	V-16	SW-846 8260C	6/21/17	6/21/17 21:10	EEH
Ethylbenzene	ND	0.0022	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 21:10	EEH

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Project Location: ADW Seekonk, MA

Sample Description:

Work Order: 17F0761

Date Received: 6/14/2017

Field Sample #: SED502-S1-061417

Sampled: 6/14/2017 13:40

Sample ID: 17F0761-07

Sample Matrix: Sediment

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Hexachlorobutadiene	ND	0.0022	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 21:10	EEH
2-Hexanone (MBK)	ND	0.022	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 21:10	EEH
Isopropylbenzene (Cumene)	ND	0.0022	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 21:10	EEH
p-Isopropyltoluene (p-Cymene)	ND	0.0022	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 21:10	EEH
Methyl tert-Butyl Ether (MTBE)	ND	0.0044	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 21:10	EEH
Methylene Chloride	ND	0.011	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 21:10	EEH
4-Methyl-2-pentanone (MIBK)	ND	0.022	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 21:10	EEH
Naphthalene	ND	0.011	mg/Kg dry	1	V-05	SW-846 8260C	6/21/17	6/21/17 21:10	EEH
n-Propylbenzene	ND	0.0022	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 21:10	EEH
Styrene	ND	0.0022	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 21:10	EEH
1,1,1,2-Tetrachloroethane	ND	0.0022	mg/Kg dry	1	V-05	SW-846 8260C	6/21/17	6/21/17 21:10	EEH
1,1,2,2-Tetrachloroethane	ND	0.0011	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 21:10	EEH
Tetrachloroethylene	ND	0.0022	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 21:10	EEH
Tetrahydrofuran	ND	0.011	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 21:10	EEH
Toluene	ND	0.0022	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 21:10	EEH
1,2,3-Trichlorobenzene	ND	0.011	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 21:10	EEH
1,2,4-Trichlorobenzene	ND	0.011	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 21:10	EEH
1,1,1-Trichloroethane	ND	0.0022	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 21:10	EEH
1,1,2-Trichloroethane	ND	0.0022	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 21:10	EEH
Trichloroethylene	ND	0.0022	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 21:10	EEH
Trichlorofluoromethane (Freon 11)	ND	0.011	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 21:10	EEH
1,2,3-Trichloropropane	ND	0.0022	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 21:10	EEH
1,2,4-Trimethylbenzene	ND	0.0022	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 21:10	EEH
1,3,5-Trimethylbenzene	ND	0.0022	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 21:10	EEH
Vinyl Chloride	ND	0.011	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 21:10	EEH
m+p Xylene	ND	0.0044	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 21:10	EEH
o-Xylene	ND	0.0022	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 21:10	EEH

Surrogates	% Recovery	Recovery Limits	Flag/Qual
1,2-Dichloroethane-d4	96.9	70-130	
Toluene-d8	93.2	70-130	
4-Bromofluorobenzene	92.3	70-130	

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Project Location: ADW Seekonk, MA

Sample Description:

Work Order: 17F0761

Date Received: 6/14/2017

Field Sample #: SED502-S1-061417

Sampled: 6/14/2017 13:40

Sample ID: 17F0761-07

Sample Matrix: Sediment

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acenaphthene	ND	0.27	mg/Kg dry	1		SW-846 8270D	6/20/17	6/23/17 0:35	BGL
Acenaphthylene	ND	0.27	mg/Kg dry	1		SW-846 8270D	6/20/17	6/23/17 0:35	BGL
Anthracene	ND	0.27	mg/Kg dry	1		SW-846 8270D	6/20/17	6/23/17 0:35	BGL
Benzo(a)anthracene	ND	0.27	mg/Kg dry	1		SW-846 8270D	6/20/17	6/23/17 0:35	BGL
Benzo(a)pyrene	ND	0.27	mg/Kg dry	1		SW-846 8270D	6/20/17	6/23/17 0:35	BGL
Benzo(b)fluoranthene	ND	0.27	mg/Kg dry	1		SW-846 8270D	6/20/17	6/23/17 0:35	BGL
Benzo(g,h,i)perylene	ND	0.27	mg/Kg dry	1		SW-846 8270D	6/20/17	6/23/17 0:35	BGL
Benzo(k)fluoranthene	ND	0.27	mg/Kg dry	1		SW-846 8270D	6/20/17	6/23/17 0:35	BGL
Chrysene	ND	0.27	mg/Kg dry	1		SW-846 8270D	6/20/17	6/23/17 0:35	BGL
Dibenz(a,h)anthracene	ND	0.27	mg/Kg dry	1		SW-846 8270D	6/20/17	6/23/17 0:35	BGL
Fluoranthene	ND	0.27	mg/Kg dry	1		SW-846 8270D	6/20/17	6/23/17 0:35	BGL
Fluorene	ND	0.27	mg/Kg dry	1		SW-846 8270D	6/20/17	6/23/17 0:35	BGL
Indeno(1,2,3-cd)pyrene	ND	0.27	mg/Kg dry	1		SW-846 8270D	6/20/17	6/23/17 0:35	BGL
2-Methylnaphthalene	ND	0.27	mg/Kg dry	1		SW-846 8270D	6/20/17	6/23/17 0:35	BGL
Naphthalene	ND	0.27	mg/Kg dry	1		SW-846 8270D	6/20/17	6/23/17 0:35	BGL
Phenanthrene	ND	0.27	mg/Kg dry	1		SW-846 8270D	6/20/17	6/23/17 0:35	BGL
Pyrene	ND	0.27	mg/Kg dry	1		SW-846 8270D	6/20/17	6/23/17 0:35	BGL
Surrogates	% Recovery	Recovery Limits	Flag/Qual						
Nitrobenzene-d5	67.5	30-130							
2-Fluorobiphenyl	61.6	30-130							
p-Terphenyl-d14	74.5	30-130							

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Project Location: ADW Seekonk, MA

Sample Description:

Work Order: 17F0761

Date Received: 6/14/2017

Field Sample #: SED502-S1-061417

Sampled: 6/14/2017 13:40

Sample ID: 17F0761-07

Sample Matrix: Sediment

Sample Flags: O-32

Polychlorinated Biphenyls By GC/ECD

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.16	mg/Kg dry	5		SW-846 8082A	6/21/17	6/22/17 22:01	KAL
Aroclor-1221 [1]	ND	0.16	mg/Kg dry	5		SW-846 8082A	6/21/17	6/22/17 22:01	KAL
Aroclor-1232 [1]	ND	0.16	mg/Kg dry	5		SW-846 8082A	6/21/17	6/22/17 22:01	KAL
Aroclor-1242 [1]	ND	0.16	mg/Kg dry	5		SW-846 8082A	6/21/17	6/22/17 22:01	KAL
Aroclor-1248 [1]	ND	0.16	mg/Kg dry	5		SW-846 8082A	6/21/17	6/22/17 22:01	KAL
Aroclor-1254 [1]	ND	0.16	mg/Kg dry	5		SW-846 8082A	6/21/17	6/22/17 22:01	KAL
Aroclor-1260 [1]	ND	0.16	mg/Kg dry	5		SW-846 8082A	6/21/17	6/22/17 22:01	KAL
Aroclor-1262 [1]	ND	0.16	mg/Kg dry	5		SW-846 8082A	6/21/17	6/22/17 22:01	KAL
Aroclor-1268 [1]	ND	0.16	mg/Kg dry	5		SW-846 8082A	6/21/17	6/22/17 22:01	KAL
Surrogates	% Recovery	Recovery Limits	Flag/Qual						
Decachlorobiphenyl [1]	83.4	30-150							
Decachlorobiphenyl [2]	93.9	30-150							
Tetrachloro-m-xylene [1]	74.8	30-150							
Tetrachloro-m-xylene [2]	76.7	30-150							

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Project Location: ADW Seekonk, MA

Sample Description:

Work Order: 17F0761

Date Received: 6/14/2017

Field Sample #: SED502-S1-061417

Sampled: 6/14/2017 13:40

Sample ID: 17F0761-07

Sample Matrix: Sediment

Petrolium Hydrocarbons Analyses - EPH

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
C9-C18 Aliphatics	ND	16	mg/Kg dry	1		MADEP-EPH-04-1.1	6/21/17	6/22/17 18:06	SCS
C19-C36 Aliphatics	29	16	mg/Kg dry	1		MADEP-EPH-04-1.1	6/21/17	6/22/17 18:06	SCS
Unadjusted C11-C22 Aromatics	22	16	mg/Kg dry	1		MADEP-EPH-04-1.1	6/21/17	6/22/17 18:06	SCS
C11-C22 Aromatics	22	16	mg/Kg dry	1		MADEP-EPH-04-1.1	6/21/17	6/22/17 18:06	SCS
Acenaphthene	ND	0.16	mg/Kg dry	1		MADEP-EPH-04-1.1	6/21/17	6/22/17 18:06	SCS
Acenaphthylene	ND	0.16	mg/Kg dry	1		MADEP-EPH-04-1.1	6/21/17	6/22/17 18:06	SCS
Anthracene	ND	0.16	mg/Kg dry	1		MADEP-EPH-04-1.1	6/21/17	6/22/17 18:06	SCS
Benzo(a)anthracene	ND	0.16	mg/Kg dry	1		MADEP-EPH-04-1.1	6/21/17	6/22/17 18:06	SCS
Benzo(a)pyrene	ND	0.16	mg/Kg dry	1		MADEP-EPH-04-1.1	6/21/17	6/22/17 18:06	SCS
Benzo(b)fluoranthene	ND	0.16	mg/Kg dry	1		MADEP-EPH-04-1.1	6/21/17	6/22/17 18:06	SCS
Benzo(g,h,i)perylene	ND	0.16	mg/Kg dry	1		MADEP-EPH-04-1.1	6/21/17	6/22/17 18:06	SCS
Benzo(k)fluoranthene	ND	0.16	mg/Kg dry	1		MADEP-EPH-04-1.1	6/21/17	6/22/17 18:06	SCS
Chrysene	ND	0.16	mg/Kg dry	1		MADEP-EPH-04-1.1	6/21/17	6/22/17 18:06	SCS
Dibenz(a,h)anthracene	ND	0.16	mg/Kg dry	1		MADEP-EPH-04-1.1	6/21/17	6/22/17 18:06	SCS
Fluoranthene	ND	0.16	mg/Kg dry	1		MADEP-EPH-04-1.1	6/21/17	6/22/17 18:06	SCS
Fluorene	ND	0.16	mg/Kg dry	1		MADEP-EPH-04-1.1	6/21/17	6/22/17 18:06	SCS
Indeno(1,2,3-cd)pyrene	ND	0.16	mg/Kg dry	1		MADEP-EPH-04-1.1	6/21/17	6/22/17 18:06	SCS
2-Methylnaphthalene	ND	0.16	mg/Kg dry	1		MADEP-EPH-04-1.1	6/21/17	6/22/17 18:06	SCS
Naphthalene	ND	0.16	mg/Kg dry	1		MADEP-EPH-04-1.1	6/21/17	6/22/17 18:06	SCS
Phenanthrene	ND	0.16	mg/Kg dry	1		MADEP-EPH-04-1.1	6/21/17	6/22/17 18:06	SCS
Pyrene	ND	0.16	mg/Kg dry	1		MADEP-EPH-04-1.1	6/21/17	6/22/17 18:06	SCS
Surrogates	% Recovery	Recovery Limits	Flag/Qual						
Chlorooctadecane (COD)	43.4	40-140							
o-Terphenyl (OTP)	49.3	40-140							
2-Bromonaphthalene	44.8	40-140							
2-Fluorobiphenyl	80.4	40-140							

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Project Location: ADW Seekonk, MA

Sample Description:

Work Order: 17F0761

Date Received: 6/14/2017

Field Sample #: SED502-S1-061417

Sampled: 6/14/2017 13:40

Sample ID: 17F0761-07

Sample Matrix: Sediment

Sample Flags: O-01

Petroleum Hydrocarbons Analyses - VPH

Soil/Methanol Preservation Ratio: 1.35

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Unadjusted C5-C8 Aliphatics	ND	18	mg/Kg dry	1		MADEP-VPH-04-1.1	6/15/17	6/15/17 20:02	EEH
C5-C8 Aliphatics	ND	18	mg/Kg dry	1		MADEP-VPH-04-1.1	6/15/17	6/15/17 20:02	EEH
Unadjusted C9-C12 Aliphatics	ND	18	mg/Kg dry	1		MADEP-VPH-04-1.1	6/15/17	6/15/17 20:02	EEH
C9-C12 Aliphatics	ND	18	mg/Kg dry	1		MADEP-VPH-04-1.1	6/15/17	6/15/17 20:02	EEH
C9-C10 Aromatics	ND	18	mg/Kg dry	1		MADEP-VPH-04-1.1	6/15/17	6/15/17 20:02	EEH
Benzene	ND	0.088	mg/Kg dry	1		MADEP-VPH-04-1.1	6/15/17	6/15/17 20:02	EEH
Ethylbenzene	ND	0.088	mg/Kg dry	1		MADEP-VPH-04-1.1	6/15/17	6/15/17 20:02	EEH
Methyl tert-Butyl Ether (MTBE)	ND	0.088	mg/Kg dry	1		MADEP-VPH-04-1.1	6/15/17	6/15/17 20:02	EEH
Naphthalene	ND	0.44	mg/Kg dry	1		MADEP-VPH-04-1.1	6/15/17	6/15/17 20:02	EEH
Toluene	ND	0.088	mg/Kg dry	1		MADEP-VPH-04-1.1	6/15/17	6/15/17 20:02	EEH
m+p Xylene	ND	0.18	mg/Kg dry	1		MADEP-VPH-04-1.1	6/15/17	6/15/17 20:02	EEH
o-Xylene	ND	0.088	mg/Kg dry	1		MADEP-VPH-04-1.1	6/15/17	6/15/17 20:02	EEH
Surrogates	% Recovery	Recovery Limits	Flag/Qual						
2,5-Dibromotoluene (FID)	101	70-130						6/15/17 20:02	
2,5-Dibromotoluene (PID)	99.8	70-130						6/15/17 20:02	

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Project Location: ADW Seekonk, MA

Sample Description:

Work Order: 17F0761

Date Received: 6/14/2017

Field Sample #: SED502-S1-061417

Sampled: 6/14/2017 13:40

Sample ID: 17F0761-07

Sample Matrix: Sediment

Metals Analyses (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Antimony	ND	3.9	mg/Kg dry	1		SW-846 6010C-D	6/20/17	6/22/17 13:47	SHN
Arsenic	5.4	3.9	mg/Kg dry	1		SW-846 6010C-D	6/20/17	6/22/17 13:47	SHN
Beryllium	ND	0.39	mg/Kg dry	1		SW-846 6010C-D	6/20/17	6/22/17 13:47	SHN
Cadmium	0.67	0.39	mg/Kg dry	1		SW-846 6010C-D	6/20/17	6/22/17 13:47	SHN
Chromium	15	0.79	mg/Kg dry	1		SW-846 6010C-D	6/20/17	6/22/17 13:47	SHN
Copper	68	0.79	mg/Kg dry	1		SW-846 6010C-D	6/20/17	6/22/17 13:47	SHN
Lead	11	1.2	mg/Kg dry	1	M-10	SW-846 6010C-D	6/20/17	6/22/17 13:47	SHN
Mercury	0.088	0.040	mg/Kg dry	1		SW-846 7471B	6/20/17	6/22/17 11:07	TJK
Nickel	15	0.79	mg/Kg dry	1		SW-846 6010C-D	6/20/17	6/22/17 13:47	SHN
Selenium	ND	7.9	mg/Kg dry	1		SW-846 6010C-D	6/20/17	6/22/17 13:47	SHN
Silver	2.3	0.79	mg/Kg dry	1		SW-846 6010C-D	6/20/17	6/22/17 13:47	SHN
Thallium	ND	3.9	mg/Kg dry	1		SW-846 6010C-D	6/20/17	6/22/17 13:47	SHN
Zinc	33	1.6	mg/Kg dry	1		SW-846 6010C-D	6/20/17	6/22/17 13:47	SHN

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Project Location: ADW Seekonk, MA

Sample Description:

Work Order: 17F0761

Date Received: 6/14/2017

Field Sample #: SED502-S1-061417

Sampled: 6/14/2017 13:40

Sample ID: 17F0761-07

Sample Matrix: Sediment

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

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Hexavalent Chromium	ND	1.2	mg/Kg dry	5	W-06	SW-846 7196A	6/21/17	6/23/17 12:30	LL
Oxidation/Reduction Potential	120		mV	1		SM2580 A	6/14/17	6/14/17 21:15	IS
pH @19.6°C	5.8		pH Units	1		SW-846 9045C	6/14/17	6/14/17 21:15	IS
Total Organic Carbon	11000	100	mg/Kg	1		Lloyd Kahn Method	6/20/17	6/20/17 21:08	DJM
% Solids	63.6		% Wt	1		SM 2540G	6/20/17	6/21/17 8:41	MRL

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Project Location: ADW Seekonk, MA

Sample Description:

Work Order: 17F0761

Date Received: 6/14/2017

Field Sample #: SED501-S1-061417

Sampled: 6/14/2017 15:35

Sample ID: 17F0761-08

Sample Matrix: Sediment

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	0.063	mg/Kg dry	1	V-05	SW-846 8260C	6/21/17	6/21/17 21:37	EEH
tert-Amyl Methyl Ether (TAME)	ND	0.00063	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 21:37	EEH
Benzene	ND	0.0013	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 21:37	EEH
Bromobenzene	ND	0.0013	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 21:37	EEH
Bromochloromethane	ND	0.0013	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 21:37	EEH
Bromodichloromethane	ND	0.0013	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 21:37	EEH
Bromoform	ND	0.0013	mg/Kg dry	1	L-04, V-05	SW-846 8260C	6/21/17	6/21/17 21:37	EEH
Bromomethane	ND	0.0063	mg/Kg dry	1	R-05	SW-846 8260C	6/21/17	6/21/17 21:37	EEH
2-Butanone (MEK)	ND	0.025	mg/Kg dry	1	V-05	SW-846 8260C	6/21/17	6/21/17 21:37	EEH
n-Butylbenzene	ND	0.0013	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 21:37	EEH
sec-Butylbenzene	ND	0.0013	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 21:37	EEH
tert-Butylbenzene	ND	0.0013	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 21:37	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	0.00063	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 21:37	EEH
Carbon Disulfide	ND	0.0038	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 21:37	EEH
Carbon Tetrachloride	ND	0.0013	mg/Kg dry	1	V-05	SW-846 8260C	6/21/17	6/21/17 21:37	EEH
Chlorobenzene	ND	0.0013	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 21:37	EEH
Chlorodibromomethane	ND	0.0013	mg/Kg dry	1	V-05	SW-846 8260C	6/21/17	6/21/17 21:37	EEH
Chloroethane	ND	0.0063	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 21:37	EEH
Chloroform	ND	0.0025	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 21:37	EEH
Chloromethane	ND	0.0063	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 21:37	EEH
2-Chlorotoluene	ND	0.0013	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 21:37	EEH
4-Chlorotoluene	ND	0.0013	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 21:37	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0025	mg/Kg dry	1	L-04, V-05	SW-846 8260C	6/21/17	6/21/17 21:37	EEH
1,2-Dibromoethane (EDB)	ND	0.0013	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 21:37	EEH
Dibromomethane	ND	0.0013	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 21:37	EEH
1,2-Dichlorobenzene	ND	0.0013	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 21:37	EEH
1,3-Dichlorobenzene	ND	0.0013	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 21:37	EEH
1,4-Dichlorobenzene	ND	0.0013	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 21:37	EEH
Dichlorodifluoromethane (Freon 12)	ND	0.0063	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 21:37	EEH
1,1-Dichloroethane	ND	0.0013	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 21:37	EEH
1,2-Dichloroethane	ND	0.0013	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 21:37	EEH
1,1-Dichloroethylene	ND	0.0025	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 21:37	EEH
cis-1,2-Dichloroethylene	ND	0.0013	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 21:37	EEH
trans-1,2-Dichloroethylene	ND	0.0013	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 21:37	EEH
1,2-Dichloropropane	ND	0.0013	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 21:37	EEH
1,3-Dichloropropane	ND	0.00063	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 21:37	EEH
2,2-Dichloropropane	ND	0.0013	mg/Kg dry	1	V-05	SW-846 8260C	6/21/17	6/21/17 21:37	EEH
1,1-Dichloropropene	ND	0.0013	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 21:37	EEH
cis-1,3-Dichloropropene	ND	0.00063	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 21:37	EEH
trans-1,3-Dichloropropene	ND	0.00063	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 21:37	EEH
Diethyl Ether	ND	0.0063	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 21:37	EEH
Diisopropyl Ether (DIPE)	ND	0.00063	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 21:37	EEH
1,4-Dioxane	ND	0.063	mg/Kg dry	1	V-16	SW-846 8260C	6/21/17	6/21/17 21:37	EEH
Ethylbenzene	ND	0.0013	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 21:37	EEH

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Project Location: ADW Seekonk, MA

Sample Description:

Work Order: 17F0761

Date Received: 6/14/2017

Field Sample #: SED501-S1-061417

Sampled: 6/14/2017 15:35

Sample ID: 17F0761-08

Sample Matrix: Sediment

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Hexachlorobutadiene	ND	0.0013	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 21:37	EEH
2-Hexanone (MBK)	ND	0.013	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 21:37	EEH
Isopropylbenzene (Cumene)	ND	0.0013	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 21:37	EEH
p-Isopropyltoluene (p-Cymene)	ND	0.0013	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 21:37	EEH
Methyl tert-Butyl Ether (MTBE)	ND	0.0025	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 21:37	EEH
Methylene Chloride	ND	0.0063	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 21:37	EEH
4-Methyl-2-pentanone (MIBK)	ND	0.013	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 21:37	EEH
Naphthalene	ND	0.0063	mg/Kg dry	1	V-05	SW-846 8260C	6/21/17	6/21/17 21:37	EEH
n-Propylbenzene	ND	0.0013	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 21:37	EEH
Styrene	ND	0.0013	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 21:37	EEH
1,1,1,2-Tetrachloroethane	ND	0.0013	mg/Kg dry	1	V-05	SW-846 8260C	6/21/17	6/21/17 21:37	EEH
1,1,2,2-Tetrachloroethane	ND	0.00063	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 21:37	EEH
Tetrachloroethylene	ND	0.0013	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 21:37	EEH
Tetrahydrofuran	ND	0.0063	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 21:37	EEH
Toluene	ND	0.0013	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 21:37	EEH
1,2,3-Trichlorobenzene	ND	0.0063	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 21:37	EEH
1,2,4-Trichlorobenzene	ND	0.0063	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 21:37	EEH
1,1,1-Trichloroethane	ND	0.0013	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 21:37	EEH
1,1,2-Trichloroethane	ND	0.0013	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 21:37	EEH
Trichloroethylene	ND	0.0013	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 21:37	EEH
Trichlorofluoromethane (Freon 11)	ND	0.0063	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 21:37	EEH
1,2,3-Trichloropropane	ND	0.0013	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 21:37	EEH
1,2,4-Trimethylbenzene	ND	0.0013	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 21:37	EEH
1,3,5-Trimethylbenzene	ND	0.0013	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 21:37	EEH
Vinyl Chloride	ND	0.0063	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 21:37	EEH
m+p Xylene	ND	0.0025	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 21:37	EEH
o-Xylene	ND	0.0013	mg/Kg dry	1		SW-846 8260C	6/21/17	6/21/17 21:37	EEH
Surrogates	% Recovery	Recovery Limits	Flag/Qual						
1,2-Dichloroethane-d4	94.9	70-130							
Toluene-d8	93.9	70-130							
4-Bromofluorobenzene	91.3	70-130							

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Project Location: ADW Seekonk, MA

Sample Description:

Work Order: 17F0761

Date Received: 6/14/2017

Field Sample #: SED501-S1-061417

Sampled: 6/14/2017 15:35

Sample ID: 17F0761-08

Sample Matrix: Sediment

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acenaphthene	ND	0.21	mg/Kg dry	1		SW-846 8270D	6/20/17	6/23/17 0:57	BGL
Acenaphthylene	ND	0.21	mg/Kg dry	1		SW-846 8270D	6/20/17	6/23/17 0:57	BGL
Anthracene	ND	0.21	mg/Kg dry	1		SW-846 8270D	6/20/17	6/23/17 0:57	BGL
Benzo(a)anthracene	ND	0.21	mg/Kg dry	1		SW-846 8270D	6/20/17	6/23/17 0:57	BGL
Benzo(a)pyrene	ND	0.21	mg/Kg dry	1		SW-846 8270D	6/20/17	6/23/17 0:57	BGL
Benzo(b)fluoranthene	ND	0.21	mg/Kg dry	1		SW-846 8270D	6/20/17	6/23/17 0:57	BGL
Benzo(g,h,i)perylene	ND	0.21	mg/Kg dry	1		SW-846 8270D	6/20/17	6/23/17 0:57	BGL
Benzo(k)fluoranthene	ND	0.21	mg/Kg dry	1		SW-846 8270D	6/20/17	6/23/17 0:57	BGL
Chrysene	ND	0.21	mg/Kg dry	1		SW-846 8270D	6/20/17	6/23/17 0:57	BGL
Dibenz(a,h)anthracene	ND	0.21	mg/Kg dry	1		SW-846 8270D	6/20/17	6/23/17 0:57	BGL
Fluoranthene	0.25	0.21	mg/Kg dry	1		SW-846 8270D	6/20/17	6/23/17 0:57	BGL
Fluorene	ND	0.21	mg/Kg dry	1		SW-846 8270D	6/20/17	6/23/17 0:57	BGL
Indeno(1,2,3-cd)pyrene	ND	0.21	mg/Kg dry	1		SW-846 8270D	6/20/17	6/23/17 0:57	BGL
2-Methylnaphthalene	ND	0.21	mg/Kg dry	1		SW-846 8270D	6/20/17	6/23/17 0:57	BGL
Naphthalene	ND	0.21	mg/Kg dry	1		SW-846 8270D	6/20/17	6/23/17 0:57	BGL
Phenanthrene	ND	0.21	mg/Kg dry	1		SW-846 8270D	6/20/17	6/23/17 0:57	BGL
Pyrene	0.29	0.21	mg/Kg dry	1		SW-846 8270D	6/20/17	6/23/17 0:57	BGL
Surrogates	% Recovery	Recovery Limits	Flag/Qual						
Nitrobenzene-d5	65.9	30-130							
2-Fluorobiphenyl	64.6	30-130							
p-Terphenyl-d14	76.3	30-130							

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Project Location: ADW Seekonk, MA

Sample Description:

Work Order: 17F0761

Date Received: 6/14/2017

Field Sample #: SED501-S1-061417

Sampled: 6/14/2017 15:35

Sample ID: 17F0761-08

Sample Matrix: Sediment

Sample Flags: O-32

Polychlorinated Biphenyls By GC/ECD

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	6/21/17	6/22/17 22:18	KAL
Aroclor-1221 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	6/21/17	6/22/17 22:18	KAL
Aroclor-1232 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	6/21/17	6/22/17 22:18	KAL
Aroclor-1242 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	6/21/17	6/22/17 22:18	KAL
Aroclor-1248 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	6/21/17	6/22/17 22:18	KAL
Aroclor-1254 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	6/21/17	6/22/17 22:18	KAL
Aroclor-1260 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	6/21/17	6/22/17 22:18	KAL
Aroclor-1262 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	6/21/17	6/22/17 22:18	KAL
Aroclor-1268 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	6/21/17	6/22/17 22:18	KAL
Surrogates	% Recovery	Recovery Limits	Flag/Qual						
Decachlorobiphenyl [1]	105	30-150						6/22/17 22:18	
Decachlorobiphenyl [2]	116	30-150						6/22/17 22:18	
Tetrachloro-m-xylene [1]	90.0	30-150						6/22/17 22:18	
Tetrachloro-m-xylene [2]	91.9	30-150						6/22/17 22:18	

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Project Location: ADW Seekonk, MA

Sample Description:

Work Order: 17F0761

Date Received: 6/14/2017

Field Sample #: SED501-S1-061417

Sampled: 6/14/2017 15:35

Sample ID: 17F0761-08

Sample Matrix: Sediment

Petrolium Hydrocarbons Analyses - EPH

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
C9-C18 Aliphatics	ND	12	mg/Kg dry	1		MADEP-EPH-04-1.1	6/21/17	6/22/17 18:26	SCS
C19-C36 Aliphatics	28	12	mg/Kg dry	1		MADEP-EPH-04-1.1	6/21/17	6/22/17 18:26	SCS
Unadjusted C11-C22 Aromatics	20	12	mg/Kg dry	1		MADEP-EPH-04-1.1	6/21/17	6/22/17 18:26	SCS
C11-C22 Aromatics	20	12	mg/Kg dry	1		MADEP-EPH-04-1.1	6/21/17	6/22/17 18:26	SCS
Acenaphthene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	6/21/17	6/22/17 18:26	SCS
Acenaphthylene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	6/21/17	6/22/17 18:26	SCS
Anthracene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	6/21/17	6/22/17 18:26	SCS
Benzo(a)anthracene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	6/21/17	6/22/17 18:26	SCS
Benzo(a)pyrene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	6/21/17	6/22/17 18:26	SCS
Benzo(b)fluoranthene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	6/21/17	6/22/17 18:26	SCS
Benzo(g,h,i)perylene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	6/21/17	6/22/17 18:26	SCS
Benzo(k)fluoranthene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	6/21/17	6/22/17 18:26	SCS
Chrysene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	6/21/17	6/22/17 18:26	SCS
Dibenz(a,h)anthracene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	6/21/17	6/22/17 18:26	SCS
Fluoranthene	0.14	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	6/21/17	6/22/17 18:26	SCS
Fluorene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	6/21/17	6/22/17 18:26	SCS
Indeno(1,2,3-cd)pyrene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	6/21/17	6/22/17 18:26	SCS
2-Methylnaphthalene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	6/21/17	6/22/17 18:26	SCS
Naphthalene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	6/21/17	6/22/17 18:26	SCS
Phenanthrene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	6/21/17	6/22/17 18:26	SCS
Pyrene	ND	0.12	mg/Kg dry	1		MADEP-EPH-04-1.1	6/21/17	6/22/17 18:26	SCS
Surrogates	% Recovery	Recovery Limits	Flag/Qual						
Chlorooctadecane (COD)	41.8	40-140							
o-Terphenyl (OTP)	44.2	40-140							
2-Bromonaphthalene	62.0	40-140							
2-Fluorobiphenyl	76.8	40-140							

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Project Location: ADW Seekonk, MA

Sample Description:

Work Order: 17F0761

Date Received: 6/14/2017

Field Sample #: SED501-S1-061417

Sampled: 6/14/2017 15:35

Sample ID: 17F0761-08

Sample Matrix: Sediment

Sample Flags: O-01

Petroleum Hydrocarbons Analyses - VPH

Soil/Methanol Preservation Ratio: 1.66

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Unadjusted C5-C8 Aliphatics	ND	9.7	mg/Kg dry	1		MADEP-VPH-04-1.1	6/15/17	6/15/17 20:31	EEH
C5-C8 Aliphatics	ND	9.7	mg/Kg dry	1		MADEP-VPH-04-1.1	6/15/17	6/15/17 20:31	EEH
Unadjusted C9-C12 Aliphatics	ND	9.7	mg/Kg dry	1		MADEP-VPH-04-1.1	6/15/17	6/15/17 20:31	EEH
C9-C12 Aliphatics	ND	9.7	mg/Kg dry	1		MADEP-VPH-04-1.1	6/15/17	6/15/17 20:31	EEH
C9-C10 Aromatics	ND	9.7	mg/Kg dry	1		MADEP-VPH-04-1.1	6/15/17	6/15/17 20:31	EEH
Benzene	ND	0.049	mg/Kg dry	1		MADEP-VPH-04-1.1	6/15/17	6/15/17 20:31	EEH
Ethylbenzene	ND	0.049	mg/Kg dry	1		MADEP-VPH-04-1.1	6/15/17	6/15/17 20:31	EEH
Methyl tert-Butyl Ether (MTBE)	ND	0.049	mg/Kg dry	1		MADEP-VPH-04-1.1	6/15/17	6/15/17 20:31	EEH
Naphthalene	ND	0.24	mg/Kg dry	1		MADEP-VPH-04-1.1	6/15/17	6/15/17 20:31	EEH
Toluene	ND	0.049	mg/Kg dry	1		MADEP-VPH-04-1.1	6/15/17	6/15/17 20:31	EEH
m+p Xylene	ND	0.097	mg/Kg dry	1		MADEP-VPH-04-1.1	6/15/17	6/15/17 20:31	EEH
o-Xylene	ND	0.049	mg/Kg dry	1		MADEP-VPH-04-1.1	6/15/17	6/15/17 20:31	EEH
Surrogates	% Recovery	Recovery Limits	Flag/Qual						
2,5-Dibromotoluene (FID)	106	70-130							
2,5-Dibromotoluene (PID)	104	70-130							

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Project Location: ADW Seekonk, MA

Sample Description:

Work Order: 17F0761

Date Received: 6/14/2017

Field Sample #: SED501-S1-061417

Sampled: 6/14/2017 15:35

Sample ID: 17F0761-08

Sample Matrix: Sediment

Metals Analyses (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Antimony	ND	2.8	mg/Kg dry	1		SW-846 6010C-D	6/20/17	6/22/17 13:55	SHN
Arsenic	ND	2.8	mg/Kg dry	1		SW-846 6010C-D	6/20/17	6/22/17 13:55	SHN
Beryllium	ND	0.28	mg/Kg dry	1		SW-846 6010C-D	6/20/17	6/22/17 13:55	SHN
Cadmium	2.8	0.28	mg/Kg dry	1		SW-846 6010C-D	6/20/17	6/22/17 13:55	SHN
Chromium	27	0.57	mg/Kg dry	1		SW-846 6010C-D	6/20/17	6/22/17 13:55	SHN
Copper	87	0.57	mg/Kg dry	1		SW-846 6010C-D	6/20/17	6/22/17 13:55	SHN
Lead	18	0.85	mg/Kg dry	1	M-10	SW-846 6010C-D	6/20/17	6/22/17 13:55	SHN
Mercury	0.086	0.031	mg/Kg dry	1		SW-846 7471B	6/20/17	6/22/17 11:09	TJK
Nickel	75	0.57	mg/Kg dry	1		SW-846 6010C-D	6/20/17	6/22/17 13:55	SHN
Selenium	ND	5.7	mg/Kg dry	1		SW-846 6010C-D	6/20/17	6/22/17 13:55	SHN
Silver	2.5	0.57	mg/Kg dry	1		SW-846 6010C-D	6/20/17	6/22/17 13:55	SHN
Thallium	ND	2.8	mg/Kg dry	1		SW-846 6010C-D	6/20/17	6/22/17 13:55	SHN
Zinc	91	1.1	mg/Kg dry	1		SW-846 6010C-D	6/20/17	6/22/17 13:55	SHN

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Project Location: ADW Seekonk, MA

Sample Description:

Work Order: 17F0761

Date Received: 6/14/2017

Field Sample #: SED501-S1-061417

Sampled: 6/14/2017 15:35

Sample ID: 17F0761-08

Sample Matrix: Sediment

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

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Hexavalent Chromium	ND	0.96	mg/Kg dry	5	W-06	SW-846 7196A	6/21/17	6/23/17 12:30	LL
Oxidation/Reduction Potential	110		mV	1		SM2580 A	6/14/17	6/14/17 21:15	IS
pH @20.2°C	6.3		pH Units	1		SW-846 9045C	6/14/17	6/14/17 21:15	IS
Total Organic Carbon	6500	100	mg/Kg	1		Lloyd Kahn Method	6/20/17	6/20/17 21:08	DJM
% Solids	81.5		% Wt	1		SM 2540G	6/20/17	6/21/17 8:41	MRL

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Sample Extraction Data**Lloyd Kahn Method**

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
17F0761-07 [SED502-S1-061417]	B179738	1.00	1.00	06/20/17
17F0761-08 [SED501-S1-061417]	B179738	1.00	1.00	06/20/17

Prep Method: SW-846 3546-MADEP-EPH-04-1.1

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
17F0761-03 [SED506-S1-061417]	B179781	20.0	2.00	06/21/17
17F0761-04 [SED505-S1-061417]	B179781	20.0	2.00	06/21/17
17F0761-05 [SED504-S1-061417]	B179781	20.0	2.00	06/21/17
17F0761-06 [SED503-S1-061417]	B179781	20.0	2.00	06/21/17
17F0761-07 [SED502-S1-061417]	B179781	20.0	2.00	06/21/17
17F0761-08 [SED501-S1-061417]	B179781	20.0	2.00	06/21/17

Prep Method: SW-846 3510C-MADEP-EPH-04-1.1

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
17F0761-01 [SW602-W1-061417]	B179543	1000	2.00	06/19/17
17F0761-02 [SW605-W1-061417]	B179543	1000	2.00	06/19/17

Prep Method: MA VPH-MADEP-VPH-04-1.1

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
17F0761-03 [SED506-S1-061417]	B179323	23.0	19.1	06/15/17
17F0761-04 [SED505-S1-061417]	B179323	15.1	23.5	06/15/17
17F0761-05 [SED504-S1-061417]	B179323	23.4	20.4	06/15/17
17F0761-06 [SED503-S1-061417]	B179323	23.8	19.1	06/15/17
17F0761-07 [SED502-S1-061417]	B179323	20.2	22.5	06/15/17
17F0761-08 [SED501-S1-061417]	B179323	24.9	19.7	06/15/17

Prep Method: MA VPH-MADEP-VPH-04-1.1

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
17F0761-01 [SW602-W1-061417]	B179321	5	5.00	06/15/17
17F0761-02 [SW605-W1-061417]	B179321	5	5.00	06/15/17

Prep Method: % Solids-SM 2540G

Lab Number [Field ID]	Batch	Date
17F0761-03 [SED506-S1-061417]	B179658	06/20/17
17F0761-04 [SED505-S1-061417]	B179658	06/20/17
17F0761-05 [SED504-S1-061417]	B179658	06/20/17
17F0761-06 [SED503-S1-061417]	B179658	06/20/17
17F0761-07 [SED502-S1-061417]	B179658	06/20/17
17F0761-08 [SED501-S1-061417]	B179658	06/20/17

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Sample Extraction Data

SM21-22 2340C

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
17F0761-01 [SW602-W1-061417]	B179724	50.0	50.0	06/20/17
17F0761-02 [SW605-W1-061417]	B179724	50.0	50.0	06/20/17

SM21-22 3500 Cr B

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
17F0761-01 [SW602-W1-061417]	B179260	50.0	50.0	06/14/17
17F0761-02 [SW605-W1-061417]	B179260	50.0	50.0	06/14/17

SM2580 A

Lab Number [Field ID]	Batch	Initial [g]	Date
17F0761-03 [SED506-S1-061417]	B179262	20.0	06/14/17
17F0761-04 [SED505-S1-061417]	B179262	20.0	06/14/17
17F0761-05 [SED504-S1-061417]	B179262	20.0	06/14/17
17F0761-06 [SED503-S1-061417]	B179262	20.0	06/14/17
17F0761-07 [SED502-S1-061417]	B179262	20.0	06/14/17
17F0761-08 [SED501-S1-061417]	B179262	20.0	06/14/17

SW 846 9060

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
17F0761-03 [SED506-S1-061417]	B179676	1.00	1.00	06/19/17
17F0761-04 [SED505-S1-061417]	B179676	1.00	1.00	06/19/17
17F0761-05 [SED504-S1-061417]	B179676	1.00	1.00	06/19/17
17F0761-06 [SED503-S1-061417]	B179676	1.00	1.00	06/19/17

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

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
17F0761-03 [SED506-S1-061417]	B179684	1.04	50.0	06/20/17
17F0761-04 [SED505-S1-061417]	B179684	0.996	50.0	06/20/17
17F0761-05 [SED504-S1-061417]	B179684	0.983	50.0	06/20/17
17F0761-06 [SED503-S1-061417]	B179684	1.02	50.0	06/20/17
17F0761-07 [SED502-S1-061417]	B179684	1.00	50.0	06/20/17
17F0761-08 [SED501-S1-061417]	B179684	1.08	50.0	06/20/17

Prep Method: SW-846 3005A Dissolved-SW-846 6020A-B

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
17F0761-01 [SW602-W1-061417]	B179574	50.0	50.0	06/19/17
17F0761-02 [SW605-W1-061417]	B179574	50.0	50.0	06/19/17

SW-846 7196A

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
17F0761-03 [SED506-S1-061417]	B179745	2.52	100	06/21/17

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Sample Extraction Data**SW-846 7196A**

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
17F0761-04 [SED505-S1-061417]	B179745	2.54	100	06/21/17
17F0761-05 [SED504-S1-061417]	B179745	2.51	100	06/21/17
17F0761-06 [SED503-S1-061417]	B179745	2.57	100	06/21/17
17F0761-07 [SED502-S1-061417]	B179745	2.57	100	06/21/17
17F0761-08 [SED501-S1-061417]	B179745	2.54	100	06/21/17

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

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
17F0761-01 [SW602-W1-061417]	B179425	6.00	6.00	06/16/17
17F0761-02 [SW605-W1-061417]	B179425	6.00	6.00	06/16/17

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

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
17F0761-03 [SED506-S1-061417]	B179693	0.592	50.0	06/20/17
17F0761-04 [SED505-S1-061417]	B179693	0.596	50.0	06/20/17
17F0761-05 [SED504-S1-061417]	B179693	0.608	50.0	06/20/17
17F0761-06 [SED503-S1-061417]	B179693	0.610	50.0	06/20/17
17F0761-07 [SED502-S1-061417]	B179693	0.597	50.0	06/20/17
17F0761-08 [SED501-S1-061417]	B179693	0.596	50.0	06/20/17

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

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
17F0761-03 [SED506-S1-061417]	B179741	10.0	10.0	06/21/17
17F0761-04 [SED505-S1-061417]	B179741	10.0	10.0	06/21/17
17F0761-05 [SED504-S1-061417]	B179741	10.0	10.0	06/21/17
17F0761-06 [SED503-S1-061417]	B179741	10.0	10.0	06/21/17
17F0761-07 [SED502-S1-061417]	B179741	10.0	10.0	06/21/17
17F0761-08 [SED501-S1-061417]	B179741	10.0	10.0	06/21/17

Prep Method: SW-846 3510C-SW-846 8082A

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
17F0761-01 [SW602-W1-061417]	B179484	1000	10.0	06/17/17
17F0761-02 [SW605-W1-061417]	B179484	1000	10.0	06/17/17

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

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
17F0761-03 [SED506-S1-061417]	B179689	8.56	10.0	06/20/17
17F0761-04 [SED505-S1-061417]	B179689	7.50	10.0	06/20/17

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

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date

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Sample Extraction Data**Prep Method: SW-846 5035-SW-846 8260C**

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
17F0761-05 [SED504-S1-061417]	B179813	8.23	10.0	06/21/17
17F0761-06 [SED503-S1-061417]	B179813	8.39	10.0	06/21/17
17F0761-07 [SED502-S1-061417]	B179813	7.10	10.0	06/21/17
17F0761-08 [SED501-S1-061417]	B179813	9.68	10.0	06/21/17

Prep Method: SW-846 5030B-SW-846 8260C

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
17F0761-01 [SW602-W1-061417]	B179401	5	5.00	06/16/17
17F0761-02 [SW605-W1-061417]	B179401	5	5.00	06/16/17

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

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
17F0761-03 [SED506-S1-061417]	B179637	30.1	1.00	06/20/17
17F0761-04 [SED505-S1-061417]	B179637	30.0	1.00	06/20/17
17F0761-05 [SED504-S1-061417]	B179637	30.2	1.00	06/20/17
17F0761-06 [SED503-S1-061417]	B179637	30.6	1.00	06/20/17
17F0761-07 [SED502-S1-061417]	B179637	30.2	1.00	06/20/17
17F0761-08 [SED501-S1-061417]	B179637	30.3	1.00	06/20/17

Prep Method: SW-846 3510C-SW-846 8270D

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
17F0761-01 [SW602-W1-061417]	B179499	1000	1.00	06/19/17
17F0761-02 [SW605-W1-061417]	B179499	1000	1.00	06/19/17

SW-846 9045C

Lab Number [Field ID]	Batch	Initial [g]	Date
17F0761-03 [SED506-S1-061417]	B179261	20.0	06/14/17
17F0761-04 [SED505-S1-061417]	B179261	20.0	06/14/17
17F0761-05 [SED504-S1-061417]	B179261	20.0	06/14/17
17F0761-06 [SED503-S1-061417]	B179261	20.0	06/14/17
17F0761-07 [SED502-S1-061417]	B179261	20.0	06/14/17
17F0761-08 [SED501-S1-061417]	B179261	20.0	06/14/17

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QUALITY CONTROL
Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B179401 - SW-846 5030B										
Blank (B179401-BLK1)				Prepared: 06/16/17 Analyzed: 06/17/17						
Acetone	ND	10	µg/L							
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L							
Benzene	ND	1.0	µg/L							
Bromobenzene	ND	1.0	µg/L							
Bromochloromethane	ND	1.0	µg/L							
Bromodichloromethane	ND	1.0	µg/L							
Bromoform	ND	1.0	µg/L							
Bromomethane	ND	2.0	µg/L							
2-Butanone (MEK)	ND	10	µg/L							V-05
n-Butylbenzene	ND	1.0	µg/L							
sec-Butylbenzene	ND	1.0	µg/L							
tert-Butylbenzene	ND	1.0	µg/L							
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L							
Carbon Disulfide	ND	5.0	µg/L							
Carbon Tetrachloride	ND	1.0	µg/L							
Chlorobenzene	ND	1.0	µg/L							
Chlorodibromomethane	ND	0.50	µg/L							
Chloroethane	ND	2.0	µg/L							
Chloroform	ND	2.0	µg/L							
Chloromethane	ND	2.0	µg/L							
2-Chlorotoluene	ND	1.0	µg/L							
4-Chlorotoluene	ND	1.0	µg/L							
1,2-Dibromo-3-chloropropane (DBCP)	ND	2.0	µg/L							
1,2-Dibromoethane (EDB)	ND	0.50	µg/L							
Dibromomethane	ND	1.0	µg/L							
1,2-Dichlorobenzene	ND	1.0	µg/L							
1,3-Dichlorobenzene	ND	1.0	µg/L							
1,4-Dichlorobenzene	ND	1.0	µg/L							
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L							
1,1-Dichloroethane	ND	1.0	µg/L							
1,2-Dichloroethane	ND	1.0	µg/L							
1,1-Dichloroethylene	ND	1.0	µg/L							
cis-1,2-Dichloroethylene	ND	1.0	µg/L							
trans-1,2-Dichloroethylene	ND	1.0	µg/L							
1,2-Dichloropropane	ND	1.0	µg/L							
1,3-Dichloropropane	ND	0.50	µg/L							
2,2-Dichloropropane	ND	1.0	µg/L							
1,1-Dichloropropene	ND	0.50	µg/L							
cis-1,3-Dichloropropene	ND	0.40	µg/L							
trans-1,3-Dichloropropene	ND	0.40	µg/L							
Diethyl Ether	ND	2.0	µg/L							
Diisopropyl Ether (DIPE)	ND	0.50	µg/L							V-05
1,4-Dioxane	ND	50	µg/L							V-16
Ethylbenzene	ND	1.0	µg/L							
Hexachlorobutadiene	ND	0.60	µg/L							
2-Hexanone (MBK)	ND	10	µg/L							
Isopropylbenzene (Cumene)	ND	1.0	µg/L							
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L							
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L							
Methylene Chloride	ND	5.0	µg/L							
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L							
Naphthalene	ND	2.0	µg/L							

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QUALITY CONTROL
Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B179401 - SW-846 5030B										
Blank (B179401-BLK1)										
Prepared: 06/16/17 Analyzed: 06/17/17										
n-Propylbenzene	ND	1.0	µg/L							
Styrene	ND	1.0	µg/L							
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L							
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L							
Tetrachloroethylene	ND	1.0	µg/L							
Tetrahydrofuran	ND	2.0	µg/L							
Toluene	ND	1.0	µg/L							
1,2,3-Trichlorobenzene	ND	2.0	µg/L							
1,2,4-Trichlorobenzene	ND	1.0	µg/L							
1,1,1-Trichloroethane	ND	1.0	µg/L							
1,1,2-Trichloroethane	ND	1.0	µg/L							
Trichloroethylene	ND	1.0	µg/L							
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L							
1,2,3-Trichloropropane	ND	2.0	µg/L							
1,2,4-Trimethylbenzene	ND	1.0	µg/L							
1,3,5-Trimethylbenzene	ND	1.0	µg/L							
Vinyl Chloride	ND	2.0	µg/L							
m+p Xylene	ND	2.0	µg/L							
o-Xylene	ND	1.0	µg/L							
Surrogate: 1,2-Dichloroethane-d4	22.4		µg/L	25.0		89.7	70-130			
Surrogate: Toluene-d8	23.6		µg/L	25.0		94.4	70-130			
Surrogate: 4-Bromofluorobenzene	25.2		µg/L	25.0		101	70-130			
LCS (B179401-BS1)										
Prepared: 06/16/17 Analyzed: 06/17/17										
Acetone	107	10	µg/L	100		107	40-160			†
tert-Amyl Methyl Ether (TAME)	9.32	0.50	µg/L	10.0		93.2	70-130			
Benzene	9.96	1.0	µg/L	10.0		99.6	70-130			
Bromobenzene	11.3	1.0	µg/L	10.0		113	70-130			
Bromochloromethane	9.90	1.0	µg/L	10.0		99.0	70-130			
Bromodichloromethane	11.2	1.0	µg/L	10.0		112	70-130			
Bromoform	11.7	1.0	µg/L	10.0		117	70-130			
Bromomethane	5.29	2.0	µg/L	10.0		52.9	40-160		L-14	†
2-Butanone (MEK)	82.2	10	µg/L	100		82.2	40-160		V-05	†
n-Butylbenzene	11.3	1.0	µg/L	10.0		113	70-130			
sec-Butylbenzene	11.2	1.0	µg/L	10.0		112	70-130			
tert-Butylbenzene	11.5	1.0	µg/L	10.0		115	70-130			
tert-Butyl Ethyl Ether (TBEE)	9.44	0.50	µg/L	10.0		94.4	70-130			
Carbon Disulfide	13.4	5.0	µg/L	10.0		134 *	70-130			L-02
Carbon Tetrachloride	11.8	1.0	µg/L	10.0		118	70-130			
Chlorobenzene	11.7	1.0	µg/L	10.0		117	70-130			
Chlorodibromomethane	11.1	0.50	µg/L	10.0		111	70-130			
Chloroethane	10.8	2.0	µg/L	10.0		108	70-130			
Chloroform	10.7	2.0	µg/L	10.0		107	70-130			
Chloromethane	4.87	2.0	µg/L	10.0		48.7	40-160		L-14	†
2-Chlorotoluene	9.85	1.0	µg/L	10.0		98.5	70-130			
4-Chlorotoluene	10.7	1.0	µg/L	10.0		107	70-130			
1,2-Dibromo-3-chloropropane (DBCP)	11.4	2.0	µg/L	10.0		114	70-130			
1,2-Dibromoethane (EDB)	10.7	0.50	µg/L	10.0		107	70-130			
Dibromomethane	11.3	1.0	µg/L	10.0		113	70-130			
1,2-Dichlorobenzene	11.2	1.0	µg/L	10.0		112	70-130			
1,3-Dichlorobenzene	11.4	1.0	µg/L	10.0		114	70-130			
1,4-Dichlorobenzene	10.4	1.0	µg/L	10.0		104	70-130			

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QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B179401 - SW-846 5030B										
LCS (B179401-BS1)				Prepared: 06/16/17 Analyzed: 06/17/17						
Dichlorodifluoromethane (Freon 12)	6.18	2.0	µg/L	10.0		61.8	40-160			L-14 †
1,1-Dichloroethane	10.8	1.0	µg/L	10.0		108	70-130			
1,2-Dichloroethane	10.5	1.0	µg/L	10.0		105	70-130			
1,1-Dichloroethylene	11.0	1.0	µg/L	10.0		110	70-130			
cis-1,2-Dichloroethylene	9.81	1.0	µg/L	10.0		98.1	70-130			
trans-1,2-Dichloroethylene	10.1	1.0	µg/L	10.0		101	70-130			
1,2-Dichloropropane	9.92	1.0	µg/L	10.0		99.2	70-130			
1,3-Dichloropropane	9.80	0.50	µg/L	10.0		98.0	70-130			
2,2-Dichloropropane	10.0	1.0	µg/L	10.0		100	70-130			
1,1-Dichloropropene	10.5	0.50	µg/L	10.0		105	70-130			
cis-1,3-Dichloropropene	9.70	0.40	µg/L	10.0		97.0	70-130			
trans-1,3-Dichloropropene	11.6	0.40	µg/L	10.0		116	70-130			
Diethyl Ether	9.83	2.0	µg/L	10.0		98.3	70-130			
Diisopropyl Ether (DIPE)	8.67	0.50	µg/L	10.0		86.7	70-130			V-05
1,4-Dioxane	120	50	µg/L	100		120	40-160			V-16 †
Ethylbenzene	11.6	1.0	µg/L	10.0		116	70-130			
Hexachlorobutadiene	12.3	0.60	µg/L	10.0		123	70-130			
2-Hexanone (MBK)	92.4	10	µg/L	100		92.4	40-160			†
Isopropylbenzene (Cumene)	12.3	1.0	µg/L	10.0		123	70-130			
p-Isopropyltoluene (p-Cymene)	11.4	1.0	µg/L	10.0		114	70-130			
Methyl tert-Butyl Ether (MTBE)	10.6	1.0	µg/L	10.0		106	70-130			
Methylene Chloride	12.1	5.0	µg/L	10.0		121	70-130			
4-Methyl-2-pentanone (MIBK)	90.3	10	µg/L	100		90.3	40-160			†
Naphthalene	11.0	2.0	µg/L	10.0		110	70-130			
n-Propylbenzene	11.8	1.0	µg/L	10.0		118	70-130			
Styrene	11.2	1.0	µg/L	10.0		112	70-130			
1,1,1,2-Tetrachloroethane	12.2	1.0	µg/L	10.0		122	70-130			
1,1,1,2,2-Tetrachloroethane	11.2	0.50	µg/L	10.0		112	70-130			
Tetrachloroethylene	12.5	1.0	µg/L	10.0		125	70-130			
Tetrahydrofuran	8.34	2.0	µg/L	10.0		83.4	70-130			
Toluene	10.7	1.0	µg/L	10.0		107	70-130			
1,2,3-Trichlorobenzene	11.1	2.0	µg/L	10.0		111	70-130			
1,2,4-Trichlorobenzene	10.6	1.0	µg/L	10.0		106	70-130			
1,1,1-Trichloroethane	11.3	1.0	µg/L	10.0		113	70-130			
1,1,2-Trichloroethane	11.0	1.0	µg/L	10.0		110	70-130			
Trichloroethylene	11.5	1.0	µg/L	10.0		115	70-130			
Trichlorofluoromethane (Freon 11)	10.4	2.0	µg/L	10.0		104	70-130			
1,2,3-Trichloropropane	10.8	2.0	µg/L	10.0		108	70-130			
1,2,4-Trimethylbenzene	10.6	1.0	µg/L	10.0		106	70-130			
1,3,5-Trimethylbenzene	11.5	1.0	µg/L	10.0		115	70-130			
Vinyl Chloride	10.8	2.0	µg/L	10.0		108	70-130			
m+p Xylene	23.2	2.0	µg/L	20.0		116	70-130			
o-Xylene	11.5	1.0	µg/L	10.0		115	70-130			
Surrogate: 1,2-Dichloroethane-d4	23.8		µg/L	25.0		95.2	70-130			
Surrogate: Toluene-d8	24.1		µg/L	25.0		96.4	70-130			
Surrogate: 4-Bromofluorobenzene	25.5		µg/L	25.0		102	70-130			

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QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B179401 - SW-846 5030B										
LCS Dup (B179401-BSD1)										
Prepared: 06/16/17 Analyzed: 06/17/17										
Acetone	104	10	µg/L	100		104	40-160	2.98	20	†
tert-Amyl Methyl Ether (TAME)	9.11	0.50	µg/L	10.0		91.1	70-130	2.28	20	
Benzene	10.1	1.0	µg/L	10.0		101	70-130	1.69	20	
Bromobenzene	11.4	1.0	µg/L	10.0		114	70-130	0.265	20	
Bromochloromethane	9.97	1.0	µg/L	10.0		99.7	70-130	0.705	20	
Bromodichloromethane	10.9	1.0	µg/L	10.0		109	70-130	3.35	20	
Bromoform	11.5	1.0	µg/L	10.0		115	70-130	1.81	20	
Bromomethane	6.18	2.0	µg/L	10.0		61.8	40-160	15.5	20	L-14 †
2-Butanone (MEK)	79.8	10	µg/L	100		79.8	40-160	3.06	20	V-05 †
n-Butylbenzene	11.4	1.0	µg/L	10.0		114	70-130	1.41	20	
sec-Butylbenzene	11.2	1.0	µg/L	10.0		112	70-130	0.358	20	
tert-Butylbenzene	11.2	1.0	µg/L	10.0		112	70-130	2.11	20	
tert-Butyl Ethyl Ether (TBEE)	9.55	0.50	µg/L	10.0		95.5	70-130	1.16	20	
Carbon Disulfide	13.6	5.0	µg/L	10.0		136	* 70-130	1.56	20	L-02
Carbon Tetrachloride	11.9	1.0	µg/L	10.0		119	70-130	0.761	20	
Chlorobenzene	11.7	1.0	µg/L	10.0		117	70-130	0.0857	20	
Chlorodibromomethane	11.3	0.50	µg/L	10.0		113	70-130	1.52	20	
Chloroethane	10.2	2.0	µg/L	10.0		102	70-130	5.34	20	
Chloroform	10.8	2.0	µg/L	10.0		108	70-130	0.933	20	
Chloromethane	5.45	2.0	µg/L	10.0		54.5	40-160	11.2	20	L-14 †
2-Chlorotoluene	10.1	1.0	µg/L	10.0		101	70-130	2.90	20	
4-Chlorotoluene	11.5	1.0	µg/L	10.0		115	70-130	7.41	20	
1,2-Dibromo-3-chloropropane (DBCP)	11.4	2.0	µg/L	10.0		114	70-130	0.0876	20	
1,2-Dibromoethane (EDB)	11.2	0.50	µg/L	10.0		112	70-130	5.39	20	
Dibromomethane	11.1	1.0	µg/L	10.0		111	70-130	1.52	20	
1,2-Dichlorobenzene	11.0	1.0	µg/L	10.0		110	70-130	1.98	20	
1,3-Dichlorobenzene	11.3	1.0	µg/L	10.0		113	70-130	0.882	20	
1,4-Dichlorobenzene	10.5	1.0	µg/L	10.0		105	70-130	0.573	20	
Dichlorodifluoromethane (Freon 12)	6.36	2.0	µg/L	10.0		63.6	40-160	2.87	20	L-14 †
1,1-Dichloroethane	10.9	1.0	µg/L	10.0		109	70-130	1.20	20	
1,2-Dichloroethane	10.1	1.0	µg/L	10.0		101	70-130	3.30	20	
1,1-Dichloroethylene	11.3	1.0	µg/L	10.0		113	70-130	1.97	20	
cis-1,2-Dichloroethylene	10.2	1.0	µg/L	10.0		102	70-130	3.90	20	
trans-1,2-Dichloroethylene	9.97	1.0	µg/L	10.0		99.7	70-130	1.39	20	
1,2-Dichloropropane	9.72	1.0	µg/L	10.0		97.2	70-130	2.04	20	
1,3-Dichloropropane	9.85	0.50	µg/L	10.0		98.5	70-130	0.509	20	
2,2-Dichloropropane	10.4	1.0	µg/L	10.0		104	70-130	4.01	20	
1,1-Dichloropropene	10.2	0.50	µg/L	10.0		102	70-130	2.71	20	
cis-1,3-Dichloropropene	9.91	0.40	µg/L	10.0		99.1	70-130	2.14	20	
trans-1,3-Dichloropropene	12.1	0.40	µg/L	10.0		121	70-130	4.05	20	
Diethyl Ether	9.89	2.0	µg/L	10.0		98.9	70-130	0.609	20	
Diisopropyl Ether (DIPE)	8.69	0.50	µg/L	10.0		86.9	70-130	0.230	20	V-05
1,4-Dioxane	122	50	µg/L	100		122	40-160	1.92	20	V-16 †
Ethylbenzene	11.7	1.0	µg/L	10.0		117	70-130	1.03	20	
Hexachlorobutadiene	12.9	0.60	µg/L	10.0		129	70-130	4.85	20	
2-Hexanone (MBK)	88.4	10	µg/L	100		88.4	40-160	4.39	20	†
Isopropylbenzene (Cumene)	12.4	1.0	µg/L	10.0		124	70-130	0.727	20	
p-Isopropyltoluene (p-Cymene)	11.4	1.0	µg/L	10.0		114	70-130	0.176	20	
Methyl tert-Butyl Ether (MTBE)	10.8	1.0	µg/L	10.0		108	70-130	1.03	20	
Methylene Chloride	11.4	5.0	µg/L	10.0		114	70-130	5.77	20	
4-Methyl-2-pentanone (MIBK)	89.1	10	µg/L	100		89.1	40-160	1.37	20	†
Naphthalene	10.6	2.0	µg/L	10.0		106	70-130	3.69	20	

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QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes

Batch B179401 - SW-846 5030B

LCS Dup (B179401-BSD1)

Prepared: 06/16/17 Analyzed: 06/17/17

n-Propylbenzene	12.0	1.0	µg/L	10.0		120	70-130	2.02	20	
Styrene	11.6	1.0	µg/L	10.0		116	70-130	2.89	20	
1,1,1,2-Tetrachloroethane	11.9	1.0	µg/L	10.0		119	70-130	1.91	20	
1,1,2,2-Tetrachloroethane	11.6	0.50	µg/L	10.0		116	70-130	3.68	20	
Tetrachloroethylene	12.6	1.0	µg/L	10.0		126	70-130	1.11	20	
Tetrahydrofuran	8.69	2.0	µg/L	10.0		86.9	70-130	4.11	20	
Toluene	11.0	1.0	µg/L	10.0		110	70-130	3.22	20	
1,2,3-Trichlorobenzene	11.7	2.0	µg/L	10.0		117	70-130	5.00	20	
1,2,4-Trichlorobenzene	10.8	1.0	µg/L	10.0		108	70-130	1.87	20	
1,1,1-Trichloroethane	11.4	1.0	µg/L	10.0		114	70-130	1.59	20	
1,1,2-Trichloroethane	11.1	1.0	µg/L	10.0		111	70-130	1.09	20	
Trichloroethylene	11.7	1.0	µg/L	10.0		117	70-130	1.73	20	
Trichlorofluoromethane (Freon 11)	10.5	2.0	µg/L	10.0		105	70-130	0.959	20	
1,2,3-Trichloropropane	11.0	2.0	µg/L	10.0		110	70-130	1.46	20	
1,2,4-Trimethylbenzene	10.5	1.0	µg/L	10.0		105	70-130	0.759	20	
1,3,5-Trimethylbenzene	11.9	1.0	µg/L	10.0		119	70-130	3.34	20	
Vinyl Chloride	10.7	2.0	µg/L	10.0		107	70-130	0.743	20	
m+p Xylene	23.4	2.0	µg/L	20.0		117	70-130	1.03	20	
o-Xylene	11.8	1.0	µg/L	10.0		118	70-130	2.15	20	
Surrogate: 1,2-Dichloroethane-d4	23.3		µg/L	25.0		93.2	70-130			
Surrogate: Toluene-d8	24.3		µg/L	25.0		97.1	70-130			
Surrogate: 4-Bromofluorobenzene	25.5		µg/L	25.0		102	70-130			

Batch B179689 - SW-846 5035

Blank (B179689-BLK1)

Prepared: 06/20/17 Analyzed: 06/21/17

Acetone	ND	0.10	mg/Kg wet							V-05
tert-Amyl Methyl Ether (TAME)	ND	0.0010	mg/Kg wet							
Benzene	ND	0.0020	mg/Kg wet							
Bromobenzene	ND	0.0020	mg/Kg wet							
Bromochloromethane	ND	0.0020	mg/Kg wet							
Bromodichloromethane	ND	0.0020	mg/Kg wet							
Bromoform	ND	0.0020	mg/Kg wet							V-05
Bromomethane	ND	0.010	mg/Kg wet							
2-Butanone (MEK)	ND	0.040	mg/Kg wet							
n-Butylbenzene	ND	0.0020	mg/Kg wet							
sec-Butylbenzene	ND	0.0020	mg/Kg wet							
tert-Butylbenzene	ND	0.0020	mg/Kg wet							
tert-Butyl Ethyl Ether (TBEE)	ND	0.0010	mg/Kg wet							
Carbon Disulfide	ND	0.0060	mg/Kg wet							
Carbon Tetrachloride	ND	0.0020	mg/Kg wet							
Chlorobenzene	ND	0.0020	mg/Kg wet							
Chlorodibromomethane	ND	0.0020	mg/Kg wet							
Chloroethane	ND	0.010	mg/Kg wet							
Chloroform	ND	0.0040	mg/Kg wet							
Chloromethane	ND	0.010	mg/Kg wet							
2-Chlorotoluene	ND	0.0020	mg/Kg wet							
4-Chlorotoluene	ND	0.0020	mg/Kg wet							
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0040	mg/Kg wet							R-05, V-05
1,2-Dibromoethane (EDB)	ND	0.0020	mg/Kg wet							
Dibromomethane	ND	0.0020	mg/Kg wet							
1,2-Dichlorobenzene	ND	0.0020	mg/Kg wet							
1,3-Dichlorobenzene	ND	0.0020	mg/Kg wet							

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QUALITY CONTROL
Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B179689 - SW-846 5035										
Blank (B179689-BLK1)				Prepared: 06/20/17 Analyzed: 06/21/17						
1,4-Dichlorobenzene	ND	0.0020	mg/Kg wet							
Dichlorodifluoromethane (Freon 12)	ND	0.010	mg/Kg wet							
1,1-Dichloroethane	ND	0.0020	mg/Kg wet							
1,2-Dichloroethane	ND	0.0020	mg/Kg wet							
1,1-Dichloroethylene	ND	0.0040	mg/Kg wet							
cis-1,2-Dichloroethylene	ND	0.0020	mg/Kg wet							
trans-1,2-Dichloroethylene	ND	0.0020	mg/Kg wet							
1,2-Dichloropropane	ND	0.0020	mg/Kg wet							
1,3-Dichloropropane	ND	0.0010	mg/Kg wet							
2,2-Dichloropropane	ND	0.0020	mg/Kg wet							
1,1-Dichloropropene	ND	0.0020	mg/Kg wet							
cis-1,3-Dichloropropene	ND	0.0010	mg/Kg wet							
trans-1,3-Dichloropropene	ND	0.0010	mg/Kg wet							
Diethyl Ether	ND	0.010	mg/Kg wet							
Diisopropyl Ether (DIPE)	ND	0.0010	mg/Kg wet							
1,4-Dioxane	ND	0.10	mg/Kg wet							V-16
Ethylbenzene	ND	0.0020	mg/Kg wet							
Hexachlorobutadiene	ND	0.0020	mg/Kg wet							
2-Hexanone (MBK)	ND	0.020	mg/Kg wet							
Isopropylbenzene (Cumene)	ND	0.0020	mg/Kg wet							
p-Isopropyltoluene (p-Cymene)	ND	0.0020	mg/Kg wet							
Methyl tert-Butyl Ether (MTBE)	ND	0.0040	mg/Kg wet							
Methylene Chloride	ND	0.010	mg/Kg wet							
4-Methyl-2-pentanone (MIBK)	ND	0.020	mg/Kg wet							
Naphthalene	ND	0.010	mg/Kg wet							
n-Propylbenzene	ND	0.0020	mg/Kg wet							
Styrene	ND	0.0020	mg/Kg wet							
1,1,1,2-Tetrachloroethane	ND	0.0020	mg/Kg wet							
1,1,2,2-Tetrachloroethane	ND	0.0010	mg/Kg wet							
Tetrachloroethylene	ND	0.0020	mg/Kg wet							
Tetrahydrofuran	ND	0.010	mg/Kg wet							
Toluene	ND	0.0020	mg/Kg wet							
1,2,3-Trichlorobenzene	ND	0.010	mg/Kg wet							
1,2,4-Trichlorobenzene	ND	0.050	mg/Kg wet							
1,1,1-Trichloroethane	ND	0.0020	mg/Kg wet							
1,1,2-Trichloroethane	ND	0.0020	mg/Kg wet							
Trichloroethylene	ND	0.0020	mg/Kg wet							
Trichlorofluoromethane (Freon 11)	ND	0.010	mg/Kg wet							
1,2,3-Trichloropropane	ND	0.0020	mg/Kg wet							
1,2,4-Trimethylbenzene	ND	0.0020	mg/Kg wet							
1,3,5-Trimethylbenzene	ND	0.0020	mg/Kg wet							
Vinyl Chloride	ND	0.010	mg/Kg wet							
m+p Xylene	ND	0.0040	mg/Kg wet							
o-Xylene	ND	0.0020	mg/Kg wet							
Surrogate: 1,2-Dichloroethane-d4	0.0469		mg/Kg wet	0.0500		93.7	70-130			
Surrogate: Toluene-d8	0.0493		mg/Kg wet	0.0500		98.6	70-130			
Surrogate: 4-Bromofluorobenzene	0.0478		mg/Kg wet	0.0500		95.6	70-130			

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QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B179689 - SW-846 5035										
LCS (B179689-BS1)				Prepared: 06/20/17 Analyzed: 06/21/17						
Acetone	0.133	0.10	mg/Kg wet	0.200		66.6	40-160			L-14, V-05 †
tert-Amyl Methyl Ether (TAME)	0.0171	0.0010	mg/Kg wet	0.0200		85.3	70-130			
Benzene	0.0191	0.0020	mg/Kg wet	0.0200		95.4	70-130			
Bromobenzene	0.0208	0.0020	mg/Kg wet	0.0200		104	70-130			
Bromochloromethane	0.0218	0.0020	mg/Kg wet	0.0200		109	70-130			
Bromodichloromethane	0.0197	0.0020	mg/Kg wet	0.0200		98.7	70-130			
Bromoform	0.0143	0.0020	mg/Kg wet	0.0200		71.4	70-130			V-05
Bromomethane	0.0134	0.010	mg/Kg wet	0.0200		66.8	40-160			L-14 †
2-Butanone (MEK)	0.156	0.040	mg/Kg wet	0.200		77.8	40-160			†
n-Butylbenzene	0.0212	0.0020	mg/Kg wet	0.0200		106	70-130			
sec-Butylbenzene	0.0198	0.0020	mg/Kg wet	0.0200		99.1	70-130			
tert-Butylbenzene	0.0206	0.0020	mg/Kg wet	0.0200		103	70-130			
tert-Butyl Ethyl Ether (TBEE)	0.0168	0.0010	mg/Kg wet	0.0200		84.1	70-130			
Carbon Disulfide	0.0190	0.0060	mg/Kg wet	0.0200		95.1	70-130			
Carbon Tetrachloride	0.0167	0.0020	mg/Kg wet	0.0200		83.6	70-130			
Chlorobenzene	0.0212	0.0020	mg/Kg wet	0.0200		106	70-130			
Chlorodibromomethane	0.0169	0.0020	mg/Kg wet	0.0200		84.5	70-130			
Chloroethane	0.0154	0.010	mg/Kg wet	0.0200		77.0	70-130			
Chloroform	0.0192	0.0040	mg/Kg wet	0.0200		96.0	70-130			
Chloromethane	0.0140	0.010	mg/Kg wet	0.0200		69.9	40-160			L-14 †
2-Chlorotoluene	0.0219	0.0020	mg/Kg wet	0.0200		110	70-130			
4-Chlorotoluene	0.0207	0.0020	mg/Kg wet	0.0200		104	70-130			
1,2-Dibromo-3-chloropropane (DBCP)	0.0164	0.0040	mg/Kg wet	0.0200		81.8	70-130			R-05, V-05
1,2-Dibromoethane (EDB)	0.0190	0.0020	mg/Kg wet	0.0200		95.0	70-130			
Dibromomethane	0.0201	0.0020	mg/Kg wet	0.0200		101	70-130			
1,2-Dichlorobenzene	0.0206	0.0020	mg/Kg wet	0.0200		103	70-130			
1,3-Dichlorobenzene	0.0210	0.0020	mg/Kg wet	0.0200		105	70-130			
1,4-Dichlorobenzene	0.0205	0.0020	mg/Kg wet	0.0200		103	70-130			
Dichlorodifluoromethane (Freon 12)	0.0117	0.010	mg/Kg wet	0.0200		58.4	40-160			L-14 †
1,1-Dichloroethane	0.0211	0.0020	mg/Kg wet	0.0200		106	70-130			
1,2-Dichloroethane	0.0203	0.0020	mg/Kg wet	0.0200		102	70-130			
1,1-Dichloroethylene	0.0193	0.0040	mg/Kg wet	0.0200		96.6	70-130			
cis-1,2-Dichloroethylene	0.0193	0.0020	mg/Kg wet	0.0200		96.7	70-130			
trans-1,2-Dichloroethylene	0.0181	0.0020	mg/Kg wet	0.0200		90.3	70-130			
1,2-Dichloropropane	0.0180	0.0020	mg/Kg wet	0.0200		89.9	70-130			
1,3-Dichloropropane	0.0200	0.0010	mg/Kg wet	0.0200		99.9	70-130			
2,2-Dichloropropane	0.0187	0.0020	mg/Kg wet	0.0200		93.6	70-130			
1,1-Dichloropropene	0.0199	0.0020	mg/Kg wet	0.0200		99.3	70-130			
cis-1,3-Dichloropropene	0.0187	0.0010	mg/Kg wet	0.0200		93.6	70-130			
trans-1,3-Dichloropropene	0.0182	0.0010	mg/Kg wet	0.0200		90.8	70-130			
Diethyl Ether	0.0169	0.010	mg/Kg wet	0.0200		84.5	70-130			
Diisopropyl Ether (DIPE)	0.0180	0.0010	mg/Kg wet	0.0200		90.2	70-130			
1,4-Dioxane	0.163	0.10	mg/Kg wet	0.200		81.3	40-160			V-16 †
Ethylbenzene	0.0214	0.0020	mg/Kg wet	0.0200		107	70-130			
Hexachlorobutadiene	0.0235	0.0020	mg/Kg wet	0.0200		117	70-130			
2-Hexanone (MBK)	0.172	0.020	mg/Kg wet	0.200		86.1	40-160			†
Isopropylbenzene (Cumene)	0.0222	0.0020	mg/Kg wet	0.0200		111	70-130			
p-Isopropyltoluene (p-Cymene)	0.0207	0.0020	mg/Kg wet	0.0200		104	70-130			
Methyl tert-Butyl Ether (MTBE)	0.0188	0.0040	mg/Kg wet	0.0200		94.0	70-130			
Methylene Chloride	0.0182	0.010	mg/Kg wet	0.0200		91.2	70-130			
4-Methyl-2-pentanone (MIBK)	0.191	0.020	mg/Kg wet	0.200		95.6	40-160			†
Naphthalene	0.0167	0.010	mg/Kg wet	0.0200		83.4	70-130			

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QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B179689 - SW-846 5035										
LCS (B179689-BS1)										
				Prepared: 06/20/17 Analyzed: 06/21/17						
n-Propylbenzene	0.0206	0.0020	mg/Kg wet	0.0200		103	70-130			
Styrene	0.0211	0.0020	mg/Kg wet	0.0200		106	70-130			
1,1,1,2-Tetrachloroethane	0.0173	0.0020	mg/Kg wet	0.0200		86.4	70-130			
1,1,2,2-Tetrachloroethane	0.0194	0.0010	mg/Kg wet	0.0200		96.9	70-130			
Tetrachloroethylene	0.0221	0.0020	mg/Kg wet	0.0200		111	70-130			
Tetrahydrofuran	0.0157	0.010	mg/Kg wet	0.0200		78.3	70-130			
Toluene	0.0200	0.0020	mg/Kg wet	0.0200		100	70-130			
1,2,3-Trichlorobenzene	0.0182	0.010	mg/Kg wet	0.0200		91.1	70-130			
1,2,4-Trichlorobenzene	0.0184	0.050	mg/Kg wet	0.0200		92.0	70-130			
1,1,1-Trichloroethane	0.0198	0.0020	mg/Kg wet	0.0200		99.2	70-130			
1,1,2-Trichloroethane	0.0204	0.0020	mg/Kg wet	0.0200		102	70-130			
Trichloroethylene	0.0191	0.0020	mg/Kg wet	0.0200		95.7	70-130			
Trichlorofluoromethane (Freon 11)	0.0177	0.010	mg/Kg wet	0.0200		88.4	70-130			
1,2,3-Trichloropropane	0.0191	0.0020	mg/Kg wet	0.0200		95.4	70-130			
1,2,4-Trimethylbenzene	0.0187	0.0020	mg/Kg wet	0.0200		93.4	70-130			
1,3,5-Trimethylbenzene	0.0211	0.0020	mg/Kg wet	0.0200		106	70-130			
Vinyl Chloride	0.0160	0.010	mg/Kg wet	0.0200		79.9	70-130			
m+p Xylene	0.0412	0.0040	mg/Kg wet	0.0400		103	70-130			
o-Xylene	0.0200	0.0020	mg/Kg wet	0.0200		99.9	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.0461		mg/Kg wet	0.0500		92.2	70-130			
Surrogate: Toluene-d8	0.0473		mg/Kg wet	0.0500		94.6	70-130			
Surrogate: 4-Bromofluorobenzene	0.0506		mg/Kg wet	0.0500		101	70-130			
LCS Dup (B179689-BSD1)										
				Prepared: 06/20/17 Analyzed: 06/21/17						
Acetone	0.130	0.10	mg/Kg wet	0.200		65.0	40-160	2.48	20	L-14, V-05 †
tert-Amyl Methyl Ether (TAME)	0.0186	0.0010	mg/Kg wet	0.0200		93.1	70-130	8.74	20	
Benzene	0.0195	0.0020	mg/Kg wet	0.0200		97.4	70-130	2.07	20	
Bromobenzene	0.0207	0.0020	mg/Kg wet	0.0200		104	70-130	0.0964	20	
Bromochloromethane	0.0230	0.0020	mg/Kg wet	0.0200		115	70-130	5.63	20	
Bromodichloromethane	0.0193	0.0020	mg/Kg wet	0.0200		96.7	70-130	2.05	20	
Bromoform	0.0145	0.0020	mg/Kg wet	0.0200		72.4	70-130	1.39	20	V-05
Bromomethane	0.0145	0.010	mg/Kg wet	0.0200		72.4	40-160	8.05	20	†
2-Butanone (MEK)	0.158	0.040	mg/Kg wet	0.200		78.9	40-160	1.43	20	†
n-Butylbenzene	0.0213	0.0020	mg/Kg wet	0.0200		106	70-130	0.565	20	
sec-Butylbenzene	0.0202	0.0020	mg/Kg wet	0.0200		101	70-130	2.00	20	
tert-Butylbenzene	0.0200	0.0020	mg/Kg wet	0.0200		100	70-130	2.66	20	
tert-Butyl Ethyl Ether (TBEE)	0.0170	0.0010	mg/Kg wet	0.0200		85.0	70-130	1.06	20	
Carbon Disulfide	0.0195	0.0060	mg/Kg wet	0.0200		97.6	70-130	2.59	20	
Carbon Tetrachloride	0.0173	0.0020	mg/Kg wet	0.0200		86.3	70-130	3.18	20	
Chlorobenzene	0.0223	0.0020	mg/Kg wet	0.0200		111	70-130	5.07	20	
Chlorodibromomethane	0.0171	0.0020	mg/Kg wet	0.0200		85.7	70-130	1.41	20	
Chloroethane	0.0162	0.010	mg/Kg wet	0.0200		80.8	70-130	4.82	20	
Chloroform	0.0201	0.0040	mg/Kg wet	0.0200		101	70-130	4.78	20	
Chloromethane	0.0148	0.010	mg/Kg wet	0.0200		73.9	40-160	5.56	20	†
2-Chlorotoluene	0.0215	0.0020	mg/Kg wet	0.0200		107	70-130	2.12	20	
4-Chlorotoluene	0.0213	0.0020	mg/Kg wet	0.0200		106	70-130	2.76	20	
1,2-Dibromo-3-chloropropane (DBCP)	0.0130	0.0040	mg/Kg wet	0.0200		65.2	* 70-130	22.6	* 20	L-07A, R-05, V-05
1,2-Dibromoethane (EDB)	0.0206	0.0020	mg/Kg wet	0.0200		103	70-130	8.18	20	
Dibromomethane	0.0214	0.0020	mg/Kg wet	0.0200		107	70-130	6.25	20	
1,2-Dichlorobenzene	0.0206	0.0020	mg/Kg wet	0.0200		103	70-130	0.194	20	
1,3-Dichlorobenzene	0.0210	0.0020	mg/Kg wet	0.0200		105	70-130	0.191	20	
1,4-Dichlorobenzene	0.0206	0.0020	mg/Kg wet	0.0200		103	70-130	0.195	20	

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QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B179689 - SW-846 5035										
LCS Dup (B179689-BSD1)					Prepared: 06/20/17 Analyzed: 06/21/17					
Dichlorodifluoromethane (Freon 12)	0.0122	0.010	mg/Kg wet	0.0200		61.1	40-160	4.52	20	L-14 †
1,1-Dichloroethane	0.0219	0.0020	mg/Kg wet	0.0200		110	70-130	3.63	20	
1,2-Dichloroethane	0.0212	0.0020	mg/Kg wet	0.0200		106	70-130	3.95	20	
1,1-Dichloroethylene	0.0189	0.0040	mg/Kg wet	0.0200		94.3	70-130	2.41	20	
cis-1,2-Dichloroethylene	0.0204	0.0020	mg/Kg wet	0.0200		102	70-130	5.33	20	
trans-1,2-Dichloroethylene	0.0191	0.0020	mg/Kg wet	0.0200		95.5	70-130	5.60	20	
1,2-Dichloropropane	0.0192	0.0020	mg/Kg wet	0.0200		96.0	70-130	6.56	20	
1,3-Dichloropropane	0.0194	0.0010	mg/Kg wet	0.0200		97.1	70-130	2.84	20	
2,2-Dichloropropane	0.0190	0.0020	mg/Kg wet	0.0200		95.1	70-130	1.59	20	
1,1-Dichloropropene	0.0207	0.0020	mg/Kg wet	0.0200		103	70-130	4.05	20	
cis-1,3-Dichloropropene	0.0182	0.0010	mg/Kg wet	0.0200		91.0	70-130	2.82	20	
trans-1,3-Dichloropropene	0.0193	0.0010	mg/Kg wet	0.0200		96.3	70-130	5.88	20	
Diethyl Ether	0.0172	0.010	mg/Kg wet	0.0200		85.9	70-130	1.64	20	
Diisopropyl Ether (DIPE)	0.0181	0.0010	mg/Kg wet	0.0200		90.3	70-130	0.111	20	
1,4-Dioxane	0.172	0.10	mg/Kg wet	0.200		86.0	40-160	5.62	20	V-16 †
Ethylbenzene	0.0219	0.0020	mg/Kg wet	0.0200		110	70-130	2.12	20	
Hexachlorobutadiene	0.0239	0.0020	mg/Kg wet	0.0200		120	70-130	2.03	20	
2-Hexanone (MBK)	0.179	0.020	mg/Kg wet	0.200		89.4	40-160	3.72	20	†
Isopropylbenzene (Cumene)	0.0224	0.0020	mg/Kg wet	0.0200		112	70-130	0.897	20	
p-Isopropyltoluene (p-Cymene)	0.0203	0.0020	mg/Kg wet	0.0200		102	70-130	1.75	20	
Methyl tert-Butyl Ether (MTBE)	0.0191	0.0040	mg/Kg wet	0.0200		95.7	70-130	1.79	20	
Methylene Chloride	0.0187	0.010	mg/Kg wet	0.0200		93.5	70-130	2.49	20	
4-Methyl-2-pentanone (MIBK)	0.193	0.020	mg/Kg wet	0.200		96.7	40-160	1.18	20	†
Naphthalene	0.0171	0.010	mg/Kg wet	0.0200		85.7	70-130	2.72	20	
n-Propylbenzene	0.0214	0.0020	mg/Kg wet	0.0200		107	70-130	3.81	20	
Styrene	0.0217	0.0020	mg/Kg wet	0.0200		108	70-130	2.62	20	
1,1,1,2-Tetrachloroethane	0.0179	0.0020	mg/Kg wet	0.0200		89.7	70-130	3.75	20	
1,1,1,2,2-Tetrachloroethane	0.0188	0.0010	mg/Kg wet	0.0200		94.1	70-130	2.93	20	
Tetrachloroethylene	0.0220	0.0020	mg/Kg wet	0.0200		110	70-130	0.543	20	
Tetrahydrofuran	0.0173	0.010	mg/Kg wet	0.0200		86.6	70-130	10.1	20	
Toluene	0.0203	0.0020	mg/Kg wet	0.0200		101	70-130	1.39	20	
1,2,3-Trichlorobenzene	0.0192	0.010	mg/Kg wet	0.0200		95.9	70-130	5.13	20	
1,2,4-Trichlorobenzene	0.0190	0.050	mg/Kg wet	0.0200		95.2	70-130	3.42	20	
1,1,1-Trichloroethane	0.0206	0.0020	mg/Kg wet	0.0200		103	70-130	3.76	20	
1,1,2-Trichloroethane	0.0201	0.0020	mg/Kg wet	0.0200		100	70-130	1.38	20	
Trichloroethylene	0.0194	0.0020	mg/Kg wet	0.0200		97.0	70-130	1.35	20	
Trichlorofluoromethane (Freon 11)	0.0186	0.010	mg/Kg wet	0.0200		93.0	70-130	5.07	20	
1,2,3-Trichloropropane	0.0188	0.0020	mg/Kg wet	0.0200		93.8	70-130	1.69	20	
1,2,4-Trimethylbenzene	0.0192	0.0020	mg/Kg wet	0.0200		96.2	70-130	2.95	20	
1,3,5-Trimethylbenzene	0.0216	0.0020	mg/Kg wet	0.0200		108	70-130	2.43	20	
Vinyl Chloride	0.0165	0.010	mg/Kg wet	0.0200		82.6	70-130	3.32	20	
m+p Xylene	0.0423	0.0040	mg/Kg wet	0.0400		106	70-130	2.64	20	
o-Xylene	0.0203	0.0020	mg/Kg wet	0.0200		102	70-130	1.69	20	
Surrogate: 1,2-Dichloroethane-d4	0.0471		mg/Kg wet	0.0500		94.2	70-130			
Surrogate: Toluene-d8	0.0473		mg/Kg wet	0.0500		94.6	70-130			
Surrogate: 4-Bromofluorobenzene	0.0498		mg/Kg wet	0.0500		99.6	70-130			

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QUALITY CONTROL
Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B179813 - SW-846 5035										
Blank (B179813-BLK1)				Prepared & Analyzed: 06/21/17						
Acetone	ND	0.10	mg/Kg wet							V-05
tert-Amyl Methyl Ether (TAME)	ND	0.0010	mg/Kg wet							
Benzene	ND	0.0020	mg/Kg wet							
Bromobenzene	ND	0.0020	mg/Kg wet							
Bromochloromethane	ND	0.0020	mg/Kg wet							
Bromodichloromethane	ND	0.0020	mg/Kg wet							
Bromoform	ND	0.0020	mg/Kg wet							L-04, V-05
Bromomethane	ND	0.010	mg/Kg wet							R-05
2-Butanone (MEK)	ND	0.040	mg/Kg wet							V-05
n-Butylbenzene	ND	0.0020	mg/Kg wet							
sec-Butylbenzene	ND	0.0020	mg/Kg wet							
tert-Butylbenzene	ND	0.0020	mg/Kg wet							
tert-Butyl Ethyl Ether (TBEE)	ND	0.0010	mg/Kg wet							
Carbon Disulfide	ND	0.0060	mg/Kg wet							
Carbon Tetrachloride	ND	0.0020	mg/Kg wet							V-05
Chlorobenzene	ND	0.0020	mg/Kg wet							
Chlorodibromomethane	ND	0.0020	mg/Kg wet							V-05
Chloroethane	ND	0.010	mg/Kg wet							
Chloroform	ND	0.0040	mg/Kg wet							
Chloromethane	ND	0.010	mg/Kg wet							
2-Chlorotoluene	ND	0.0020	mg/Kg wet							
4-Chlorotoluene	ND	0.0020	mg/Kg wet							
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0040	mg/Kg wet							L-04, V-05
1,2-Dibromoethane (EDB)	ND	0.0020	mg/Kg wet							
Dibromomethane	ND	0.0020	mg/Kg wet							
1,2-Dichlorobenzene	ND	0.0020	mg/Kg wet							
1,3-Dichlorobenzene	ND	0.0020	mg/Kg wet							
1,4-Dichlorobenzene	ND	0.0020	mg/Kg wet							
Dichlorodifluoromethane (Freon 12)	ND	0.010	mg/Kg wet							
1,1-Dichloroethane	ND	0.0020	mg/Kg wet							
1,2-Dichloroethane	ND	0.0020	mg/Kg wet							
1,1-Dichloroethylene	ND	0.0040	mg/Kg wet							
cis-1,2-Dichloroethylene	ND	0.0020	mg/Kg wet							
trans-1,2-Dichloroethylene	ND	0.0020	mg/Kg wet							
1,2-Dichloropropane	ND	0.0020	mg/Kg wet							
1,3-Dichloropropane	ND	0.0010	mg/Kg wet							
2,2-Dichloropropane	ND	0.0020	mg/Kg wet							V-05
1,1-Dichloropropene	ND	0.0020	mg/Kg wet							
cis-1,3-Dichloropropene	ND	0.0010	mg/Kg wet							
trans-1,3-Dichloropropene	ND	0.0010	mg/Kg wet							
Diethyl Ether	ND	0.010	mg/Kg wet							
Diisopropyl Ether (DIPE)	ND	0.0010	mg/Kg wet							
1,4-Dioxane	ND	0.10	mg/Kg wet							V-16
Ethylbenzene	ND	0.0020	mg/Kg wet							
Hexachlorobutadiene	ND	0.0020	mg/Kg wet							
2-Hexanone (MBK)	ND	0.020	mg/Kg wet							
Isopropylbenzene (Cumene)	ND	0.0020	mg/Kg wet							
p-Isopropyltoluene (p-Cymene)	ND	0.0020	mg/Kg wet							
Methyl tert-Butyl Ether (MTBE)	ND	0.0040	mg/Kg wet							
Methylene Chloride	ND	0.010	mg/Kg wet							
4-Methyl-2-pentanone (MIBK)	ND	0.020	mg/Kg wet							
Naphthalene	ND	0.010	mg/Kg wet							V-05

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Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B179813 - SW-846 5035										
Blank (B179813-BLK1)										
Prepared & Analyzed: 06/21/17										
n-Propylbenzene	ND	0.0020	mg/Kg wet							V-05
Styrene	ND	0.0020	mg/Kg wet							
1,1,1,2-Tetrachloroethane	ND	0.0020	mg/Kg wet							
1,1,2,2-Tetrachloroethane	ND	0.0010	mg/Kg wet							
Tetrachloroethylene	ND	0.0020	mg/Kg wet							
Tetrahydrofuran	ND	0.010	mg/Kg wet							
Toluene	ND	0.0020	mg/Kg wet							
1,2,3-Trichlorobenzene	ND	0.010	mg/Kg wet							
1,2,4-Trichlorobenzene	ND	0.010	mg/Kg wet							
1,1,1-Trichloroethane	ND	0.0020	mg/Kg wet							
1,1,2-Trichloroethane	ND	0.0020	mg/Kg wet							
Trichloroethylene	ND	0.0020	mg/Kg wet							
Trichlorofluoromethane (Freon 11)	ND	0.010	mg/Kg wet							
1,2,3-Trichloropropane	ND	0.0020	mg/Kg wet							
1,2,4-Trimethylbenzene	ND	0.0020	mg/Kg wet							
1,3,5-Trimethylbenzene	ND	0.0020	mg/Kg wet							
Vinyl Chloride	ND	0.010	mg/Kg wet							
m+p Xylene	ND	0.0040	mg/Kg wet							
o-Xylene	ND	0.0020	mg/Kg wet							
Surrogate: 1,2-Dichloroethane-d4	0.0457		mg/Kg wet	0.0500		91.3	70-130			
Surrogate: Toluene-d8	0.0458		mg/Kg wet	0.0500		91.6	70-130			
Surrogate: 4-Bromofluorobenzene	0.0466		mg/Kg wet	0.0500		93.2	70-130			
LCS (B179813-BS1)										
Prepared & Analyzed: 06/21/17										
Acetone	0.115	0.10	mg/Kg wet	0.200		57.4	40-160			L-14, V-05 †
tert-Amyl Methyl Ether (TAME)	0.0165	0.0010	mg/Kg wet	0.0200		82.4	70-130			
Benzene	0.0175	0.0020	mg/Kg wet	0.0200		87.7	70-130			
Bromobenzene	0.0223	0.0020	mg/Kg wet	0.0200		112	70-130			
Bromochloromethane	0.0209	0.0020	mg/Kg wet	0.0200		104	70-130			
Bromodichloromethane	0.0183	0.0020	mg/Kg wet	0.0200		91.3	70-130			
Bromoform	0.0138	0.0020	mg/Kg wet	0.0200		69.1 *	70-130			L-04, V-05
Bromomethane	0.0105	0.010	mg/Kg wet	0.0200		52.5	40-160			L-14, R-05 †
2-Butanone (MEK)	0.145	0.040	mg/Kg wet	0.200		72.5	40-160			V-05 †
n-Butylbenzene	0.0229	0.0020	mg/Kg wet	0.0200		114	70-130			
sec-Butylbenzene	0.0215	0.0020	mg/Kg wet	0.0200		108	70-130			
tert-Butylbenzene	0.0218	0.0020	mg/Kg wet	0.0200		109	70-130			
tert-Butyl Ethyl Ether (TBEE)	0.0154	0.0010	mg/Kg wet	0.0200		76.8	70-130			
Carbon Disulfide	0.0179	0.0060	mg/Kg wet	0.0200		89.7	70-130			
Carbon Tetrachloride	0.0139	0.0020	mg/Kg wet	0.0200		69.5 *	70-130			V-05, L-07
Chlorobenzene	0.0229	0.0020	mg/Kg wet	0.0200		115	70-130			
Chlorodibromomethane	0.0160	0.0020	mg/Kg wet	0.0200		80.0	70-130			V-05
Chloroethane	0.0153	0.010	mg/Kg wet	0.0200		76.7	70-130			
Chloroform	0.0182	0.0040	mg/Kg wet	0.0200		90.9	70-130			
Chloromethane	0.0131	0.010	mg/Kg wet	0.0200		65.7	40-160			L-14 †
2-Chlorotoluene	0.0232	0.0020	mg/Kg wet	0.0200		116	70-130			
4-Chlorotoluene	0.0228	0.0020	mg/Kg wet	0.0200		114	70-130			
1,2-Dibromo-3-chloropropane (DBCP)	0.0108	0.0040	mg/Kg wet	0.0200		53.8 *	70-130			V-05, L-04
1,2-Dibromoethane (EDB)	0.0197	0.0020	mg/Kg wet	0.0200		98.4	70-130			
Dibromomethane	0.0199	0.0020	mg/Kg wet	0.0200		99.3	70-130			
1,2-Dichlorobenzene	0.0233	0.0020	mg/Kg wet	0.0200		116	70-130			
1,3-Dichlorobenzene	0.0229	0.0020	mg/Kg wet	0.0200		114	70-130			
1,4-Dichlorobenzene	0.0221	0.0020	mg/Kg wet	0.0200		111	70-130			

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QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B179813 - SW-846 5035										
LCS (B179813-BS1)				Prepared & Analyzed: 06/21/17						
Dichlorodifluoromethane (Freon 12)	0.00978	0.010	mg/Kg wet	0.0200		48.9	40-160			L-14 †
1,1-Dichloroethane	0.0200	0.0020	mg/Kg wet	0.0200		100	70-130			
1,2-Dichloroethane	0.0189	0.0020	mg/Kg wet	0.0200		94.4	70-130			
1,1-Dichloroethylene	0.0173	0.0040	mg/Kg wet	0.0200		86.6	70-130			
cis-1,2-Dichloroethylene	0.0179	0.0020	mg/Kg wet	0.0200		89.4	70-130			
trans-1,2-Dichloroethylene	0.0167	0.0020	mg/Kg wet	0.0200		83.7	70-130			
1,2-Dichloropropane	0.0181	0.0020	mg/Kg wet	0.0200		90.7	70-130			
1,3-Dichloropropane	0.0189	0.0010	mg/Kg wet	0.0200		94.5	70-130			
2,2-Dichloropropane	0.0167	0.0020	mg/Kg wet	0.0200		83.7	70-130			V-05
1,1-Dichloropropene	0.0185	0.0020	mg/Kg wet	0.0200		92.5	70-130			
cis-1,3-Dichloropropene	0.0178	0.0010	mg/Kg wet	0.0200		88.8	70-130			
trans-1,3-Dichloropropene	0.0179	0.0010	mg/Kg wet	0.0200		89.3	70-130			
Diethyl Ether	0.0155	0.010	mg/Kg wet	0.0200		77.3	70-130			
Diisopropyl Ether (DIPE)	0.0164	0.0010	mg/Kg wet	0.0200		81.9	70-130			
1,4-Dioxane	0.175	0.10	mg/Kg wet	0.200		87.7	40-160			V-16 †
Ethylbenzene	0.0228	0.0020	mg/Kg wet	0.0200		114	70-130			
Hexachlorobutadiene	0.0249	0.0020	mg/Kg wet	0.0200		124	70-130			
2-Hexanone (MBK)	0.181	0.020	mg/Kg wet	0.200		90.3	40-160			†
Isopropylbenzene (Cumene)	0.0242	0.0020	mg/Kg wet	0.0200		121	70-130			
p-Isopropyltoluene (p-Cymene)	0.0225	0.0020	mg/Kg wet	0.0200		113	70-130			
Methyl tert-Butyl Ether (MTBE)	0.0172	0.0040	mg/Kg wet	0.0200		85.9	70-130			
Methylene Chloride	0.0169	0.010	mg/Kg wet	0.0200		84.7	70-130			
4-Methyl-2-pentanone (MIBK)	0.196	0.020	mg/Kg wet	0.200		97.9	40-160			†
Naphthalene	0.0153	0.010	mg/Kg wet	0.0200		76.5	70-130			V-05
n-Propylbenzene	0.0231	0.0020	mg/Kg wet	0.0200		116	70-130			
Styrene	0.0227	0.0020	mg/Kg wet	0.0200		114	70-130			
1,1,1,2-Tetrachloroethane	0.0161	0.0020	mg/Kg wet	0.0200		80.7	70-130			V-05
1,1,2,2-Tetrachloroethane	0.0212	0.0010	mg/Kg wet	0.0200		106	70-130			
Tetrachloroethylene	0.0214	0.0020	mg/Kg wet	0.0200		107	70-130			
Tetrahydrofuran	0.0161	0.010	mg/Kg wet	0.0200		80.7	70-130			
Toluene	0.0191	0.0020	mg/Kg wet	0.0200		95.4	70-130			
1,2,3-Trichlorobenzene	0.0182	0.010	mg/Kg wet	0.0200		90.9	70-130			
1,2,4-Trichlorobenzene	0.0180	0.010	mg/Kg wet	0.0200		89.9	70-130			
1,1,1-Trichloroethane	0.0175	0.0020	mg/Kg wet	0.0200		87.7	70-130			
1,1,2-Trichloroethane	0.0206	0.0020	mg/Kg wet	0.0200		103	70-130			
Trichloroethylene	0.0180	0.0020	mg/Kg wet	0.0200		90.0	70-130			
Trichlorofluoromethane (Freon 11)	0.0166	0.010	mg/Kg wet	0.0200		82.9	70-130			
1,2,3-Trichloropropane	0.0221	0.0020	mg/Kg wet	0.0200		110	70-130			
1,2,4-Trimethylbenzene	0.0204	0.0020	mg/Kg wet	0.0200		102	70-130			
1,3,5-Trimethylbenzene	0.0235	0.0020	mg/Kg wet	0.0200		118	70-130			
Vinyl Chloride	0.0138	0.010	mg/Kg wet	0.0200		69.2	* 70-130			L-07
m+p Xylene	0.0439	0.0040	mg/Kg wet	0.0400		110	70-130			
o-Xylene	0.0214	0.0020	mg/Kg wet	0.0200		107	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.0461		mg/Kg wet	0.0500		92.2	70-130			
Surrogate: Toluene-d8	0.0464		mg/Kg wet	0.0500		92.9	70-130			
Surrogate: 4-Bromofluorobenzene	0.0505		mg/Kg wet	0.0500		101	70-130			

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QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B179813 - SW-846 5035										
LCS Dup (B179813-BSD1)				Prepared & Analyzed: 06/21/17						
Acetone	0.111	0.10	mg/Kg wet	0.200		55.5	40-160	3.37	20	L-14, V-05 †
tert-Amyl Methyl Ether (TAME)	0.0164	0.0010	mg/Kg wet	0.0200		82.0	70-130	0.487	20	
Benzene	0.0185	0.0020	mg/Kg wet	0.0200		92.5	70-130	5.33	20	
Bromobenzene	0.0204	0.0020	mg/Kg wet	0.0200		102	70-130	9.18	20	
Bromochloromethane	0.0211	0.0020	mg/Kg wet	0.0200		105	70-130	0.954	20	
Bromodichloromethane	0.0175	0.0020	mg/Kg wet	0.0200		87.4	70-130	4.36	20	
Bromoform	0.0128	0.0020	mg/Kg wet	0.0200		63.8 *	70-130	7.98	20	L-04, V-05
Bromomethane	0.0136	0.010	mg/Kg wet	0.0200		68.0	40-160	25.7 *	20	L-14, R-05 †
2-Butanone (MEK)	0.142	0.040	mg/Kg wet	0.200		71.2	40-160	1.93	20	V-05 †
n-Butylbenzene	0.0208	0.0020	mg/Kg wet	0.0200		104	70-130	9.71	20	
sec-Butylbenzene	0.0206	0.0020	mg/Kg wet	0.0200		103	70-130	4.46	20	
tert-Butylbenzene	0.0206	0.0020	mg/Kg wet	0.0200		103	70-130	5.85	20	
tert-Butyl Ethyl Ether (TBEE)	0.0159	0.0010	mg/Kg wet	0.0200		79.4	70-130	3.33	20	
Carbon Disulfide	0.0186	0.0060	mg/Kg wet	0.0200		93.0	70-130	3.61	20	
Carbon Tetrachloride	0.0148	0.0020	mg/Kg wet	0.0200		74.1	70-130	6.41	20	V-05
Chlorobenzene	0.0216	0.0020	mg/Kg wet	0.0200		108	70-130	6.12	20	
Chlorodibromomethane	0.0142	0.0020	mg/Kg wet	0.0200		71.0	70-130	11.9	20	V-05
Chloroethane	0.0148	0.010	mg/Kg wet	0.0200		73.9	70-130	3.72	20	
Chloroform	0.0189	0.0040	mg/Kg wet	0.0200		94.6	70-130	3.99	20	
Chloromethane	0.0135	0.010	mg/Kg wet	0.0200		67.5	40-160	2.70	20	L-14 †
2-Chlorotoluene	0.0220	0.0020	mg/Kg wet	0.0200		110	70-130	5.23	20	
4-Chlorotoluene	0.0207	0.0020	mg/Kg wet	0.0200		104	70-130	9.66	20	
1,2-Dibromo-3-chloropropane (DBCP)	0.0120	0.0040	mg/Kg wet	0.0200		60.1 *	70-130	11.1	20	L-04, V-05
1,2-Dibromoethane (EDB)	0.0178	0.0020	mg/Kg wet	0.0200		88.9	70-130	10.1	20	
Dibromomethane	0.0212	0.0020	mg/Kg wet	0.0200		106	70-130	6.72	20	
1,2-Dichlorobenzene	0.0212	0.0020	mg/Kg wet	0.0200		106	70-130	9.16	20	
1,3-Dichlorobenzene	0.0210	0.0020	mg/Kg wet	0.0200		105	70-130	8.47	20	
1,4-Dichlorobenzene	0.0204	0.0020	mg/Kg wet	0.0200		102	70-130	8.28	20	
Dichlorodifluoromethane (Freon 12)	0.0111	0.010	mg/Kg wet	0.0200		55.3	40-160	12.3	20	L-14 †
1,1-Dichloroethane	0.0211	0.0020	mg/Kg wet	0.0200		106	70-130	5.45	20	
1,2-Dichloroethane	0.0193	0.0020	mg/Kg wet	0.0200		96.7	70-130	2.41	20	
1,1-Dichloroethylene	0.0185	0.0040	mg/Kg wet	0.0200		92.4	70-130	6.48	20	
cis-1,2-Dichloroethylene	0.0188	0.0020	mg/Kg wet	0.0200		94.1	70-130	5.12	20	
trans-1,2-Dichloroethylene	0.0171	0.0020	mg/Kg wet	0.0200		85.5	70-130	2.13	20	
1,2-Dichloropropane	0.0177	0.0020	mg/Kg wet	0.0200		88.5	70-130	2.46	20	
1,3-Dichloropropane	0.0184	0.0010	mg/Kg wet	0.0200		91.8	70-130	2.90	20	
2,2-Dichloropropane	0.0173	0.0020	mg/Kg wet	0.0200		86.3	70-130	3.06	20	V-05
1,1-Dichloropropene	0.0191	0.0020	mg/Kg wet	0.0200		95.5	70-130	3.19	20	
cis-1,3-Dichloropropene	0.0178	0.0010	mg/Kg wet	0.0200		88.8	70-130	0.00	20	
trans-1,3-Dichloropropene	0.0165	0.0010	mg/Kg wet	0.0200		82.4	70-130	8.04	20	
Diethyl Ether	0.0156	0.010	mg/Kg wet	0.0200		78.2	70-130	1.16	20	
Diisopropyl Ether (DIPE)	0.0169	0.0010	mg/Kg wet	0.0200		84.4	70-130	3.01	20	
1,4-Dioxane	0.172	0.10	mg/Kg wet	0.200		86.0	40-160	1.97	20	V-16 †
Ethylbenzene	0.0215	0.0020	mg/Kg wet	0.0200		108	70-130	5.69	20	
Hexachlorobutadiene	0.0240	0.0020	mg/Kg wet	0.0200		120	70-130	3.60	20	
2-Hexanone (MBK)	0.168	0.020	mg/Kg wet	0.200		84.2	40-160	6.98	20	†
Isopropylbenzene (Cumene)	0.0229	0.0020	mg/Kg wet	0.0200		115	70-130	5.27	20	
p-Isopropyltoluene (p-Cymene)	0.0213	0.0020	mg/Kg wet	0.0200		106	70-130	5.66	20	
Methyl tert-Butyl Ether (MTBE)	0.0171	0.0040	mg/Kg wet	0.0200		85.6	70-130	0.350	20	
Methylene Chloride	0.0178	0.010	mg/Kg wet	0.0200		88.8	70-130	4.73	20	
4-Methyl-2-pentanone (MIBK)	0.182	0.020	mg/Kg wet	0.200		90.8	40-160	7.51	20	†
Naphthalene	0.0146	0.010	mg/Kg wet	0.0200		73.2	70-130	4.41	20	V-05

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QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B179813 - SW-846 5035										
LCS Dup (B179813-BSD1)				Prepared & Analyzed: 06/21/17						
n-Propylbenzene	0.0209	0.0020	mg/Kg wet	0.0200		105	70-130	9.90	20	
Styrene	0.0211	0.0020	mg/Kg wet	0.0200		106	70-130	7.30	20	
1,1,1,2-Tetrachloroethane	0.0162	0.0020	mg/Kg wet	0.0200		80.8	70-130	0.124	20	V-05
1,1,2,2-Tetrachloroethane	0.0206	0.0010	mg/Kg wet	0.0200		103	70-130	2.78	20	
Tetrachloroethylene	0.0221	0.0020	mg/Kg wet	0.0200		110	70-130	3.04	20	
Tetrahydrofuran	0.0159	0.010	mg/Kg wet	0.0200		79.7	70-130	1.25	20	
Toluene	0.0190	0.0020	mg/Kg wet	0.0200		95.1	70-130	0.315	20	
1,2,3-Trichlorobenzene	0.0167	0.010	mg/Kg wet	0.0200		83.7	70-130	8.25	20	
1,2,4-Trichlorobenzene	0.0167	0.010	mg/Kg wet	0.0200		83.7	70-130	7.14	20	
1,1,1-Trichloroethane	0.0178	0.0020	mg/Kg wet	0.0200		88.8	70-130	1.25	20	
1,1,2-Trichloroethane	0.0192	0.0020	mg/Kg wet	0.0200		95.9	70-130	7.33	20	
Trichloroethylene	0.0180	0.0020	mg/Kg wet	0.0200		89.8	70-130	0.222	20	
Trichlorofluoromethane (Freon 11)	0.0167	0.010	mg/Kg wet	0.0200		83.5	70-130	0.721	20	
1,2,3-Trichloropropane	0.0205	0.0020	mg/Kg wet	0.0200		103	70-130	7.14	20	
1,2,4-Trimethylbenzene	0.0191	0.0020	mg/Kg wet	0.0200		95.3	70-130	6.60	20	
1,3,5-Trimethylbenzene	0.0210	0.0020	mg/Kg wet	0.0200		105	70-130	11.5	20	
Vinyl Chloride	0.0155	0.010	mg/Kg wet	0.0200		77.5	70-130	11.3	20	
m+p Xylene	0.0418	0.0040	mg/Kg wet	0.0400		104	70-130	5.04	20	
o-Xylene	0.0205	0.0020	mg/Kg wet	0.0200		103	70-130	3.91	20	
Surrogate: 1,2-Dichloroethane-d4	0.0454		mg/Kg wet	0.0500		90.7	70-130			
Surrogate: Toluene-d8	0.0454		mg/Kg wet	0.0500		90.8	70-130			
Surrogate: 4-Bromofluorobenzene	0.0489		mg/Kg wet	0.0500		97.8	70-130			

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QUALITY CONTROL
Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes

Batch B179499 - SW-846 3510C
Blank (B179499-BLK1)

Prepared: 06/19/17 Analyzed: 06/21/17

Acenaphthene (low)	ND	0.30	µg/L							
Acenaphthylene (low)	ND	0.30	µg/L							
Anthracene (low)	ND	0.20	µg/L							
Benzo(a)anthracene (low)	ND	0.050	µg/L							
Benzo(a)pyrene (low)	ND	0.10	µg/L							
Benzo(b)fluoranthene (low)	ND	0.050	µg/L							
Benzo(g,h,i)perylene (low)	ND	0.50	µg/L							
Benzo(k)fluoranthene (low)	ND	0.20	µg/L							
Chrysene (low)	ND	0.20	µg/L							
Dibenz(a,h)anthracene (low)	ND	0.20	µg/L							
Fluoranthene (low)	ND	0.50	µg/L							
Fluorene (low)	ND	1.0	µg/L							
Indeno(1,2,3-cd)pyrene (low)	ND	0.20	µg/L							
2-Methylnaphthalene (low)	ND	1.0	µg/L							
Naphthalene (low)	ND	1.0	µg/L							
Phenanthrene (low)	ND	0.050	µg/L							
Pyrene (low)	ND	1.0	µg/L							
Surrogate: Nitrobenzene-d5 (low)	99.2		µg/L	100		99.2	30-130			
Surrogate: 2-Fluorobiphenyl (low)	98.3		µg/L	100		98.3	30-130			
Surrogate: p-Terphenyl-d14 (low)	94.8		µg/L	100		94.8	30-130			

LCS (B179499-BS1)

Prepared: 06/19/17 Analyzed: 06/21/17

Acenaphthene (low)	80.8	7.5	µg/L	100		80.8	40-140			
Acenaphthylene (low)	80.0	7.5	µg/L	100		80.0	40-140			
Anthracene (low)	81.7	5.0	µg/L	100		81.7	40-140			
Benzo(a)anthracene (low)	83.8	1.2	µg/L	100		83.8	40-140			
Benzo(a)pyrene (low)	88.1	2.5	µg/L	100		88.1	40-140			
Benzo(b)fluoranthene (low)	93.8	1.2	µg/L	100		93.8	40-140			
Benzo(g,h,i)perylene (low)	88.2	12	µg/L	100		88.2	40-140			
Benzo(k)fluoranthene (low)	90.2	5.0	µg/L	100		90.2	40-140			
Chrysene (low)	79.3	5.0	µg/L	100		79.3	40-140			
Dibenz(a,h)anthracene (low)	88.4	5.0	µg/L	100		88.4	40-140			
Fluoranthene (low)	81.3	12	µg/L	100		81.3	40-140			
Fluorene (low)	85.0	25	µg/L	100		85.0	40-140			
Indeno(1,2,3-cd)pyrene (low)	90.4	5.0	µg/L	100		90.4	40-140			
2-Methylnaphthalene (low)	85.3	25	µg/L	100		85.3	40-140			
Naphthalene (low)	79.4	25	µg/L	100		79.4	40-140			
Phenanthrene (low)	80.8	1.2	µg/L	100		80.8	40-140			
Pyrene (low)	83.8	25	µg/L	100		83.8	40-140			
Surrogate: Nitrobenzene-d5 (low)	84.8		µg/L	100		84.8	30-130			
Surrogate: 2-Fluorobiphenyl (low)	83.0		µg/L	100		83.0	30-130			
Surrogate: p-Terphenyl-d14 (low)	62.2		µg/L	100		62.2	30-130			

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QUALITY CONTROL
Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes

Batch B179499 - SW-846 3510C
LCS Dup (B179499-BSD1)

Prepared: 06/19/17 Analyzed: 06/21/17

Acenaphthene (low)	82.7	7.5	µg/L	100		82.7	40-140	2.39	20	
Acenaphthylene (low)	80.6	7.5	µg/L	100		80.6	40-140	0.747	20	
Anthracene (low)	85.0	5.0	µg/L	100		85.0	40-140	3.90	20	
Benzo(a)anthracene (low)	86.4	1.2	µg/L	100		86.4	40-140	3.00	20	
Benzo(a)pyrene (low)	90.4	2.5	µg/L	100		90.4	40-140	2.58	20	
Benzo(b)fluoranthene (low)	95.5	1.2	µg/L	100		95.5	40-140	1.82	20	
Benzo(g,h,i)perylene (low)	89.7	12	µg/L	100		89.7	40-140	1.74	20	
Benzo(k)fluoranthene (low)	92.8	5.0	µg/L	100		92.8	40-140	2.84	20	
Chrysene (low)	81.7	5.0	µg/L	100		81.7	40-140	3.01	20	
Dibenz(a,h)anthracene (low)	88.4	5.0	µg/L	100		88.4	40-140	0.0283	20	
Fluoranthene (low)	85.9	12	µg/L	100		85.9	40-140	5.47	20	
Fluorene (low)	87.6	25	µg/L	100		87.6	40-140	3.01	20	
Indeno(1,2,3-cd)pyrene (low)	91.3	5.0	µg/L	100		91.3	40-140	0.990	20	
2-Methylnaphthalene (low)	87.2	25	µg/L	100		87.2	40-140	2.23	20	
Naphthalene (low)	80.5	25	µg/L	100		80.5	40-140	1.47	20	
Phenanthrene (low)	82.2	1.2	µg/L	100		82.2	40-140	1.72	20	
Pyrene (low)	83.7	25	µg/L	100		83.7	40-140	0.149	20	
Surrogate: Nitrobenzene-d5 (low)	83.2		µg/L	100		83.2	30-130			
Surrogate: 2-Fluorobiphenyl (low)	80.4		µg/L	100		80.4	30-130			
Surrogate: p-Terphenyl-d14 (low)	60.1		µg/L	100		60.1	30-130			

Batch B179637 - SW-846 3546
Blank (B179637-BLK1)

Prepared & Analyzed: 06/20/17

Acenaphthene	ND	0.17	mg/Kg wet							
Acenaphthylene	ND	0.17	mg/Kg wet							
Anthracene	ND	0.17	mg/Kg wet							
Benzo(a)anthracene	ND	0.17	mg/Kg wet							
Benzo(a)pyrene	ND	0.17	mg/Kg wet							
Benzo(b)fluoranthene	ND	0.17	mg/Kg wet							
Benzo(g,h,i)perylene	ND	0.17	mg/Kg wet							V-05
Benzo(k)fluoranthene	ND	0.17	mg/Kg wet							
Chrysene	ND	0.17	mg/Kg wet							
Dibenz(a,h)anthracene	ND	0.17	mg/Kg wet							V-05
Fluoranthene	ND	0.17	mg/Kg wet							
Fluorene	ND	0.17	mg/Kg wet							
Indeno(1,2,3-cd)pyrene	ND	0.17	mg/Kg wet							V-05
2-Methylnaphthalene	ND	0.17	mg/Kg wet							
Naphthalene	ND	0.17	mg/Kg wet							
Phenanthrene	ND	0.17	mg/Kg wet							
Pyrene	ND	0.17	mg/Kg wet							
Surrogate: Nitrobenzene-d5	2.56		mg/Kg wet	3.33		76.8	30-130			
Surrogate: 2-Fluorobiphenyl	2.43		mg/Kg wet	3.33		72.9	30-130			
Surrogate: p-Terphenyl-d14	2.92		mg/Kg wet	3.33		87.7	30-130			

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QUALITY CONTROL
Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B179637 - SW-846 3546										
LCS (B179637-BS1)										
Prepared & Analyzed: 06/20/17										
Acenaphthene	1.21	0.17	mg/Kg wet	1.67		72.5	40-140			
Acenaphthylene	1.16	0.17	mg/Kg wet	1.67		69.5	40-140			
Anthracene	1.26	0.17	mg/Kg wet	1.67		75.4	40-140			
Benzo(a)anthracene	1.24	0.17	mg/Kg wet	1.67		74.4	40-140			
Benzo(a)pyrene	1.29	0.17	mg/Kg wet	1.67		77.2	40-140			
Benzo(b)fluoranthene	1.18	0.17	mg/Kg wet	1.67		70.6	40-140			
Benzo(g,h,i)perylene	1.03	0.17	mg/Kg wet	1.67		61.9	40-140			V-05
Benzo(k)fluoranthene	1.24	0.17	mg/Kg wet	1.67		74.5	40-140			
Chrysene	1.14	0.17	mg/Kg wet	1.67		68.4	40-140			
Dibenz(a,h)anthracene	1.13	0.17	mg/Kg wet	1.67		67.8	40-140			V-05
Fluoranthene	1.32	0.17	mg/Kg wet	1.67		79.4	40-140			
Fluorene	1.27	0.17	mg/Kg wet	1.67		75.9	40-140			
Indeno(1,2,3-cd)pyrene	1.07	0.17	mg/Kg wet	1.67		64.0	40-140			V-05
2-Methylnaphthalene	1.42	0.17	mg/Kg wet	1.67		84.9	40-140			
Naphthalene	1.23	0.17	mg/Kg wet	1.67		73.8	40-140			
Phenanthrene	1.24	0.17	mg/Kg wet	1.67		74.6	40-140			
Pyrene	1.24	0.17	mg/Kg wet	1.67		74.3	40-140			
Surrogate: Nitrobenzene-d5	2.90		mg/Kg wet	3.33		86.9	30-130			
Surrogate: 2-Fluorobiphenyl	2.80		mg/Kg wet	3.33		83.9	30-130			
Surrogate: p-Terphenyl-d14	2.93		mg/Kg wet	3.33		87.8	30-130			
LCS Dup (B179637-BSD1)										
Prepared & Analyzed: 06/20/17										
Acenaphthene	1.19	0.17	mg/Kg wet	1.67		71.5	40-140	1.47	30	
Acenaphthylene	1.17	0.17	mg/Kg wet	1.67		70.3	40-140	1.20	30	
Anthracene	1.29	0.17	mg/Kg wet	1.67		77.1	40-140	2.23	30	
Benzo(a)anthracene	1.26	0.17	mg/Kg wet	1.67		75.4	40-140	1.31	30	
Benzo(a)pyrene	1.31	0.17	mg/Kg wet	1.67		78.7	40-140	1.95	30	
Benzo(b)fluoranthene	1.23	0.17	mg/Kg wet	1.67		73.8	40-140	4.52	30	
Benzo(g,h,i)perylene	1.09	0.17	mg/Kg wet	1.67		65.6	40-140	5.84	30	V-05
Benzo(k)fluoranthene	1.28	0.17	mg/Kg wet	1.67		76.9	40-140	3.25	30	
Chrysene	1.17	0.17	mg/Kg wet	1.67		70.0	40-140	2.25	30	
Dibenz(a,h)anthracene	1.17	0.17	mg/Kg wet	1.67		70.1	40-140	3.28	30	V-05
Fluoranthene	1.38	0.17	mg/Kg wet	1.67		83.0	40-140	4.33	30	
Fluorene	1.30	0.17	mg/Kg wet	1.67		78.0	40-140	2.73	30	
Indeno(1,2,3-cd)pyrene	1.16	0.17	mg/Kg wet	1.67		69.5	40-140	8.18	30	V-05
2-Methylnaphthalene	1.35	0.17	mg/Kg wet	1.67		81.1	40-140	4.65	30	
Naphthalene	1.18	0.17	mg/Kg wet	1.67		70.8	40-140	4.15	30	
Phenanthrene	1.29	0.17	mg/Kg wet	1.67		77.5	40-140	3.81	30	
Pyrene	1.24	0.17	mg/Kg wet	1.67		74.6	40-140	0.403	30	
Surrogate: Nitrobenzene-d5	2.69		mg/Kg wet	3.33		80.7	30-130			
Surrogate: 2-Fluorobiphenyl	2.79		mg/Kg wet	3.33		83.8	30-130			
Surrogate: p-Terphenyl-d14	2.93		mg/Kg wet	3.33		87.8	30-130			

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QUALITY CONTROL
Polychlorinated Biphenyls By GC/ECD - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes

Batch B179484 - SW-846 3510C
Blank (B179484-BLK1)

Prepared: 06/17/17 Analyzed: 06/21/17

Aroclor-1016	ND	0.20	µg/L							
Aroclor-1016 [2C]	ND	0.20	µg/L							
Aroclor-1221	ND	0.20	µg/L							
Aroclor-1221 [2C]	ND	0.20	µg/L							
Aroclor-1232	ND	0.20	µg/L							
Aroclor-1232 [2C]	ND	0.20	µg/L							
Aroclor-1242	ND	0.20	µg/L							
Aroclor-1242 [2C]	ND	0.20	µg/L							
Aroclor-1248	ND	0.20	µg/L							
Aroclor-1248 [2C]	ND	0.20	µg/L							
Aroclor-1254	ND	0.20	µg/L							
Aroclor-1254 [2C]	ND	0.20	µg/L							
Aroclor-1260	ND	0.20	µg/L							
Aroclor-1260 [2C]	ND	0.20	µg/L							
Aroclor-1262	ND	0.20	µg/L							
Aroclor-1262 [2C]	ND	0.20	µg/L							
Aroclor-1268	ND	0.20	µg/L							
Aroclor-1268 [2C]	ND	0.20	µg/L							
Surrogate: Decachlorobiphenyl	1.87		µg/L	2.00		93.5	30-150			
Surrogate: Decachlorobiphenyl [2C]	1.73		µg/L	2.00		86.5	30-150			
Surrogate: Tetrachloro-m-xylene	1.20		µg/L	2.00		60.0	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	1.37		µg/L	2.00		68.4	30-150			

LCS (B179484-BS1)

Prepared: 06/17/17 Analyzed: 06/21/17

Aroclor-1016	0.33	0.20	µg/L	0.500		66.1	40-140			
Aroclor-1016 [2C]	0.40	0.20	µg/L	0.500		79.1	40-140			
Aroclor-1260	0.39	0.20	µg/L	0.500		78.2	40-140			
Aroclor-1260 [2C]	0.42	0.20	µg/L	0.500		83.9	40-140			
Surrogate: Decachlorobiphenyl	1.94		µg/L	2.00		96.8	30-150			
Surrogate: Decachlorobiphenyl [2C]	1.77		µg/L	2.00		88.4	30-150			
Surrogate: Tetrachloro-m-xylene	1.30		µg/L	2.00		64.9	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	1.43		µg/L	2.00		71.5	30-150			

LCS Dup (B179484-BSD1)

Prepared: 06/17/17 Analyzed: 06/21/17

Aroclor-1016	0.31	0.20	µg/L	0.500		62.9	40-140	4.96	20	
Aroclor-1016 [2C]	0.37	0.20	µg/L	0.500		74.4	40-140	6.10	20	
Aroclor-1260	0.37	0.20	µg/L	0.500		73.9	40-140	5.69	20	
Aroclor-1260 [2C]	0.39	0.20	µg/L	0.500		78.1	40-140	7.11	20	
Surrogate: Decachlorobiphenyl	1.82		µg/L	2.00		91.2	30-150			
Surrogate: Decachlorobiphenyl [2C]	1.70		µg/L	2.00		85.0	30-150			
Surrogate: Tetrachloro-m-xylene	1.19		µg/L	2.00		59.5	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	1.35		µg/L	2.00		67.5	30-150			

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QUALITY CONTROL

Polychlorinated Biphenyls By GC/ECD - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B179741 - SW-846 3546										
Blank (B179741-BLK1)										
Prepared: 06/21/17 Analyzed: 06/22/17										
Aroclor-1016	ND	0.020	mg/Kg wet							
Aroclor-1016 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1221	ND	0.020	mg/Kg wet							
Aroclor-1221 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1232	ND	0.020	mg/Kg wet							
Aroclor-1232 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1242	ND	0.020	mg/Kg wet							
Aroclor-1242 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1248	ND	0.020	mg/Kg wet							
Aroclor-1248 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1254	ND	0.020	mg/Kg wet							
Aroclor-1254 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1260	ND	0.020	mg/Kg wet							
Aroclor-1260 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1262	ND	0.020	mg/Kg wet							
Aroclor-1262 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1268	ND	0.020	mg/Kg wet							
Aroclor-1268 [2C]	ND	0.020	mg/Kg wet							
Surrogate: Decachlorobiphenyl	0.204		mg/Kg wet	0.200		102	30-150			
Surrogate: Decachlorobiphenyl [2C]	0.216		mg/Kg wet	0.200		108	30-150			
Surrogate: Tetrachloro-m-xylene	0.155		mg/Kg wet	0.200		77.4	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	0.157		mg/Kg wet	0.200		78.6	30-150			
LCS (B179741-BS1)										
Prepared: 06/21/17 Analyzed: 06/22/17										
Aroclor-1016	0.18	0.020	mg/Kg wet	0.200		87.8	40-140			
Aroclor-1016 [2C]	0.18	0.020	mg/Kg wet	0.200		90.2	40-140			
Aroclor-1260	0.18	0.020	mg/Kg wet	0.200		87.7	40-140			
Aroclor-1260 [2C]	0.17	0.020	mg/Kg wet	0.200		87.4	40-140			
Surrogate: Decachlorobiphenyl	0.205		mg/Kg wet	0.200		103	30-150			
Surrogate: Decachlorobiphenyl [2C]	0.218		mg/Kg wet	0.200		109	30-150			
Surrogate: Tetrachloro-m-xylene	0.169		mg/Kg wet	0.200		84.4	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	0.167		mg/Kg wet	0.200		83.7	30-150			
LCS Dup (B179741-BSD1)										
Prepared: 06/21/17 Analyzed: 06/22/17										
Aroclor-1016	0.17	0.020	mg/Kg wet	0.200		82.9	40-140	5.69	30	
Aroclor-1016 [2C]	0.17	0.020	mg/Kg wet	0.200		85.3	40-140	5.53	30	
Aroclor-1260	0.17	0.020	mg/Kg wet	0.200		83.8	40-140	4.56	30	
Aroclor-1260 [2C]	0.17	0.020	mg/Kg wet	0.200		83.6	40-140	4.44	30	
Surrogate: Decachlorobiphenyl	0.194		mg/Kg wet	0.200		97.1	30-150			
Surrogate: Decachlorobiphenyl [2C]	0.206		mg/Kg wet	0.200		103	30-150			
Surrogate: Tetrachloro-m-xylene	0.158		mg/Kg wet	0.200		78.9	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	0.157		mg/Kg wet	0.200		78.7	30-150			

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QUALITY CONTROL
Petroleum Hydrocarbons Analyses - EPH - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes

Batch B179543 - SW-846 3510C
Blank (B179543-BLK1)

Prepared: 06/19/17 Analyzed: 06/20/17

C9-C18 Aliphatics	ND	100	µg/L							
C19-C36 Aliphatics	ND	100	µg/L							
Unadjusted C11-C22 Aromatics	ND	100	µg/L							
C11-C22 Aromatics	ND	100	µg/L							
Acenaphthene	ND	2.0	µg/L							
Acenaphthylene	ND	2.0	µg/L							
Anthracene	ND	2.0	µg/L							
Benzo(a)anthracene	ND	2.0	µg/L							
Benzo(a)pyrene	ND	2.0	µg/L							
Benzo(b)fluoranthene	ND	2.0	µg/L							
Benzo(g,h,i)perylene	ND	2.0	µg/L							
Benzo(k)fluoranthene	ND	2.0	µg/L							
Chrysene	ND	2.0	µg/L							
Dibenz(a,h)anthracene	ND	2.0	µg/L							
Fluoranthene	ND	2.0	µg/L							
Fluorene	ND	2.0	µg/L							
Indeno(1,2,3-cd)pyrene	ND	2.0	µg/L							
2-Methylnaphthalene	ND	2.0	µg/L							
Naphthalene	ND	2.0	µg/L							
Phenanthrene	ND	2.0	µg/L							
Pyrene	ND	2.0	µg/L							
n-Decane	ND	2.0	µg/L							
n-Docosane	ND	2.0	µg/L							
n-Dodecane	ND	2.0	µg/L							
n-Eicosane	ND	2.0	µg/L							
n-Hexacosane	ND	2.0	µg/L							
n-Hexadecane	ND	2.0	µg/L							
n-Hexatriacontane	ND	2.0	µg/L							
n-Nonadecane	ND	2.0	µg/L							
n-Nonane	ND	2.0	µg/L							
n-Octacosane	ND	2.0	µg/L							
n-Octadecane	ND	2.0	µg/L							
n-Tetracosane	ND	2.0	µg/L							
n-Tetradecane	ND	2.0	µg/L							
n-Triacontane	ND	2.0	µg/L							
Naphthalene-aliphatic fraction	ND	2.0	µg/L							
2-Methylnaphthalene-aliphatic fraction	ND	2.0	µg/L							
Surrogate: Chlorooctadecane (COD)	49.5		µg/L	99.8		49.6	40-140			
Surrogate: o-Terphenyl (OTP)	69.3		µg/L	100		69.3	40-140			
Surrogate: 2-Bromonaphthalene	101		µg/L	100		101	40-140			
Surrogate: 2-Fluorobiphenyl	94.7		µg/L	100		94.7	40-140			

LCS (B179543-BS1)

Prepared: 06/19/17 Analyzed: 06/20/17

C9-C18 Aliphatics	424	100	µg/L	600		70.7	0-200			
C19-C36 Aliphatics	628	100	µg/L	800		78.4	0-200			
Acenaphthene	71.0	2.0	µg/L	100		71.0	40-140			
Acenaphthylene	68.6	2.0	µg/L	100		68.6	40-140			
Anthracene	75.1	2.0	µg/L	100		75.1	40-140			
Benzo(a)anthracene	77.8	2.0	µg/L	100		77.8	40-140			
Benzo(a)pyrene	75.1	2.0	µg/L	100		75.1	40-140			
Benzo(b)fluoranthene	77.6	2.0	µg/L	100		77.6	40-140			
Benzo(g,h,i)perylene	75.9	2.0	µg/L	100		75.9	40-140			

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QUALITY CONTROL
Petroleum Hydrocarbons Analyses - EPH - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes

Batch B179543 - SW-846 3510C
LCS (B179543-BS1)

Prepared: 06/19/17 Analyzed: 06/20/17

Benzo(k)fluoranthene	71.6	2.0	µg/L	100		71.6	40-140			
Chrysene	73.8	2.0	µg/L	100		73.8	40-140			
Dibenz(a,h)anthracene	78.6	2.0	µg/L	100		78.6	40-140			
Fluoranthene	76.6	2.0	µg/L	100		76.6	40-140			
Fluorene	75.3	2.0	µg/L	100		75.3	40-140			
Indeno(1,2,3-cd)pyrene	79.0	2.0	µg/L	100		79.0	40-140			
2-Methylnaphthalene	67.8	2.0	µg/L	100		67.8	40-140			
Naphthalene	58.1	2.0	µg/L	100		58.1	40-140			
Phenanthrene	78.1	2.0	µg/L	100		78.1	40-140			
Pyrene	77.6	2.0	µg/L	100		77.6	40-140			
n-Decane	46.1	2.0	µg/L	100		46.1	40-140			
n-Docosane	70.0	2.0	µg/L	100		70.0	40-140			
n-Dodecane	56.0	2.0	µg/L	100		56.0	40-140			
n-Eicosane	69.3	2.0	µg/L	100		69.3	40-140			
n-Hexacosane	70.4	2.0	µg/L	100		70.4	40-140			
n-Hexadecane	69.4	2.0	µg/L	100		69.4	40-140			
n-Hexatriacontane	79.9	2.0	µg/L	100		79.9	40-140			
n-Nonadecane	69.2	2.0	µg/L	100		69.2	40-140			
n-Nonane	35.9	2.0	µg/L	100		35.9	30-140			
n-Octacosane	70.4	2.0	µg/L	100		70.4	40-140			
n-Octadecane	71.9	2.0	µg/L	100		71.9	40-140			
n-Tetracosane	70.7	2.0	µg/L	100		70.7	40-140			
n-Tetradecane	64.8	2.0	µg/L	100		64.8	40-140			
n-Triacontane	73.0	2.0	µg/L	100		73.0	40-140			
Naphthalene-aliphatic fraction	ND	2.0	µg/L	100			0-5			
2-Methylnaphthalene-aliphatic fraction	ND	2.0	µg/L	100			0-5			
Surrogate: Chlorooctadecane (COD)	53.9		µg/L	99.8		54.0	40-140			
Surrogate: o-Terphenyl (OTP)	74.6		µg/L	100		74.6	40-140			
Surrogate: 2-Bromonaphthalene	103		µg/L	100		103	40-140			
Surrogate: 2-Fluorobiphenyl	96.7		µg/L	100		96.7	40-140			

LCS Dup (B179543-BS1)

Prepared: 06/19/17 Analyzed: 06/20/17

C9-C18 Aliphatics	427	100	µg/L	600		71.2	0-200	0.578		
C19-C36 Aliphatics	610	100	µg/L	800		76.3	0-200	2.78		
Acenaphthene	66.9	2.0	µg/L	100		66.9	40-140	5.93	25	
Acenaphthylene	65.1	2.0	µg/L	100		65.1	40-140	5.23	25	
Anthracene	68.8	2.0	µg/L	100		68.8	40-140	8.68	25	
Benzo(a)anthracene	71.3	2.0	µg/L	100		71.3	40-140	8.75	25	
Benzo(a)pyrene	68.6	2.0	µg/L	100		68.6	40-140	8.98	25	
Benzo(b)fluoranthene	70.9	2.0	µg/L	100		70.9	40-140	9.14	25	
Benzo(g,h,i)perylene	68.9	2.0	µg/L	100		68.9	40-140	9.70	25	
Benzo(k)fluoranthene	65.7	2.0	µg/L	100		65.7	40-140	8.63	25	
Chrysene	67.8	2.0	µg/L	100		67.8	40-140	8.43	25	
Dibenz(a,h)anthracene	71.6	2.0	µg/L	100		71.6	40-140	9.26	25	
Fluoranthene	70.1	2.0	µg/L	100		70.1	40-140	8.83	25	
Fluorene	69.6	2.0	µg/L	100		69.6	40-140	7.95	25	
Indeno(1,2,3-cd)pyrene	72.1	2.0	µg/L	100		72.1	40-140	9.15	25	
2-Methylnaphthalene	65.6	2.0	µg/L	100		65.6	40-140	3.30	25	
Naphthalene	57.2	2.0	µg/L	100		57.2	40-140	1.63	25	
Phenanthrene	71.3	2.0	µg/L	100		71.3	40-140	9.19	25	
Pyrene	71.1	2.0	µg/L	100		71.1	40-140	8.86	25	
n-Decane	47.5	2.0	µg/L	100		47.5	40-140	3.04	25	

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QUALITY CONTROL
Petroleum Hydrocarbons Analyses - EPH - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes

Batch B179543 - SW-846 3510C
LCS Dup (B179543-BSD1)

Prepared: 06/19/17 Analyzed: 06/20/17

n-Docosane	66.8	2.0	µg/L	100		66.8	40-140	4.61	25	
n-Dodecane	56.7	2.0	µg/L	100		56.7	40-140	1.31	25	
n-Eicosane	66.1	2.0	µg/L	100		66.1	40-140	4.61	25	
n-Hexacosane	67.4	2.0	µg/L	100		67.4	40-140	4.35	25	
n-Hexadecane	66.9	2.0	µg/L	100		66.9	40-140	3.78	25	
n-Hexatriacontane	76.8	2.0	µg/L	100		76.8	40-140	3.96	25	
n-Nonadecane	66.2	2.0	µg/L	100		66.2	40-140	4.52	25	
n-Nonane	37.7	2.0	µg/L	100		37.7	30-140	4.91	25	
n-Octacosane	67.5	2.0	µg/L	100		67.5	40-140	4.29	25	
n-Octadecane	68.8	2.0	µg/L	100		68.8	40-140	4.44	25	
n-Tetracosane	67.5	2.0	µg/L	100		67.5	40-140	4.69	25	
n-Tetradecane	63.4	2.0	µg/L	100		63.4	40-140	2.17	25	
n-Triacontane	70.1	2.0	µg/L	100		70.1	40-140	3.99	25	
Naphthalene-aliphatic fraction	ND	2.0	µg/L	100			0-5			
2-Methylnaphthalene-aliphatic fraction	ND	2.0	µg/L	100			0-5			
Surrogate: Chlorooctadecane (COD)	52.8		µg/L	99.8		52.9	40-140			
Surrogate: o-Terphenyl (OTP)	67.5		µg/L	100		67.5	40-140			
Surrogate: 2-Bromonaphthalene	96.7		µg/L	100		96.7	40-140			
Surrogate: 2-Fluorobiphenyl	93.8		µg/L	100		93.8	40-140			

Batch B179781 - SW-846 3546
Blank (B179781-BLK1)

Prepared: 06/21/17 Analyzed: 06/23/17

C9-C18 Aliphatics	ND	10	mg/Kg wet							
C19-C36 Aliphatics	ND	10	mg/Kg wet							
Unadjusted C11-C22 Aromatics	ND	10	mg/Kg wet							
C11-C22 Aromatics	ND	10	mg/Kg wet							
Acenaphthene	ND	0.10	mg/Kg wet							
Acenaphthylene	ND	0.10	mg/Kg wet							
Anthracene	ND	0.10	mg/Kg wet							
Benzo(a)anthracene	ND	0.10	mg/Kg wet							
Benzo(a)pyrene	ND	0.10	mg/Kg wet							
Benzo(b)fluoranthene	ND	0.10	mg/Kg wet							
Benzo(g,h,i)perylene	ND	0.10	mg/Kg wet							
Benzo(k)fluoranthene	ND	0.10	mg/Kg wet							
Chrysene	ND	0.10	mg/Kg wet							
Dibenz(a,h)anthracene	ND	0.10	mg/Kg wet							
Fluoranthene	ND	0.10	mg/Kg wet							
Fluorene	ND	0.10	mg/Kg wet							
Indeno(1,2,3-cd)pyrene	ND	0.10	mg/Kg wet							
2-Methylnaphthalene	ND	0.10	mg/Kg wet							
Naphthalene	ND	0.10	mg/Kg wet							
Phenanthrene	ND	0.10	mg/Kg wet							
Pyrene	ND	0.10	mg/Kg wet							
n-Decane	ND	0.10	mg/Kg wet							
n-Docosane	ND	0.10	mg/Kg wet							
n-Dodecane	ND	0.10	mg/Kg wet							
n-Eicosane	ND	0.10	mg/Kg wet							
n-Hexacosane	ND	0.10	mg/Kg wet							
n-Hexadecane	ND	0.10	mg/Kg wet							
n-Hexatriacontane	ND	0.10	mg/Kg wet							
n-Nonadecane	ND	0.10	mg/Kg wet							
n-Nonane	ND	0.10	mg/Kg wet							

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QUALITY CONTROL
Petroleum Hydrocarbons Analyses - EPH - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B179781 - SW-846 3546										
Blank (B179781-BLK1)										
Prepared: 06/21/17 Analyzed: 06/23/17										
n-Octacosane	ND	0.10	mg/Kg wet							
n-Octadecane	ND	0.10	mg/Kg wet							
n-Tetracosane	ND	0.10	mg/Kg wet							
n-Tetradecane	ND	0.10	mg/Kg wet							
n-Triacontane	ND	0.10	mg/Kg wet							
Naphthalene-aliphatic fraction	ND	0.10	mg/Kg wet							
2-Methylnaphthalene-aliphatic fraction	ND	0.10	mg/Kg wet							
Surrogate: Chlorooctadecane (COD)	2.91		mg/Kg wet	4.99		58.4	40-140			
Surrogate: o-Terphenyl (OTP)	3.62		mg/Kg wet	5.00		72.4	40-140			
Surrogate: 2-Bromonaphthalene	3.37		mg/Kg wet	5.00		67.4	40-140			
Surrogate: 2-Fluorobiphenyl	3.68		mg/Kg wet	5.00		73.5	40-140			
LCS (B179781-BS1)										
Prepared: 06/21/17 Analyzed: 06/23/17										
C9-C18 Aliphatics	22.3	10	mg/Kg wet	30.0		74.4	40-140			
C19-C36 Aliphatics	34.3	10	mg/Kg wet	40.0		85.8	40-140			
Acenaphthene	3.58	0.10	mg/Kg wet	5.00		71.6	40-140			
Acenaphthylene	3.47	0.10	mg/Kg wet	5.00		69.5	40-140			
Anthracene	3.79	0.10	mg/Kg wet	5.00		75.7	40-140			
Benzo(a)anthracene	3.87	0.10	mg/Kg wet	5.00		77.4	40-140			
Benzo(a)pyrene	3.69	0.10	mg/Kg wet	5.00		73.9	40-140			
Benzo(b)fluoranthene	3.82	0.10	mg/Kg wet	5.00		76.4	40-140			
Benzo(g,h,i)perylene	3.70	0.10	mg/Kg wet	5.00		74.0	40-140			
Benzo(k)fluoranthene	3.53	0.10	mg/Kg wet	5.00		70.7	40-140			
Chrysene	3.69	0.10	mg/Kg wet	5.00		73.8	40-140			
Dibenz(a,h)anthracene	3.87	0.10	mg/Kg wet	5.00		77.5	40-140			
Fluoranthene	3.81	0.10	mg/Kg wet	5.00		76.2	40-140			
Fluorene	3.79	0.10	mg/Kg wet	5.00		75.7	40-140			
Indeno(1,2,3-cd)pyrene	3.82	0.10	mg/Kg wet	5.00		76.5	40-140			
2-Methylnaphthalene	3.45	0.10	mg/Kg wet	5.00		69.1	40-140			
Naphthalene	2.98	0.10	mg/Kg wet	5.00		59.7	40-140			
Phenanthrene	3.91	0.10	mg/Kg wet	5.00		78.2	40-140			
Pyrene	3.86	0.10	mg/Kg wet	5.00		77.2	40-140			
n-Decane	2.43	0.10	mg/Kg wet	5.00		48.7	40-140			
n-Docosane	3.51	0.10	mg/Kg wet	5.00		70.1	40-140			
n-Dodecane	2.88	0.10	mg/Kg wet	5.00		57.5	40-140			
n-Eicosane	3.45	0.10	mg/Kg wet	5.00		69.0	40-140			
n-Hexacosane	3.50	0.10	mg/Kg wet	5.00		70.0	40-140			
n-Hexadecane	3.54	0.10	mg/Kg wet	5.00		70.8	40-140			
n-Hexatriacontane	3.89	0.10	mg/Kg wet	5.00		77.8	40-140			
n-Nonadecane	3.44	0.10	mg/Kg wet	5.00		68.9	40-140			
n-Nonane	1.91	0.10	mg/Kg wet	5.00		38.2	30-140			
n-Octacosane	3.49	0.10	mg/Kg wet	5.00		69.7	40-140			
n-Octadecane	3.62	0.10	mg/Kg wet	5.00		72.3	40-140			
n-Tetracosane	3.52	0.10	mg/Kg wet	5.00		70.5	40-140			
n-Tetradecane	3.29	0.10	mg/Kg wet	5.00		65.8	40-140			
n-Triacontane	3.61	0.10	mg/Kg wet	5.00		72.2	40-140			
Naphthalene-aliphatic fraction	ND	0.10	mg/Kg wet	5.00			0-5			
2-Methylnaphthalene-aliphatic fraction	ND	0.10	mg/Kg wet	5.00			0-5			
Surrogate: Chlorooctadecane (COD)	3.04		mg/Kg wet	4.99		60.8	40-140			
Surrogate: o-Terphenyl (OTP)	3.79		mg/Kg wet	5.00		75.8	40-140			
Surrogate: 2-Bromonaphthalene	3.49		mg/Kg wet	5.00		69.7	40-140			
Surrogate: 2-Fluorobiphenyl	3.69		mg/Kg wet	5.00		73.9	40-140			

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QUALITY CONTROL
Petroleum Hydrocarbons Analyses - EPH - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B179781 - SW-846 3546										
LCS Dup (B179781-BSD1)					Prepared: 06/21/17 Analyzed: 06/23/17					
C9-C18 Aliphatics	21.0	10	mg/Kg wet	30.0		70.1	40-140	5.88	25	
C19-C36 Aliphatics	34.5	10	mg/Kg wet	40.0		86.2	40-140	0.487	25	
Acenaphthene	3.54	0.10	mg/Kg wet	5.00		70.7	40-140	1.32	25	
Acenaphthylene	3.42	0.10	mg/Kg wet	5.00		68.4	40-140	1.55	25	
Anthracene	3.86	0.10	mg/Kg wet	5.00		77.1	40-140	1.83	25	
Benzo(a)anthracene	3.97	0.10	mg/Kg wet	5.00		79.4	40-140	2.61	25	
Benzo(a)pyrene	3.80	0.10	mg/Kg wet	5.00		76.0	40-140	2.80	25	
Benzo(b)fluoranthene	3.91	0.10	mg/Kg wet	5.00		78.2	40-140	2.38	25	
Benzo(g,h,i)perylene	3.77	0.10	mg/Kg wet	5.00		75.4	40-140	1.88	25	
Benzo(k)fluoranthene	3.64	0.10	mg/Kg wet	5.00		72.8	40-140	2.87	25	
Chrysene	3.80	0.10	mg/Kg wet	5.00		76.0	40-140	2.90	25	
Dibenz(a,h)anthracene	3.98	0.10	mg/Kg wet	5.00		79.6	40-140	2.67	25	
Fluoranthene	3.90	0.10	mg/Kg wet	5.00		77.9	40-140	2.27	25	
Fluorene	3.79	0.10	mg/Kg wet	5.00		75.9	40-140	0.182	25	
Indeno(1,2,3-cd)pyrene	3.92	0.10	mg/Kg wet	5.00		78.5	40-140	2.62	25	
2-Methylnaphthalene	3.30	0.10	mg/Kg wet	5.00		66.0	40-140	4.57	25	
Naphthalene	2.80	0.10	mg/Kg wet	5.00		56.1	40-140	6.19	25	
Phenanthrene	3.95	0.10	mg/Kg wet	5.00		78.9	40-140	0.985	25	
Pyrene	3.95	0.10	mg/Kg wet	5.00		78.9	40-140	2.25	25	
n-Decane	2.21	0.10	mg/Kg wet	5.00		44.2	40-140	9.59	25	
n-Docosane	3.41	0.10	mg/Kg wet	5.00		68.2	40-140	2.70	25	
n-Dodecane	2.62	0.10	mg/Kg wet	5.00		52.4	40-140	9.28	25	
n-Eicosane	3.36	0.10	mg/Kg wet	5.00		67.2	40-140	2.77	25	
n-Hexacosane	3.40	0.10	mg/Kg wet	5.00		68.0	40-140	2.85	25	
n-Hexadecane	3.40	0.10	mg/Kg wet	5.00		68.1	40-140	3.92	25	
n-Hexatriacontane	3.78	0.10	mg/Kg wet	5.00		75.6	40-140	2.97	25	
n-Nonadecane	3.35	0.10	mg/Kg wet	5.00		67.0	40-140	2.86	25	
n-Nonane	1.69	0.10	mg/Kg wet	5.00		33.8	30-140	12.3	25	
n-Octacosane	3.39	0.10	mg/Kg wet	5.00		67.7	40-140	2.94	25	
n-Octadecane	3.51	0.10	mg/Kg wet	5.00		70.1	40-140	3.06	25	
n-Tetracosane	3.43	0.10	mg/Kg wet	5.00		68.6	40-140	2.71	25	
n-Tetradecane	3.10	0.10	mg/Kg wet	5.00		62.0	40-140	6.06	25	
n-Triacontane	3.50	0.10	mg/Kg wet	5.00		70.1	40-140	2.97	25	
Naphthalene-aliphatic fraction	ND	0.10	mg/Kg wet	5.00			0-5			
2-Methylnaphthalene-aliphatic fraction	ND	0.10	mg/Kg wet	5.00			0-5			
Surrogate: Chlorooctadecane (COD)	2.88		mg/Kg wet	4.99		57.8	40-140			
Surrogate: o-Terphenyl (OTP)	3.70		mg/Kg wet	5.00		74.0	40-140			
Surrogate: 2-Bromonaphthalene	3.70		mg/Kg wet	5.00		73.9	40-140			
Surrogate: 2-Fluorobiphenyl	4.08		mg/Kg wet	5.00		81.7	40-140			

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QUALITY CONTROL
Petroleum Hydrocarbons Analyses - VPH - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes

Batch B179321 - MA VPH
Blank (B179321-BLK1)

Prepared: 06/15/17 Analyzed: 06/16/17

Unadjusted C5-C8 Aliphatics	ND	100	µg/L							
C5-C8 Aliphatics	ND	100	µg/L							
Unadjusted C9-C12 Aliphatics	ND	100	µg/L							
C9-C12 Aliphatics	ND	100	µg/L							
C9-C10 Aromatics	ND	100	µg/L							
Benzene	ND	1.0	µg/L							
Butylcyclohexane	ND	1.0	µg/L							
Decane	ND	1.0	µg/L							
Ethylbenzene	ND	1.0	µg/L							
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L							
2-Methylpentane	ND	1.0	µg/L							
Naphthalene	ND	5.0	µg/L							
Nonane	ND	1.0	µg/L							
Pentane	ND	1.0	µg/L							
Toluene	ND	1.0	µg/L							
1,2,4-Trimethylbenzene	ND	1.0	µg/L							
2,2,4-Trimethylpentane	ND	1.0	µg/L							
m+p Xylene	ND	2.0	µg/L							
o-Xylene	ND	1.0	µg/L							
Surrogate: 2,5-Dibromotoluene (FID)	38.3		µg/L	40.0		95.7	70-130			
Surrogate: 2,5-Dibromotoluene (PID)	41.1		µg/L	40.0		103	70-130			

LCS (B179321-BS1)

Prepared: 06/15/17 Analyzed: 06/16/17

Benzene	85.9	1.0	µg/L	100		85.9	70-130			
Butylcyclohexane	91.0	1.0	µg/L	100		91.0	70-130			
Decane	97.6	1.0	µg/L	100		97.6	70-130			
Ethylbenzene	93.2	1.0	µg/L	100		93.2	70-130			
Methyl tert-Butyl Ether (MTBE)	96.4	1.0	µg/L	100		96.4	70-130			
2-Methylpentane	91.6	1.0	µg/L	100		91.6	70-130			
Naphthalene	92.3	5.0	µg/L	100		92.3	70-130			
Nonane	96.2	1.0	µg/L	100		96.2	30-130			
Pentane	81.1	1.0	µg/L	100		81.1	70-130			
Toluene	91.8	1.0	µg/L	100		91.8	70-130			
1,2,4-Trimethylbenzene	90.6	1.0	µg/L	100		90.6	70-130			
2,2,4-Trimethylpentane	96.2	1.0	µg/L	100		96.2	70-130			
m+p Xylene	183	2.0	µg/L	200		91.6	70-130			
o-Xylene	92.2	1.0	µg/L	100		92.2	70-130			
Surrogate: 2,5-Dibromotoluene (FID)	40.1		µg/L	40.0		100	70-130			
Surrogate: 2,5-Dibromotoluene (PID)	40.8		µg/L	40.0		102	70-130			

LCS Dup (B179321-BSD1)

Prepared: 06/15/17 Analyzed: 06/16/17

Benzene	80.2	1.0	µg/L	100		80.2	70-130	6.91	25	
Butylcyclohexane	92.0	1.0	µg/L	100		92.0	70-130	1.12	25	
Decane	96.4	1.0	µg/L	100		96.4	70-130	1.16	25	
Ethylbenzene	86.5	1.0	µg/L	100		86.5	70-130	7.40	25	
Methyl tert-Butyl Ether (MTBE)	89.8	1.0	µg/L	100		89.8	70-130	7.17	25	
2-Methylpentane	103	1.0	µg/L	100		103	70-130	11.7	25	
Naphthalene	86.1	5.0	µg/L	100		86.1	70-130	6.98	25	
Nonane	98.6	1.0	µg/L	100		98.6	30-130	2.56	25	
Pentane	91.4	1.0	µg/L	100		91.4	70-130	12.0	25	
Toluene	82.7	1.0	µg/L	100		82.7	70-130	10.5	25	
1,2,4-Trimethylbenzene	82.5	1.0	µg/L	100		82.5	70-130	9.31	25	

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QUALITY CONTROL
Petroleum Hydrocarbons Analyses - VPH - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes

Batch B179321 - MA VPH
LCS Dup (B179321-BSD1)

Prepared: 06/15/17 Analyzed: 06/16/17

2,2,4-Trimethylpentane	107	1.0	µg/L	100		107	70-130	10.8	25	
m+p Xylene	170	2.0	µg/L	200		84.8	70-130	7.70	25	
o-Xylene	84.5	1.0	µg/L	100		84.5	70-130	8.76	25	
Surrogate: 2,5-Dibromotoluene (FID)	31.7		µg/L	40.0		79.2	70-130			
Surrogate: 2,5-Dibromotoluene (PID)	34.0		µg/L	40.0		85.0	70-130			

Batch B179323 - MA VPH
Blank (B179323-BLK1)

Prepared & Analyzed: 06/15/17

Unadjusted C5-C8 Aliphatics	ND	10	mg/Kg wet							
C5-C8 Aliphatics	ND	10	mg/Kg wet							
Unadjusted C9-C12 Aliphatics	ND	10	mg/Kg wet							
C9-C12 Aliphatics	ND	10	mg/Kg wet							
C9-C10 Aromatics	ND	10	mg/Kg wet							
Benzene	ND	0.050	mg/Kg wet							
Butylcyclohexane	ND	0.050	mg/Kg wet							
Decane	ND	0.050	mg/Kg wet							
Ethylbenzene	ND	0.050	mg/Kg wet							
Methyl tert-Butyl Ether (MTBE)	ND	0.050	mg/Kg wet							
2-Methylpentane	ND	0.050	mg/Kg wet							
Naphthalene	ND	0.25	mg/Kg wet							
Nonane	ND	0.050	mg/Kg wet							
Pentane	ND	0.050	mg/Kg wet							
Toluene	ND	0.050	mg/Kg wet							
1,2,4-Trimethylbenzene	ND	0.050	mg/Kg wet							
2,2,4-Trimethylpentane	ND	0.050	mg/Kg wet							
m+p Xylene	ND	0.10	mg/Kg wet							
o-Xylene	ND	0.050	mg/Kg wet							
Surrogate: 2,5-Dibromotoluene (FID)	2.63		mg/Kg wet	3.33		79.0	70-130			
Surrogate: 2,5-Dibromotoluene (PID)	2.72		mg/Kg wet	3.33		81.6	70-130			

LCS (B179323-BS1)

Prepared & Analyzed: 06/15/17

Benzene	0.110	0.0010	mg/Kg wet	0.100		110	70-130			
Butylcyclohexane	0.0908	0.0010	mg/Kg wet	0.100		90.8	70-130			
Decane	0.0966	0.0010	mg/Kg wet	0.100		96.6	70-130			
Ethylbenzene	0.109	0.0010	mg/Kg wet	0.100		109	70-130			
Methyl tert-Butyl Ether (MTBE)	0.104	0.0010	mg/Kg wet	0.100		104	70-130			
2-Methylpentane	0.111	0.0010	mg/Kg wet	0.100		111	70-130			
Naphthalene	0.0977	0.0050	mg/Kg wet	0.100		97.7	70-130			
Nonane	0.0896	0.0010	mg/Kg wet	0.100		89.6	30-130			
Pentane	0.116	0.0010	mg/Kg wet	0.100		116	70-130			
Toluene	0.110	0.0010	mg/Kg wet	0.100		110	70-130			
1,2,4-Trimethylbenzene	0.104	0.0010	mg/Kg wet	0.100		104	70-130			
2,2,4-Trimethylpentane	0.0920	0.0010	mg/Kg wet	0.100		92.0	70-130			
m+p Xylene	0.217	0.0020	mg/Kg wet	0.200		108	70-130			
o-Xylene	0.108	0.0010	mg/Kg wet	0.100		108	70-130			
Surrogate: 2,5-Dibromotoluene (FID)	0.0361		mg/Kg wet	0.0400		90.2	70-130			
Surrogate: 2,5-Dibromotoluene (PID)	0.0362		mg/Kg wet	0.0400		90.4	70-130			

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QUALITY CONTROL
Petroleum Hydrocarbons Analyses - VPH - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B179323 - MA VPH										
LCS Dup (B179323-BSD1)										
Prepared & Analyzed: 06/15/17										
Benzene	0.105	0.0010	mg/Kg wet	0.100		105	70-130	5.10	25	
Butylcyclohexane	0.0877	0.0010	mg/Kg wet	0.100		87.7	70-130	3.51	25	
Decane	0.0940	0.0010	mg/Kg wet	0.100		94.0	70-130	2.69	25	
Ethylbenzene	0.104	0.0010	mg/Kg wet	0.100		104	70-130	4.66	25	
Methyl tert-Butyl Ether (MTBE)	0.100	0.0010	mg/Kg wet	0.100		100	70-130	3.61	25	
2-Methylpentane	0.104	0.0010	mg/Kg wet	0.100		104	70-130	6.34	25	
Naphthalene	0.0981	0.0050	mg/Kg wet	0.100		98.1	70-130	0.391	25	
Nonane	0.0869	0.0010	mg/Kg wet	0.100		86.9	30-130	3.08	25	
Pentane	0.105	0.0010	mg/Kg wet	0.100		105	70-130	10.2	25	
Toluene	0.105	0.0010	mg/Kg wet	0.100		105	70-130	4.82	25	
1,2,4-Trimethylbenzene	0.0994	0.0010	mg/Kg wet	0.100		99.4	70-130	4.65	25	
2,2,4-Trimethylpentane	0.0863	0.0010	mg/Kg wet	0.100		86.3	70-130	6.41	25	
m+p Xylene	0.207	0.0020	mg/Kg wet	0.200		103	70-130	4.90	25	
o-Xylene	0.103	0.0010	mg/Kg wet	0.100		103	70-130	4.86	25	
Surrogate: 2,5-Dibromotoluene (FID)	0.0363		mg/Kg wet	0.0400		90.8	70-130			
Surrogate: 2,5-Dibromotoluene (PID)	0.0366		mg/Kg wet	0.0400		91.5	70-130			

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QUALITY CONTROL
Metals Analyses (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes

Batch B179684 - SW-846 3050B
Blank (B179684-BLK1)

Prepared: 06/20/17 Analyzed: 06/22/17

Antimony	ND	2.5	mg/Kg wet							
Arsenic	ND	2.5	mg/Kg wet							
Beryllium	ND	0.25	mg/Kg wet							
Cadmium	ND	0.25	mg/Kg wet							
Chromium	ND	0.50	mg/Kg wet							
Copper	ND	0.50	mg/Kg wet							
Lead	ND	0.75	mg/Kg wet							
Nickel	ND	0.50	mg/Kg wet							
Selenium	ND	5.0	mg/Kg wet							
Silver	ND	0.50	mg/Kg wet							
Thallium	ND	2.5	mg/Kg wet							
Zinc	ND	1.0	mg/Kg wet							

LCS (B179684-BS1)

Prepared: 06/20/17 Analyzed: 06/22/17

Antimony	66.1	4.9	mg/Kg wet	88.2		75.0	0-210.3			
Arsenic	58.2	4.9	mg/Kg wet	57.0		102	77.8-122.1			
Beryllium	72.7	0.49	mg/Kg wet	67.5		108	82.3-117.7			
Cadmium	77.1	0.49	mg/Kg wet	77.8		99.1	81.9-118.2			
Chromium	66.9	0.97	mg/Kg wet	65.0		103	78.7-120.6			
Copper	62.0	0.97	mg/Kg wet	56.4		110	80.4-119.6			
Lead	82.5	1.5	mg/Kg wet	85.6		96.3	82.4-117.8			
Nickel	60.3	0.97	mg/Kg wet	61.3		98.3	82.2-117.8			
Selenium	78.5	9.7	mg/Kg wet	78.9		99.5	77.1-122.3			
Silver	55.3	0.97	mg/Kg wet	54.2		102	74.3-125.4			
Thallium	182	4.9	mg/Kg wet	178		102	78.2-121.6			
Zinc	197	1.9	mg/Kg wet	198		99.3	79.7-120.8			

LCS Dup (B179684-BSD1)

Prepared: 06/20/17 Analyzed: 06/22/17

Antimony	69.0	5.1	mg/Kg wet	88.2		78.2	0-210.3	4.18	30	
Arsenic	58.3	5.1	mg/Kg wet	57.0		102	77.8-122.1	0.125	30	
Beryllium	72.4	0.51	mg/Kg wet	67.5		107	82.3-117.7	0.409	30	
Cadmium	77.3	0.51	mg/Kg wet	77.8		99.4	81.9-118.2	0.300	30	
Chromium	67.1	1.0	mg/Kg wet	65.0		103	78.7-120.6	0.294	30	
Copper	63.1	1.0	mg/Kg wet	56.4		112	80.4-119.6	1.81	30	
Lead	82.2	1.5	mg/Kg wet	85.6		96.0	82.4-117.8	0.330	30	
Nickel	60.6	1.0	mg/Kg wet	61.3		98.8	82.2-117.8	0.524	30	
Selenium	78.7	10	mg/Kg wet	78.9		99.8	77.1-122.3	0.304	30	
Silver	56.0	1.0	mg/Kg wet	54.2		103	74.3-125.4	1.14	30	
Thallium	183	5.1	mg/Kg wet	178		103	78.2-121.6	0.527	30	
Zinc	196	2.0	mg/Kg wet	198		98.8	79.7-120.8	0.511	30	

MRL Check (B179684-MRL1)

Prepared: 06/20/17 Analyzed: 06/23/17

Lead	1.07	0.75	mg/Kg wet	0.750		142	* 80-120			M-10

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QUALITY CONTROL
Metals Analyses (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes

Batch B179693 - SW-846 7471
Blank (B179693-BLK1)

Prepared: 06/20/17 Analyzed: 06/22/17

Mercury	ND	0.025	mg/Kg wet							

LCS (B179693-BS1)

Prepared: 06/20/17 Analyzed: 06/22/17

Mercury	9.60	1.9	mg/Kg wet	9.36		103	73.7-126.3			

LCS Dup (B179693-BSD1)

Prepared: 06/20/17 Analyzed: 06/22/17

Mercury	9.87	1.9	mg/Kg wet	9.36		105	73.7-126.3	2.75	30	

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QUALITY CONTROL
Metals Analyses (Dissolved) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B179425 - SW-846 7470A Prep										
Blank (B179425-BLK1)				Prepared: 06/16/17 Analyzed: 06/19/17						
Mercury	ND	0.00010	mg/L							
LCS (B179425-BS1)				Prepared: 06/16/17 Analyzed: 06/19/17						
Mercury	0.00204	0.00010	mg/L	0.00200		102	80-120			
LCS Dup (B179425-BSD1)				Prepared: 06/16/17 Analyzed: 06/19/17						
Mercury	0.00200	0.00010	mg/L	0.00200		100	80-120	1.96	20	
Batch B179574 - SW-846 3005A Dissolved										
Blank (B179574-BLK1)				Prepared: 06/19/17 Analyzed: 06/20/17						
Antimony	ND	1.0	µg/L							
Arsenic	ND	0.40	µg/L							
Beryllium	ND	0.40	µg/L							
Cadmium	ND	0.50	µg/L							
Chromium	ND	1.0	µg/L							
Copper	ND	5.0	µg/L							
Lead	ND	1.0	µg/L							
Nickel	ND	5.0	µg/L							
Selenium	ND	5.0	µg/L							
Silver	ND	0.50	µg/L							
Thallium	ND	0.20	µg/L							
Zinc	ND	10	µg/L							
LCS (B179574-BS1)				Prepared: 06/19/17 Analyzed: 06/20/17						
Antimony	269	5.0	µg/L	250		108	80-120			
Arsenic	262	2.0	µg/L	250		105	80-120			
Beryllium	269	2.0	µg/L	250		108	80-120			
Cadmium	260	2.5	µg/L	250		104	80-120			
Chromium	271	5.0	µg/L	250		109	80-120			
Copper	268	25	µg/L	250		107	80-120			
Lead	281	5.0	µg/L	250		112	80-120			
Nickel	267	25	µg/L	250		107	80-120			
Selenium	249	25	µg/L	250		99.5	80-120			
Silver	251	2.5	µg/L	250		100	80-120			
Thallium	263	1.0	µg/L	250		105	80-120			
Zinc	264	50	µg/L	250		105	80-120			
LCS Dup (B179574-BSD1)				Prepared: 06/19/17 Analyzed: 06/20/17						
Antimony	263	5.0	µg/L	250		105	80-120	2.29	20	
Arsenic	254	2.0	µg/L	250		102	80-120	2.90	20	
Beryllium	258	2.0	µg/L	250		103	80-120	4.29	20	
Cadmium	253	2.5	µg/L	250		101	80-120	2.51	20	
Chromium	263	5.0	µg/L	250		105	80-120	3.11	20	
Copper	264	25	µg/L	250		105	80-120	1.76	20	
Lead	261	5.0	µg/L	250		104	80-120	7.43	20	
Nickel	260	25	µg/L	250		104	80-120	2.80	20	
Selenium	243	25	µg/L	250		97.3	80-120	2.23	20	
Silver	247	2.5	µg/L	250		98.9	80-120	1.56	20	
Thallium	250	1.0	µg/L	250		100	80-120	5.14	20	
Zinc	253	50	µg/L	250		101	80-120	3.98	20	

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B179260 - SM21-22 3500 Cr B										
Blank (B179260-BLK1)				Prepared & Analyzed: 06/14/17						
Hexavalent Chromium	ND	0.0040	mg/L							
LCS (B179260-BS1)				Prepared & Analyzed: 06/14/17						
Hexavalent Chromium	0.092	0.0040	mg/L	0.100		92.4	86.6-115			
LCS Dup (B179260-BSD1)				Prepared & Analyzed: 06/14/17						
Hexavalent Chromium	0.092	0.0040	mg/L	0.100		92.4	86.6-115	0.00	6.61	
Batch B179261 - SW-846 9045C										
LCS (B179261-BS1)				Prepared & Analyzed: 06/14/17						
pH	6.05		pH Units	6.00		101	98.5-110			
Duplicate (B179261-DUP1)				Source: 17F0761-04		Prepared & Analyzed: 06/14/17				
pH	5.8		pH Units		5.8			0.00	5	
Batch B179262 - SM2580 A										
Duplicate (B179262-DUP1)				Source: 17F0761-04		Prepared & Analyzed: 06/14/17				
Oxidation/Reduction Potential	92.0		mV		97			5.29	16.7	
Batch B179676 - SW 846 9060										
Blank (B179676-BLK1)				Prepared & Analyzed: 06/19/17						
Total Organic Carbon	ND	100	mg/Kg							
LCS (B179676-BS1)				Prepared & Analyzed: 06/19/17						
Total Organic Carbon	854	100	mg/Kg	750		114	74.8-122			
LCS Dup (B179676-BSD1)				Prepared & Analyzed: 06/19/17						
Total Organic Carbon	673	100	mg/Kg	750		89.7	74.8-122	23.7	26.5	
Duplicate (B179676-DUP1)				Source: 17F0761-06		Prepared & Analyzed: 06/19/17				
Total Organic Carbon	1640	100	mg/Kg		1800			9.36	20	
Matrix Spike (B179676-MS1)				Source: 17F0761-06		Prepared & Analyzed: 06/19/17				
Total Organic Carbon	2110	100	mg/Kg	750	1800	41.1	* 85-115			MS-07
Batch B179724 - SM21-22 2340C										
Blank (B179724-BLK1)				Prepared & Analyzed: 06/20/17						
Hardness	ND	2.0	mg/L							

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B179724 - SM21-22 2340C										
LCS (B179724-BS1)				Prepared & Analyzed: 06/20/17						
Hardness	68	4.0	mg/L	62.2		109	92.6-114			
LCS Dup (B179724-BSD1)				Prepared & Analyzed: 06/20/17						
Hardness	68	4.0	mg/L	62.2		109	92.6-114	0.00	5	
Duplicate (B179724-DUP1)				Source: 17F0761-01		Prepared & Analyzed: 06/20/17				
Hardness	72	2.0	mg/L		72			0.00	5	
Matrix Spike (B179724-MS1)				Source: 17F0761-01		Prepared & Analyzed: 06/20/17				
Hardness	92	2.0	mg/L	20.0	72	100	90-114			
Batch B179738 - Lloyd Kahn Method										
Blank (B179738-BLK1)				Prepared & Analyzed: 06/20/17						
Total Organic Carbon	ND	100	mg/Kg							
LCS (B179738-BS1)				Prepared & Analyzed: 06/20/17						
Total Organic Carbon	734	100	mg/Kg	750		97.9	74.8-122			
LCS Dup (B179738-BSD1)				Prepared & Analyzed: 06/20/17						
Total Organic Carbon	704	100	mg/Kg	750		93.9	74.8-122	4.15	26.5	
Batch B179745 - SW-846 7196A										
Blank (B179745-BLK1)				Prepared: 06/21/17 Analyzed: 06/23/17						
Hexavalent Chromium	ND	0.16	mg/Kg wet							
LCS (B179745-BS1)				Prepared: 06/21/17 Analyzed: 06/23/17						
Hexavalent Chromium	40	2.0	mg/Kg wet	46.1		86.9	80-120			
LCS Dup (B179745-BSD1)				Prepared: 06/21/17 Analyzed: 06/23/17						
Hexavalent Chromium	38	1.8	mg/Kg wet	43.0		88.1	80-120	5.53	20	
Matrix Spike (B179745-MS1)				Source: 17F0761-05		Prepared: 06/21/17 Analyzed: 06/23/17				
Hexavalent Chromium	37	1.0	mg/Kg dry	50.2	0.73	72.2 *	75-125			MS-16
Matrix Spike (B179745-MS2)				Source: 17F0761-05		Prepared: 06/21/17 Analyzed: 06/23/17				
Hexavalent Chromium	43	1.0	mg/Kg dry	50.3	0.73	84.0	75-125			
Matrix Spike (B179745-MS3)				Source: 17F0761-05		Prepared: 06/21/17 Analyzed: 06/23/17				
Hexavalent Chromium	690	20	mg/Kg dry	817	ND	83.9	75-125			

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes

Batch B179745 - SW-846 7196A
Matrix Spike Dup (B179745-MSD1)
Source: 17F0761-05

Prepared: 06/21/17 Analyzed: 06/23/17

Hexavalent Chromium	44	1.0	mg/Kg dry	50.3	0.73	85.2	75-125	16.3	35	

FLAG/QUALIFIER SUMMARY

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
ND	Not Detected
RL	Reporting Limit
DL	Method Detection Limit
MCL	Maximum Contaminant Level
	Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.
	No results have been blank subtracted unless specified in the case narrative section.
L-02	Laboratory fortified blank/laboratory control sample recovery and duplicate recoveries outside of control limits. Data validation is not affected since all results are "not detected" for associated samples in this batch and bias is on the high side.
L-04	Laboratory fortified blank/laboratory control sample recovery and duplicate recovery are outside of control limits. Reported value for this compound is likely to be biased on the low side.
L-07	Either laboratory fortified blank/laboratory control sample or duplicate recovery is outside of control limits, but the other is within limits. RPD between the two LFB/LCS results is within method specified criteria.
L-07A	Either laboratory fortified blank/laboratory control sample or duplicate recovery is outside of control limits, but the other is within limits. RPD outside of control limits. Reduced precision anticipated for any reported result for this compound.
L-14	Compound classified by MA CAM as difficult with acceptable recoveries of 40-160%. Recovery does not meet 70-130% criteria but does meet difficult compound criteria.
M-10	The reporting limit verification for the AIHA lead program is outside of control limits for this element. Any reported result at or near the detection limit may be biased on the high side.
MS-07	Matrix spike recovery is outside of control limits. Analysis is in control based on laboratory fortified blank recovery. Possibility of sample matrix effects that lead to low bias for reported result or non-homogeneous sample aliquot cannot be eliminated.
MS-16	For solid method SW846-7196A, the matrix spike is outside of control limits. pH and ORP results were indicative of reducing conditions. Reanalysis is not required. Analysis is in control based on LCS recoveries.
O-01	Soil/methanol ratio does not meet method specifications. Excess amount of soil. Sample was completely covered with methanol, but with less than the method-specified amount.
O-32	A dilution was performed as part of the standard analytical procedure.
R-05	Laboratory fortified blank duplicate RPD is outside of control limits. Reduced precision is anticipated for any reported value for this compound.
RL-07	Elevated reporting limit based on lowest point in calibration. MA CAM reporting limit not met.
V-05	Continuing calibration did not meet method specifications and was biased on the low side for this compound. Increased uncertainty is associated with the reported value which is likely to be biased on the low side.
V-16	Response factor is less than method specified minimum acceptable value. Reduced precision and accuracy may be associated with reported result.
W-06	Elevated method reporting limit due to intense color of sample

CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
<i>Lloyd Kahn Method in Soil</i>	
Total Organic Carbon	NY,CT,ME,VA,NH
<i>MADEP-EPH-04-1.1 in Soil</i>	
C9-C18 Aliphatics	CT,NC,ME,NH-P
C19-C36 Aliphatics	CT,NC,ME,NH-P
Unadjusted C11-C22 Aromatics	CT,NC,ME,NH-P
C11-C22 Aromatics	CT,NC,ME,NH-P
Acenaphthene	CT,NC,ME,NH-P
Acenaphthylene	CT,NC,ME,NH-P
Anthracene	CT,NC,ME,NH-P
Benzo(a)anthracene	CT,NC,ME,NH-P
Benzo(a)pyrene	CT,NC,ME,NH-P
Benzo(b)fluoranthene	CT,NC,ME,NH-P
Benzo(g,h,i)perylene	CT,NC,ME,NH-P
Benzo(k)fluoranthene	CT,NC,ME,NH-P
Chrysene	CT,NC,ME,NH-P
Dibenz(a,h)anthracene	CT,NC,ME,NH-P
Fluoranthene	CT,NC,ME,NH-P
Fluorene	CT,NC,ME
Indeno(1,2,3-cd)pyrene	CT,NC,ME,NH-P
2-Methylnaphthalene	CT,NC
Naphthalene	CT,NC,ME,NH-P
Phenanthrene	CT,NC,ME,NH-P
Pyrene	CT,NC,ME,NH-P
<i>MADEP-EPH-04-1.1 in Water</i>	
C9-C18 Aliphatics	CT,NC,ME,NH-P
C19-C36 Aliphatics	CT,NC,ME,NH-P
Unadjusted C11-C22 Aromatics	CT,NC,ME,NH-P
C11-C22 Aromatics	CT,NC,ME,NH-P
Acenaphthene	CT,NC,ME,NH-P
Acenaphthylene	CT,NC,ME,NH-P
Anthracene	CT,NC,ME,NH-P
Benzo(a)anthracene	CT,NC,ME,NH-P
Benzo(a)pyrene	CT,NC,ME,NH-P
Benzo(b)fluoranthene	CT,NC,ME,NH-P
Benzo(g,h,i)perylene	CT,NC,ME,NH-P
Benzo(k)fluoranthene	CT,NC,ME,NH-P
Chrysene	CT,NC,ME,NH-P
Dibenz(a,h)anthracene	CT,NC,ME,NH-P
Fluoranthene	CT,NC,ME,NH-P
Fluorene	CT,NC,ME
Indeno(1,2,3-cd)pyrene	CT,NC,ME,NH-P
2-Methylnaphthalene	CT,NC
Naphthalene	CT,NC,ME,NH-P
Phenanthrene	CT,NC,ME,NH-P
Pyrene	CT,NC,ME,NH-P

MADEP-VPH-04-1.1 in Soil

CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
MADEP-VPH-04-1.1 in Soil	
Unadjusted C5-C8 Aliphatics	CT,NC,ME,NH-P
C5-C8 Aliphatics	CT,NC,ME,NH-P
Unadjusted C9-C12 Aliphatics	CT,NC,ME,NH-P
C9-C12 Aliphatics	CT,NC,ME,NH-P
C9-C10 Aromatics	CT,NC,ME,NH-P
Benzene	CT,NC,ME,NH-P
Ethylbenzene	CT,NC,ME,NH-P
Methyl tert-Butyl Ether (MTBE)	CT,NC,ME,NH-P
Naphthalene	CT,NC,ME,NH-P
Toluene	CT,NC,ME,NH-P
m+p Xylene	CT,NC,ME,NH-P
o-Xylene	CT,NC,ME,NH-P
MADEP-VPH-04-1.1 in Water	
Unadjusted C5-C8 Aliphatics	CT,NC,ME,NH-P
C5-C8 Aliphatics	CT,NC,ME,NH-P
Unadjusted C9-C12 Aliphatics	CT,NC,ME,NH-P
C9-C12 Aliphatics	CT,NC,ME,NH-P
C9-C10 Aromatics	CT,NC,ME,NH-P
Benzene	CT,NC,ME,NH-P
Ethylbenzene	CT,NC,ME,NH-P
Methyl tert-Butyl Ether (MTBE)	CT,NC,ME,NH-P
Naphthalene	CT,NC,ME,NH-P
Toluene	CT,NC,ME,NH-P
m+p Xylene	CT,NC,ME,NH-P
o-Xylene	CT,NC,ME,NH-P
SM21-22 2340C in Water	
Hardness	CT,MA,NH,NY,RI,NC,ME,VA
SM21-22 3500 Cr B in Water	
Hexavalent Chromium	NY,CT,NH,RI,ME,VA,NC
SW 846 9060 in Soil	
Total Organic Carbon	NY,CT,ME,VA,NH
SW-846 6010C-D in Soil	
Antimony	CT,NH,NY,ME,VA,NC
Arsenic	CT,NH,NY,ME,VA,NC
Beryllium	CT,NH,NY,ME,VA,NC
Cadmium	CT,NH,NY,ME,VA,NC
Chromium	CT,NH,NY,ME,VA,NC
Copper	CT,NH,NY,ME,VA,NC
Lead	CT,NH,NY,AIHA,ME,VA,NC
Nickel	CT,NH,NY,ME,VA,NC
Selenium	CT,NH,NY,ME,VA,NC
Silver	CT,NH,NY,ME,VA,NC
Thallium	CT,NH,NY,ME,VA,NC
Zinc	CT,NH,NY,ME,VA,NC
SW-846 6020A-B in Water	

CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
SW-846 6020A-B in Water	
Antimony	CT,NH,NY,ME,VA,NC
Arsenic	CT,NH,NY,NC,ME,VA
Beryllium	CT,NH,NY,NC,ME,VA
Cadmium	CT,NH,NY,NC,ME,VA
Chromium	CT,NH,NY,NC,ME,VA
Copper	CT,NH,NY,NC,ME,VA
Lead	CT,NH,NY,NC,ME,VA
Nickel	CT,NH,NY,NC,ME,VA
Selenium	CT,NH,NY,NC,ME,VA
Silver	CT,NC,NH,NY,ME,VA
Thallium	CT,NH,NY,NC,ME,VA
Zinc	CT,NH,NY,NC,ME,VA
SW-846 7196A in Soil	
Hexavalent Chromium	NY,CT,NH,NC,ME,VA
SW-846 7470A in Water	
Mercury	CT,NH,NY,NC,ME,VA
SW-846 7471B in Soil	
Mercury	CT,NH,NY,NC,ME,VA
SW-846 8082A in Soil	
Aroclor-1016	CT,NH,NY,NC,ME,VA
Aroclor-1016 [2C]	CT,NH,NY,NC,ME,VA
Aroclor-1221	CT,NH,NY,NC,ME,VA
Aroclor-1221 [2C]	CT,NH,NY,NC,ME,VA
Aroclor-1232	CT,NH,NY,NC,ME,VA
Aroclor-1232 [2C]	CT,NH,NY,NC,ME,VA
Aroclor-1242	CT,NH,NY,NC,ME,VA
Aroclor-1242 [2C]	CT,NH,NY,NC,ME,VA
Aroclor-1248	CT,NH,NY,NC,ME,VA
Aroclor-1248 [2C]	CT,NH,NY,NC,ME,VA
Aroclor-1254	CT,NH,NY,NC,ME,VA
Aroclor-1254 [2C]	CT,NH,NY,NC,ME,VA
Aroclor-1260	CT,NH,NY,NC,ME,VA
Aroclor-1260 [2C]	CT,NH,NY,NC,ME,VA
Aroclor-1262	NH,NY,NC,ME,VA
Aroclor-1262 [2C]	NH,NY,NC,ME,VA
Aroclor-1268	NH,NY,NC,ME,VA
Aroclor-1268 [2C]	NH,NY,NC,ME,VA
SW-846 8082A in Water	
Aroclor-1016	CT,NH,NY,NC,ME,VA
Aroclor-1016 [2C]	CT,NH,NY,NC,ME,VA
Aroclor-1221	CT,NH,NY,NC,ME,VA
Aroclor-1221 [2C]	CT,NH,NY,NC,ME,VA
Aroclor-1232	CT,NH,NY,NC,ME,VA
Aroclor-1232 [2C]	CT,NH,NY,NC,ME,VA
Aroclor-1242	CT,NH,NY,NC,ME,VA

CERTIFICATIONS
Certified Analyses included in this Report

Analyte	Certifications
<i>SW-846 8082A in Water</i>	
Aroclor-1242 [2C]	CT,NH,NY,NC,ME,VA
Aroclor-1248	CT,NH,NY,NC,ME,VA
Aroclor-1248 [2C]	CT,NH,NY,NC,ME,VA
Aroclor-1254	CT,NH,NY,NC,ME,VA
Aroclor-1254 [2C]	CT,NH,NY,NC,ME,VA
Aroclor-1260	CT,NH,NY,NC,ME,VA
Aroclor-1260 [2C]	CT,NH,NY,NC,ME,VA
Aroclor-1262	NH,NY,NC,ME,VA
Aroclor-1262 [2C]	NH,NY,NC,ME,VA
Aroclor-1268	NH,NY,NC,ME,VA
Aroclor-1268 [2C]	NH,NY,NC,ME,VA
<i>SW-846 8260C in Soil</i>	
Acetone	CT,NH,NY,ME
Benzene	CT,NH,NY,ME
Bromobenzene	NH,NY,ME
Bromochloromethane	NH,NY,ME
Bromodichloromethane	CT,NH,NY,ME
Bromoform	CT,NH,NY,ME
Bromomethane	CT,NH,NY,ME
2-Butanone (MEK)	CT,NH,NY,ME
n-Butylbenzene	CT,NH,NY,ME
sec-Butylbenzene	CT,NH,NY,ME
tert-Butylbenzene	CT,NH,NY,ME
Carbon Disulfide	CT,NH,NY,ME
Carbon Tetrachloride	CT,NH,NY,ME
Chlorobenzene	CT,NH,NY,ME
Chlorodibromomethane	CT,NH,NY,ME
Chloroethane	CT,NH,NY,ME
Chloroform	CT,NH,NY,ME
Chloromethane	CT,NH,NY,ME
2-Chlorotoluene	CT,NH,NY,ME
4-Chlorotoluene	CT,NH,NY,ME
Dibromomethane	NH,NY,ME
1,2-Dichlorobenzene	CT,NH,NY,ME
1,3-Dichlorobenzene	CT,NH,NY,ME
1,4-Dichlorobenzene	CT,NH,NY,ME
Dichlorodifluoromethane (Freon 12)	NY,ME
1,1-Dichloroethane	CT,NH,NY,ME
1,2-Dichloroethane	CT,NH,NY,ME
1,1-Dichloroethylene	CT,NH,NY,ME
cis-1,2-Dichloroethylene	CT,NH,NY,ME
trans-1,2-Dichloroethylene	CT,NH,NY,ME
1,2-Dichloropropane	CT,NH,NY,ME
1,3-Dichloropropane	NH,NY,ME
2,2-Dichloropropane	NH,NY,ME
1,1-Dichloropropene	NH,NY,ME

CERTIFICATIONS
Certified Analyses included in this Report

Analyte	Certifications
<i>SW-846 8260C in Soil</i>	
cis-1,3-Dichloropropene	CT,NH,NY,ME
trans-1,3-Dichloropropene	CT,NH,NY,ME
1,4-Dioxane	NY
Ethylbenzene	CT,NH,NY,ME
Hexachlorobutadiene	NH,NY,ME
2-Hexanone (MBK)	CT,NH,NY,ME
Isopropylbenzene (Cumene)	CT,NH,NY,ME
p-Isopropyltoluene (p-Cymene)	NH,NY
Methyl tert-Butyl Ether (MTBE)	NH,NY
Methylene Chloride	CT,NH,NY,ME
4-Methyl-2-pentanone (MIBK)	CT,NH,NY
Naphthalene	NH,NY,ME
n-Propylbenzene	NH,NY
Styrene	CT,NH,NY,ME
1,1,1,2-Tetrachloroethane	CT,NH,NY,ME
1,1,2,2-Tetrachloroethane	CT,NH,NY,ME
Tetrachloroethylene	CT,NH,NY,ME
Toluene	CT,NH,NY,ME
1,2,3-Trichlorobenzene	NY
1,2,4-Trichlorobenzene	NH,NY,ME
1,1,1-Trichloroethane	CT,NH,NY,ME
1,1,2-Trichloroethane	CT,NH,NY,ME
Trichloroethylene	CT,NH,NY,ME
Trichlorofluoromethane (Freon 11)	CT,NH,NY,ME
1,2,3-Trichloropropane	NH,NY,ME
1,2,4-Trimethylbenzene	CT,NH,NY,ME
1,3,5-Trimethylbenzene	CT,NH,NY,ME
Vinyl Chloride	CT,NH,NY,ME
m+p Xylene	CT,NH,NY,ME
o-Xylene	CT,NH,NY,ME
<i>SW-846 8260C in Water</i>	
Acetone	CT,NH,NY,ME
tert-Amyl Methyl Ether (TAME)	NH,NY,ME
Benzene	CT,NH,NY,ME
Bromobenzene	ME
Bromochloromethane	NH,NY,ME
Bromodichloromethane	CT,NH,NY,ME
Bromoform	CT,NH,NY,ME
Bromomethane	CT,NH,NY,ME
2-Butanone (MEK)	CT,NH,NY,ME
n-Butylbenzene	NY,ME
sec-Butylbenzene	NY,ME
tert-Butylbenzene	NY,ME
tert-Butyl Ethyl Ether (TBEE)	NH,NY,ME
Carbon Disulfide	CT,NH,NY,ME
Carbon Tetrachloride	CT,NH,NY,ME

CERTIFICATIONS
Certified Analyses included in this Report

Analyte	Certifications
<i>SW-846 8260C in Water</i>	
Chlorobenzene	CT,NH,NY,ME
Chlorodibromomethane	CT,NH,NY,ME
Chloroethane	CT,NH,NY,ME
Chloroform	CT,NH,NY,ME
Chloromethane	CT,NH,NY,ME
2-Chlorotoluene	NY,ME
4-Chlorotoluene	NY,ME
Dibromomethane	NH,NY,ME
1,2-Dichlorobenzene	CT,NY,ME
1,3-Dichlorobenzene	CT,NH,NY,ME
1,4-Dichlorobenzene	CT,NH,NY,ME
Dichlorodifluoromethane (Freon 12)	NH,NY,ME
1,1-Dichloroethane	CT,NH,NY,ME
1,2-Dichloroethane	CT,NH,NY,ME
1,1-Dichloroethylene	CT,NH,NY,ME
cis-1,2-Dichloroethylene	NY,ME
trans-1,2-Dichloroethylene	CT,NH,NY,ME
1,2-Dichloropropane	CT,NH,NY,ME
1,3-Dichloropropane	NY,ME
2,2-Dichloropropane	NH,NY,ME
1,1-Dichloropropene	NH,NY,ME
cis-1,3-Dichloropropene	CT,NH,NY,ME
trans-1,3-Dichloropropene	CT,NH,NY,ME
Diisopropyl Ether (DIPE)	NH,NY,ME
Ethylbenzene	CT,NH,NY,ME
Hexachlorobutadiene	CT,NH,NY,ME
2-Hexanone (MBK)	CT,NH,NY,ME
Isopropylbenzene (Cumene)	NY,ME
p-Isopropyltoluene (p-Cymene)	CT,NH,NY,ME
Methyl tert-Butyl Ether (MTBE)	CT,NH,NY,ME
Methylene Chloride	CT,NH,NY,ME
4-Methyl-2-pentanone (MIBK)	CT,NH,NY,ME
Naphthalene	NH,NY,ME
n-Propylbenzene	CT,NH,NY,ME
Styrene	CT,NH,NY,ME
1,1,1,2-Tetrachloroethane	CT,NH,NY,ME
1,1,2,2-Tetrachloroethane	CT,NH,NY,ME
Tetrachloroethylene	CT,NH,NY,ME
Toluene	CT,NH,NY,ME
1,2,3-Trichlorobenzene	NH,NY,ME
1,2,4-Trichlorobenzene	CT,NH,NY,ME
1,1,1-Trichloroethane	CT,NH,NY,ME
1,1,2-Trichloroethane	CT,NH,NY,ME
Trichloroethylene	CT,NH,NY,ME
Trichlorofluoromethane (Freon 11)	CT,NH,NY,ME
1,2,3-Trichloropropane	NH,NY,ME
1,2,4-Trimethylbenzene	NY,ME

CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
SW-846 8260C in Water	
1,3,5-Trimethylbenzene	NY,ME
Vinyl Chloride	CT,NH,NY,ME
m+p Xylene	CT,NH,NY,ME
o-Xylene	CT,NH,NY,ME
SW-846 8270D in Soil	
Acenaphthene	CT,NY,NH,ME,NC,VA
Acenaphthylene	CT,NY,NH,ME,NC,VA
Anthracene	CT,NY,NH,ME,NC,VA
Benzo(a)anthracene	CT,NY,NH,ME,NC,VA
Benzo(a)pyrene	CT,NY,NH,ME,NC,VA
Benzo(b)fluoranthene	CT,NY,NH,ME,NC,VA
Benzo(g,h,i)perylene	CT,NY,NH,ME,NC,VA
Benzo(k)fluoranthene	CT,NY,NH,ME,NC,VA
Chrysene	CT,NY,NH,ME,NC,VA
Dibenz(a,h)anthracene	CT,NY,NH,ME,NC,VA
Fluoranthene	CT,NY,NH,ME,NC,VA
Fluorene	CT,NY,NH,ME,NC,VA
Indeno(1,2,3-cd)pyrene	CT,NY,NH,ME,NC,VA
2-Methylnaphthalene	CT,NY,NH,ME,NC,VA
Naphthalene	CT,NY,NH,ME,NC,VA
Phenanthrene	CT,NY,NH,ME,NC,VA
Pyrene	CT,NY,NH,ME,NC,VA

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

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC - ISO17025:2005	100033	02/1/2018
MA	Massachusetts DEP	M-MA100	06/30/2018
CT	Connecticut Department of Public Health	PH-0567	09/30/2017
NY	New York State Department of Health	10899 NELAP	04/1/2018
NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2018
RI	Rhode Island Department of Health	LAO00112	12/30/2017
NC	North Carolina Div. of Water Quality	652	12/31/2017
NJ	New Jersey DEP	MA007 NELAP	06/30/2018
FL	Florida Department of Health	E871027 NELAP	06/30/2018
VT	Vermont Department of Health Lead Laboratory	LL015036	07/30/2017
ME	State of Maine	2011028	06/9/2019
VA	Commonwealth of Virginia	460217	12/14/2017
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2017
VT-DW	Vermont Department of Health Drinking Water	VT-255716	06/12/2018

MADEP MCP Analytical Method Report Certification Form

Laboratory Name: Con-Test Analytical Laboratory	Project #: 17F0761
Project Location: ADW Seekonk, MA	RTN:

This Form provides certifications for the following data set: [list Laboratory Sample ID Number(s)]
17F0761-01 thru 17F0761-08

Matrices: Soil Water

CAM Protocol (check all that below)

8260 VOC CAM II A (X)	7470/7471 Hg CAM IIIB (X)	MassDEP VPH CAM IV A (X)	8081 Pesticides CAM V B ()	7196 Hex Cr CAM VI B (X)	MassDEP APH CAM IX A ()
8270 SVOC CAM II B (X)	7010 Metals CAM III C ()	MassDEP EPH CAM IV A (X)	8151 Herbicides CAM V C ()	8330 Explosives CAM VIII A ()	TO-15 VOC CAM IX B ()
6010 Metals CAM III A (X)	6020 Metals CAM III D (X)	8082 PCB CAM V A (X)	9014 Total Cyanide/PAC CAM VI A ()	6860 Perchlorate CAM VIII B ()	

Affirmative response to Questions A through F is required for "Presumptive Certainty" status

A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?	☒ Yes ☐ No ¹
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	☒ Yes ☐ No ¹
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	☒ Yes ☐ No ¹
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data?	☒ Yes ☐ No ¹
E a	VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications).	☒ Yes ☐ No ¹
E b	APH and TO-15 Methods only: Was the complete analyte list reported for each method?	☐ Yes ☐ No ¹
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all No responses to Questions A through E)?	☒ Yes ☐ No ¹

A response to questions G, H and I below is required for "Presumptive Certainty" status

G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	☐ Yes ☒ No ¹

Data User Note: Data that achieve "Presumptive Certainty" status may not necessarily meet the data usability and representativeness requirements described in 310 CMR 40. 1056 (2)(k) and WSC-07-350.

H	Were all QC performance standards specified in the CAM protocol(s) achieved?	☐ Yes ☒ No ¹
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	☐ Yes ☒ No ¹

¹ All Negative responses must be addressed in an attached Environmental Laboratory case narrative.

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

Signature: Lisa A. Worthington
Printed Name: Lisa A. Worthington

Position: Project Manager
Date: 06/23/17



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Company Name: Ransom Consulting, Inc.Address: 60 Valley Street, Suite 106, Rocking Hill, CT 06866Phone: 401-433-2160Project Name: ASW SeabankProject Location: Seabank, MAProject Number: 16102023.001Project Manager: Tracey CostaCon-Test Quote Name/Number: Invoice Recipient: PO #: 10093Sampled By: CPS/PTMCon-Test Work Order# Client Sample ID / Description Beginning Date/Time Ending Date/Time Composite Grab Matrix Code Conc Code Requester Turnaround Time Due Date: Rush Approval Required Data Delivery Format: PDF ☒ EXCEL ☒Other: CLP Like Data Pkg Required: ☐Email To: Tracey.Costa@ransominc.comFax To #: Conc Code Matrix Code Grab Composite Matrix Code Conc Code Requester Turnaround Time Due Date: Rush Approval Required Data Delivery Format: PDF ☒ EXCEL ☒Other: CLP Like Data Pkg Required: ☐Email To: Tracey.Costa@ransominc.comFax To #: Conc Code Matrix Code Grab Composite Matrix Code Conc Code Requester Turnaround Time Due Date: Rush Approval Required Data Delivery Format: PDF ☒ EXCEL ☒Other: CLP Like Data Pkg Required: ☐Email To: Tracey.Costa@ransominc.comFax To #: Conc Code Matrix Code Grab Composite Matrix Code Conc Code Requester Turnaround Time Due Date: Rush Approval Required Data Delivery Format: PDF ☒ EXCEL ☒Other: CLP Like Data Pkg Required: ☐Email To: Tracey.Costa@ransominc.comFax To #: Conc Code Matrix Code Grab Composite Matrix Code Conc Code Requester Turnaround Time Due Date: Rush Approval Required Data Delivery Format: PDF ☒ EXCEL ☒Other: CLP Like Data Pkg Required: ☐Email To: Tracey.Costa@ransominc.comFax To #: Conc Code Matrix Code Grab Composite Matrix Code Conc Code Requester Turnaround Time Due Date: Rush Approval Required Data Delivery Format: PDF ☒ EXCEL ☒Other: CLP Like Data Pkg Required: ☐Email To: Tracey.Costa@ransominc.comFax To #: Conc Code Matrix Code Grab Composite Matrix Code Conc Code Requester Turnaround Time Due Date: Rush Approval Required Data Delivery Format: PDF ☒ EXCEL ☒Other: CLP Like Data Pkg Required: ☐Email To: Tracey.Costa@ransominc.comFax To #: Conc Code Matrix Code Grab Composite Matrix Code Conc Code Requester Turnaround Time Due Date: Rush Approval Required Data Delivery Format: PDF ☒ EXCEL ☒Other: CLP Like Data Pkg Required: ☐Email To: Tracey.Costa@ransominc.comFax To #: Conc Code Matrix Code Grab Composite Matrix Code Conc Code Requester Turnaround Time Due Date: Rush Approval Required Data Delivery Format: PDF ☒ EXCEL ☒Other: CLP Like Data Pkg Required: ☐Email To: Tracey.Costa@ransominc.comFax To #: Conc Code Matrix Code Grab Composite Matrix Code Conc Code Requester Turnaround Time Due Date: Rush Approval Required Data Delivery Format: PDF ☒ EXCEL ☒Other: CLP Like Data Pkg Required: ☐Email To: Tracey.Costa@ransominc.comFax To #: Conc Code Matrix Code Grab Composite Matrix Code Conc Code Requester Turnaround Time Due Date: Rush Approval Required Data Delivery Format: PDF ☒ EXCEL ☒Other: CLP Like Data Pkg Required: ☐Email To: Tracey.Costa@ransominc.comFax To #: Conc Code Matrix Code Grab Composite Matrix Code Conc Code Requester Turnaround Time Due Date: Rush Approval Required Data Delivery Format: PDF ☒ EXCEL ☒Other: CLP Like Data Pkg Required: ☐Email To: Tracey.Costa@ransominc.comFax To #: Conc Code Matrix Code Grab Composite Matrix Code Conc Code Requester Turnaround Time Due Date: Rush Approval Required Data Delivery Format: PDF ☒ EXCEL ☒Other: CLP Like Data Pkg Required: ☐Email To: Tracey.Costa@ransominc.comFax To #: Conc Code Matrix Code Grab Composite Matrix Code Conc Code Requester Turnaround Time Due Date: Rush Approval Required Data Delivery Format: PDF ☒ EXCEL ☒Other: CLP Like Data Pkg Required: ☐Email To: Tracey.Costa@ransominc.comFax To #: Conc Code Matrix Code Grab Composite Matrix Code Conc Code Requester Turnaround Time Due Date: Rush Approval Required Data Delivery Format: PDF ☒ EXCEL ☒Other: CLP Like Data Pkg Required: ☐Email To: Tracey.Costa@ransominc.comFax To #: Conc Code Matrix Code Grab Composite Matrix Code Conc Code Requester Turnaround Time Due Date: Rush Approval Required Data Delivery Format: PDF ☒ EXCEL ☒Other: CLP Like Data Pkg Required: ☐Email To: Tracey.Costa@ransominc.comFax To #: Conc Code Matrix Code Grab Composite Matrix Code Conc Code Requester Turnaround Time Due Date: Rush Approval Required Data Delivery Format: PDF ☒ EXCEL ☒Other: CLP Like Data Pkg Required: ☐Email To: Tracey.Costa@ransominc.comFax To #: Conc Code Matrix Code Grab Composite Matrix Code Conc Code Requester Turnaround Time Due Date: Rush Approval Required Data Delivery Format: PDF ☒ EXCEL ☒Other: CLP Like Data Pkg Required: ☐Email To: Tracey.Costa@ransominc.comFax To #: Conc Code Matrix Code Grab Composite Matrix Code Conc Code Requester Turnaround Time Due Date: Rush Approval Required Data Delivery Format: PDF ☒ EXCEL ☒Other: CLP Like Data Pkg Required: ☐Email To: Tracey.Costa@ransominc.comFax To #: Conc Code Matrix Code Grab Composite Matrix Code

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con-test[®]
ANALYTICAL LABORATORY

Doc# 277 Rev 5 2017

Login Sample Receipt Checklist - (Rejection Criteria Listing - Using Acceptance Policy) Any False Statement will be brought to the attention of the Client - State True or False

Client Ransom Consulting
Received By SM Date 6/14/17 Time 1915
How were the samples received? In Cooler T No Cooler _____ On Ice T No Ice _____
Direct From Sample _____ Ambient _____ Melted Ice _____
Were samples within Temperature? 2-6°C T By Gun # 2 Actual Temp - 3.4
By Blank # _____ Actual Temp - _____
Was Custody Seal Intact? T Were Samples Tampered with? F
Was COC Relinquished? T Does Chain Agree With Samples? T
Are there broken/leaking/loose caps on any samples? F
Is COC in ink/ Legible? T Were samples received within holding time? T
Did COC include all pertinent Information? Client? F Analysis? T Sampler Name? T
Project? T ID's? T Collection Dates/Times? T
Are Sample labels filled out and legible? T
Are there Lab to Filters? N/A Who was notified? _____
Are there Rushes? N/A Who was notified? _____
Are there Short Holds? T Who was notified? Irma
Is there enough Volume? T
Is there Headspace where applicable? T MS/MSD? N/A
Proper Media/Containers Used? T splitting samples required? N/A
Were TB's received? N/A On COC? N/A
Do All Samples Have the proper pH? T Acid Base

Vials	#	Containers:	#	#	#
Unp-		1 Liter Amb.	12	1 Liter Plastic	16 oz Amb.
HCL-	12	500 mL Amb.	X	500 mL Plastic	8oz Amb/Clear
Meoh-		250 mL Amb.		250 mL Plastic	4oz Amb/Clear
Bisulfate-		Col./Bacteria		Flashpoint	2oz Amb/Clear
DI-		Other Plastic		Other Glass	Encore
Thiosulfate-		SOC Kit		Plastic Bag	Frozen:
Sulfuric-		Perchlorate		Ziplock	

Unused Media

Vials	#	Containers:	#	#	#
Unp-		1 Liter Amb.		1 Liter Plastic	16 oz Amb.
HCL-		500 mL Amb.		500 mL Plastic	8oz Amb/Clear
Meoh-		250 mL Amb.		250 mL Plastic	4oz Amb/Clear
Bisulfate-		Col./Bacteria		Flashpoint	2oz Amb/Clear
DI-		Other Plastic		Other Glass	Encore
Thiosulfate-		SOC Kit		Plastic Bag	Frozen:
Sulfuric-		Perchlorate		Ziplock	

Comments:

April 10, 2013

Tracey Costa
Nobis Engineering
585 Middlesex Street
Lowell, MA 01851

Project Location: Former Attleboro Dyeworks, Seekonk, MA
Client Job Number:
Project Number: 80081
Laboratory Work Order Number: 13D0093

Enclosed are results of analyses for samples received by the laboratory on April 2, 2013. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Meghan E. Kelley
Project Manager

Nobis Engineering
585 Middlesex Street
Lowell, MA 01851
ATTN: Tracey Costa

REPORT DATE: 4/10/2013

PURCHASE ORDER NUMBER: MO-10-008

PROJECT NUMBER: 80081

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 13D0093

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

PROJECT LOCATION: Former Attleboro Dyeworks, Seekonk, MA

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
D05311	13D0093-01	Soil	80081-NOB301-SED	MADEP-EPH-04-1.1	
				MADEP-VPH-04-1.1	
				SM 2540G	
				SM2580 A	
				SW-846 6010C	
				SW-846 7196A	
				SW-846 7471B	
				SW-846 8082A	
				SW-846 8260C	
				SW-846 8270D	
				SW-846 9045C	
D05312	13D0093-02	Surface Water	80081-NOB302-SW	MADEP-EPH-04-1.1	
				MADEP-VPH-04-1.1	
				SM18-20 4500 H B	
				SM2580 A	
				SW-846 6020A	
				SW-846 7196A	
				SW-846 7470A	
				SW-846 8082A	
				SW-846 8260C	
				SW-846 8270D	
D05313	13D0093-03	Trip Blank Water	80081-TRIPBLANK-SW	SW-846 8260C	

CASE NARRATIVE SUMMARY

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

For method 6010, only PP13 metals, Ba and V results were requested and reported.

For method 6020, only PP13 metals, Ba and V results were requested and reported.

MADEP-VPH-04-1.1**Qualifications:**

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

Analyte & Samples(s) Qualified:**Naphthalene**B070299-BS1, B070300-BS1

Soil/methanol ratio does not meet method specifications. Insufficient amount of soil. Data validation is not affected since a sufficient amount of preservative is present. Detection limits may be above useful levels.

Analyte & Samples(s) Qualified:

13D0093-01[D05311]

SM18-20 4500 H B**Qualifications:**

Holding time was exceeded. pH analysis should be performed immediately at time of sampling. Nominal 15 minute holding time was exceeded.

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

13D0093-02[D05312], B070313-DUP1

SW-846 7196A**Qualifications:**

Elevated method reporting limit due to intense color of sample

Analyte & Samples(s) Qualified:**Hexavalent Chromium**

13D0093-01[D05311]

SW-846 8082A**Qualifications:**

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

Analyte & Samples(s) Qualified:13D0093-01[D05311]

Laboratory fortified blank duplicate RPD is outside of control limits. Reduced precision is anticipated for any reported value for this compound.

Analyte & Samples(s) Qualified:**Aroclor-1016 [2C], Aroclor-1260, Aroclor-1260 [2C]**

13D0093-02[D05312], B070417-BLK1, B070417-BS1, B070417-BSD1

SW-846 8260C**Qualifications:**

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

Analyte & Samples(s) Qualified:**1,2,3-Trichlorobenzene, Naphthalene**

B070389-BSD1

Compound classified by MA CAM as difficult with acceptable recoveries of 40-160%. Recovery does not meet 70-130% criteria but does meet difficult compound criteria.

Analyte & Samples(s) Qualified:**Acetone, Bromomethane, Dichlorodifluoromethane (Freon 12)**

B070389-BS1, B070389-BSD1, B070293-BS1, B070293-BSD1

Laboratory fortified blank duplicate RPD is outside of control limits. Reduced precision is anticipated for any reported value for this compound.

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

13D0093-02[D05312], 13D0093-03[D05313], B070389-BLK1, B070389-BS1, B070389-BSD1

Elevated reporting limit based on lowest point in calibration.
MA CAM reporting limit not met.

Analyte & Samples(s) Qualified:**Carbon Disulfide, Methylene Chloride, tert-Amyl Methyl Ether (TAME), tert-Butyl Ethyl Ether (TBEE)**

13D0093-02[D05312], 13D0093-03[D05313]

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

Analyte & Samples(s) Qualified:**1,2,3-Trichlorobenzene, 1,2-Dibromo-3-chloropropane (DBCP), Naphthalene, Tetrahydrofuran**

13D0093-02[D05312], 13D0093-03[D05313], B070389-BLK1, B070389-BS1, B070389-BSD1, 13D0093-01[D05311], B070293-BLK1, B070293-BS1, B070293-BSD1

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

Analyte & Samples(s) Qualified:**1,2-Dibromo-3-chloropropane (DBCP), 1,4-Dioxane, Tetrahydrofuran**

13D0093-01[D05311], B070293-BLK1, B070293-BS1, B070293-BSD1, 13D0093-02[D05312], 13D0093-03[D05313], B070389-BLK1, B070389-BS1, B070389-BSD1

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

Analyte & Samples(s) Qualified:**Acetone, Bromomethane, Carbon Disulfide, Methylene Chloride**

B070293-BS1, B070293-BSD1, B070389-BS1, B070389-BSD1

SW-846 8270D

Qualifications:

Laboratory fortified blank/laboratory control sample recovery and duplicate recoveries outside of control limits. Data validation is not affected since all results are "not detected" for associated samples in this batch and bias is on the high side.

Analyte & Samples(s) Qualified:**3/4-Methylphenol**

B070279-BS1, B070279-BSD1, B070335-BS1, B070335-BSD1

One associated surrogate standard recovery is outside of control limits but the other(s) is/are within limits. All recoveries are > 10%.

Analyte & Samples(s) Qualified:**2,4,6-Tribromophenol**B070279-BS1, B070279-BSD1

Initial calibration did not meet method specifications. Compound was calibrated using a response factor where %RSD is outside of method specified criteria.

Analyte & Samples(s) Qualified:**2,4-Dinitrophenol**13D0093-01[D05311]

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

Analyte & Samples(s) Qualified:**Bis(2-chloroisopropyl)ether**B070279-BLK1, B070279-BS1, B070279-BSD1

Initial calibration did not meet method specifications. Compound was calibrated using linear regression with correlation coefficient <0.99.

Analyte & Samples(s) Qualified:**2,4-Dinitrotoluene**13D0093-01[D05311]

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

Analyte & Samples(s) Qualified:**2,4-Dinitrophenol, Di-n-octylphthalate**13D0093-01[D05311]

MADEP-EPH-04-1.1

SPE cartridge contamination with non-petroleum compounds, if present, is verified by GC/MS in each method blank per extraction batch and excluded from C11-C22 aromatic range fraction in all samples in the batch. No significant modifications were made to the method.

MADEP-VPH-04-1.1

No significant modifications were made to the method. All VPH samples were received preserved properly at pH <2 in the proper containers as specified on the chain-of-custody form unless specified in this narrative.

No significant modifications were made to the method. All VPH samples were received preserved properly in methanol with a soil/methanol ratio of 1:1 +/- 25% completely covered by methanol in the proper containers specified on the chain-of-custody form unless specified in this narrative.

SW-846 8260C

Laboratory control sample recoveries for required MCP Data Enhancement 8260 compounds were all within limits specified by the method except for "difficult analytes" where recovery control limits of 40-160% are used and/or unless otherwise listed in this narrative. Difficult analytes: MIBK, MEK, acetone, 1,4-dioxane, chloromethane, dichlorodifluoromethane, 2-hexanone, and bromomethane.

SW-846 8270D

Laboratory control sample recoveries for required MCP Data Enhancement 8270 compounds were all within control limits specified by the method, 40-140% for base/neutrals and 30-130% for acids except for "difficult analytes" listed below and/or otherwise listed in this narrative. Difficult analytes limits are 15 and 140%: 2,4-dinitrophenol, 4-chloroaniline, 4-nitrophenol, and phenol.

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

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

A handwritten signature in black ink, appearing to read "Daren J. Damboragian", is written over a light gray rectangular background.

Daren J. Damboragian
Laboratory Manager

Project Location: Former Attleboro Dyeworks, Seek

Sample Description: 80081-NOB301-SED

Work Order: 13D0093

Date Received: 4/2/2013

Field Sample #: D05311

Sampled: 4/2/2013 10:30

Sample ID: 13D0093-01

Sample Matrix: Soil

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	0.25	mg/Kg dry	1		SW-846 8260C	4/3/13	4/3/13 16:37	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.0025	mg/Kg dry	1		SW-846 8260C	4/3/13	4/3/13 16:37	MFF
Benzene	ND	0.0049	mg/Kg dry	1		SW-846 8260C	4/3/13	4/3/13 16:37	MFF
Bromobenzene	ND	0.0049	mg/Kg dry	1		SW-846 8260C	4/3/13	4/3/13 16:37	MFF
Bromochloromethane	ND	0.0049	mg/Kg dry	1		SW-846 8260C	4/3/13	4/3/13 16:37	MFF
Bromodichloromethane	ND	0.0049	mg/Kg dry	1		SW-846 8260C	4/3/13	4/3/13 16:37	MFF
Bromoform	ND	0.0049	mg/Kg dry	1		SW-846 8260C	4/3/13	4/3/13 16:37	MFF
Bromomethane	ND	0.025	mg/Kg dry	1		SW-846 8260C	4/3/13	4/3/13 16:37	MFF
2-Butanone (MEK)	ND	0.099	mg/Kg dry	1		SW-846 8260C	4/3/13	4/3/13 16:37	MFF
n-Butylbenzene	ND	0.0049	mg/Kg dry	1		SW-846 8260C	4/3/13	4/3/13 16:37	MFF
sec-Butylbenzene	ND	0.0049	mg/Kg dry	1		SW-846 8260C	4/3/13	4/3/13 16:37	MFF
tert-Butylbenzene	ND	0.0049	mg/Kg dry	1		SW-846 8260C	4/3/13	4/3/13 16:37	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.0025	mg/Kg dry	1		SW-846 8260C	4/3/13	4/3/13 16:37	MFF
Carbon Disulfide	ND	0.015	mg/Kg dry	1		SW-846 8260C	4/3/13	4/3/13 16:37	MFF
Carbon Tetrachloride	ND	0.0049	mg/Kg dry	1		SW-846 8260C	4/3/13	4/3/13 16:37	MFF
Chlorobenzene	ND	0.0049	mg/Kg dry	1		SW-846 8260C	4/3/13	4/3/13 16:37	MFF
Chlorodibromomethane	ND	0.0025	mg/Kg dry	1		SW-846 8260C	4/3/13	4/3/13 16:37	MFF
Chloroethane	ND	0.025	mg/Kg dry	1		SW-846 8260C	4/3/13	4/3/13 16:37	MFF
Chloroform	ND	0.0099	mg/Kg dry	1		SW-846 8260C	4/3/13	4/3/13 16:37	MFF
Chloromethane	ND	0.025	mg/Kg dry	1		SW-846 8260C	4/3/13	4/3/13 16:37	MFF
2-Chlorotoluene	ND	0.0049	mg/Kg dry	1		SW-846 8260C	4/3/13	4/3/13 16:37	MFF
4-Chlorotoluene	ND	0.0049	mg/Kg dry	1		SW-846 8260C	4/3/13	4/3/13 16:37	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0049	mg/Kg dry	1	V-16	SW-846 8260C	4/3/13	4/3/13 16:37	MFF
1,2-Dibromoethane (EDB)	ND	0.0025	mg/Kg dry	1		SW-846 8260C	4/3/13	4/3/13 16:37	MFF
Dibromomethane	ND	0.0049	mg/Kg dry	1		SW-846 8260C	4/3/13	4/3/13 16:37	MFF
1,2-Dichlorobenzene	ND	0.0049	mg/Kg dry	1		SW-846 8260C	4/3/13	4/3/13 16:37	MFF
1,3-Dichlorobenzene	ND	0.0049	mg/Kg dry	1		SW-846 8260C	4/3/13	4/3/13 16:37	MFF
1,4-Dichlorobenzene	ND	0.0049	mg/Kg dry	1		SW-846 8260C	4/3/13	4/3/13 16:37	MFF
Dichlorodifluoromethane (Freon 12)	ND	0.025	mg/Kg dry	1		SW-846 8260C	4/3/13	4/3/13 16:37	MFF
1,1-Dichloroethane	ND	0.0049	mg/Kg dry	1		SW-846 8260C	4/3/13	4/3/13 16:37	MFF
1,2-Dichloroethane	ND	0.0049	mg/Kg dry	1		SW-846 8260C	4/3/13	4/3/13 16:37	MFF
1,1-Dichloroethylene	ND	0.0099	mg/Kg dry	1		SW-846 8260C	4/3/13	4/3/13 16:37	MFF
cis-1,2-Dichloroethylene	ND	0.0049	mg/Kg dry	1		SW-846 8260C	4/3/13	4/3/13 16:37	MFF
trans-1,2-Dichloroethylene	ND	0.0049	mg/Kg dry	1		SW-846 8260C	4/3/13	4/3/13 16:37	MFF
1,2-Dichloropropane	ND	0.0049	mg/Kg dry	1		SW-846 8260C	4/3/13	4/3/13 16:37	MFF
1,3-Dichloropropane	ND	0.0025	mg/Kg dry	1		SW-846 8260C	4/3/13	4/3/13 16:37	MFF
2,2-Dichloropropane	ND	0.0049	mg/Kg dry	1		SW-846 8260C	4/3/13	4/3/13 16:37	MFF
1,1-Dichloropropene	ND	0.0049	mg/Kg dry	1		SW-846 8260C	4/3/13	4/3/13 16:37	MFF
cis-1,3-Dichloropropene	ND	0.0025	mg/Kg dry	1		SW-846 8260C	4/3/13	4/3/13 16:37	MFF
trans-1,3-Dichloropropene	ND	0.0025	mg/Kg dry	1		SW-846 8260C	4/3/13	4/3/13 16:37	MFF
Diethyl Ether	ND	0.025	mg/Kg dry	1		SW-846 8260C	4/3/13	4/3/13 16:37	MFF
Diisopropyl Ether (DIPE)	ND	0.0025	mg/Kg dry	1		SW-846 8260C	4/3/13	4/3/13 16:37	MFF
1,4-Dioxane	ND	0.25	mg/Kg dry	1	V-16	SW-846 8260C	4/3/13	4/3/13 16:37	MFF
Ethylbenzene	ND	0.0049	mg/Kg dry	1		SW-846 8260C	4/3/13	4/3/13 16:37	MFF

Project Location: Former Attleboro Dyeworks, Seek

Sample Description: 80081-NOB301-SED

Work Order: 13D0093

Date Received: 4/2/2013

Field Sample #: D05311

Sampled: 4/2/2013 10:30

Sample ID: 13D0093-01

Sample Matrix: Soil

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Hexachlorobutadiene	ND	0.0049	mg/Kg dry	1		SW-846 8260C	4/3/13	4/3/13 16:37	MFF
2-Hexanone (MBK)	ND	0.049	mg/Kg dry	1		SW-846 8260C	4/3/13	4/3/13 16:37	MFF
Isopropylbenzene (Cumene)	ND	0.0049	mg/Kg dry	1		SW-846 8260C	4/3/13	4/3/13 16:37	MFF
p-Isopropyltoluene (p-Cymene)	ND	0.0049	mg/Kg dry	1		SW-846 8260C	4/3/13	4/3/13 16:37	MFF
Methyl tert-Butyl Ether (MTBE)	ND	0.0099	mg/Kg dry	1		SW-846 8260C	4/3/13	4/3/13 16:37	MFF
Methylene Chloride	ND	0.025	mg/Kg dry	1		SW-846 8260C	4/3/13	4/3/13 16:37	MFF
4-Methyl-2-pentanone (MIBK)	ND	0.049	mg/Kg dry	1		SW-846 8260C	4/3/13	4/3/13 16:37	MFF
Naphthalene	ND	0.0099	mg/Kg dry	1		SW-846 8260C	4/3/13	4/3/13 16:37	MFF
n-Propylbenzene	ND	0.0049	mg/Kg dry	1		SW-846 8260C	4/3/13	4/3/13 16:37	MFF
Styrene	ND	0.0049	mg/Kg dry	1		SW-846 8260C	4/3/13	4/3/13 16:37	MFF
1,1,1,2-Tetrachloroethane	ND	0.0049	mg/Kg dry	1		SW-846 8260C	4/3/13	4/3/13 16:37	MFF
1,1,2,2-Tetrachloroethane	ND	0.0025	mg/Kg dry	1		SW-846 8260C	4/3/13	4/3/13 16:37	MFF
Tetrachloroethylene	ND	0.0049	mg/Kg dry	1		SW-846 8260C	4/3/13	4/3/13 16:37	MFF
Tetrahydrofuran	ND	0.025	mg/Kg dry	1	V-05, V-16	SW-846 8260C	4/3/13	4/3/13 16:37	MFF
Toluene	ND	0.0049	mg/Kg dry	1		SW-846 8260C	4/3/13	4/3/13 16:37	MFF
1,2,3-Trichlorobenzene	ND	0.0049	mg/Kg dry	1		SW-846 8260C	4/3/13	4/3/13 16:37	MFF
1,2,4-Trichlorobenzene	ND	0.0049	mg/Kg dry	1		SW-846 8260C	4/3/13	4/3/13 16:37	MFF
1,1,1-Trichloroethane	ND	0.0049	mg/Kg dry	1		SW-846 8260C	4/3/13	4/3/13 16:37	MFF
1,1,2-Trichloroethane	ND	0.0049	mg/Kg dry	1		SW-846 8260C	4/3/13	4/3/13 16:37	MFF
Trichloroethylene	ND	0.0049	mg/Kg dry	1		SW-846 8260C	4/3/13	4/3/13 16:37	MFF
Trichlorofluoromethane (Freon 11)	ND	0.025	mg/Kg dry	1		SW-846 8260C	4/3/13	4/3/13 16:37	MFF
1,2,3-Trichloropropane	ND	0.0049	mg/Kg dry	1		SW-846 8260C	4/3/13	4/3/13 16:37	MFF
1,2,4-Trimethylbenzene	ND	0.0049	mg/Kg dry	1		SW-846 8260C	4/3/13	4/3/13 16:37	MFF
1,3,5-Trimethylbenzene	ND	0.0049	mg/Kg dry	1		SW-846 8260C	4/3/13	4/3/13 16:37	MFF
Vinyl Chloride	ND	0.025	mg/Kg dry	1		SW-846 8260C	4/3/13	4/3/13 16:37	MFF
m+p Xylene	ND	0.0099	mg/Kg dry	1		SW-846 8260C	4/3/13	4/3/13 16:37	MFF
o-Xylene	ND	0.0049	mg/Kg dry	1		SW-846 8260C	4/3/13	4/3/13 16:37	MFF

Surrogates	% Recovery	Recovery Limits	Flag
1,2-Dichloroethane-d4	106	70-130	4/3/13 16:37
Toluene-d8	96.1	70-130	4/3/13 16:37
4-Bromofluorobenzene	85.1	70-130	4/3/13 16:37

Project Location: Former Attleboro Dyeworks, Seek

Sample Description: 80081-NOB301-SED

Work Order: 13D0093

Date Received: 4/2/2013

Field Sample #: D05311

Sampled: 4/2/2013 10:30

Sample ID: 13D0093-01

Sample Matrix: Soil

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Acenaphthene	ND	0.28	mg/Kg dry	1		SW-846 8270D	4/3/13	4/6/13 20:13	CMR
Acenaphthylene	ND	0.28	mg/Kg dry	1		SW-846 8270D	4/3/13	4/6/13 20:13	CMR
Acetophenone	ND	0.56	mg/Kg dry	1		SW-846 8270D	4/3/13	4/6/13 20:13	CMR
Aniline	ND	0.56	mg/Kg dry	1		SW-846 8270D	4/3/13	4/6/13 20:13	CMR
Bis(2-chloroethoxy)methane	ND	0.56	mg/Kg dry	1		SW-846 8270D	4/3/13	4/6/13 20:13	CMR
Bis(2-chloroethyl)ether	ND	0.56	mg/Kg dry	1		SW-846 8270D	4/3/13	4/6/13 20:13	CMR
Bis(2-chloroisopropyl)ether	ND	0.56	mg/Kg dry	1		SW-846 8270D	4/3/13	4/6/13 20:13	CMR
Bis(2-Ethylhexyl)phthalate	ND	0.56	mg/Kg dry	1		SW-846 8270D	4/3/13	4/6/13 20:13	CMR
4-Bromophenylphenylether	ND	0.56	mg/Kg dry	1		SW-846 8270D	4/3/13	4/6/13 20:13	CMR
Butylbenzylphthalate	ND	1.1	mg/Kg dry	1		SW-846 8270D	4/3/13	4/6/13 20:13	CMR
4-Chloroaniline	ND	1.1	mg/Kg dry	1		SW-846 8270D	4/3/13	4/6/13 20:13	CMR
2-Chloronaphthalene	ND	0.56	mg/Kg dry	1		SW-846 8270D	4/3/13	4/6/13 20:13	CMR
2-Chlorophenol	ND	0.56	mg/Kg dry	1		SW-846 8270D	4/3/13	4/6/13 20:13	CMR
Dibenzofuran	ND	0.56	mg/Kg dry	1		SW-846 8270D	4/3/13	4/6/13 20:13	CMR
Di-n-butylphthalate	ND	0.56	mg/Kg dry	1		SW-846 8270D	4/3/13	4/6/13 20:13	CMR
1,2-Dichlorobenzene	ND	0.56	mg/Kg dry	1		SW-846 8270D	4/3/13	4/6/13 20:13	CMR
1,3-Dichlorobenzene	ND	0.56	mg/Kg dry	1		SW-846 8270D	4/3/13	4/6/13 20:13	CMR
1,4-Dichlorobenzene	ND	0.56	mg/Kg dry	1		SW-846 8270D	4/3/13	4/6/13 20:13	CMR
3,3-Dichlorobenzidine	ND	0.28	mg/Kg dry	1		SW-846 8270D	4/3/13	4/6/13 20:13	CMR
2,4-Dichlorophenol	ND	0.56	mg/Kg dry	1		SW-846 8270D	4/3/13	4/6/13 20:13	CMR
Diethylphthalate	ND	0.56	mg/Kg dry	1		SW-846 8270D	4/3/13	4/6/13 20:13	CMR
2,4-Dimethylphenol	ND	0.56	mg/Kg dry	1		SW-846 8270D	4/3/13	4/6/13 20:13	CMR
Dimethylphthalate	ND	1.1	mg/Kg dry	1		SW-846 8270D	4/3/13	4/6/13 20:13	CMR
2,4-Dinitrophenol	ND	1.1	mg/Kg dry	1	V-04, V-20	SW-846 8270D	4/3/13	4/6/13 20:13	CMR
2,4-Dinitrotoluene	ND	0.56	mg/Kg dry	1	V-19	SW-846 8270D	4/3/13	4/6/13 20:13	CMR
2,6-Dinitrotoluene	ND	0.56	mg/Kg dry	1		SW-846 8270D	4/3/13	4/6/13 20:13	CMR
Di-n-octylphthalate	ND	1.1	mg/Kg dry	1	V-20	SW-846 8270D	4/3/13	4/6/13 20:13	CMR
1,2-Diphenylhydrazine (as Azobenzene)	ND	0.56	mg/Kg dry	1		SW-846 8270D	4/3/13	4/6/13 20:13	CMR
Hexachlorobenzene	ND	0.56	mg/Kg dry	1		SW-846 8270D	4/3/13	4/6/13 20:13	CMR
Hexachlorobutadiene	ND	0.56	mg/Kg dry	1		SW-846 8270D	4/3/13	4/6/13 20:13	CMR
Hexachloroethane	ND	0.56	mg/Kg dry	1		SW-846 8270D	4/3/13	4/6/13 20:13	CMR
Isophorone	ND	0.56	mg/Kg dry	1		SW-846 8270D	4/3/13	4/6/13 20:13	CMR
2-Methylphenol	ND	0.56	mg/Kg dry	1		SW-846 8270D	4/3/13	4/6/13 20:13	CMR
3/4-Methylphenol	ND	0.56	mg/Kg dry	1		SW-846 8270D	4/3/13	4/6/13 20:13	CMR
Nitrobenzene	ND	0.56	mg/Kg dry	1		SW-846 8270D	4/3/13	4/6/13 20:13	CMR
2-Nitrophenol	ND	0.56	mg/Kg dry	1		SW-846 8270D	4/3/13	4/6/13 20:13	CMR
4-Nitrophenol	ND	1.1	mg/Kg dry	1		SW-846 8270D	4/3/13	4/6/13 20:13	CMR
Pentachlorophenol	ND	0.56	mg/Kg dry	1		SW-846 8270D	4/3/13	4/6/13 20:13	CMR
Phenol	ND	0.56	mg/Kg dry	1		SW-846 8270D	4/3/13	4/6/13 20:13	CMR
1,2,4-Trichlorobenzene	ND	0.56	mg/Kg dry	1		SW-846 8270D	4/3/13	4/6/13 20:13	CMR
2,4,5-Trichlorophenol	ND	0.56	mg/Kg dry	1		SW-846 8270D	4/3/13	4/6/13 20:13	CMR
2,4,6-Trichlorophenol	ND	0.56	mg/Kg dry	1		SW-846 8270D	4/3/13	4/6/13 20:13	CMR
Surrogates	% Recovery	Recovery Limits			Flag				
2-Fluorophenol	66.9	30-130						4/6/13 20:13	

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

Project Location: Former Attleboro Dyeworks, Seek

Sample Description: 80081-NOB301-SED

Work Order: 13D0093

Date Received: 4/2/2013

Field Sample #: D05311

Sampled: 4/2/2013 10:30

Sample ID: 13D0093-01

Sample Matrix: Soil

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Surrogates		% Recovery	Recovery Limits		Flag				
Phenol-d6		68.0	30-130					4/6/13 20:13	
Nitrobenzene-d5		75.7	30-130					4/6/13 20:13	
2-Fluorobiphenyl		78.5	30-130					4/6/13 20:13	
2,4,6-Tribromophenol		91.9	30-130					4/6/13 20:13	
p-Terphenyl-d14		70.0	30-130					4/6/13 20:13	

Project Location: Former Attleboro Dyeworks, Seek

Sample Description: 80081-NOB301-SED

Work Order: 13D0093

Date Received: 4/2/2013

Field Sample #: D05311

Sampled: 4/2/2013 10:30

Sample ID: 13D0093-01

Sample Matrix: Soil

Sample Flags: O-32

Polychlorinated Biphenyls By GC/ECD

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.16	mg/Kg dry	5		SW-846 8082A	4/3/13	4/4/13 11:54	MJC
Aroclor-1221 [1]	ND	0.16	mg/Kg dry	5		SW-846 8082A	4/3/13	4/4/13 11:54	MJC
Aroclor-1232 [1]	ND	0.16	mg/Kg dry	5		SW-846 8082A	4/3/13	4/4/13 11:54	MJC
Aroclor-1242 [1]	ND	0.16	mg/Kg dry	5		SW-846 8082A	4/3/13	4/4/13 11:54	MJC
Aroclor-1248 [1]	ND	0.16	mg/Kg dry	5		SW-846 8082A	4/3/13	4/4/13 11:54	MJC
Aroclor-1254 [1]	ND	0.16	mg/Kg dry	5		SW-846 8082A	4/3/13	4/4/13 11:54	MJC
Aroclor-1260 [1]	ND	0.16	mg/Kg dry	5		SW-846 8082A	4/3/13	4/4/13 11:54	MJC
Aroclor-1262 [1]	ND	0.16	mg/Kg dry	5		SW-846 8082A	4/3/13	4/4/13 11:54	MJC
Aroclor-1268 [1]	ND	0.16	mg/Kg dry	5		SW-846 8082A	4/3/13	4/4/13 11:54	MJC
Surrogates	% Recovery	Recovery Limits	Flag						
Decachlorobiphenyl [1]	65.7	30-150							
Decachlorobiphenyl [2]	63.6	30-150							
Tetrachloro-m-xylene [1]	61.3	30-150							
Tetrachloro-m-xylene [2]	61.9	30-150							

Project Location: Former Attleboro Dyeworks, Seek

Sample Description: 80081-NOB301-SED

Work Order: 13D0093

Date Received: 4/2/2013

Field Sample #: D05311

Sampled: 4/2/2013 10:30

Sample ID: 13D0093-01

Sample Matrix: Soil

Petroleum Hydrocarbons Analyses - EPH

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
C9-C18 Aliphatics	33	16	mg/Kg dry	1		MADEP-EPH-04-1.1	4/3/13	4/4/13 17:29	SCS
C19-C36 Aliphatics	360	82	mg/Kg dry	5		MADEP-EPH-04-1.1	4/3/13	4/5/13 12:36	SCS
Unadjusted C11-C22 Aromatics	160	16	mg/Kg dry	1		MADEP-EPH-04-1.1	4/3/13	4/4/13 17:29	SCS
C11-C22 Aromatics	160	16	mg/Kg dry	1		MADEP-EPH-04-1.1	4/3/13	4/4/13 17:29	SCS
Acenaphthene	ND	0.16	mg/Kg dry	1		MADEP-EPH-04-1.1	4/3/13	4/4/13 17:29	SCS
Acenaphthylene	ND	0.16	mg/Kg dry	1		MADEP-EPH-04-1.1	4/3/13	4/4/13 17:29	SCS
Anthracene	ND	0.16	mg/Kg dry	1		MADEP-EPH-04-1.1	4/3/13	4/4/13 17:29	SCS
Benzo(a)anthracene	0.19	0.16	mg/Kg dry	1		MADEP-EPH-04-1.1	4/3/13	4/4/13 17:29	SCS
Benzo(a)pyrene	ND	0.16	mg/Kg dry	1		MADEP-EPH-04-1.1	4/3/13	4/4/13 17:29	SCS
Benzo(b)fluoranthene	0.37	0.16	mg/Kg dry	1		MADEP-EPH-04-1.1	4/3/13	4/4/13 17:29	SCS
Benzo(g,h,i)perylene	0.47	0.16	mg/Kg dry	1		MADEP-EPH-04-1.1	4/3/13	4/4/13 17:29	SCS
Benzo(k)fluoranthene	ND	0.16	mg/Kg dry	1		MADEP-EPH-04-1.1	4/3/13	4/4/13 17:29	SCS
Chrysene	0.33	0.16	mg/Kg dry	1		MADEP-EPH-04-1.1	4/3/13	4/4/13 17:29	SCS
Dibenz(a,h)anthracene	ND	0.16	mg/Kg dry	1		MADEP-EPH-04-1.1	4/3/13	4/4/13 17:29	SCS
Fluoranthene	0.59	0.16	mg/Kg dry	1		MADEP-EPH-04-1.1	4/3/13	4/4/13 17:29	SCS
Fluorene	ND	0.16	mg/Kg dry	1		MADEP-EPH-04-1.1	4/3/13	4/4/13 17:29	SCS
Indeno(1,2,3-cd)pyrene	0.48	0.16	mg/Kg dry	1		MADEP-EPH-04-1.1	4/3/13	4/4/13 17:29	SCS
2-Methylnaphthalene	ND	0.16	mg/Kg dry	1		MADEP-EPH-04-1.1	4/3/13	4/4/13 17:29	SCS
Naphthalene	ND	0.16	mg/Kg dry	1		MADEP-EPH-04-1.1	4/3/13	4/4/13 17:29	SCS
Phenanthrene	0.26	0.16	mg/Kg dry	1		MADEP-EPH-04-1.1	4/3/13	4/4/13 17:29	SCS
Pyrene	0.54	0.16	mg/Kg dry	1		MADEP-EPH-04-1.1	4/3/13	4/4/13 17:29	SCS

Surrogates	% Recovery	Recovery Limits	Flag
Chlorooctadecane (COD)	66.7	40-140	
o-Terphenyl (OTP)	62.2	40-140	
2-Bromonaphthalene	76.0	40-140	
2-Fluorobiphenyl	82.4	40-140	

Project Location: Former Attleboro Dyeworks, Seek

Sample Description: 80081-NOB301-SED

Work Order: 13D0093

Date Received: 4/2/2013

Field Sample #: D05311

Sampled: 4/2/2013 10:30

Sample ID: 13D0093-01

Sample Matrix: Soil

Sample Flags: O-02

Petroleum Hydrocarbons Analyses - VPH

Soil/Methanol Preservation Ratio: 0.61

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Unadjusted C5-C8 Aliphatics	ND	34	mg/Kg dry	1		MADEP-VPH-04-1.1	4/3/13	4/4/13 0:54	EEH
C5-C8 Aliphatics	ND	34	mg/Kg dry	1		MADEP-VPH-04-1.1	4/3/13	4/4/13 0:54	EEH
Unadjusted C9-C12 Aliphatics	ND	34	mg/Kg dry	1		MADEP-VPH-04-1.1	4/3/13	4/4/13 0:54	EEH
C9-C12 Aliphatics	ND	34	mg/Kg dry	1		MADEP-VPH-04-1.1	4/3/13	4/4/13 0:54	EEH
C9-C10 Aromatics	ND	34	mg/Kg dry	1		MADEP-VPH-04-1.1	4/3/13	4/4/13 0:54	EEH
Benzene	ND	0.17	mg/Kg dry	1		MADEP-VPH-04-1.1	4/3/13	4/4/13 0:54	EEH
Ethylbenzene	ND	0.17	mg/Kg dry	1		MADEP-VPH-04-1.1	4/3/13	4/4/13 0:54	EEH
Methyl tert-Butyl Ether (MTBE)	ND	0.17	mg/Kg dry	1		MADEP-VPH-04-1.1	4/3/13	4/4/13 0:54	EEH
Naphthalene	ND	0.84	mg/Kg dry	1		MADEP-VPH-04-1.1	4/3/13	4/4/13 0:54	EEH
Toluene	ND	0.17	mg/Kg dry	1		MADEP-VPH-04-1.1	4/3/13	4/4/13 0:54	EEH
m+p Xylene	ND	0.34	mg/Kg dry	1		MADEP-VPH-04-1.1	4/3/13	4/4/13 0:54	EEH
o-Xylene	ND	0.17	mg/Kg dry	1		MADEP-VPH-04-1.1	4/3/13	4/4/13 0:54	EEH
Surrogates	% Recovery	Recovery Limits	Flag						
2,5-Dibromotoluene (FID)	106	70-130							
2,5-Dibromotoluene (PID)	109	70-130							

Project Location: Former Attleboro Dyeworks, Seek

Sample Description: 80081-NOB301-SED

Work Order: 13D0093

Date Received: 4/2/2013

Field Sample #: D05311

Sampled: 4/2/2013 10:30

Sample ID: 13D0093-01

Sample Matrix: Soil

Metals Analyses (Total)

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Antimony	14	4.0	mg/Kg dry	1		SW-846 6010C	4/3/13	4/3/13 21:28	OP
Arsenic	ND	4.0	mg/Kg dry	1		SW-846 6010C	4/3/13	4/3/13 21:28	OP
Barium	26	4.0	mg/Kg dry	1		SW-846 6010C	4/3/13	4/3/13 21:28	OP
Beryllium	ND	0.40	mg/Kg dry	1		SW-846 6010C	4/3/13	4/3/13 21:28	OP
Cadmium	1.7	0.40	mg/Kg dry	1		SW-846 6010C	4/3/13	4/3/13 21:28	OP
Chromium	53	0.81	mg/Kg dry	1		SW-846 6010C	4/3/13	4/3/13 21:28	OP
Copper	450	0.81	mg/Kg dry	1		SW-846 6010C	4/3/13	4/3/13 21:28	OP
Lead	54	1.2	mg/Kg dry	1		SW-846 6010C	4/3/13	4/3/13 21:28	OP
Mercury	0.64	0.040	mg/Kg dry	1		SW-846 7471B	4/4/13	4/4/13 15:06	SAJ
Nickel	79	0.81	mg/Kg dry	1		SW-846 6010C	4/3/13	4/3/13 21:28	OP
Selenium	ND	8.1	mg/Kg dry	1		SW-846 6010C	4/3/13	4/3/13 21:28	OP
Silver	ND	0.81	mg/Kg dry	1		SW-846 6010C	4/3/13	4/3/13 21:28	OP
Thallium	ND	4.0	mg/Kg dry	1		SW-846 6010C	4/3/13	4/5/13 20:50	OP
Vanadium	160	1.6	mg/Kg dry	1		SW-846 6010C	4/3/13	4/3/13 21:28	OP
Zinc	210	1.6	mg/Kg dry	1		SW-846 6010C	4/3/13	4/3/13 21:28	OP

Project Location: Former Attleboro Dyeworks, Seek

Sample Description: 80081-NOB301-SED

Work Order: 13D0093

Date Received: 4/2/2013

Field Sample #: D05311

Sampled: 4/2/2013 10:30

Sample ID: 13D0093-01

Sample Matrix: Soil

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

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Hexavalent Chromium	ND	1.3	mg/Kg dry	5	W-06	SW-846 7196A	4/10/13	4/10/13 11:00	LL
Oxidation/Reduction Potential	140		mV	1		SM2580 A	4/3/13	4/3/13 8:15	LL
pH @19.3°C	5.9		pH Units	1		SW-846 9045C	4/3/13	4/3/13 8:10	LL
% Solids	60.3		% Wt	1		SM 2540G	4/3/13	4/4/13 8:56	WAL

Project Location: Former Attleboro Dyeworks, Seek

Sample Description: 80081-NOB302-SW

Work Order: 13D0093

Date Received: 4/2/2013

Field Sample #: D05312

Sampled: 4/2/2013 09:45

Sample ID: 13D0093-02

Sample Matrix: Surface Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	10	µg/L	1		SW-846 8260C	4/4/13	4/4/13 23:49	EEH
tert-Amyl Methyl Ether (TAME)	ND	5.0	µg/L	1	RL-07	SW-846 8260C	4/4/13	4/4/13 23:49	EEH
Benzene	ND	1.0	µg/L	1		SW-846 8260C	4/4/13	4/4/13 23:49	EEH
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260C	4/4/13	4/4/13 23:49	EEH
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260C	4/4/13	4/4/13 23:49	EEH
Bromodichloromethane	ND	1.0	µg/L	1		SW-846 8260C	4/4/13	4/4/13 23:49	EEH
Bromoform	ND	1.0	µg/L	1		SW-846 8260C	4/4/13	4/4/13 23:49	EEH
Bromomethane	ND	2.0	µg/L	1	R-05	SW-846 8260C	4/4/13	4/4/13 23:49	EEH
2-Butanone (MEK)	ND	10	µg/L	1		SW-846 8260C	4/4/13	4/4/13 23:49	EEH
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	4/4/13	4/4/13 23:49	EEH
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	4/4/13	4/4/13 23:49	EEH
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	4/4/13	4/4/13 23:49	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	5.0	µg/L	1	RL-07	SW-846 8260C	4/4/13	4/4/13 23:49	EEH
Carbon Disulfide	ND	5.0	µg/L	1	RL-07	SW-846 8260C	4/4/13	4/4/13 23:49	EEH
Carbon Tetrachloride	ND	1.0	µg/L	1		SW-846 8260C	4/4/13	4/4/13 23:49	EEH
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	4/4/13	4/4/13 23:49	EEH
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260C	4/4/13	4/4/13 23:49	EEH
Chloroethane	ND	2.0	µg/L	1		SW-846 8260C	4/4/13	4/4/13 23:49	EEH
Chloroform	ND	2.0	µg/L	1		SW-846 8260C	4/4/13	4/4/13 23:49	EEH
Chloromethane	ND	2.0	µg/L	1		SW-846 8260C	4/4/13	4/4/13 23:49	EEH
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	4/4/13	4/4/13 23:49	EEH
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	4/4/13	4/4/13 23:49	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	2.0	µg/L	1	V-05	SW-846 8260C	4/4/13	4/4/13 23:49	EEH
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260C	4/4/13	4/4/13 23:49	EEH
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260C	4/4/13	4/4/13 23:49	EEH
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	4/4/13	4/4/13 23:49	EEH
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	4/4/13	4/4/13 23:49	EEH
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	4/4/13	4/4/13 23:49	EEH
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1		SW-846 8260C	4/4/13	4/4/13 23:49	EEH
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	4/4/13	4/4/13 23:49	EEH
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	4/4/13	4/4/13 23:49	EEH
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	4/4/13	4/4/13 23:49	EEH
cis-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	4/4/13	4/4/13 23:49	EEH
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	4/4/13	4/4/13 23:49	EEH
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	4/4/13	4/4/13 23:49	EEH
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260C	4/4/13	4/4/13 23:49	EEH
2,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	4/4/13	4/4/13 23:49	EEH
1,1-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	4/4/13	4/4/13 23:49	EEH
cis-1,3-Dichloropropene	ND	0.40	µg/L	1		SW-846 8260C	4/4/13	4/4/13 23:49	EEH
trans-1,3-Dichloropropene	ND	0.40	µg/L	1		SW-846 8260C	4/4/13	4/4/13 23:49	EEH
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260C	4/4/13	4/4/13 23:49	EEH
Diisopropyl Ether (DIPE)	ND	0.50	µg/L	1		SW-846 8260C	4/4/13	4/4/13 23:49	EEH
1,4-Dioxane	ND	50	µg/L	1	V-16	SW-846 8260C	4/4/13	4/4/13 23:49	EEH
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	4/4/13	4/4/13 23:49	EEH

Project Location: Former Attleboro Dyeworks, Seek

Sample Description: 80081-NOB302-SW

Work Order: 13D0093

Date Received: 4/2/2013

Field Sample #: D05312

Sampled: 4/2/2013 09:45

Sample ID: 13D0093-02

Sample Matrix: Surface Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Hexachlorobutadiene	ND	0.50	µg/L	1		SW-846 8260C	4/4/13	4/4/13 23:49	EEH
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260C	4/4/13	4/4/13 23:49	EEH
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260C	4/4/13	4/4/13 23:49	EEH
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260C	4/4/13	4/4/13 23:49	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260C	4/4/13	4/4/13 23:49	EEH
Methylene Chloride	ND	5.0	µg/L	1	RL-07	SW-846 8260C	4/4/13	4/4/13 23:49	EEH
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260C	4/4/13	4/4/13 23:49	EEH
Naphthalene	ND	2.0	µg/L	1	V-05	SW-846 8260C	4/4/13	4/4/13 23:49	EEH
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260C	4/4/13	4/4/13 23:49	EEH
Styrene	ND	1.0	µg/L	1		SW-846 8260C	4/4/13	4/4/13 23:49	EEH
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1		SW-846 8260C	4/4/13	4/4/13 23:49	EEH
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260C	4/4/13	4/4/13 23:49	EEH
Tetrachloroethylene	ND	1.0	µg/L	1		SW-846 8260C	4/4/13	4/4/13 23:49	EEH
Tetrahydrofuran	ND	2.0	µg/L	1		SW-846 8260C	4/4/13	4/4/13 23:49	EEH
Toluene	ND	1.0	µg/L	1		SW-846 8260C	4/4/13	4/4/13 23:49	EEH
1,2,3-Trichlorobenzene	ND	2.0	µg/L	1	V-05	SW-846 8260C	4/4/13	4/4/13 23:49	EEH
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	4/4/13	4/4/13 23:49	EEH
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	4/4/13	4/4/13 23:49	EEH
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	4/4/13	4/4/13 23:49	EEH
Trichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	4/4/13	4/4/13 23:49	EEH
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260C	4/4/13	4/4/13 23:49	EEH
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260C	4/4/13	4/4/13 23:49	EEH
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	4/4/13	4/4/13 23:49	EEH
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	4/4/13	4/4/13 23:49	EEH
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260C	4/4/13	4/4/13 23:49	EEH
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260C	4/4/13	4/4/13 23:49	EEH
o-Xylene	ND	1.0	µg/L	1		SW-846 8260C	4/4/13	4/4/13 23:49	EEH

Surrogates	% Recovery	Recovery Limits	Flag
1,2-Dichloroethane-d4	98.8	70-130	
Toluene-d8	102	70-130	
4-Bromofluorobenzene	99.7	70-130	

Project Location: Former Attleboro Dyeworks, Seek

Sample Description: 80081-NOB302-SW

Work Order: 13D0093

Date Received: 4/2/2013

Field Sample #: D05312

Sampled: 4/2/2013 09:45

Sample ID: 13D0093-02

Sample Matrix: Surface Water

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Acenaphthene (low)	ND	0.30	µg/L	1		SW-846 8270D	4/3/13	4/5/13 12:44	CJM
Acenaphthylene (low)	ND	0.30	µg/L	1		SW-846 8270D	4/3/13	4/5/13 12:44	CJM
Acetophenone	ND	10	µg/L	1		SW-846 8270D	4/3/13	4/8/13 13:15	CMR
Aniline	ND	5.0	µg/L	1		SW-846 8270D	4/3/13	4/8/13 13:15	CMR
Anthracene (low)	ND	0.20	µg/L	1		SW-846 8270D	4/3/13	4/5/13 12:44	CJM
Benzo(a)anthracene (low)	ND	0.050	µg/L	1		SW-846 8270D	4/3/13	4/5/13 12:44	CJM
Benzo(a)pyrene (low)	ND	0.10	µg/L	1		SW-846 8270D	4/3/13	4/5/13 12:44	CJM
Benzo(b)fluoranthene (low)	ND	0.050	µg/L	1		SW-846 8270D	4/3/13	4/5/13 12:44	CJM
Benzo(g,h,i)perylene (low)	ND	0.50	µg/L	1		SW-846 8270D	4/3/13	4/5/13 12:44	CJM
Benzo(k)fluoranthene (low)	ND	0.20	µg/L	1		SW-846 8270D	4/3/13	4/5/13 12:44	CJM
Bis(2-chloroethoxy)methane	ND	10	µg/L	1		SW-846 8270D	4/3/13	4/8/13 13:15	CMR
Bis(2-chloroethyl)ether	ND	10	µg/L	1		SW-846 8270D	4/3/13	4/8/13 13:15	CMR
Bis(2-chloroisopropyl)ether	ND	10	µg/L	1		SW-846 8270D	4/3/13	4/8/13 13:15	CMR
Bis(2-Ethylhexyl)phthalate	ND	10	µg/L	1		SW-846 8270D	4/3/13	4/8/13 13:15	CMR
4-Bromophenylphenylether	ND	10	µg/L	1		SW-846 8270D	4/3/13	4/8/13 13:15	CMR
Butylbenzylphthalate	ND	10	µg/L	1		SW-846 8270D	4/3/13	4/8/13 13:15	CMR
4-Chloroaniline	ND	10	µg/L	1		SW-846 8270D	4/3/13	4/8/13 13:15	CMR
2-Chloronaphthalene	ND	10	µg/L	1		SW-846 8270D	4/3/13	4/8/13 13:15	CMR
2-Chlorophenol	ND	10	µg/L	1		SW-846 8270D	4/3/13	4/8/13 13:15	CMR
Chrysene (low)	ND	0.20	µg/L	1		SW-846 8270D	4/3/13	4/5/13 12:44	CJM
Dibenz(a,h)anthracene (low)	ND	0.20	µg/L	1		SW-846 8270D	4/3/13	4/5/13 12:44	CJM
Dibenzofuran	ND	5.0	µg/L	1		SW-846 8270D	4/3/13	4/8/13 13:15	CMR
Di-n-butylphthalate	ND	10	µg/L	1		SW-846 8270D	4/3/13	4/8/13 13:15	CMR
1,2-Dichlorobenzene	ND	5.0	µg/L	1		SW-846 8270D	4/3/13	4/8/13 13:15	CMR
1,3-Dichlorobenzene	ND	5.0	µg/L	1		SW-846 8270D	4/3/13	4/8/13 13:15	CMR
1,4-Dichlorobenzene	ND	5.0	µg/L	1		SW-846 8270D	4/3/13	4/8/13 13:15	CMR
3,3-Dichlorobenzidine	ND	10	µg/L	1		SW-846 8270D	4/3/13	4/8/13 13:15	CMR
2,4-Dichlorophenol	ND	10	µg/L	1		SW-846 8270D	4/3/13	4/8/13 13:15	CMR
Diethylphthalate	ND	10	µg/L	1		SW-846 8270D	4/3/13	4/8/13 13:15	CMR
2,4-Dimethylphenol	ND	10	µg/L	1		SW-846 8270D	4/3/13	4/8/13 13:15	CMR
Dimethylphthalate	ND	10	µg/L	1		SW-846 8270D	4/3/13	4/8/13 13:15	CMR
2,4-Dinitrophenol	ND	10	µg/L	1		SW-846 8270D	4/3/13	4/8/13 13:15	CMR
2,4-Dinitrotoluene	ND	10	µg/L	1		SW-846 8270D	4/3/13	4/8/13 13:15	CMR
2,6-Dinitrotoluene	ND	10	µg/L	1		SW-846 8270D	4/3/13	4/8/13 13:15	CMR
Di-n-octylphthalate	ND	10	µg/L	1		SW-846 8270D	4/3/13	4/8/13 13:15	CMR
1,2-Diphenylhydrazine (as Azobenzene)	ND	10	µg/L	1		SW-846 8270D	4/3/13	4/8/13 13:15	CMR
Fluoranthene (low)	ND	0.50	µg/L	1		SW-846 8270D	4/3/13	4/5/13 12:44	CJM
Fluorene (low)	ND	1.0	µg/L	1		SW-846 8270D	4/3/13	4/5/13 12:44	CJM
Hexachlorobenzene	ND	10	µg/L	1		SW-846 8270D	4/3/13	4/8/13 13:15	CMR
Hexachlorobutadiene	ND	10	µg/L	1		SW-846 8270D	4/3/13	4/8/13 13:15	CMR
Hexachloroethane	ND	10	µg/L	1		SW-846 8270D	4/3/13	4/8/13 13:15	CMR
Indeno(1,2,3-cd)pyrene (low)	ND	0.20	µg/L	1		SW-846 8270D	4/3/13	4/5/13 12:44	CJM
Isophorone	ND	10	µg/L	1		SW-846 8270D	4/3/13	4/8/13 13:15	CMR
2-Methylnaphthalene (low)	ND	1.0	µg/L	1		SW-846 8270D	4/3/13	4/5/13 12:44	CJM

Project Location: Former Attleboro Dyeworks, Seek

Sample Description: 80081-NOB302-SW

Work Order: 13D0093

Date Received: 4/2/2013

Field Sample #: D05312

Sampled: 4/2/2013 09:45

Sample ID: 13D0093-02

Sample Matrix: Surface Water

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
2-Methylphenol	ND	10	µg/L	1		SW-846 8270D	4/3/13	4/8/13 13:15	CMR
3/4-Methylphenol	ND	10	µg/L	1		SW-846 8270D	4/3/13	4/8/13 13:15	CMR
Naphthalene (low)	ND	1.0	µg/L	1		SW-846 8270D	4/3/13	4/5/13 12:44	CJM
Nitrobenzene	ND	10	µg/L	1		SW-846 8270D	4/3/13	4/8/13 13:15	CMR
2-Nitrophenol	ND	10	µg/L	1		SW-846 8270D	4/3/13	4/8/13 13:15	CMR
4-Nitrophenol	ND	10	µg/L	1		SW-846 8270D	4/3/13	4/8/13 13:15	CMR
Pentachlorophenol	ND	10	µg/L	1		SW-846 8270D	4/3/13	4/8/13 13:15	CMR
Phenanthrene (low)	ND	0.050	µg/L	1		SW-846 8270D	4/3/13	4/5/13 12:44	CJM
Phenol	ND	10	µg/L	1		SW-846 8270D	4/3/13	4/8/13 13:15	CMR
Pyrene (low)	ND	1.0	µg/L	1		SW-846 8270D	4/3/13	4/5/13 12:44	CJM
1,2,4-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8270D	4/3/13	4/8/13 13:15	CMR
2,4,5-Trichlorophenol	ND	10	µg/L	1		SW-846 8270D	4/3/13	4/8/13 13:15	CMR
2,4,6-Trichlorophenol	ND	10	µg/L	1		SW-846 8270D	4/3/13	4/8/13 13:15	CMR
Surrogates	% Recovery	Recovery Limits	Flag						
2-Fluorophenol	35.7	15-110						4/8/13 13:15	
Phenol-d6	34.9	15-110						4/8/13 13:15	
Nitrobenzene-d5	68.0	30-130						4/8/13 13:15	
Nitrobenzene-d5 (low)	68.6	30-130						4/5/13 12:44	
2-Fluorobiphenyl	62.7	30-130						4/8/13 13:15	
2-Fluorobiphenyl (low)	61.8	30-130						4/5/13 12:44	
2,4,6-Tribromophenol	82.1	15-110						4/8/13 13:15	
p-Terphenyl-d14	70.1	30-130						4/8/13 13:15	
p-Terphenyl-d14 (low)	53.1	30-130						4/5/13 12:44	

Project Location: Former Attleboro Dyeworks, Seek

Sample Description: 80081-NOB302-SW

Work Order: 13D0093

Date Received: 4/2/2013

Field Sample #: D05312

Sampled: 4/2/2013 09:45

Sample ID: 13D0093-02

Sample Matrix: Surface Water

Polychlorinated Biphenyls By GC/ECD

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.20	µg/L	1		SW-846 8082A	4/4/13	4/8/13 14:40	JMB
Aroclor-1221 [1]	ND	0.20	µg/L	1		SW-846 8082A	4/4/13	4/8/13 14:40	JMB
Aroclor-1232 [1]	ND	0.20	µg/L	1		SW-846 8082A	4/4/13	4/8/13 14:40	JMB
Aroclor-1242 [1]	ND	0.20	µg/L	1		SW-846 8082A	4/4/13	4/8/13 14:40	JMB
Aroclor-1248 [1]	ND	0.20	µg/L	1		SW-846 8082A	4/4/13	4/8/13 14:40	JMB
Aroclor-1254 [1]	ND	0.20	µg/L	1		SW-846 8082A	4/4/13	4/8/13 14:40	JMB
Aroclor-1260 [1]	ND	0.20	µg/L	1	R-05	SW-846 8082A	4/4/13	4/8/13 14:40	JMB
Aroclor-1262 [1]	ND	0.20	µg/L	1		SW-846 8082A	4/4/13	4/8/13 14:40	JMB
Aroclor-1268 [1]	ND	0.20	µg/L	1		SW-846 8082A	4/4/13	4/8/13 14:40	JMB
Surrogates	% Recovery	Recovery Limits	Flag						
Decachlorobiphenyl [1]	84.7	30-150							
Decachlorobiphenyl [2]	68.6	30-150							
Tetrachloro-m-xylene [1]	105	30-150							
Tetrachloro-m-xylene [2]	103	30-150							

Project Location: Former Attleboro Dyeworks, Seek

Sample Description: 80081-NOB302-SW

Work Order: 13D0093

Date Received: 4/2/2013

Field Sample #: D05312

Sampled: 4/2/2013 09:45

Sample ID: 13D0093-02

Sample Matrix: Surface Water

Petrolium Hydrocarbons Analyses - EPH

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
C9-C18 Aliphatics	ND	100	µg/L	1		MADEP-EPH-04-1.1	4/3/13	4/5/13 1:09	SCS
C19-C36 Aliphatics	ND	100	µg/L	1		MADEP-EPH-04-1.1	4/3/13	4/5/13 1:09	SCS
Unadjusted C11-C22 Aromatics	ND	100	µg/L	1		MADEP-EPH-04-1.1	4/3/13	4/5/13 1:09	SCS
C11-C22 Aromatics	ND	100	µg/L	1		MADEP-EPH-04-1.1	4/3/13	4/5/13 1:09	SCS
Acenaphthene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/3/13	4/5/13 1:09	SCS
Acenaphthylene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/3/13	4/5/13 1:09	SCS
Anthracene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/3/13	4/5/13 1:09	SCS
Benzo(a)anthracene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/3/13	4/5/13 1:09	SCS
Benzo(a)pyrene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/3/13	4/5/13 1:09	SCS
Benzo(b)fluoranthene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/3/13	4/5/13 1:09	SCS
Benzo(g,h,i)perylene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/3/13	4/5/13 1:09	SCS
Benzo(k)fluoranthene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/3/13	4/5/13 1:09	SCS
Chrysene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/3/13	4/5/13 1:09	SCS
Dibenz(a,h)anthracene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/3/13	4/5/13 1:09	SCS
Fluoranthene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/3/13	4/5/13 1:09	SCS
Fluorene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/3/13	4/5/13 1:09	SCS
Indeno(1,2,3-cd)pyrene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/3/13	4/5/13 1:09	SCS
2-Methylnaphthalene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/3/13	4/5/13 1:09	SCS
Naphthalene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/3/13	4/5/13 1:09	SCS
Phenanthrene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/3/13	4/5/13 1:09	SCS
Pyrene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/3/13	4/5/13 1:09	SCS

Surrogates	% Recovery	Recovery Limits	Flag
Chlorooctadecane (COD)	66.1	40-140	
o-Terphenyl (OTP)	74.1	40-140	
2-Bromonaphthalene	91.9	40-140	
2-Fluorobiphenyl	94.9	40-140	

Project Location: Former Attleboro Dyeworks, Seek

Sample Description: 80081-NOB302-SW

Work Order: 13D0093

Date Received: 4/2/2013

Field Sample #: D05312

Sampled: 4/2/2013 09:45

Sample ID: 13D0093-02

Sample Matrix: Surface Water

Petroleum Hydrocarbons Analyses - VPH

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Unadjusted C5-C8 Aliphatics	ND	100	µg/L	1		MADEP-VPH-04-1.1	4/3/13	4/4/13 9:42	EEH
C5-C8 Aliphatics	ND	100	µg/L	1		MADEP-VPH-04-1.1	4/3/13	4/4/13 9:42	EEH
Unadjusted C9-C12 Aliphatics	ND	100	µg/L	1		MADEP-VPH-04-1.1	4/3/13	4/4/13 9:42	EEH
C9-C12 Aliphatics	ND	100	µg/L	1		MADEP-VPH-04-1.1	4/3/13	4/4/13 9:42	EEH
C9-C10 Aromatics	ND	100	µg/L	1		MADEP-VPH-04-1.1	4/3/13	4/4/13 9:42	EEH
Benzene	ND	1.0	µg/L	1		MADEP-VPH-04-1.1	4/3/13	4/4/13 9:42	EEH
Ethylbenzene	ND	1.0	µg/L	1		MADEP-VPH-04-1.1	4/3/13	4/4/13 9:42	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		MADEP-VPH-04-1.1	4/3/13	4/4/13 9:42	EEH
Naphthalene	ND	5.0	µg/L	1		MADEP-VPH-04-1.1	4/3/13	4/4/13 9:42	EEH
Toluene	ND	1.0	µg/L	1		MADEP-VPH-04-1.1	4/3/13	4/4/13 9:42	EEH
m+p Xylene	ND	2.0	µg/L	1		MADEP-VPH-04-1.1	4/3/13	4/4/13 9:42	EEH
o-Xylene	ND	1.0	µg/L	1		MADEP-VPH-04-1.1	4/3/13	4/4/13 9:42	EEH
Surrogates	% Recovery	Recovery Limits	Flag						
2,5-Dibromotoluene (FID)	84.1	70-130							
2,5-Dibromotoluene (PID)	87.3	70-130							

Project Location: Former Attleboro Dyeworks, Seek

Sample Description: 80081-NOB302-SW

Work Order: 13D0093

Date Received: 4/2/2013

Field Sample #: D05312

Sampled: 4/2/2013 09:45

Sample ID: 13D0093-02

Sample Matrix: Surface Water

Metals Analyses (Total)

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Antimony	8.9	1.0	µg/L	1		SW-846 6020A	4/4/13	4/5/13 13:25	KSH
Arsenic	0.71	0.40	µg/L	1		SW-846 6020A	4/4/13	4/5/13 13:25	KSH
Barium	ND	10	µg/L	1		SW-846 6020A	4/4/13	4/5/13 13:25	KSH
Beryllium	ND	0.40	µg/L	1		SW-846 6020A	4/4/13	4/5/13 13:25	KSH
Cadmium	ND	0.50	µg/L	1		SW-846 6020A	4/4/13	4/5/13 13:25	KSH
Chromium	1.1	1.0	µg/L	1		SW-846 6020A	4/4/13	4/5/13 13:25	KSH
Copper	9.1	5.0	µg/L	1		SW-846 6020A	4/4/13	4/5/13 13:25	KSH
Lead	ND	1.0	µg/L	1		SW-846 6020A	4/4/13	4/5/13 13:25	KSH
Mercury	ND	0.00010	mg/L	1		SW-846 7470A	4/3/13	4/3/13 13:31	SAJ
Nickel	5.8	5.0	µg/L	1		SW-846 6020A	4/4/13	4/5/13 13:25	KSH
Selenium	ND	5.0	µg/L	1		SW-846 6020A	4/4/13	4/5/13 13:25	KSH
Silver	ND	0.50	µg/L	1		SW-846 6020A	4/4/13	4/5/13 13:25	KSH
Thallium	ND	0.20	µg/L	1		SW-846 6020A	4/4/13	4/5/13 13:25	KSH
Vanadium	88	5.0	µg/L	1		SW-846 6020A	4/4/13	4/5/13 13:25	KSH
Zinc	32	10	µg/L	1		SW-846 6020A	4/4/13	4/5/13 13:25	KSH

Project Location: Former Attleboro Dyeworks, Seek

Sample Description: 80081-NOB302-SW

Work Order: 13D0093

Date Received: 4/2/2013

Field Sample #: D05312

Sampled: 4/2/2013 09:45

Sample ID: 13D0093-02

Sample Matrix: Surface Water

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

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Hexavalent Chromium	ND	0.0040	mg/L	1		SW-846 7196A	4/2/13	4/2/13 20:00	DJM
Oxidation/Reduction Potential	140		mV	1		SM2580 A	4/3/13	4/3/13 8:15	LL
pH @13.6°C	6.2		pH Units	1	H-05	SM18-20 4500 H B	4/3/13	4/3/13 8:10	LL

Project Location: Former Attleboro Dyeworks, Seek

Sample Description: 80081-TRIPBLANK-SW

Work Order: 13D0093

Date Received: 4/2/2013

Field Sample #: D05313

Sampled: 4/2/2013 07:00

Sample ID: 13D0093-03

Sample Matrix: Trip Blank Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	10	µg/L	1		SW-846 8260C	4/4/13	4/5/13 0:16	EEH
tert-Amyl Methyl Ether (TAME)	ND	5.0	µg/L	1	RL-07	SW-846 8260C	4/4/13	4/5/13 0:16	EEH
Benzene	ND	1.0	µg/L	1		SW-846 8260C	4/4/13	4/5/13 0:16	EEH
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260C	4/4/13	4/5/13 0:16	EEH
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260C	4/4/13	4/5/13 0:16	EEH
Bromodichloromethane	ND	1.0	µg/L	1		SW-846 8260C	4/4/13	4/5/13 0:16	EEH
Bromoform	ND	1.0	µg/L	1		SW-846 8260C	4/4/13	4/5/13 0:16	EEH
Bromomethane	ND	2.0	µg/L	1	R-05	SW-846 8260C	4/4/13	4/5/13 0:16	EEH
2-Butanone (MEK)	ND	10	µg/L	1		SW-846 8260C	4/4/13	4/5/13 0:16	EEH
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	4/4/13	4/5/13 0:16	EEH
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	4/4/13	4/5/13 0:16	EEH
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	4/4/13	4/5/13 0:16	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	5.0	µg/L	1	RL-07	SW-846 8260C	4/4/13	4/5/13 0:16	EEH
Carbon Disulfide	ND	5.0	µg/L	1	RL-07	SW-846 8260C	4/4/13	4/5/13 0:16	EEH
Carbon Tetrachloride	ND	1.0	µg/L	1		SW-846 8260C	4/4/13	4/5/13 0:16	EEH
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	4/4/13	4/5/13 0:16	EEH
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260C	4/4/13	4/5/13 0:16	EEH
Chloroethane	ND	2.0	µg/L	1		SW-846 8260C	4/4/13	4/5/13 0:16	EEH
Chloroform	ND	2.0	µg/L	1		SW-846 8260C	4/4/13	4/5/13 0:16	EEH
Chloromethane	ND	2.0	µg/L	1		SW-846 8260C	4/4/13	4/5/13 0:16	EEH
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	4/4/13	4/5/13 0:16	EEH
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	4/4/13	4/5/13 0:16	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	2.0	µg/L	1	V-05	SW-846 8260C	4/4/13	4/5/13 0:16	EEH
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260C	4/4/13	4/5/13 0:16	EEH
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260C	4/4/13	4/5/13 0:16	EEH
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	4/4/13	4/5/13 0:16	EEH
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	4/4/13	4/5/13 0:16	EEH
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	4/4/13	4/5/13 0:16	EEH
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1		SW-846 8260C	4/4/13	4/5/13 0:16	EEH
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	4/4/13	4/5/13 0:16	EEH
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	4/4/13	4/5/13 0:16	EEH
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	4/4/13	4/5/13 0:16	EEH
cis-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	4/4/13	4/5/13 0:16	EEH
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	4/4/13	4/5/13 0:16	EEH
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	4/4/13	4/5/13 0:16	EEH
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260C	4/4/13	4/5/13 0:16	EEH
2,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	4/4/13	4/5/13 0:16	EEH
1,1-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	4/4/13	4/5/13 0:16	EEH
cis-1,3-Dichloropropene	ND	0.40	µg/L	1		SW-846 8260C	4/4/13	4/5/13 0:16	EEH
trans-1,3-Dichloropropene	ND	0.40	µg/L	1		SW-846 8260C	4/4/13	4/5/13 0:16	EEH
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260C	4/4/13	4/5/13 0:16	EEH
Diisopropyl Ether (DIPE)	ND	0.50	µg/L	1		SW-846 8260C	4/4/13	4/5/13 0:16	EEH
1,4-Dioxane	ND	50	µg/L	1	V-16	SW-846 8260C	4/4/13	4/5/13 0:16	EEH
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	4/4/13	4/5/13 0:16	EEH

Project Location: Former Attleboro Dyeworks, Seek

Sample Description: 80081-TRIPBLANK-SW

Work Order: 13D0093

Date Received: 4/2/2013

Field Sample #: D05313

Sampled: 4/2/2013 07:00

Sample ID: 13D0093-03

Sample Matrix: Trip Blank Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Hexachlorobutadiene	ND	0.50	µg/L	1		SW-846 8260C	4/4/13	4/5/13 0:16	EEH
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260C	4/4/13	4/5/13 0:16	EEH
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260C	4/4/13	4/5/13 0:16	EEH
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260C	4/4/13	4/5/13 0:16	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260C	4/4/13	4/5/13 0:16	EEH
Methylene Chloride	ND	5.0	µg/L	1	RL-07	SW-846 8260C	4/4/13	4/5/13 0:16	EEH
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260C	4/4/13	4/5/13 0:16	EEH
Naphthalene	ND	2.0	µg/L	1	V-05	SW-846 8260C	4/4/13	4/5/13 0:16	EEH
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260C	4/4/13	4/5/13 0:16	EEH
Styrene	ND	1.0	µg/L	1		SW-846 8260C	4/4/13	4/5/13 0:16	EEH
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1		SW-846 8260C	4/4/13	4/5/13 0:16	EEH
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260C	4/4/13	4/5/13 0:16	EEH
Tetrachloroethylene	ND	1.0	µg/L	1		SW-846 8260C	4/4/13	4/5/13 0:16	EEH
Tetrahydrofuran	ND	2.0	µg/L	1		SW-846 8260C	4/4/13	4/5/13 0:16	EEH
Toluene	ND	1.0	µg/L	1		SW-846 8260C	4/4/13	4/5/13 0:16	EEH
1,2,3-Trichlorobenzene	ND	2.0	µg/L	1	V-05	SW-846 8260C	4/4/13	4/5/13 0:16	EEH
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	4/4/13	4/5/13 0:16	EEH
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	4/4/13	4/5/13 0:16	EEH
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	4/4/13	4/5/13 0:16	EEH
Trichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	4/4/13	4/5/13 0:16	EEH
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260C	4/4/13	4/5/13 0:16	EEH
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260C	4/4/13	4/5/13 0:16	EEH
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	4/4/13	4/5/13 0:16	EEH
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	4/4/13	4/5/13 0:16	EEH
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260C	4/4/13	4/5/13 0:16	EEH
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260C	4/4/13	4/5/13 0:16	EEH
o-Xylene	ND	1.0	µg/L	1		SW-846 8260C	4/4/13	4/5/13 0:16	EEH
Surrogates	% Recovery	Recovery Limits	Flag						
1,2-Dichloroethane-d4	99.9	70-130							
Toluene-d8	102	70-130							
4-Bromofluorobenzene	104	70-130							

Sample Extraction Data**Prep Method: SW-846 3546-MADEP-EPH-04-1.1**

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
13D0093-01 [D05311]	B070262	20.2	2.00	04/03/13

Prep Method: SW-846 3510C-MADEP-EPH-04-1.1

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
13D0093-02 [D05312]	B070305	1000	2.00	04/03/13

Prep Method: MA VPH-MADEP-VPH-04-1.1

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
13D0093-01 [D05311]	B070300	9.20	18.7	04/03/13

Prep Method: MA VPH-MADEP-VPH-04-1.1

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
13D0093-02 [D05312]	B070299	5	5.00	04/03/13

Prep Method: % Solids-SM 2540G

Lab Number [Field ID]	Batch			Date
13D0093-01 [D05311]	B070322			04/03/13

SM18-20 4500 H B

Lab Number [Field ID]	Batch	Initial [mL]		Date
13D0093-02 [D05312]	B070313	50.0		04/03/13

SM2580 A

Lab Number [Field ID]	Batch	Initial [g]		Date
13D0093-01 [D05311]	B070311	20.0		04/03/13

SM2580 A

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
13D0093-02 [D05312]	B070309	50.0	50.0	04/03/13

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

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
13D0093-01 [D05311]	B070276	1.03	50.0	04/03/13

Sample Extraction Data

Prep Method: SW-846 3005A-SW-846 6020A

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
13D0093-02 [D05312]	B070424	50.0	50.0	04/04/13

SW-846 7196A

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
13D0093-01 [D05311]	B070584	2.60	100	04/10/13

SW-846 7196A

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
13D0093-02 [D05312]	B070673	50.0	50.0	04/02/13

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

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
13D0093-02 [D05312]	B070268	6.00	6.00	04/03/13

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

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
13D0093-01 [D05311]	B070361	0.618	50.0	04/04/13

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

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
13D0093-01 [D05311]	B070323	10.4	10.0	04/03/13

Prep Method: SW-846 3510C-SW-846 8082A

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
13D0093-02 [D05312]	B070417	1000	10.0	04/04/13

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

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
13D0093-01 [D05311]	B070293	3.36	10.0	04/03/13

Prep Method: SW-846 5030B-SW-846 8260C

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
13D0093-02 [D05312]	B070389	5	5.00	04/04/13
13D0093-03 [D05313]	B070389	5	5.00	04/04/13

Sample Extraction Data**Prep Method: SW-846 3546-SW-846 8270D**

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
13D0093-01 [D05311]	B070279	30.2	1.00	04/03/13

Prep Method: SW-846 3510C-SW-846 8270D

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
13D0093-02 [D05312]	B070335	1000	1.00	04/03/13

SW-846 9045C

Lab Number [Field ID]	Batch	Initial [g]	Date
13D0093-01 [D05311]	B070264	20.0	04/03/13

QUALITY CONTROL
Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B070293 - SW-846 5035										
Blank (B070293-BLK1)				Prepared & Analyzed: 04/03/13						
Acetone	ND	0.10	mg/Kg wet							
tert-Amyl Methyl Ether (TAME)	ND	0.0010	mg/Kg wet							
Benzene	ND	0.0020	mg/Kg wet							
Bromobenzene	ND	0.0020	mg/Kg wet							
Bromochloromethane	ND	0.0020	mg/Kg wet							
Bromodichloromethane	ND	0.0020	mg/Kg wet							
Bromoform	ND	0.0020	mg/Kg wet							
Bromomethane	ND	0.010	mg/Kg wet							
2-Butanone (MEK)	ND	0.040	mg/Kg wet							
n-Butylbenzene	ND	0.0020	mg/Kg wet							
sec-Butylbenzene	ND	0.0020	mg/Kg wet							
tert-Butylbenzene	ND	0.0020	mg/Kg wet							
tert-Butyl Ethyl Ether (TBEE)	ND	0.0010	mg/Kg wet							
Carbon Disulfide	ND	0.0060	mg/Kg wet							
Carbon Tetrachloride	ND	0.0020	mg/Kg wet							
Chlorobenzene	ND	0.0020	mg/Kg wet							
Chlorodibromomethane	ND	0.0010	mg/Kg wet							
Chloroethane	ND	0.010	mg/Kg wet							
Chloroform	ND	0.0040	mg/Kg wet							
Chloromethane	ND	0.010	mg/Kg wet							
2-Chlorotoluene	ND	0.0020	mg/Kg wet							
4-Chlorotoluene	ND	0.0020	mg/Kg wet							
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0020	mg/Kg wet							V-16
1,2-Dibromoethane (EDB)	ND	0.0010	mg/Kg wet							
Dibromomethane	ND	0.0020	mg/Kg wet							
1,2-Dichlorobenzene	ND	0.0020	mg/Kg wet							
1,3-Dichlorobenzene	ND	0.0020	mg/Kg wet							
1,4-Dichlorobenzene	ND	0.0020	mg/Kg wet							
Dichlorodifluoromethane (Freon 12)	ND	0.010	mg/Kg wet							
1,1-Dichloroethane	ND	0.0020	mg/Kg wet							
1,2-Dichloroethane	ND	0.0020	mg/Kg wet							
1,1-Dichloroethylene	ND	0.0040	mg/Kg wet							
cis-1,2-Dichloroethylene	ND	0.0020	mg/Kg wet							
trans-1,2-Dichloroethylene	ND	0.0020	mg/Kg wet							
1,2-Dichloropropane	ND	0.0020	mg/Kg wet							
1,3-Dichloropropane	ND	0.0010	mg/Kg wet							
2,2-Dichloropropane	ND	0.0020	mg/Kg wet							
1,1-Dichloropropene	ND	0.0020	mg/Kg wet							
cis-1,3-Dichloropropene	ND	0.0010	mg/Kg wet							
trans-1,3-Dichloropropene	ND	0.0010	mg/Kg wet							
Diethyl Ether	ND	0.010	mg/Kg wet							
Diisopropyl Ether (DIPE)	ND	0.0010	mg/Kg wet							
1,4-Dioxane	ND	0.10	mg/Kg wet							V-16
Ethylbenzene	ND	0.0020	mg/Kg wet							
Hexachlorobutadiene	ND	0.0020	mg/Kg wet							
2-Hexanone (MBK)	ND	0.020	mg/Kg wet							
Isopropylbenzene (Cumene)	ND	0.0020	mg/Kg wet							
p-Isopropyltoluene (p-Cymene)	ND	0.0020	mg/Kg wet							
Methyl tert-Butyl Ether (MTBE)	ND	0.0040	mg/Kg wet							
Methylene Chloride	ND	0.010	mg/Kg wet							
4-Methyl-2-pentanone (MIBK)	ND	0.020	mg/Kg wet							
Naphthalene	ND	0.0040	mg/Kg wet							

QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B070293 - SW-846 5035										
Blank (B070293-BLK1)				Prepared & Analyzed: 04/03/13						
n-Propylbenzene	ND	0.0020	mg/Kg wet							
Styrene	ND	0.0020	mg/Kg wet							
1,1,1,2-Tetrachloroethane	ND	0.0020	mg/Kg wet							
1,1,2,2-Tetrachloroethane	ND	0.0010	mg/Kg wet							
Tetrachloroethylene	ND	0.0020	mg/Kg wet							
Tetrahydrofuran	ND	0.010	mg/Kg wet							V-05, V-16
Toluene	ND	0.0020	mg/Kg wet							
1,2,3-Trichlorobenzene	ND	0.0020	mg/Kg wet							
1,2,4-Trichlorobenzene	ND	0.0020	mg/Kg wet							
1,1,1-Trichloroethane	ND	0.0020	mg/Kg wet							
1,1,2-Trichloroethane	ND	0.0020	mg/Kg wet							
Trichloroethylene	ND	0.0020	mg/Kg wet							
Trichlorofluoromethane (Freon 11)	ND	0.010	mg/Kg wet							
1,2,3-Trichloropropane	ND	0.0020	mg/Kg wet							
1,2,4-Trimethylbenzene	ND	0.0020	mg/Kg wet							
1,3,5-Trimethylbenzene	ND	0.0020	mg/Kg wet							
Vinyl Chloride	ND	0.010	mg/Kg wet							
m+p Xylene	ND	0.0040	mg/Kg wet							
o-Xylene	ND	0.0020	mg/Kg wet							
Surrogate: 1,2-Dichloroethane-d4	0.0531		mg/Kg wet	0.0500		106	70-130			
Surrogate: Toluene-d8	0.0499		mg/Kg wet	0.0500		99.8	70-130			
Surrogate: 4-Bromofluorobenzene	0.0486		mg/Kg wet	0.0500		97.3	70-130			
LCS (B070293-BS1)				Prepared & Analyzed: 04/03/13						
Acetone	0.185	0.10	mg/Kg wet	0.200		92.3	40-160			V-20 †
tert-Amyl Methyl Ether (TAME)	0.0166	0.0010	mg/Kg wet	0.0200		83.2	70-130			
Benzene	0.0175	0.0020	mg/Kg wet	0.0200		87.4	70-130			
Bromobenzene	0.0183	0.0020	mg/Kg wet	0.0200		91.3	70-130			
Bromochloromethane	0.0172	0.0020	mg/Kg wet	0.0200		86.2	70-130			
Bromodichloromethane	0.0161	0.0020	mg/Kg wet	0.0200		80.4	70-130			
Bromoform	0.0156	0.0020	mg/Kg wet	0.0200		77.9	70-130			
Bromomethane	0.0238	0.010	mg/Kg wet	0.0200		119	40-160			V-20 †
2-Butanone (MEK)	0.143	0.040	mg/Kg wet	0.200		71.5	40-160			†
n-Butylbenzene	0.0200	0.0020	mg/Kg wet	0.0200		99.9	70-130			
sec-Butylbenzene	0.0196	0.0020	mg/Kg wet	0.0200		98.2	70-130			
tert-Butylbenzene	0.0187	0.0020	mg/Kg wet	0.0200		93.6	70-130			
tert-Butyl Ethyl Ether (TBEE)	0.0170	0.0010	mg/Kg wet	0.0200		85.1	70-130			
Carbon Disulfide	0.0183	0.0060	mg/Kg wet	0.0200		91.4	70-130			V-20
Carbon Tetrachloride	0.0182	0.0020	mg/Kg wet	0.0200		91.1	70-130			
Chlorobenzene	0.0176	0.0020	mg/Kg wet	0.0200		88.2	70-130			
Chlorodibromomethane	0.0160	0.0010	mg/Kg wet	0.0200		80.2	70-130			
Chloroethane	0.0216	0.010	mg/Kg wet	0.0200		108	70-130			
Chloroform	0.0184	0.0040	mg/Kg wet	0.0200		92.2	70-130			
Chloromethane	0.0143	0.010	mg/Kg wet	0.0200		71.5	40-160			†
2-Chlorotoluene	0.0177	0.0020	mg/Kg wet	0.0200		88.6	70-130			
4-Chlorotoluene	0.0190	0.0020	mg/Kg wet	0.0200		94.8	70-130			
1,2-Dibromo-3-chloropropane (DBCP)	0.0154	0.0020	mg/Kg wet	0.0200		77.0	70-130			V-16
1,2-Dibromoethane (EDB)	0.0162	0.0010	mg/Kg wet	0.0200		81.1	70-130			
Dibromomethane	0.0175	0.0020	mg/Kg wet	0.0200		87.6	70-130			
1,2-Dichlorobenzene	0.0177	0.0020	mg/Kg wet	0.0200		88.5	70-130			
1,3-Dichlorobenzene	0.0179	0.0020	mg/Kg wet	0.0200		89.6	70-130			
1,4-Dichlorobenzene	0.0188	0.0020	mg/Kg wet	0.0200		94.2	70-130			

QUALITY CONTROL
Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B070293 - SW-846 5035										
LCS (B070293-BS1)				Prepared & Analyzed: 04/03/13						
Dichlorodifluoromethane (Freon 12)	0.0105	0.010	mg/Kg wet	0.0200		52.3	40-160			L-14 †
1,1-Dichloroethane	0.0170	0.0020	mg/Kg wet	0.0200		85.1	70-130			
1,2-Dichloroethane	0.0171	0.0020	mg/Kg wet	0.0200		85.5	70-130			
1,1-Dichloroethylene	0.0197	0.0040	mg/Kg wet	0.0200		98.5	70-130			
cis-1,2-Dichloroethylene	0.0166	0.0020	mg/Kg wet	0.0200		83.1	70-130			
trans-1,2-Dichloroethylene	0.0171	0.0020	mg/Kg wet	0.0200		85.6	70-130			
1,2-Dichloropropane	0.0173	0.0020	mg/Kg wet	0.0200		86.7	70-130			
1,3-Dichloropropane	0.0169	0.0010	mg/Kg wet	0.0200		84.5	70-130			
2,2-Dichloropropane	0.0170	0.0020	mg/Kg wet	0.0200		85.1	70-130			
1,1-Dichloropropene	0.0186	0.0020	mg/Kg wet	0.0200		93.2	70-130			
cis-1,3-Dichloropropene	0.0162	0.0010	mg/Kg wet	0.0200		80.8	70-130			
trans-1,3-Dichloropropene	0.0174	0.0010	mg/Kg wet	0.0200		86.8	70-130			
Diethyl Ether	0.0212	0.010	mg/Kg wet	0.0200		106	70-130			
Diisopropyl Ether (DIPE)	0.0182	0.0010	mg/Kg wet	0.0200		91.1	70-130			
1,4-Dioxane	0.159	0.10	mg/Kg wet	0.200		79.7	40-160			V-16 †
Ethylbenzene	0.0187	0.0020	mg/Kg wet	0.0200		93.5	70-130			
Hexachlorobutadiene	0.0198	0.0020	mg/Kg wet	0.0200		99.1	70-130			
2-Hexanone (MBK)	0.152	0.020	mg/Kg wet	0.200		76.1	40-160			†
Isopropylbenzene (Cumene)	0.0185	0.0020	mg/Kg wet	0.0200		92.6	70-130			
p-Isopropyltoluene (p-Cymene)	0.0200	0.0020	mg/Kg wet	0.0200		100	70-130			
Methyl tert-Butyl Ether (MTBE)	0.0172	0.0040	mg/Kg wet	0.0200		85.8	70-130			
Methylene Chloride	0.0142	0.010	mg/Kg wet	0.0200		71.0	70-130			
4-Methyl-2-pentanone (MIBK)	0.158	0.020	mg/Kg wet	0.200		79.0	40-160			†
Naphthalene	0.0151	0.0040	mg/Kg wet	0.0200		75.3	70-130			
n-Propylbenzene	0.0186	0.0020	mg/Kg wet	0.0200		92.9	70-130			
Styrene	0.0184	0.0020	mg/Kg wet	0.0200		91.8	70-130			
1,1,1,2-Tetrachloroethane	0.0189	0.0020	mg/Kg wet	0.0200		94.3	70-130			
1,1,1,2,2-Tetrachloroethane	0.0167	0.0010	mg/Kg wet	0.0200		83.3	70-130			
Tetrachloroethylene	0.0175	0.0020	mg/Kg wet	0.0200		87.6	70-130			
Tetrahydrofuran	0.0168	0.010	mg/Kg wet	0.0200		83.9	70-130			V-05, V-16
Toluene	0.0165	0.0020	mg/Kg wet	0.0200		82.5	70-130			
1,2,3-Trichlorobenzene	0.0184	0.0020	mg/Kg wet	0.0200		92.0	70-130			
1,2,4-Trichlorobenzene	0.0175	0.0020	mg/Kg wet	0.0200		87.6	70-130			
1,1,1-Trichloroethane	0.0171	0.0020	mg/Kg wet	0.0200		85.4	70-130			
1,1,2-Trichloroethane	0.0166	0.0020	mg/Kg wet	0.0200		82.8	70-130			
Trichloroethylene	0.0172	0.0020	mg/Kg wet	0.0200		86.0	70-130			
Trichlorofluoromethane (Freon 11)	0.0201	0.010	mg/Kg wet	0.0200		100	70-130			
1,2,3-Trichloropropane	0.0165	0.0020	mg/Kg wet	0.0200		82.6	70-130			
1,2,4-Trimethylbenzene	0.0192	0.0020	mg/Kg wet	0.0200		95.9	70-130			
1,3,5-Trimethylbenzene	0.0189	0.0020	mg/Kg wet	0.0200		94.4	70-130			
Vinyl Chloride	0.0144	0.010	mg/Kg wet	0.0200		72.1	70-130			
m+p Xylene	0.0375	0.0040	mg/Kg wet	0.0400		93.8	70-130			
o-Xylene	0.0185	0.0020	mg/Kg wet	0.0200		92.3	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.0510		mg/Kg wet	0.0500		102	70-130			
Surrogate: Toluene-d8	0.0504		mg/Kg wet	0.0500		101	70-130			
Surrogate: 4-Bromofluorobenzene	0.0498		mg/Kg wet	0.0500		99.5	70-130			

QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B070293 - SW-846 5035										
LCS Dup (B070293-BSD1)				Prepared & Analyzed: 04/03/13						
Acetone	0.206	0.10	mg/Kg wet	0.200		103	40-160	11.1	20	V-20 †
tert-Amyl Methyl Ether (TAME)	0.0178	0.0010	mg/Kg wet	0.0200		89.2	70-130	6.96	20	
Benzene	0.0182	0.0020	mg/Kg wet	0.0200		90.8	70-130	3.82	20	
Bromobenzene	0.0187	0.0020	mg/Kg wet	0.0200		93.7	70-130	2.59	20	
Bromochloromethane	0.0177	0.0020	mg/Kg wet	0.0200		88.5	70-130	2.63	20	
Bromodichloromethane	0.0164	0.0020	mg/Kg wet	0.0200		82.1	70-130	2.09	20	
Bromoform	0.0168	0.0020	mg/Kg wet	0.0200		84.1	70-130	7.65	20	
Bromomethane	0.0270	0.010	mg/Kg wet	0.0200		135	40-160	12.8	20	V-20 †
2-Butanone (MEK)	0.160	0.040	mg/Kg wet	0.200		80.2	40-160	11.5	20	†
n-Butylbenzene	0.0199	0.0020	mg/Kg wet	0.0200		99.5	70-130	0.401	20	
sec-Butylbenzene	0.0193	0.0020	mg/Kg wet	0.0200		96.3	70-130	1.95	20	
tert-Butylbenzene	0.0190	0.0020	mg/Kg wet	0.0200		95.1	70-130	1.59	20	
tert-Butyl Ethyl Ether (TBEE)	0.0180	0.0010	mg/Kg wet	0.0200		90.1	70-130	5.71	20	
Carbon Disulfide	0.0190	0.0060	mg/Kg wet	0.0200		94.8	70-130	3.65	20	V-20
Carbon Tetrachloride	0.0186	0.0020	mg/Kg wet	0.0200		92.8	70-130	1.85	20	
Chlorobenzene	0.0179	0.0020	mg/Kg wet	0.0200		89.5	70-130	1.46	20	
Chlorodibromomethane	0.0169	0.0010	mg/Kg wet	0.0200		84.3	70-130	4.98	20	
Chloroethane	0.0234	0.010	mg/Kg wet	0.0200		117	70-130	7.91	20	
Chloroform	0.0192	0.0040	mg/Kg wet	0.0200		95.9	70-130	3.93	20	
Chloromethane	0.0148	0.010	mg/Kg wet	0.0200		73.9	40-160	3.30	20	†
2-Chlorotoluene	0.0189	0.0020	mg/Kg wet	0.0200		94.3	70-130	6.23	20	
4-Chlorotoluene	0.0195	0.0020	mg/Kg wet	0.0200		97.5	70-130	2.81	20	
1,2-Dibromo-3-chloropropane (DBCP)	0.0182	0.0020	mg/Kg wet	0.0200		90.9	70-130	16.6	20	V-16
1,2-Dibromoethane (EDB)	0.0173	0.0010	mg/Kg wet	0.0200		86.3	70-130	6.21	20	
Dibromomethane	0.0178	0.0020	mg/Kg wet	0.0200		88.8	70-130	1.36	20	
1,2-Dichlorobenzene	0.0185	0.0020	mg/Kg wet	0.0200		92.3	70-130	4.20	20	
1,3-Dichlorobenzene	0.0186	0.0020	mg/Kg wet	0.0200		93.0	70-130	3.72	20	
1,4-Dichlorobenzene	0.0196	0.0020	mg/Kg wet	0.0200		98.2	70-130	4.16	20	
Dichlorodifluoromethane (Freon 12)	0.0106	0.010	mg/Kg wet	0.0200		53.1	40-160	1.52	20	L-14 †
1,1-Dichloroethane	0.0176	0.0020	mg/Kg wet	0.0200		88.2	70-130	3.58	20	
1,2-Dichloroethane	0.0180	0.0020	mg/Kg wet	0.0200		90.0	70-130	5.13	20	
1,1-Dichloroethylene	0.0205	0.0040	mg/Kg wet	0.0200		103	70-130	4.08	20	
cis-1,2-Dichloroethylene	0.0175	0.0020	mg/Kg wet	0.0200		87.3	70-130	4.93	20	
trans-1,2-Dichloroethylene	0.0174	0.0020	mg/Kg wet	0.0200		87.2	70-130	1.85	20	
1,2-Dichloropropane	0.0173	0.0020	mg/Kg wet	0.0200		86.3	70-130	0.462	20	
1,3-Dichloropropane	0.0180	0.0010	mg/Kg wet	0.0200		89.8	70-130	6.08	20	
2,2-Dichloropropane	0.0175	0.0020	mg/Kg wet	0.0200		87.4	70-130	2.67	20	
1,1-Dichloropropene	0.0178	0.0020	mg/Kg wet	0.0200		89.2	70-130	4.39	20	
cis-1,3-Dichloropropene	0.0166	0.0010	mg/Kg wet	0.0200		82.8	70-130	2.44	20	
trans-1,3-Dichloropropene	0.0180	0.0010	mg/Kg wet	0.0200		90.1	70-130	3.73	20	
Diethyl Ether	0.0231	0.010	mg/Kg wet	0.0200		115	70-130	8.30	20	
Diisopropyl Ether (DIPE)	0.0191	0.0010	mg/Kg wet	0.0200		95.5	70-130	4.72	20	
1,4-Dioxane	0.155	0.10	mg/Kg wet	0.200		77.6	40-160	2.63	20	V-16 †
Ethylbenzene	0.0189	0.0020	mg/Kg wet	0.0200		94.6	70-130	1.17	20	
Hexachlorobutadiene	0.0201	0.0020	mg/Kg wet	0.0200		100	70-130	1.40	20	
2-Hexanone (MBK)	0.170	0.020	mg/Kg wet	0.200		85.0	40-160	11.0	20	†
Isopropylbenzene (Cumene)	0.0192	0.0020	mg/Kg wet	0.0200		95.9	70-130	3.50	20	
p-Isopropyltoluene (p-Cymene)	0.0206	0.0020	mg/Kg wet	0.0200		103	70-130	3.15	20	
Methyl tert-Butyl Ether (MTBE)	0.0186	0.0040	mg/Kg wet	0.0200		92.8	70-130	7.84	20	
Methylene Chloride	0.0157	0.010	mg/Kg wet	0.0200		78.4	70-130	9.91	20	
4-Methyl-2-pentanone (MIBK)	0.176	0.020	mg/Kg wet	0.200		88.0	40-160	10.9	20	†
Naphthalene	0.0164	0.0040	mg/Kg wet	0.0200		82.0	70-130	8.52	20	

QUALITY CONTROL
Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes

Batch B070293 - SW-846 5035
LCS Dup (B070293-BSD1)

Prepared & Analyzed: 04/03/13

n-Propylbenzene	0.0188	0.0020	mg/Kg wet	0.0200		94.2	70-130	1.39	20	
Styrene	0.0191	0.0020	mg/Kg wet	0.0200		95.5	70-130	3.95	20	
1,1,1,2-Tetrachloroethane	0.0183	0.0020	mg/Kg wet	0.0200		91.3	70-130	3.23	20	
1,1,2,2-Tetrachloroethane	0.0176	0.0010	mg/Kg wet	0.0200		87.8	70-130	5.26	20	
Tetrachloroethylene	0.0182	0.0020	mg/Kg wet	0.0200		91.0	70-130	3.81	20	
Tetrahydrofuran	0.0146	0.010	mg/Kg wet	0.0200		73.2	70-130	13.6	20	V-05, V-16
Toluene	0.0174	0.0020	mg/Kg wet	0.0200		87.2	70-130	5.54	20	
1,2,3-Trichlorobenzene	0.0189	0.0020	mg/Kg wet	0.0200		94.7	70-130	2.89	20	
1,2,4-Trichlorobenzene	0.0185	0.0020	mg/Kg wet	0.0200		92.4	70-130	5.33	20	
1,1,1-Trichloroethane	0.0177	0.0020	mg/Kg wet	0.0200		88.5	70-130	3.57	20	
1,1,2-Trichloroethane	0.0175	0.0020	mg/Kg wet	0.0200		87.5	70-130	5.52	20	
Trichloroethylene	0.0176	0.0020	mg/Kg wet	0.0200		88.0	70-130	2.30	20	
Trichlorofluoromethane (Freon 11)	0.0207	0.010	mg/Kg wet	0.0200		104	70-130	2.94	20	
1,2,3-Trichloropropane	0.0174	0.0020	mg/Kg wet	0.0200		86.9	70-130	5.07	20	
1,2,4-Trimethylbenzene	0.0196	0.0020	mg/Kg wet	0.0200		98.2	70-130	2.37	20	
1,3,5-Trimethylbenzene	0.0195	0.0020	mg/Kg wet	0.0200		97.5	70-130	3.23	20	
Vinyl Chloride	0.0149	0.010	mg/Kg wet	0.0200		74.6	70-130	3.41	20	
m+p Xylene	0.0385	0.0040	mg/Kg wet	0.0400		96.2	70-130	2.52	20	
o-Xylene	0.0190	0.0020	mg/Kg wet	0.0200		95.1	70-130	2.99	20	
Surrogate: 1,2-Dichloroethane-d4	0.0511		mg/Kg wet	0.0500		102	70-130			
Surrogate: Toluene-d8	0.0510		mg/Kg wet	0.0500		102	70-130			
Surrogate: 4-Bromofluorobenzene	0.0507		mg/Kg wet	0.0500		101	70-130			

Batch B070389 - SW-846 5030B
Blank (B070389-BLK1)

Prepared & Analyzed: 04/04/13

Acetone	ND	10	µg/L							
tert-Amyl Methyl Ether (TAME)	ND	5.0	µg/L							
Benzene	ND	1.0	µg/L							
Bromobenzene	ND	1.0	µg/L							
Bromochloromethane	ND	1.0	µg/L							
Bromodichloromethane	ND	1.0	µg/L							
Bromoform	ND	1.0	µg/L							
Bromomethane	ND	2.0	µg/L							R-05
2-Butanone (MEK)	ND	10	µg/L							
n-Butylbenzene	ND	1.0	µg/L							
sec-Butylbenzene	ND	1.0	µg/L							
tert-Butylbenzene	ND	1.0	µg/L							
tert-Butyl Ethyl Ether (TBEE)	ND	5.0	µg/L							
Carbon Disulfide	ND	5.0	µg/L							
Carbon Tetrachloride	ND	1.0	µg/L							
Chlorobenzene	ND	1.0	µg/L							
Chlorodibromomethane	ND	0.50	µg/L							
Chloroethane	ND	2.0	µg/L							
Chloroform	ND	2.0	µg/L							
Chloromethane	ND	2.0	µg/L							
2-Chlorotoluene	ND	1.0	µg/L							
4-Chlorotoluene	ND	1.0	µg/L							
1,2-Dibromo-3-chloropropane (DBCP)	ND	2.0	µg/L							V-05
1,2-Dibromoethane (EDB)	ND	0.50	µg/L							
Dibromomethane	ND	1.0	µg/L							
1,2-Dichlorobenzene	ND	1.0	µg/L							
1,3-Dichlorobenzene	ND	1.0	µg/L							

QUALITY CONTROL
Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B070389 - SW-846 5030B										
Blank (B070389-BLK1)				Prepared & Analyzed: 04/04/13						
1,4-Dichlorobenzene	ND	1.0	µg/L							
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L							
1,1-Dichloroethane	ND	1.0	µg/L							
1,2-Dichloroethane	ND	1.0	µg/L							
1,1-Dichloroethylene	ND	1.0	µg/L							
cis-1,2-Dichloroethylene	ND	1.0	µg/L							
trans-1,2-Dichloroethylene	ND	1.0	µg/L							
1,2-Dichloropropane	ND	1.0	µg/L							
1,3-Dichloropropane	ND	0.50	µg/L							
2,2-Dichloropropane	ND	1.0	µg/L							
1,1-Dichloropropene	ND	0.50	µg/L							
cis-1,3-Dichloropropene	ND	0.40	µg/L							
trans-1,3-Dichloropropene	ND	0.40	µg/L							
Diethyl Ether	ND	2.0	µg/L							
Diisopropyl Ether (DIPE)	ND	0.50	µg/L							
1,4-Dioxane	ND	50	µg/L							V-16
Ethylbenzene	ND	1.0	µg/L							
Hexachlorobutadiene	ND	0.50	µg/L							
2-Hexanone (MBK)	ND	10	µg/L							
Isopropylbenzene (Cumene)	ND	1.0	µg/L							
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L							
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L							
Methylene Chloride	ND	5.0	µg/L							
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L							
Naphthalene	ND	2.0	µg/L							V-05
n-Propylbenzene	ND	1.0	µg/L							
Styrene	ND	1.0	µg/L							
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L							
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L							
Tetrachloroethylene	ND	1.0	µg/L							
Tetrahydrofuran	ND	2.0	µg/L							
Toluene	ND	1.0	µg/L							
1,2,3-Trichlorobenzene	ND	2.0	µg/L							V-05
1,2,4-Trichlorobenzene	ND	1.0	µg/L							
1,1,1-Trichloroethane	ND	1.0	µg/L							
1,1,2-Trichloroethane	ND	1.0	µg/L							
Trichloroethylene	ND	1.0	µg/L							
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L							
1,2,3-Trichloropropane	ND	2.0	µg/L							
1,2,4-Trimethylbenzene	ND	1.0	µg/L							
1,3,5-Trimethylbenzene	ND	1.0	µg/L							
Vinyl Chloride	ND	2.0	µg/L							
m+p Xylene	ND	2.0	µg/L							
o-Xylene	ND	1.0	µg/L							
Surrogate: 1,2-Dichloroethane-d4	25.2		µg/L	25.0		101	70-130			
Surrogate: Toluene-d8	25.3		µg/L	25.0		101	70-130			
Surrogate: 4-Bromofluorobenzene	24.7		µg/L	25.0		98.9	70-130			

QUALITY CONTROL
Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B070389 - SW-846 5030B										
LCS (B070389-BS1)				Prepared & Analyzed: 04/04/13						
Acetone	151	10	µg/L	100		151	40-160			L-14 †
tert-Amyl Methyl Ether (TAME)	11.9	5.0	µg/L	10.0		119	70-130			
Benzene	10.3	1.0	µg/L	10.0		103	70-130			
Bromobenzene	9.01	1.0	µg/L	10.0		90.1	70-130			
Bromochloromethane	9.86	1.0	µg/L	10.0		98.6	70-130			
Bromodichloromethane	9.35	1.0	µg/L	10.0		93.5	70-130			
Bromoform	9.48	1.0	µg/L	10.0		94.8	70-130			
Bromomethane	5.75	2.0	µg/L	10.0		57.5	40-160			L-14, R-05 †
2-Butanone (MEK)	114	10	µg/L	100		114	40-160			†
n-Butylbenzene	9.33	1.0	µg/L	10.0		93.3	70-130			
sec-Butylbenzene	9.45	1.0	µg/L	10.0		94.5	70-130			
tert-Butylbenzene	9.37	1.0	µg/L	10.0		93.7	70-130			
tert-Butyl Ethyl Ether (TBEE)	11.9	5.0	µg/L	10.0		119	70-130			
Carbon Disulfide	10.9	5.0	µg/L	10.0		109	70-130			
Carbon Tetrachloride	10.0	1.0	µg/L	10.0		100	70-130			
Chlorobenzene	9.56	1.0	µg/L	10.0		95.6	70-130			
Chlorodibromomethane	10.1	0.50	µg/L	10.0		101	70-130			
Chloroethane	11.5	2.0	µg/L	10.0		115	70-130			
Chloroform	8.89	2.0	µg/L	10.0		88.9	70-130			
Chloromethane	7.91	2.0	µg/L	10.0		79.1	40-160			†
2-Chlorotoluene	9.70	1.0	µg/L	10.0		97.0	70-130			
4-Chlorotoluene	9.93	1.0	µg/L	10.0		99.3	70-130			
1,2-Dibromo-3-chloropropane (DBCP)	8.57	2.0	µg/L	10.0		85.7	70-130			V-05
1,2-Dibromoethane (EDB)	9.78	0.50	µg/L	10.0		97.8	70-130			
Dibromomethane	9.59	1.0	µg/L	10.0		95.9	70-130			
1,2-Dichlorobenzene	9.60	1.0	µg/L	10.0		96.0	70-130			
1,3-Dichlorobenzene	9.42	1.0	µg/L	10.0		94.2	70-130			
1,4-Dichlorobenzene	8.84	1.0	µg/L	10.0		88.4	70-130			
Dichlorodifluoromethane (Freon 12)	6.55	2.0	µg/L	10.0		65.5	40-160			L-14 †
1,1-Dichloroethane	9.70	1.0	µg/L	10.0		97.0	70-130			
1,2-Dichloroethane	9.22	1.0	µg/L	10.0		92.2	70-130			
1,1-Dichloroethylene	9.82	1.0	µg/L	10.0		98.2	70-130			
cis-1,2-Dichloroethylene	9.32	1.0	µg/L	10.0		93.2	70-130			
trans-1,2-Dichloroethylene	9.99	1.0	µg/L	10.0		99.9	70-130			
1,2-Dichloropropane	9.28	1.0	µg/L	10.0		92.8	70-130			
1,3-Dichloropropane	9.30	0.50	µg/L	10.0		93.0	70-130			
2,2-Dichloropropane	11.3	1.0	µg/L	10.0		113	70-130			
1,1-Dichloropropene	9.67	0.50	µg/L	10.0		96.7	70-130			
cis-1,3-Dichloropropene	9.85	0.40	µg/L	10.0		98.5	70-130			
trans-1,3-Dichloropropene	11.5	0.40	µg/L	10.0		115	70-130			
Diethyl Ether	11.9	2.0	µg/L	10.0		119	70-130			
Diisopropyl Ether (DIPE)	11.9	0.50	µg/L	10.0		119	70-130			
1,4-Dioxane	130	50	µg/L	100		130	40-160			V-16 †
Ethylbenzene	10.3	1.0	µg/L	10.0		103	70-130			
Hexachlorobutadiene	8.95	0.50	µg/L	10.0		89.5	70-130			
2-Hexanone (MBK)	119	10	µg/L	100		119	40-160			†
Isopropylbenzene (Cumene)	9.60	1.0	µg/L	10.0		96.0	70-130			
p-Isopropyltoluene (p-Cymene)	9.46	1.0	µg/L	10.0		94.6	70-130			
Methyl tert-Butyl Ether (MTBE)	12.6	1.0	µg/L	10.0		126	70-130			
Methylene Chloride	10.6	5.0	µg/L	10.0		106	70-130			V-20
4-Methyl-2-pentanone (MIBK)	116	10	µg/L	100		116	40-160			†
Naphthalene	7.32	2.0	µg/L	10.0		73.2	70-130			V-05

QUALITY CONTROL
Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B070389 - SW-846 5030B										
LCS (B070389-BS1)										
Prepared & Analyzed: 04/04/13										
n-Propylbenzene	10.0	1.0	µg/L	10.0		100	70-130			
Styrene	9.41	1.0	µg/L	10.0		94.1	70-130			
1,1,1,2-Tetrachloroethane	9.31	1.0	µg/L	10.0		93.1	70-130			
1,1,2,2-Tetrachloroethane	9.36	0.50	µg/L	10.0		93.6	70-130			
Tetrachloroethylene	9.90	1.0	µg/L	10.0		99.0	70-130			
Tetrahydrofuran	11.5	2.0	µg/L	10.0		115	70-130			
Toluene	10.6	1.0	µg/L	10.0		106	70-130			
1,2,3-Trichlorobenzene	7.35	2.0	µg/L	10.0		73.5	70-130			V-05
1,2,4-Trichlorobenzene	8.24	1.0	µg/L	10.0		82.4	70-130			
1,1,1-Trichloroethane	10.1	1.0	µg/L	10.0		101	70-130			
1,1,2-Trichloroethane	9.46	1.0	µg/L	10.0		94.6	70-130			
Trichloroethylene	8.97	1.0	µg/L	10.0		89.7	70-130			
Trichlorofluoromethane (Freon 11)	12.2	2.0	µg/L	10.0		122	70-130			
1,2,3-Trichloropropane	9.53	2.0	µg/L	10.0		95.3	70-130			
1,2,4-Trimethylbenzene	9.46	1.0	µg/L	10.0		94.6	70-130			
1,3,5-Trimethylbenzene	8.97	1.0	µg/L	10.0		89.7	70-130			
Vinyl Chloride	9.57	2.0	µg/L	10.0		95.7	70-130			
m+p Xylene	21.1	2.0	µg/L	20.0		105	70-130			
o-Xylene	10.8	1.0	µg/L	10.0		108	70-130			
Surrogate: 1,2-Dichloroethane-d4	25.4		µg/L	25.0		102	70-130			
Surrogate: Toluene-d8	25.3		µg/L	25.0		101	70-130			
Surrogate: 4-Bromofluorobenzene	24.9		µg/L	25.0		99.6	70-130			
LCS Dup (B070389-BS1)										
Prepared & Analyzed: 04/04/13										
Acetone	142	10	µg/L	100		142	40-160	6.31	20	L-14 †
tert-Amyl Methyl Ether (TAME)	12.0	5.0	µg/L	10.0		120	70-130	0.501	20	
Benzene	10.8	1.0	µg/L	10.0		108	70-130	4.26	20	
Bromobenzene	9.28	1.0	µg/L	10.0		92.8	70-130	2.95	20	
Bromochloromethane	10.3	1.0	µg/L	10.0		103	70-130	4.37	20	
Bromodichloromethane	9.28	1.0	µg/L	10.0		92.8	70-130	0.751	20	
Bromoform	9.21	1.0	µg/L	10.0		92.1	70-130	2.89	20	
Bromomethane	7.60	2.0	µg/L	10.0		76.0	40-160	27.7 *	20	R-05 †
2-Butanone (MEK)	108	10	µg/L	100		108	40-160	5.48	20	†
n-Butylbenzene	9.58	1.0	µg/L	10.0		95.8	70-130	2.64	20	
sec-Butylbenzene	9.90	1.0	µg/L	10.0		99.0	70-130	4.65	20	
tert-Butylbenzene	9.72	1.0	µg/L	10.0		97.2	70-130	3.67	20	
tert-Butyl Ethyl Ether (TBEE)	12.1	5.0	µg/L	10.0		121	70-130	1.25	20	
Carbon Disulfide	10.9	5.0	µg/L	10.0		109	70-130	0.0915	20	
Carbon Tetrachloride	10.2	1.0	µg/L	10.0		102	70-130	2.07	20	
Chlorobenzene	10.0	1.0	µg/L	10.0		100	70-130	4.60	20	
Chlorodibromomethane	10.0	0.50	µg/L	10.0		100	70-130	1.19	20	
Chloroethane	12.4	2.0	µg/L	10.0		124	70-130	7.67	20	
Chloroform	9.12	2.0	µg/L	10.0		91.2	70-130	2.55	20	
Chloromethane	8.90	2.0	µg/L	10.0		89.0	40-160	11.8	20	†
2-Chlorotoluene	9.92	1.0	µg/L	10.0		99.2	70-130	2.24	20	
4-Chlorotoluene	10.2	1.0	µg/L	10.0		102	70-130	2.58	20	
1,2-Dibromo-3-chloropropane (DBCP)	7.90	2.0	µg/L	10.0		79.0	70-130	8.14	20	V-05
1,2-Dibromoethane (EDB)	9.64	0.50	µg/L	10.0		96.4	70-130	1.44	20	
Dibromomethane	9.68	1.0	µg/L	10.0		96.8	70-130	0.934	20	
1,2-Dichlorobenzene	9.63	1.0	µg/L	10.0		96.3	70-130	0.312	20	
1,3-Dichlorobenzene	9.70	1.0	µg/L	10.0		97.0	70-130	2.93	20	
1,4-Dichlorobenzene	8.88	1.0	µg/L	10.0		88.8	70-130	0.451	20	

QUALITY CONTROL
Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B070389 - SW-846 5030B										
LCS Dup (B070389-BSD1)				Prepared & Analyzed: 04/04/13						
Dichlorodifluoromethane (Freon 12)	6.63	2.0	µg/L	10.0		66.3	40-160	1.21	20	L-14 †
1,1-Dichloroethane	9.80	1.0	µg/L	10.0		98.0	70-130	1.03	20	
1,2-Dichloroethane	9.14	1.0	µg/L	10.0		91.4	70-130	0.871	20	
1,1-Dichloroethylene	10.1	1.0	µg/L	10.0		101	70-130	3.01	20	
cis-1,2-Dichloroethylene	9.51	1.0	µg/L	10.0		95.1	70-130	2.02	20	
trans-1,2-Dichloroethylene	10.5	1.0	µg/L	10.0		105	70-130	4.60	20	
1,2-Dichloropropane	9.65	1.0	µg/L	10.0		96.5	70-130	3.91	20	
1,3-Dichloropropane	9.45	0.50	µg/L	10.0		94.5	70-130	1.60	20	
2,2-Dichloropropane	11.7	1.0	µg/L	10.0		117	70-130	2.87	20	
1,1-Dichloropropene	9.98	0.50	µg/L	10.0		99.8	70-130	3.16	20	
cis-1,3-Dichloropropene	10.0	0.40	µg/L	10.0		100	70-130	1.71	20	
trans-1,3-Dichloropropene	11.4	0.40	µg/L	10.0		114	70-130	0.872	20	
Diethyl Ether	12.5	2.0	µg/L	10.0		125	70-130	4.76	20	
Diisopropyl Ether (DIPE)	11.9	0.50	µg/L	10.0		119	70-130	0.0839	20	
1,4-Dioxane	120	50	µg/L	100		120	40-160	7.93	20	V-16 †
Ethylbenzene	10.7	1.0	µg/L	10.0		107	70-130	3.63	20	
Hexachlorobutadiene	9.09	0.50	µg/L	10.0		90.9	70-130	1.55	20	
2-Hexanone (MBK)	111	10	µg/L	100		111	40-160	6.63	20	†
Isopropylbenzene (Cumene)	10.0	1.0	µg/L	10.0		100	70-130	4.48	20	
p-Isopropyltoluene (p-Cymene)	9.82	1.0	µg/L	10.0		98.2	70-130	3.73	20	
Methyl tert-Butyl Ether (MTBE)	12.8	1.0	µg/L	10.0		128	70-130	1.49	20	
Methylene Chloride	10.9	5.0	µg/L	10.0		109	70-130	2.99	20	V-20
4-Methyl-2-pentanone (MIBK)	107	10	µg/L	100		107	40-160	7.97	20	†
Naphthalene	6.69	2.0	µg/L	10.0		66.9 *	70-130	8.99	20	L-07, V-05
n-Propylbenzene	10.3	1.0	µg/L	10.0		103	70-130	2.56	20	
Styrene	9.67	1.0	µg/L	10.0		96.7	70-130	2.73	20	
1,1,1,2-Tetrachloroethane	9.68	1.0	µg/L	10.0		96.8	70-130	3.90	20	
1,1,2,2-Tetrachloroethane	9.12	0.50	µg/L	10.0		91.2	70-130	2.60	20	
Tetrachloroethylene	10.2	1.0	µg/L	10.0		102	70-130	2.89	20	
Tetrahydrofuran	11.2	2.0	µg/L	10.0		112	70-130	2.82	20	
Toluene	10.6	1.0	µg/L	10.0		106	70-130	0.376	20	
1,2,3-Trichlorobenzene	6.91	2.0	µg/L	10.0		69.1 *	70-130	6.17	20	L-07, V-05
1,2,4-Trichlorobenzene	8.24	1.0	µg/L	10.0		82.4	70-130	0.00	20	
1,1,1-Trichloroethane	10.2	1.0	µg/L	10.0		102	70-130	1.18	20	
1,1,2-Trichloroethane	9.39	1.0	µg/L	10.0		93.9	70-130	0.743	20	
Trichloroethylene	9.53	1.0	µg/L	10.0		95.3	70-130	6.05	20	
Trichlorofluoromethane (Freon 11)	12.5	2.0	µg/L	10.0		125	70-130	2.76	20	
1,2,3-Trichloropropane	9.13	2.0	µg/L	10.0		91.3	70-130	4.29	20	
1,2,4-Trimethylbenzene	10.0	1.0	µg/L	10.0		100	70-130	6.05	20	
1,3,5-Trimethylbenzene	9.38	1.0	µg/L	10.0		93.8	70-130	4.47	20	
Vinyl Chloride	10.2	2.0	µg/L	10.0		102	70-130	6.28	20	
m+p Xylene	21.6	2.0	µg/L	20.0		108	70-130	2.30	20	
o-Xylene	11.1	1.0	µg/L	10.0		111	70-130	2.82	20	
Surrogate: 1,2-Dichloroethane-d4	25.1		µg/L	25.0		100	70-130			
Surrogate: Toluene-d8	25.5		µg/L	25.0		102	70-130			
Surrogate: 4-Bromofluorobenzene	25.2		µg/L	25.0		101	70-130			

QUALITY CONTROL
Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes

Batch B070279 - SW-846 3546
Blank (B070279-BLK1)

Prepared & Analyzed: 04/03/13

Acenaphthene	ND	0.17	mg/Kg wet							
Acenaphthylene	ND	0.17	mg/Kg wet							
Acetophenone	ND	0.34	mg/Kg wet							
Aniline	ND	0.34	mg/Kg wet							
Anthracene	ND	0.17	mg/Kg wet							
Benzo(a)anthracene	ND	0.17	mg/Kg wet							
Benzo(a)pyrene	ND	0.17	mg/Kg wet							
Benzo(b)fluoranthene	ND	0.17	mg/Kg wet							
Benzo(g,h,i)perylene	ND	0.17	mg/Kg wet							
Benzo(k)fluoranthene	ND	0.17	mg/Kg wet							
Bis(2-chloroethoxy)methane	ND	0.34	mg/Kg wet							
Bis(2-chloroethyl)ether	ND	0.34	mg/Kg wet							
Bis(2-chloroisopropyl)ether	ND	0.34	mg/Kg wet							V-05
Bis(2-Ethylhexyl)phthalate	ND	0.34	mg/Kg wet							
4-Bromophenylphenylether	ND	0.34	mg/Kg wet							
Butylbenzylphthalate	ND	0.66	mg/Kg wet							
4-Chloroaniline	ND	0.66	mg/Kg wet							
2-Chloronaphthalene	ND	0.34	mg/Kg wet							
2-Chlorophenol	ND	0.34	mg/Kg wet							
Chrysene	ND	0.17	mg/Kg wet							
Dibenz(a,h)anthracene	ND	0.17	mg/Kg wet							
Dibenzofuran	ND	0.34	mg/Kg wet							
Di-n-butylphthalate	ND	0.34	mg/Kg wet							
1,2-Dichlorobenzene	ND	0.34	mg/Kg wet							
1,3-Dichlorobenzene	ND	0.34	mg/Kg wet							
1,4-Dichlorobenzene	ND	0.34	mg/Kg wet							
3,3-Dichlorobenzidine	ND	0.17	mg/Kg wet							
2,4-Dichlorophenol	ND	0.34	mg/Kg wet							
Diethylphthalate	ND	0.34	mg/Kg wet							
2,4-Dimethylphenol	ND	0.34	mg/Kg wet							
Dimethylphthalate	ND	0.66	mg/Kg wet							
2,4-Dinitrophenol	ND	0.66	mg/Kg wet							
2,4-Dinitrotoluene	ND	0.34	mg/Kg wet							
2,6-Dinitrotoluene	ND	0.34	mg/Kg wet							
Di-n-octylphthalate	ND	0.66	mg/Kg wet							
1,2-Diphenylhydrazine (as Azobenzene)	ND	0.34	mg/Kg wet							
Fluoranthene	ND	0.17	mg/Kg wet							
Fluorene	ND	0.17	mg/Kg wet							
Hexachlorobenzene	ND	0.34	mg/Kg wet							
Hexachlorobutadiene	ND	0.34	mg/Kg wet							
Hexachloroethane	ND	0.34	mg/Kg wet							
Indeno(1,2,3-cd)pyrene	ND	0.17	mg/Kg wet							
Isophorone	ND	0.34	mg/Kg wet							
2-Methylnaphthalene	ND	0.17	mg/Kg wet							
2-Methylphenol	ND	0.34	mg/Kg wet							
3/4-Methylphenol	ND	0.34	mg/Kg wet							
Naphthalene	ND	0.17	mg/Kg wet							
Nitrobenzene	ND	0.34	mg/Kg wet							
2-Nitrophenol	ND	0.34	mg/Kg wet							
4-Nitrophenol	ND	0.66	mg/Kg wet							
Pentachlorophenol	ND	0.34	mg/Kg wet							
Phenanthrene	ND	0.17	mg/Kg wet							

QUALITY CONTROL
Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B070279 - SW-846 3546										
Blank (B070279-BLK1)				Prepared & Analyzed: 04/03/13						
Phenol	ND	0.34	mg/Kg wet							
Pyrene	ND	0.17	mg/Kg wet							
1,2,4-Trichlorobenzene	ND	0.34	mg/Kg wet							
2,4,5-Trichlorophenol	ND	0.34	mg/Kg wet							
2,4,6-Trichlorophenol	ND	0.34	mg/Kg wet							
Surrogate: 2-Fluorophenol	6.40		mg/Kg wet	6.67		96.0	30-130			
Surrogate: Phenol-d6	6.43		mg/Kg wet	6.67		96.4	30-130			
Surrogate: Nitrobenzene-d5	3.07		mg/Kg wet	3.33		92.2	30-130			
Surrogate: 2-Fluorobiphenyl	3.31		mg/Kg wet	3.33		99.3	30-130			
Surrogate: 2,4,6-Tribromophenol	8.39		mg/Kg wet	6.67		126	30-130			
Surrogate: p-Terphenyl-d14	2.18		mg/Kg wet	3.33		65.4	30-130			
LCS (B070279-BS1)				Prepared & Analyzed: 04/03/13						
Acenaphthene	1.68	0.17	mg/Kg wet	1.67		101	40-140			
Acenaphthylene	1.67	0.17	mg/Kg wet	1.67		100	40-140			
Acetophenone	1.44	0.34	mg/Kg wet	1.67		86.1	40-140			
Aniline	0.751	0.34	mg/Kg wet	1.67		45.1	40-140			
Anthracene	1.70	0.17	mg/Kg wet	1.67		102	40-140			
Benzo(a)anthracene	1.75	0.17	mg/Kg wet	1.67		105	40-140			
Benzo(a)pyrene	1.80	0.17	mg/Kg wet	1.67		108	40-140			
Benzo(b)fluoranthene	1.86	0.17	mg/Kg wet	1.67		111	40-140			
Benzo(g,h,i)perylene	0.860	0.17	mg/Kg wet	1.67		51.6	40-140			
Benzo(k)fluoranthene	1.81	0.17	mg/Kg wet	1.67		109	40-140			
Bis(2-chloroethoxy)methane	1.69	0.34	mg/Kg wet	1.67		101	40-140			
Bis(2-chloroethyl)ether	1.60	0.34	mg/Kg wet	1.67		95.7	40-140			
Bis(2-chloroisopropyl)ether	1.32	0.34	mg/Kg wet	1.67		79.2	40-140			V-05
Bis(2-Ethylhexyl)phthalate	1.68	0.34	mg/Kg wet	1.67		101	40-140			
4-Bromophenylphenylether	2.00	0.34	mg/Kg wet	1.67		120	40-140			
Butylbenzylphthalate	1.62	0.66	mg/Kg wet	1.67		97.5	40-140			
4-Chloroaniline	0.846	0.66	mg/Kg wet	1.67		50.7	15-140			†
2-Chloronaphthalene	1.46	0.34	mg/Kg wet	1.67		87.4	40-140			
2-Chlorophenol	1.57	0.34	mg/Kg wet	1.67		94.2	30-130			
Chrysene	1.70	0.17	mg/Kg wet	1.67		102	40-140			
Dibenz(a,h)anthracene	0.995	0.17	mg/Kg wet	1.67		59.7	40-140			
Dibenzofuran	1.73	0.34	mg/Kg wet	1.67		104	40-140			
Di-n-butylphthalate	1.74	0.34	mg/Kg wet	1.67		104	40-140			
1,2-Dichlorobenzene	1.39	0.34	mg/Kg wet	1.67		83.6	40-140			
1,3-Dichlorobenzene	1.41	0.34	mg/Kg wet	1.67		84.8	40-140			
1,4-Dichlorobenzene	1.40	0.34	mg/Kg wet	1.67		83.8	40-140			
3,3-Dichlorobenzidine	1.53	0.17	mg/Kg wet	1.67		91.5	40-140			
2,4-Dichlorophenol	1.63	0.34	mg/Kg wet	1.67		97.9	30-130			
Diethylphthalate	2.07	0.34	mg/Kg wet	1.67		124	40-140			
2,4-Dimethylphenol	1.63	0.34	mg/Kg wet	1.67		97.8	30-130			
Dimethylphthalate	1.98	0.66	mg/Kg wet	1.67		119	40-140			
2,4-Dinitrophenol	1.48	0.66	mg/Kg wet	1.67		88.9	15-140			†
2,4-Dinitrotoluene	2.05	0.34	mg/Kg wet	1.67		123	40-140			
2,6-Dinitrotoluene	2.07	0.34	mg/Kg wet	1.67		124	40-140			
Di-n-octylphthalate	1.51	0.66	mg/Kg wet	1.67		90.4	40-140			
1,2-Diphenylhydrazine (as Azobenzene)	1.82	0.34	mg/Kg wet	1.67		109	40-140			
Fluoranthene	1.41	0.17	mg/Kg wet	1.67		84.5	40-140			
Fluorene	1.83	0.17	mg/Kg wet	1.67		110	40-140			
Hexachlorobenzene	1.88	0.34	mg/Kg wet	1.67		113	40-140			

QUALITY CONTROL

Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B070279 - SW-846 3546										
LCS (B070279-BS1)				Prepared & Analyzed: 04/03/13						
Hexachlorobutadiene	1.64	0.34	mg/Kg wet	1.67		98.5	40-140			
Hexachloroethane	1.39	0.34	mg/Kg wet	1.67		83.5	40-140			
Indeno(1,2,3-cd)pyrene	0.981	0.17	mg/Kg wet	1.67		58.8	40-140			
Isophorone	1.50	0.34	mg/Kg wet	1.67		89.8	40-140			
2-Methylnaphthalene	1.45	0.17	mg/Kg wet	1.67		87.1	40-140			
2-Methylphenol	1.41	0.34	mg/Kg wet	1.67		84.9	30-130			
3/4-Methylphenol	2.22	0.34	mg/Kg wet	1.67		133 *	30-130			L-02
Naphthalene	1.54	0.17	mg/Kg wet	1.67		92.4	40-140			
Nitrobenzene	1.54	0.34	mg/Kg wet	1.67		92.5	40-140			
2-Nitrophenol	1.62	0.34	mg/Kg wet	1.67		97.5	30-130			
4-Nitrophenol	1.77	0.66	mg/Kg wet	1.67		106	15-140			†
Pentachlorophenol	1.42	0.34	mg/Kg wet	1.67		85.5	30-130			
Phenanthrene	1.70	0.17	mg/Kg wet	1.67		102	40-140			
Phenol	1.38	0.34	mg/Kg wet	1.67		82.9	15-140			†
Pyrene	1.52	0.17	mg/Kg wet	1.67		91.5	40-140			
1,2,4-Trichlorobenzene	1.60	0.34	mg/Kg wet	1.67		95.9	40-140			
2,4,5-Trichlorophenol	1.92	0.34	mg/Kg wet	1.67		115	30-130			
2,4,6-Trichlorophenol	1.80	0.34	mg/Kg wet	1.67		108	30-130			
Surrogate: 2-Fluorophenol	6.60		mg/Kg wet	6.67		99.0	30-130			
Surrogate: Phenol-d6	6.15		mg/Kg wet	6.67		92.2	30-130			
Surrogate: Nitrobenzene-d5	3.21		mg/Kg wet	3.33		96.4	30-130			
Surrogate: 2-Fluorobiphenyl	3.20		mg/Kg wet	3.33		96.1	30-130			
Surrogate: 2,4,6-Tribromophenol	9.25		mg/Kg wet	6.67		139 *	30-130			S-07
Surrogate: p-Terphenyl-d14	3.26		mg/Kg wet	3.33		97.9	30-130			
LCS Dup (B070279-BS1)				Prepared & Analyzed: 04/03/13						
Acenaphthene	1.70	0.17	mg/Kg wet	1.67		102	40-140	1.24	30	
Acenaphthylene	1.70	0.17	mg/Kg wet	1.67		102	40-140	1.98	30	
Acetophenone	1.51	0.34	mg/Kg wet	1.67		90.6	40-140	5.07	30	
Aniline	0.698	0.34	mg/Kg wet	1.67		41.9	40-140	7.27	30	
Anthracene	1.73	0.17	mg/Kg wet	1.67		104	40-140	1.82	30	
Benzo(a)anthracene	1.77	0.17	mg/Kg wet	1.67		106	40-140	0.889	30	
Benzo(a)pyrene	1.85	0.17	mg/Kg wet	1.67		111	40-140	2.65	30	
Benzo(b)fluoranthene	1.92	0.17	mg/Kg wet	1.67		115	40-140	3.53	30	
Benzo(g,h,i)perylene	0.849	0.17	mg/Kg wet	1.67		51.0	40-140	1.29	30	
Benzo(k)fluoranthene	1.90	0.17	mg/Kg wet	1.67		114	40-140	4.58	30	
Bis(2-chloroethoxy)methane	1.67	0.34	mg/Kg wet	1.67		99.9	40-140	1.27	30	
Bis(2-chloroethyl)ether	1.60	0.34	mg/Kg wet	1.67		96.1	40-140	0.375	30	
Bis(2-chloroisopropyl)ether	1.36	0.34	mg/Kg wet	1.67		81.6	40-140	2.89	30	V-05
Bis(2-Ethylhexyl)phthalate	1.74	0.34	mg/Kg wet	1.67		104	40-140	3.54	30	
4-Bromophenylphenylether	2.01	0.34	mg/Kg wet	1.67		121	40-140	0.599	30	
Butylbenzylphthalate	1.68	0.66	mg/Kg wet	1.67		101	40-140	3.19	30	
4-Chloroaniline	0.840	0.66	mg/Kg wet	1.67		50.4	15-140	0.633	30	†
2-Chloronaphthalene	1.53	0.34	mg/Kg wet	1.67		91.7	40-140	4.78	30	
2-Chlorophenol	1.62	0.34	mg/Kg wet	1.67		97.1	30-130	3.05	30	
Chrysene	1.71	0.17	mg/Kg wet	1.67		102	40-140	0.666	30	
Dibenz(a,h)anthracene	0.991	0.17	mg/Kg wet	1.67		59.4	40-140	0.436	30	
Dibenzofuran	1.75	0.34	mg/Kg wet	1.67		105	40-140	1.04	30	
Di-n-butylphthalate	1.84	0.34	mg/Kg wet	1.67		110	40-140	5.40	30	
1,2-Dichlorobenzene	1.42	0.34	mg/Kg wet	1.67		85.0	40-140	1.61	30	
1,3-Dichlorobenzene	1.39	0.34	mg/Kg wet	1.67		83.6	40-140	1.40	30	
1,4-Dichlorobenzene	1.39	0.34	mg/Kg wet	1.67		83.4	40-140	0.526	30	

QUALITY CONTROL

Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes

Batch B070279 - SW-846 3546

LCS Dup (B070279-BSD1)

Prepared & Analyzed: 04/03/13

3,3-Dichlorobenzidine	1.49	0.17	mg/Kg wet	1.67		89.4	40-140	2.34	30	
2,4-Dichlorophenol	1.70	0.34	mg/Kg wet	1.67		102	30-130	4.04	30	
Diethylphthalate	2.05	0.34	mg/Kg wet	1.67		123	40-140	1.17	30	
2,4-Dimethylphenol	1.69	0.34	mg/Kg wet	1.67		102	30-130	3.81	30	
Dimethylphthalate	1.97	0.66	mg/Kg wet	1.67		118	40-140	0.135	30	
2,4-Dinitrophenol	1.35	0.66	mg/Kg wet	1.67		80.8	15-140	9.57	30	†
2,4-Dinitrotoluene	2.06	0.34	mg/Kg wet	1.67		123	40-140	0.227	30	
2,6-Dinitrotoluene	2.07	0.34	mg/Kg wet	1.67		124	40-140	0.338	30	
Di-n-octylphthalate	1.57	0.66	mg/Kg wet	1.67		94.0	40-140	3.86	30	
1,2-Diphenylhydrazine (as Azobenzene)	1.85	0.34	mg/Kg wet	1.67		111	40-140	1.22	30	
Fluoranthene	1.46	0.17	mg/Kg wet	1.67		87.4	40-140	3.35	30	
Fluorene	1.83	0.17	mg/Kg wet	1.67		110	40-140	0.273	30	
Hexachlorobenzene	1.92	0.34	mg/Kg wet	1.67		115	40-140	1.91	30	
Hexachlorobutadiene	1.61	0.34	mg/Kg wet	1.67		96.7	40-140	1.91	30	
Hexachloroethane	1.40	0.34	mg/Kg wet	1.67		83.9	40-140	0.430	30	
Indeno(1,2,3-cd)pyrene	0.969	0.17	mg/Kg wet	1.67		58.1	40-140	1.23	30	
Isophorone	1.53	0.34	mg/Kg wet	1.67		92.0	40-140	2.42	30	
2-Methylnaphthalene	1.49	0.17	mg/Kg wet	1.67		89.6	40-140	2.88	30	
2-Methylphenol	1.52	0.34	mg/Kg wet	1.67		91.3	30-130	7.27	30	
3/4-Methylphenol	2.32	0.34	mg/Kg wet	1.67		139	* 30-130	4.52	30	L-02
Naphthalene	1.54	0.17	mg/Kg wet	1.67		92.7	40-140	0.303	30	
Nitrobenzene	1.53	0.34	mg/Kg wet	1.67		92.0	40-140	0.542	30	
2-Nitrophenol	1.63	0.34	mg/Kg wet	1.67		97.5	30-130	0.0410	30	
4-Nitrophenol	1.66	0.66	mg/Kg wet	1.67		99.5	15-140	6.74	30	†
Pentachlorophenol	1.41	0.34	mg/Kg wet	1.67		84.5	30-130	1.11	30	
Phenanthrene	1.73	0.17	mg/Kg wet	1.67		104	40-140	1.71	30	
Phenol	1.45	0.34	mg/Kg wet	1.67		87.0	15-140	4.76	30	†
Pyrene	1.55	0.17	mg/Kg wet	1.67		93.0	40-140	1.65	30	
1,2,4-Trichlorobenzene	1.59	0.34	mg/Kg wet	1.67		95.7	40-140	0.251	30	
2,4,5-Trichlorophenol	1.93	0.34	mg/Kg wet	1.67		116	30-130	0.484	30	
2,4,6-Trichlorophenol	1.85	0.34	mg/Kg wet	1.67		111	30-130	2.45	30	
Surrogate: 2-Fluorophenol	6.47		mg/Kg wet	6.67		97.0	30-130			
Surrogate: Phenol-d6	6.36		mg/Kg wet	6.67		95.5	30-130			
Surrogate: Nitrobenzene-d5	3.14		mg/Kg wet	3.33		94.1	30-130			
Surrogate: 2-Fluorobiphenyl	3.26		mg/Kg wet	3.33		97.9	30-130			
Surrogate: 2,4,6-Tribromophenol	8.86		mg/Kg wet	6.67		133	* 30-130			S-07
Surrogate: p-Terphenyl-d14	3.29		mg/Kg wet	3.33		98.7	30-130			

Batch B070335 - SW-846 3510C

Blank (B070335-BLK1)

Prepared: 04/03/13 Analyzed: 04/08/13

Acenaphthene	ND	5.0	µg/L							
Acenaphthene (low)	ND	0.30	µg/L							
Acenaphthylene	ND	5.0	µg/L							
Acenaphthylene (low)	ND	0.30	µg/L							
Acetophenone	ND	10	µg/L							
Aniline	ND	5.0	µg/L							
Anthracene	ND	5.0	µg/L							
Anthracene (low)	ND	0.20	µg/L							
Benzo(a)anthracene	ND	5.0	µg/L							
Benzo(a)anthracene (low)	ND	0.050	µg/L							
Benzo(a)pyrene	ND	5.0	µg/L							
Benzo(a)pyrene (low)	ND	0.10	µg/L							

QUALITY CONTROL
Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes

Batch B070335 - SW-846 3510C
Blank (B070335-BLK1)

Prepared: 04/03/13 Analyzed: 04/08/13

Benzo(b)fluoranthene	ND	5.0	µg/L
Benzo(b)fluoranthene (low)	ND	0.050	µg/L
Benzo(g,h,i)perylene	ND	5.0	µg/L
Benzo(g,h,i)perylene (low)	ND	0.50	µg/L
Benzo(k)fluoranthene	ND	5.0	µg/L
Benzo(k)fluoranthene (low)	ND	0.20	µg/L
Bis(2-chloroethoxy)methane	ND	10	µg/L
Bis(2-chloroethyl)ether	ND	10	µg/L
Bis(2-chloroisopropyl)ether	ND	10	µg/L
Bis(2-Ethylhexyl)phthalate	ND	10	µg/L
4-Bromophenylphenylether	ND	10	µg/L
Butylbenzylphthalate	ND	10	µg/L
4-Chloroaniline	ND	10	µg/L
2-Chloronaphthalene	ND	10	µg/L
2-Chlorophenol	ND	10	µg/L
Chrysene	ND	5.0	µg/L
Chrysene (low)	ND	0.20	µg/L
Dibenz(a,h)anthracene	ND	5.0	µg/L
Dibenz(a,h)anthracene (low)	ND	0.20	µg/L
Dibenzofuran	ND	5.0	µg/L
Di-n-butylphthalate	ND	10	µg/L
1,2-Dichlorobenzene	ND	5.0	µg/L
1,3-Dichlorobenzene	ND	5.0	µg/L
1,4-Dichlorobenzene	ND	5.0	µg/L
3,3-Dichlorobenzidine	ND	10	µg/L
2,4-Dichlorophenol	ND	10	µg/L
Diethylphthalate	ND	10	µg/L
2,4-Dimethylphenol	ND	10	µg/L
Dimethylphthalate	ND	10	µg/L
2,4-Dinitrophenol	ND	10	µg/L
2,4-Dinitrotoluene	ND	10	µg/L
2,6-Dinitrotoluene	ND	10	µg/L
Di-n-octylphthalate	ND	10	µg/L
1,2-Diphenylhydrazine (as Azobenzene)	ND	10	µg/L
Fluoranthene	ND	5.0	µg/L
Fluoranthene (low)	ND	0.50	µg/L
Fluorene	ND	5.0	µg/L
Fluorene (low)	ND	1.0	µg/L
Hexachlorobenzene	ND	10	µg/L
Hexachlorobutadiene	ND	10	µg/L
Hexachloroethane	ND	10	µg/L
Indeno(1,2,3-cd)pyrene	ND	5.0	µg/L
Indeno(1,2,3-cd)pyrene (low)	ND	0.20	µg/L
Isophorone	ND	10	µg/L
2-Methylnaphthalene	ND	5.0	µg/L
2-Methylnaphthalene (low)	ND	1.0	µg/L
2-Methylphenol	ND	10	µg/L
3/4-Methylphenol	ND	10	µg/L
Naphthalene	ND	5.0	µg/L
Naphthalene (low)	ND	1.0	µg/L
Nitrobenzene	ND	10	µg/L
2-Nitrophenol	ND	10	µg/L

QUALITY CONTROL
Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes

Batch B070335 - SW-846 3510C
Blank (B070335-BLK1)

Prepared: 04/03/13 Analyzed: 04/08/13

4-Nitrophenol	ND	10	µg/L							
Pentachlorophenol	ND	10	µg/L							
Phenanthrene	ND	5.0	µg/L							
Phenanthrene (low)	ND	0.050	µg/L							
Phenol	ND	10	µg/L							
Pyrene	ND	5.0	µg/L							
Pyrene (low)	ND	1.0	µg/L							
1,2,4-Trichlorobenzene	ND	5.0	µg/L							
2,4,5-Trichlorophenol	ND	10	µg/L							
2,4,6-Trichlorophenol	ND	10	µg/L							
Surrogate: 2-Fluorophenol	72.4		µg/L	200		36.2	15-110			
Surrogate: Phenol-d6	75.0		µg/L	200		37.5	15-110			
Surrogate: Nitrobenzene-d5	77.6		µg/L	100		77.6	30-130			
Surrogate: Nitrobenzene-d5 (low)	74.3		µg/L	100		74.3	30-130			
Surrogate: 2-Fluorobiphenyl	73.7		µg/L	100		73.7	30-130			
Surrogate: 2-Fluorobiphenyl (low)	70.6		µg/L	100		70.6	30-130			
Surrogate: 2,4,6-Tribromophenol	173		µg/L	200		86.4	15-110			
Surrogate: p-Terphenyl-d14	82.2		µg/L	100		82.2	30-130			
Surrogate: p-Terphenyl-d14 (low)	60.9		µg/L	100		60.9	30-130			

LCS (B070335-BS1)

Prepared: 04/03/13 Analyzed: 04/08/13

Acenaphthene	39.6	5.0	µg/L	50.0		79.3	40-140			
Acenaphthene (low)	37.7	7.5	µg/L	50.0		75.4	40-140			
Acenaphthylene	39.3	5.0	µg/L	50.0		78.7	40-140			
Acenaphthylene (low)	38.2	7.5	µg/L	50.0		76.3	40-140			
Acetophenone	41.2	10	µg/L	50.0		82.5	40-140			
Aniline	32.0	5.0	µg/L	50.0		64.0	40-140			
Anthracene	41.8	5.0	µg/L	50.0		83.6	40-140			
Anthracene (low)	37.4	5.0	µg/L	50.0		74.9	40-140			
Benzo(a)anthracene	42.6	5.0	µg/L	50.0		85.1	40-140			
Benzo(a)anthracene (low)	38.3	1.2	µg/L	50.0		76.6	40-140			
Benzo(a)pyrene	43.5	5.0	µg/L	50.0		87.0	40-140			
Benzo(a)pyrene (low)	37.1	2.5	µg/L	50.0		74.2	40-140			
Benzo(b)fluoranthene	40.9	5.0	µg/L	50.0		81.8	40-140			
Benzo(b)fluoranthene (low)	39.3	1.2	µg/L	50.0		78.6	40-140			
Benzo(g,h,i)perylene	39.0	5.0	µg/L	50.0		77.9	40-140			
Benzo(g,h,i)perylene (low)	38.6	12	µg/L	50.0		77.1	40-140			
Benzo(k)fluoranthene	42.7	5.0	µg/L	50.0		85.4	40-140			
Benzo(k)fluoranthene (low)	35.4	5.0	µg/L	50.0		70.8	40-140			
Bis(2-chloroethoxy)methane	53.9	10	µg/L	50.0		108	40-140			
Bis(2-chloroethyl)ether	41.4	10	µg/L	50.0		82.7	40-140			
Bis(2-chloroisopropyl)ether	37.1	10	µg/L	50.0		74.2	40-140			
Bis(2-Ethylhexyl)phthalate	44.8	10	µg/L	50.0		89.7	40-140			
4-Bromophenylphenylether	44.8	10	µg/L	50.0		89.6	40-140			
Butylbenzylphthalate	42.9	10	µg/L	50.0		85.8	40-140			
4-Chloroaniline	36.9	10	µg/L	50.0		73.9	15-140			†
2-Chloronaphthalene	33.8	10	µg/L	50.0		67.5	40-140			
2-Chlorophenol	40.5	10	µg/L	50.0		81.0	30-130			
Chrysene	42.4	5.0	µg/L	50.0		84.7	40-140			
Chrysene (low)	35.3	5.0	µg/L	50.0		70.6	40-140			
Dibenz(a,h)anthracene	45.1	5.0	µg/L	50.0		90.2	40-140			
Dibenz(a,h)anthracene (low)	39.9	5.0	µg/L	50.0		79.8	40-140			

QUALITY CONTROL
Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B070335 - SW-846 3510C										
LCS (B070335-BS1)				Prepared: 04/03/13 Analyzed: 04/08/13						
Dibenzofuran	38.5	5.0	µg/L	50.0		77.1	40-140			
Di-n-butylphthalate	42.4	10	µg/L	50.0		84.7	40-140			
1,2-Dichlorobenzene	39.7	5.0	µg/L	50.0		79.4	40-140			
1,3-Dichlorobenzene	38.4	5.0	µg/L	50.0		76.7	40-140			
1,4-Dichlorobenzene	39.0	5.0	µg/L	50.0		78.0	40-140			
3,3-Dichlorobenzidine	47.1	10	µg/L	50.0		94.2	40-140			
2,4-Dichlorophenol	42.2	10	µg/L	50.0		84.3	30-130			
Diethylphthalate	39.4	10	µg/L	50.0		78.7	40-140			
2,4-Dimethylphenol	40.7	10	µg/L	50.0		81.5	30-130			
Dimethylphthalate	39.6	10	µg/L	50.0		79.2	40-140			
2,4-Dinitrophenol	40.4	10	µg/L	50.0		80.9	15-140			†
2,4-Dinitrotoluene	41.5	10	µg/L	50.0		82.9	40-140			
2,6-Dinitrotoluene	41.0	10	µg/L	50.0		82.1	40-140			
Di-n-octylphthalate	45.5	10	µg/L	50.0		91.1	40-140			
1,2-Diphenylhydrazine (as Azobenzene)	38.6	10	µg/L	50.0		77.2	40-140			
Fluoranthene	41.6	5.0	µg/L	50.0		83.2	40-140			
Fluoranthene (low)	37.5	12	µg/L	50.0		75.0	40-140			
Fluorene	34.9	5.0	µg/L	50.0		69.8	40-140			
Fluorene (low)	39.4	25	µg/L	50.0		78.7	40-140			
Hexachlorobenzene	43.8	10	µg/L	50.0		87.6	40-140			
Hexachlorobutadiene	41.4	10	µg/L	50.0		82.9	40-140			
Hexachloroethane	40.6	10	µg/L	50.0		81.2	40-140			
Indeno(1,2,3-cd)pyrene	45.4	5.0	µg/L	50.0		90.9	40-140			
Indeno(1,2,3-cd)pyrene (low)	41.0	5.0	µg/L	50.0		82.0	40-140			
Isophorone	39.8	10	µg/L	50.0		79.7	40-140			
2-Methylnaphthalene	38.0	5.0	µg/L	50.0		76.0	40-140			
2-Methylnaphthalene (low)	34.5	25	µg/L	50.0		69.0	40-140			
2-Methylphenol	38.2	10	µg/L	50.0		76.4	30-130			
3/4-Methylphenol	73.9	10	µg/L	50.0		148 *	30-130			L-02
Naphthalene	38.7	5.0	µg/L	50.0		77.5	40-140			
Naphthalene (low)	32.9	25	µg/L	50.0		65.8	40-140			
Nitrobenzene	38.5	10	µg/L	50.0		77.1	40-140			
2-Nitrophenol	41.8	10	µg/L	50.0		83.5	30-130			
4-Nitrophenol	26.9	10	µg/L	50.0		53.8	15-140			†
Pentachlorophenol	41.4	10	µg/L	50.0		82.7	30-130			
Phenanthrene	39.8	5.0	µg/L	50.0		79.5	40-140			
Phenanthrene (low)	33.4	1.2	µg/L	50.0		66.8	40-140			
Phenol	21.9	10	µg/L	50.0		43.8	15-140			†
Pyrene	40.9	5.0	µg/L	50.0		81.9	40-140			
Pyrene (low)	35.6	25	µg/L	50.0		71.1	40-140			
1,2,4-Trichlorobenzene	40.5	5.0	µg/L	50.0		81.0	40-140			
2,4,5-Trichlorophenol	41.2	10	µg/L	50.0		82.5	30-130			
2,4,6-Trichlorophenol	40.9	10	µg/L	50.0		81.8	30-130			
Surrogate: 2-Fluorophenol	110		µg/L	200		54.8	15-110			
Surrogate: Phenol-d6	81.0		µg/L	200		40.5	15-110			
Surrogate: Nitrobenzene-d5	78.9		µg/L	100		78.9	30-130			
Surrogate: Nitrobenzene-d5 (low)	80.6		µg/L	100		80.6	30-130			
Surrogate: 2-Fluorobiphenyl	75.7		µg/L	100		75.7	30-130			
Surrogate: 2-Fluorobiphenyl (low)	75.6		µg/L	100		75.6	30-130			
Surrogate: 2,4,6-Tribromophenol	179		µg/L	200		89.4	15-110			
Surrogate: p-Terphenyl-d14	80.2		µg/L	100		80.2	30-130			
Surrogate: p-Terphenyl-d14 (low)	54.8		µg/L	100		54.8	30-130			

QUALITY CONTROL
Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B070335 - SW-846 3510C										
LCS Dup (B070335-BSD1)				Prepared: 04/03/13 Analyzed: 04/08/13						
Acenaphthene	38.1	5.0	µg/L	50.0		76.2	40-140	3.91	20	
Acenaphthene (low)	41.6	7.5	µg/L	50.0		83.2	40-140	9.83	20	
Acenaphthylene	38.1	5.0	µg/L	50.0		76.2	40-140	3.20	20	
Acenaphthylene (low)	42.0	7.5	µg/L	50.0		84.0	40-140	9.67	20	
Acetophenone	38.1	10	µg/L	50.0		76.1	40-140	8.00	20	
Aniline	29.6	5.0	µg/L	50.0		59.1	40-140	7.92	20	
Anthracene	42.3	5.0	µg/L	50.0		84.5	40-140	1.09	20	
Anthracene (low)	41.7	5.0	µg/L	50.0		83.4	40-140	10.7	20	
Benzo(a)anthracene	41.3	5.0	µg/L	50.0		82.7	40-140	2.93	20	
Benzo(a)anthracene (low)	42.4	1.2	µg/L	50.0		84.8	40-140	10.2	20	
Benzo(a)pyrene	43.5	5.0	µg/L	50.0		87.0	40-140	0.00	20	
Benzo(a)pyrene (low)	41.4	2.5	µg/L	50.0		82.8	40-140	10.9	20	
Benzo(b)fluoranthene	41.5	5.0	µg/L	50.0		82.9	40-140	1.41	20	
Benzo(b)fluoranthene (low)	43.8	1.2	µg/L	50.0		87.7	40-140	10.9	20	
Benzo(g,h,i)perylene	37.5	5.0	µg/L	50.0		74.9	40-140	3.95	20	
Benzo(g,h,i)perylene (low)	43.0	12	µg/L	50.0		86.1	40-140	11.0	20	
Benzo(k)fluoranthene	42.7	5.0	µg/L	50.0		85.5	40-140	0.0468	20	
Benzo(k)fluoranthene (low)	39.5	5.0	µg/L	50.0		79.0	40-140	10.9	20	
Bis(2-chloroethoxy)methane	51.9	10	µg/L	50.0		104	40-140	3.72	20	
Bis(2-chloroethyl)ether	41.2	10	µg/L	50.0		82.3	40-140	0.485	20	
Bis(2-chloroisopropyl)ether	35.2	10	µg/L	50.0		70.3	40-140	5.37	20	
Bis(2-Ethylhexyl)phthalate	43.8	10	µg/L	50.0		87.6	40-140	2.30	20	
4-Bromophenylphenylether	45.6	10	µg/L	50.0		91.1	40-140	1.68	20	
Butylbenzylphthalate	41.5	10	µg/L	50.0		83.1	40-140	3.20	20	
4-Chloroaniline	33.1	10	µg/L	50.0		66.3	15-140	10.9	20	†
2-Chloronaphthalene	36.6	10	µg/L	50.0		73.3	40-140	8.15	20	
2-Chlorophenol	38.6	10	µg/L	50.0		77.3	30-130	4.72	20	
Chrysene	41.4	5.0	µg/L	50.0		82.8	40-140	2.29	20	
Chrysene (low)	39.2	5.0	µg/L	50.0		78.4	40-140	10.6	20	
Dibenz(a,h)anthracene	42.9	5.0	µg/L	50.0		85.7	40-140	5.09	20	
Dibenz(a,h)anthracene (low)	44.5	5.0	µg/L	50.0		89.0	40-140	11.0	20	
Dibenzofuran	36.7	5.0	µg/L	50.0		73.4	40-140	4.81	20	
Di-n-butylphthalate	44.7	10	µg/L	50.0		89.3	40-140	5.26	20	
1,2-Dichlorobenzene	38.0	5.0	µg/L	50.0		75.9	40-140	4.53	20	
1,3-Dichlorobenzene	37.5	5.0	µg/L	50.0		74.9	40-140	2.37	20	
1,4-Dichlorobenzene	36.9	5.0	µg/L	50.0		73.7	40-140	5.64	20	
3,3-Dichlorobenzidine	44.5	10	µg/L	50.0		89.1	40-140	5.61	20	
2,4-Dichlorophenol	40.4	10	µg/L	50.0		80.8	30-130	4.29	20	
Diethylphthalate	41.0	10	µg/L	50.0		82.0	40-140	4.03	20	
2,4-Dimethylphenol	39.6	10	µg/L	50.0		79.1	30-130	2.91	20	
Dimethylphthalate	39.5	10	µg/L	50.0		78.9	40-140	0.354	20	
2,4-Dinitrophenol	38.2	10	µg/L	50.0		76.3	15-140	5.75	20	†
2,4-Dinitrotoluene	39.9	10	µg/L	50.0		79.8	40-140	3.86	20	
2,6-Dinitrotoluene	41.0	10	µg/L	50.0		81.9	40-140	0.220	20	
Di-n-octylphthalate	46.4	10	µg/L	50.0		92.7	40-140	1.81	20	
1,2-Diphenylhydrazine (as Azobenzene)	44.1	10	µg/L	50.0		88.2	40-140	13.2	20	
Fluoranthene	43.2	5.0	µg/L	50.0		86.4	40-140	3.84	20	
Fluoranthene (low)	41.6	12	µg/L	50.0		83.2	40-140	10.4	20	
Fluorene	33.0	5.0	µg/L	50.0		66.0	40-140	5.59	20	
Fluorene (low)	43.6	25	µg/L	50.0		87.2	40-140	10.2	20	
Hexachlorobenzene	46.9	10	µg/L	50.0		93.7	40-140	6.70	20	
Hexachlorobutadiene	40.0	10	µg/L	50.0		80.0	40-140	3.61	20	

QUALITY CONTROL
Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B070335 - SW-846 3510C										
LCS Dup (B070335-BSD1)					Prepared: 04/03/13 Analyzed: 04/08/13					
Hexachloroethane	39.6	10	µg/L	50.0		79.3	40-140	2.42	20	
Indeno(1,2,3-cd)pyrene	43.5	5.0	µg/L	50.0		87.0	40-140	4.39	20	
Indeno(1,2,3-cd)pyrene (low)	45.8	5.0	µg/L	50.0		91.6	40-140	10.9	50	
Isophorone	39.3	10	µg/L	50.0		78.7	40-140	1.29	20	
2-Methylnaphthalene	36.0	5.0	µg/L	50.0		71.9	40-140	5.49	20	
2-Methylnaphthalene (low)	37.6	25	µg/L	50.0		75.3	40-140	8.80	20	
2-Methylphenol	36.3	10	µg/L	50.0		72.7	30-130	5.04	20	
3/4-Methylphenol	70.1	10	µg/L	50.0		140 *	30-130	5.30	20	L-02
Naphthalene	36.7	5.0	µg/L	50.0		73.4	40-140	5.38	20	
Naphthalene (low)	36.3	25	µg/L	50.0		72.6	40-140	9.76	20	
Nitrobenzene	36.3	10	µg/L	50.0		72.5	40-140	6.07	20	
2-Nitrophenol	39.8	10	µg/L	50.0		79.5	30-130	4.91	20	
4-Nitrophenol	26.5	10	µg/L	50.0		53.0	15-140	1.39	20	†
Pentachlorophenol	43.8	10	µg/L	50.0		87.5	30-130	5.66	20	
Phenanthrene	39.0	5.0	µg/L	50.0		78.1	40-140	1.78	20	
Phenanthrene (low)	37.0	1.2	µg/L	50.0		73.9	40-140	10.2	20	
Phenol	20.1	10	µg/L	50.0		40.2	15-140	8.58	20	†
Pyrene	39.4	5.0	µg/L	50.0		78.8	40-140	3.76	20	
Pyrene (low)	39.4	25	µg/L	50.0		78.8	40-140	10.3	20	
1,2,4-Trichlorobenzene	39.4	5.0	µg/L	50.0		78.7	40-140	2.88	20	
2,4,5-Trichlorophenol	40.7	10	µg/L	50.0		81.3	30-130	1.42	20	
2,4,6-Trichlorophenol	40.6	10	µg/L	50.0		81.3	30-130	0.662	20	
Surrogate: 2-Fluorophenol	105		µg/L	200		52.3	15-110			
Surrogate: Phenol-d6	72.6		µg/L	200		36.3	15-110			
Surrogate: Nitrobenzene-d5	72.2		µg/L	100		72.2	30-130			
Surrogate: Nitrobenzene-d5 (low)	85.0		µg/L	100		85.0	30-130			
Surrogate: 2-Fluorobiphenyl	69.4		µg/L	100		69.4	30-130			
Surrogate: 2-Fluorobiphenyl (low)	80.3		µg/L	100		80.3	30-130			
Surrogate: 2,4,6-Tribromophenol	166		µg/L	200		82.8	15-110			
Surrogate: p-Terphenyl-d14	73.8		µg/L	100		73.8	30-130			
Surrogate: p-Terphenyl-d14 (low)	58.4		µg/L	100		58.4	30-130			

QUALITY CONTROL
Polychlorinated Biphenyls By GC/ECD - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes

Batch B070323 - SW-846 3546
Blank (B070323-BLK1)

Prepared: 04/03/13 Analyzed: 04/04/13

Aroclor-1016	ND	0.020	mg/Kg wet							
Aroclor-1016 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1221	ND	0.020	mg/Kg wet							
Aroclor-1221 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1232	ND	0.020	mg/Kg wet							
Aroclor-1232 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1242	ND	0.020	mg/Kg wet							
Aroclor-1242 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1248	ND	0.020	mg/Kg wet							
Aroclor-1248 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1254	ND	0.020	mg/Kg wet							
Aroclor-1254 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1260	ND	0.020	mg/Kg wet							
Aroclor-1260 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1262	ND	0.020	mg/Kg wet							
Aroclor-1262 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1268	ND	0.020	mg/Kg wet							
Aroclor-1268 [2C]	ND	0.020	mg/Kg wet							
Surrogate: Decachlorobiphenyl	0.162		mg/Kg wet	0.200		80.9	30-150			
Surrogate: Decachlorobiphenyl [2C]	0.153		mg/Kg wet	0.200		76.4	30-150			
Surrogate: Tetrachloro-m-xylene	0.154		mg/Kg wet	0.200		76.8	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	0.154		mg/Kg wet	0.200		76.8	30-150			

LCS (B070323-BS1)

Prepared: 04/03/13 Analyzed: 04/04/13

Aroclor-1016	0.17	0.10	mg/Kg wet	0.200		83.9	40-140			
Aroclor-1016 [2C]	0.16	0.10	mg/Kg wet	0.200		78.0	40-140			
Aroclor-1260	0.16	0.10	mg/Kg wet	0.200		80.8	40-140			
Aroclor-1260 [2C]	0.17	0.10	mg/Kg wet	0.200		84.0	40-140			
Surrogate: Decachlorobiphenyl	0.168		mg/Kg wet	0.200		83.8	30-150			
Surrogate: Decachlorobiphenyl [2C]	0.154		mg/Kg wet	0.200		77.0	30-150			
Surrogate: Tetrachloro-m-xylene	0.158		mg/Kg wet	0.200		78.8	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	0.162		mg/Kg wet	0.200		81.2	30-150			

LCS Dup (B070323-BSD1)

Prepared: 04/03/13 Analyzed: 04/04/13

Aroclor-1016	0.16	0.10	mg/Kg wet	0.200		79.6	40-140	5.36	30	
Aroclor-1016 [2C]	0.15	0.10	mg/Kg wet	0.200		76.1	40-140	2.50	30	
Aroclor-1260	0.15	0.10	mg/Kg wet	0.200		77.1	40-140	4.74	30	
Aroclor-1260 [2C]	0.16	0.10	mg/Kg wet	0.200		80.2	40-140	4.62	30	
Surrogate: Decachlorobiphenyl	0.151		mg/Kg wet	0.200		75.6	30-150			
Surrogate: Decachlorobiphenyl [2C]	0.139		mg/Kg wet	0.200		69.3	30-150			
Surrogate: Tetrachloro-m-xylene	0.144		mg/Kg wet	0.200		72.0	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	0.148		mg/Kg wet	0.200		74.0	30-150			

QUALITY CONTROL
Polychlorinated Biphenyls By GC/ECD - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B070417 - SW-846 3510C										
Blank (B070417-BLK1)										
Prepared: 04/04/13 Analyzed: 04/08/13										
Aroclor-1016	ND	0.20	µg/L							
Aroclor-1016 [2C]	ND	0.20	µg/L							R-05
Aroclor-1221	ND	0.20	µg/L							
Aroclor-1221 [2C]	ND	0.20	µg/L							
Aroclor-1232	ND	0.20	µg/L							
Aroclor-1232 [2C]	ND	0.20	µg/L							
Aroclor-1242	ND	0.20	µg/L							
Aroclor-1242 [2C]	ND	0.20	µg/L							
Aroclor-1248	ND	0.20	µg/L							
Aroclor-1248 [2C]	ND	0.20	µg/L							
Aroclor-1254	ND	0.20	µg/L							
Aroclor-1254 [2C]	ND	0.20	µg/L							
Aroclor-1260	ND	0.20	µg/L							R-05
Aroclor-1260 [2C]	ND	0.20	µg/L							R-05
Aroclor-1262	ND	0.20	µg/L							
Aroclor-1262 [2C]	ND	0.20	µg/L							
Aroclor-1268	ND	0.20	µg/L							
Aroclor-1268 [2C]	ND	0.20	µg/L							
Surrogate: Decachlorobiphenyl	2.13		µg/L	2.00		107	30-150			
Surrogate: Decachlorobiphenyl [2C]	1.69		µg/L	2.00		84.5	30-150			
Surrogate: Tetrachloro-m-xylene	1.94		µg/L	2.00		96.8	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	1.90		µg/L	2.00		94.8	30-150			
LCS (B070417-BS1)										
Prepared: 04/04/13 Analyzed: 04/08/13										
Aroclor-1016	0.47	0.20	µg/L	0.500		93.9	40-140			
Aroclor-1016 [2C]	0.44	0.20	µg/L	0.500		89.0	40-140			R-05
Aroclor-1260	0.46	0.20	µg/L	0.500		92.1	40-140			R-05
Aroclor-1260 [2C]	0.43	0.20	µg/L	0.500		85.9	40-140			R-05
Surrogate: Decachlorobiphenyl	1.81		µg/L	2.00		90.4	30-150			
Surrogate: Decachlorobiphenyl [2C]	1.40		µg/L	2.00		70.1	30-150			
Surrogate: Tetrachloro-m-xylene	1.81		µg/L	2.00		90.7	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	1.76		µg/L	2.00		88.2	30-150			
LCS Dup (B070417-BSD1)										
Prepared: 04/04/13 Analyzed: 04/08/13										
Aroclor-1016	0.57	0.20	µg/L	0.500		115	40-140	19.8	20	
Aroclor-1016 [2C]	0.56	0.20	µg/L	0.500		111	40-140	22.3	* 20	R-05
Aroclor-1260	0.59	0.20	µg/L	0.500		118	40-140	24.8	* 20	R-05
Aroclor-1260 [2C]	0.55	0.20	µg/L	0.500		110	40-140	24.9	* 20	R-05
Surrogate: Decachlorobiphenyl	2.31		µg/L	2.00		116	30-150			
Surrogate: Decachlorobiphenyl [2C]	1.86		µg/L	2.00		93.1	30-150			
Surrogate: Tetrachloro-m-xylene	2.12		µg/L	2.00		106	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	2.09		µg/L	2.00		104	30-150			

QUALITY CONTROL
Petroleum Hydrocarbons Analyses - EPH - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes

Batch B070262 - SW-846 3546
Blank (B070262-BLK1)

Prepared: 04/03/13 Analyzed: 04/04/13

C9-C18 Aliphatics	ND	10	mg/Kg wet							
C19-C36 Aliphatics	ND	10	mg/Kg wet							
Unadjusted C11-C22 Aromatics	ND	10	mg/Kg wet							
C11-C22 Aromatics	ND	10	mg/Kg wet							
Acenaphthene	ND	0.10	mg/Kg wet							
Acenaphthylene	ND	0.10	mg/Kg wet							
Anthracene	ND	0.10	mg/Kg wet							
Benzo(a)anthracene	ND	0.10	mg/Kg wet							
Benzo(a)pyrene	ND	0.10	mg/Kg wet							
Benzo(b)fluoranthene	ND	0.10	mg/Kg wet							
Benzo(g,h,i)perylene	ND	0.10	mg/Kg wet							
Benzo(k)fluoranthene	ND	0.10	mg/Kg wet							
Chrysene	ND	0.10	mg/Kg wet							
Dibenz(a,h)anthracene	ND	0.10	mg/Kg wet							
Fluoranthene	ND	0.10	mg/Kg wet							
Fluorene	ND	0.10	mg/Kg wet							
Indeno(1,2,3-cd)pyrene	ND	0.10	mg/Kg wet							
2-Methylnaphthalene	ND	0.10	mg/Kg wet							
Naphthalene	ND	0.10	mg/Kg wet							
Phenanthrene	ND	0.10	mg/Kg wet							
Pyrene	ND	0.10	mg/Kg wet							
Surrogate: Chlorooctadecane (COD)	4.15		mg/Kg wet	4.99		83.2	40-140			
Surrogate: o-Terphenyl (OTP)	4.16		mg/Kg wet	5.00		83.2	40-140			
Surrogate: 2-Bromonaphthalene	4.51		mg/Kg wet	5.00		90.2	40-140			
Surrogate: 2-Fluorobiphenyl	4.69		mg/Kg wet	5.00		93.8	40-140			

LCS (B070262-BS1)

Prepared: 04/03/13 Analyzed: 04/04/13

Acenaphthene	4.03	0.10	mg/Kg wet	5.00		80.6	40-140			
Acenaphthylene	3.94	0.10	mg/Kg wet	5.00		78.8	40-140			
Anthracene	4.39	0.10	mg/Kg wet	5.00		87.8	40-140			
Benzo(a)anthracene	4.40	0.10	mg/Kg wet	5.00		88.0	40-140			
Benzo(a)pyrene	4.24	0.10	mg/Kg wet	5.00		84.9	40-140			
Benzo(b)fluoranthene	4.41	0.10	mg/Kg wet	5.00		88.1	40-140			
Benzo(g,h,i)perylene	4.53	0.10	mg/Kg wet	5.00		90.5	40-140			
Benzo(k)fluoranthene	4.32	0.10	mg/Kg wet	5.00		86.4	40-140			
Chrysene	4.12	0.10	mg/Kg wet	5.00		82.5	40-140			
Dibenz(a,h)anthracene	4.53	0.10	mg/Kg wet	5.00		90.7	40-140			
Fluoranthene	4.35	0.10	mg/Kg wet	5.00		87.0	40-140			
Fluorene	4.16	0.10	mg/Kg wet	5.00		83.3	40-140			
Indeno(1,2,3-cd)pyrene	4.62	0.10	mg/Kg wet	5.00		92.4	40-140			
2-Methylnaphthalene	3.85	0.10	mg/Kg wet	5.00		77.0	40-140			
Naphthalene	3.46	0.10	mg/Kg wet	5.00		69.3	40-140			
Phenanthrene	4.34	0.10	mg/Kg wet	5.00		86.8	40-140			
Pyrene	4.22	0.10	mg/Kg wet	5.00		84.5	40-140			
n-Decane	2.73	0.10	mg/Kg wet	5.00		54.7	40-140			
n-Docosane	4.20	0.10	mg/Kg wet	5.00		84.0	40-140			
n-Dodecane	3.36	0.10	mg/Kg wet	5.00		67.1	40-140			
n-Eicosane	4.32	0.10	mg/Kg wet	5.00		86.3	40-140			
n-Hexacosane	4.02	0.10	mg/Kg wet	5.00		80.4	40-140			
n-Hexadecane	4.32	0.10	mg/Kg wet	5.00		86.5	40-140			
n-Hexatriacontane	4.33	0.10	mg/Kg wet	5.00		86.5	40-140			
n-Nonadecane	4.22	0.10	mg/Kg wet	5.00		84.4	40-140			

QUALITY CONTROL
Petroleum Hydrocarbons Analyses - EPH - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B070262 - SW-846 3546										
LCS (B070262-BS1)										
					Prepared: 04/03/13 Analyzed: 04/04/13					
n-Nonane	1.99	0.10	mg/Kg wet	5.00		39.9	30-140			
n-Octacosane	3.94	0.10	mg/Kg wet	5.00		78.9	40-140			
n-Octadecane	4.47	0.10	mg/Kg wet	5.00		89.3	40-140			
n-Tetracosane	4.09	0.10	mg/Kg wet	5.00		81.9	40-140			
n-Tetradecane	3.87	0.10	mg/Kg wet	5.00		77.4	40-140			
n-Triacontane	4.02	0.10	mg/Kg wet	5.00		80.4	40-140			
Naphthalene-aliphatic fraction	ND	0.10	mg/Kg wet	5.00			0-5			
2-Methylnaphthalene-aliphatic fraction	ND	0.10	mg/Kg wet	5.00			0-5			
Surrogate: Chlorooctadecane (COD)	4.14		mg/Kg wet	4.99		83.0	40-140			
Surrogate: o-Terphenyl (OTP)	4.11		mg/Kg wet	5.00		82.1	40-140			
Surrogate: 2-Bromonaphthalene	4.67		mg/Kg wet	5.00		93.4	40-140			
Surrogate: 2-Fluorobiphenyl	4.93		mg/Kg wet	5.00		98.6	40-140			
LCS Dup (B070262-BS1)										
					Prepared: 04/03/13 Analyzed: 04/04/13					
Acenaphthene	4.23	0.10	mg/Kg wet	5.00		84.6	40-140	4.79	25	
Acenaphthylene	4.16	0.10	mg/Kg wet	5.00		83.2	40-140	5.40	25	
Anthracene	4.41	0.10	mg/Kg wet	5.00		88.2	40-140	0.420	25	
Benzo(a)anthracene	4.34	0.10	mg/Kg wet	5.00		86.8	40-140	1.42	25	
Benzo(a)pyrene	4.17	0.10	mg/Kg wet	5.00		83.5	40-140	1.65	25	
Benzo(b)fluoranthene	4.33	0.10	mg/Kg wet	5.00		86.7	40-140	1.66	25	
Benzo(g,h,i)perylene	4.45	0.10	mg/Kg wet	5.00		89.0	40-140	1.70	25	
Benzo(k)fluoranthene	4.24	0.10	mg/Kg wet	5.00		84.8	40-140	1.82	25	
Chrysene	4.06	0.10	mg/Kg wet	5.00		81.3	40-140	1.46	25	
Dibenz(a,h)anthracene	4.45	0.10	mg/Kg wet	5.00		89.0	40-140	1.86	25	
Fluoranthene	4.33	0.10	mg/Kg wet	5.00		86.7	40-140	0.378	25	
Fluorene	4.28	0.10	mg/Kg wet	5.00		85.5	40-140	2.70	25	
Indeno(1,2,3-cd)pyrene	4.53	0.10	mg/Kg wet	5.00		90.6	40-140	2.01	25	
2-Methylnaphthalene	4.10	0.10	mg/Kg wet	5.00		82.0	40-140	6.37	25	
Naphthalene	3.64	0.10	mg/Kg wet	5.00		72.9	40-140	5.02	25	
Phenanthrene	4.37	0.10	mg/Kg wet	5.00		87.3	40-140	0.682	25	
Pyrene	4.21	0.10	mg/Kg wet	5.00		84.2	40-140	0.313	25	
n-Decane	2.85	0.10	mg/Kg wet	5.00		57.0	40-140	4.18	25	
n-Docosane	4.34	0.10	mg/Kg wet	5.00		86.7	40-140	3.20	25	
n-Dodecane	3.53	0.10	mg/Kg wet	5.00		70.7	40-140	5.15	25	
n-Eicosane	4.51	0.10	mg/Kg wet	5.00		90.1	40-140	4.35	25	
n-Hexacosane	4.19	0.10	mg/Kg wet	5.00		83.9	40-140	4.17	25	
n-Hexadecane	4.45	0.10	mg/Kg wet	5.00		88.9	40-140	2.80	25	
n-Hexatriacontane	4.44	0.10	mg/Kg wet	5.00		88.7	40-140	2.48	25	
n-Nonadecane	4.35	0.10	mg/Kg wet	5.00		87.0	40-140	3.06	25	
n-Nonane	2.09	0.10	mg/Kg wet	5.00		41.8	30-140	4.75	25	
n-Octacosane	4.12	0.10	mg/Kg wet	5.00		82.4	40-140	4.29	25	
n-Octadecane	4.54	0.10	mg/Kg wet	5.00		90.8	40-140	1.70	25	
n-Tetracosane	4.25	0.10	mg/Kg wet	5.00		84.9	40-140	3.67	25	
n-Tetradecane	4.08	0.10	mg/Kg wet	5.00		81.6	40-140	5.31	25	
n-Triacontane	4.19	0.10	mg/Kg wet	5.00		83.8	40-140	4.16	25	
Naphthalene-aliphatic fraction	ND	0.10	mg/Kg wet	5.00			0-5			
2-Methylnaphthalene-aliphatic fraction	ND	0.10	mg/Kg wet	5.00			0-5			
Surrogate: Chlorooctadecane (COD)	4.02		mg/Kg wet	4.99		80.6	40-140			
Surrogate: o-Terphenyl (OTP)	3.90		mg/Kg wet	5.00		78.0	40-140			
Surrogate: 2-Bromonaphthalene	4.50		mg/Kg wet	5.00		90.0	40-140			
Surrogate: 2-Fluorobiphenyl	4.75		mg/Kg wet	5.00		95.0	40-140			

QUALITY CONTROL
Petroleum Hydrocarbons Analyses - EPH - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes

Batch B070305 - SW-846 3510C
Blank (B070305-BLK1)

Prepared: 04/03/13 Analyzed: 04/04/13

C9-C18 Aliphatics	ND	100	µg/L							
C19-C36 Aliphatics	ND	100	µg/L							
Unadjusted C11-C22 Aromatics	ND	100	µg/L							
C11-C22 Aromatics	ND	100	µg/L							
Acenaphthene	ND	2.0	µg/L							
Acenaphthylene	ND	2.0	µg/L							
Anthracene	ND	2.0	µg/L							
Benzo(a)anthracene	ND	2.0	µg/L							
Benzo(a)pyrene	ND	2.0	µg/L							
Benzo(b)fluoranthene	ND	2.0	µg/L							
Benzo(g,h,i)perylene	ND	2.0	µg/L							
Benzo(k)fluoranthene	ND	2.0	µg/L							
Chrysene	ND	2.0	µg/L							
Dibenz(a,h)anthracene	ND	2.0	µg/L							
Fluoranthene	ND	2.0	µg/L							
Fluorene	ND	2.0	µg/L							
Indeno(1,2,3-cd)pyrene	ND	2.0	µg/L							
2-Methylnaphthalene	ND	2.0	µg/L							
Naphthalene	ND	2.0	µg/L							
Phenanthrene	ND	2.0	µg/L							
Pyrene	ND	2.0	µg/L							
Surrogate: Chlorooctadecane (COD)	53.4		µg/L	99.8		53.5	40-140			
Surrogate: o-Terphenyl (OTP)	61.7		µg/L	100		61.7	40-140			
Surrogate: 2-Bromonaphthalene	174		µg/L	200		86.8	40-140			
Surrogate: 2-Fluorobiphenyl	176		µg/L	200		88.1	40-140			

LCS (B070305-BS1)

Prepared: 04/03/13 Analyzed: 04/04/13

Acenaphthene	62.4	2.0	µg/L	100		62.4	40-140			
Acenaphthylene	60.8	2.0	µg/L	100		60.8	40-140			
Anthracene	66.8	2.0	µg/L	100		66.8	40-140			
Benzo(a)anthracene	67.1	2.0	µg/L	100		67.1	40-140			
Benzo(a)pyrene	64.6	2.0	µg/L	100		64.6	40-140			
Benzo(b)fluoranthene	66.9	2.0	µg/L	100		66.9	40-140			
Benzo(g,h,i)perylene	68.6	2.0	µg/L	100		68.6	40-140			
Benzo(k)fluoranthene	66.0	2.0	µg/L	100		66.0	40-140			
Chrysene	62.8	2.0	µg/L	100		62.8	40-140			
Dibenz(a,h)anthracene	69.0	2.0	µg/L	100		69.0	40-140			
Fluoranthene	66.5	2.0	µg/L	100		66.5	40-140			
Fluorene	64.3	2.0	µg/L	100		64.3	40-140			
Indeno(1,2,3-cd)pyrene	70.4	2.0	µg/L	100		70.4	40-140			
2-Methylnaphthalene	59.1	2.0	µg/L	100		59.1	40-140			
Naphthalene	51.9	2.0	µg/L	100		51.9	40-140			
Phenanthrene	66.9	2.0	µg/L	100		66.9	40-140			
Pyrene	64.7	2.0	µg/L	100		64.7	40-140			
n-Decane	41.3	2.0	µg/L	100		41.3	40-140			
n-Docosane	68.2	2.0	µg/L	100		68.2	40-140			
n-Dodecane	52.2	2.0	µg/L	100		52.2	40-140			
n-Eicosane	70.5	2.0	µg/L	100		70.5	40-140			
n-Hexacosane	65.4	2.0	µg/L	100		65.4	40-140			
n-Hexadecane	70.2	2.0	µg/L	100		70.2	40-140			
n-Hexatriacontane	73.9	2.0	µg/L	100		73.9	40-140			
n-Nonadecane	67.8	2.0	µg/L	100		67.8	40-140			

QUALITY CONTROL
Petroleum Hydrocarbons Analyses - EPH - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B070305 - SW-846 3510C										
LCS (B070305-BS1)										
				Prepared: 04/03/13 Analyzed: 04/04/13						
n-Nonane	32.0	2.0	µg/L	100		32.0	30-140			
n-Octacosane	64.8	2.0	µg/L	100		64.8	40-140			
n-Octadecane	72.2	2.0	µg/L	100		72.2	40-140			
n-Tetracosane	66.3	2.0	µg/L	100		66.3	40-140			
n-Tetradecane	61.9	2.0	µg/L	100		61.9	40-140			
n-Triacontane	67.0	2.0	µg/L	100		67.0	40-140			
Naphthalene-aliphatic fraction	ND	2.0	µg/L	100			0-5			
2-Methylnaphthalene-aliphatic fraction	ND	2.0	µg/L	100			0-5			
Surrogate: Chlorooctadecane (COD)	55.1		µg/L	99.8		55.2	40-140			
Surrogate: o-Terphenyl (OTP)	63.8		µg/L	100		63.8	40-140			
Surrogate: 2-Bromonaphthalene	88.7		µg/L	100		88.7	40-140			
Surrogate: 2-Fluorobiphenyl	90.0		µg/L	100		90.0	40-140			
LCS Dup (B070305-BS1)										
				Prepared: 04/03/13 Analyzed: 04/04/13						
Acenaphthene	65.1	2.0	µg/L	100		65.1	40-140	4.18	25	
Acenaphthylene	63.4	2.0	µg/L	100		63.4	40-140	4.06	25	
Anthracene	70.6	2.0	µg/L	100		70.6	40-140	5.45	25	
Benzo(a)anthracene	71.5	2.0	µg/L	100		71.5	40-140	6.33	25	
Benzo(a)pyrene	68.8	2.0	µg/L	100		68.8	40-140	6.34	25	
Benzo(b)fluoranthene	71.5	2.0	µg/L	100		71.5	40-140	6.57	25	
Benzo(g,h,i)perylene	73.2	2.0	µg/L	100		73.2	40-140	6.53	25	
Benzo(k)fluoranthene	70.1	2.0	µg/L	100		70.1	40-140	6.06	25	
Chrysene	67.0	2.0	µg/L	100		67.0	40-140	6.47	25	
Dibenz(a,h)anthracene	73.4	2.0	µg/L	100		73.4	40-140	6.20	25	
Fluoranthene	70.7	2.0	µg/L	100		70.7	40-140	6.14	25	
Fluorene	68.3	2.0	µg/L	100		68.3	40-140	6.12	25	
Indeno(1,2,3-cd)pyrene	74.9	2.0	µg/L	100		74.9	40-140	6.15	25	
2-Methylnaphthalene	61.6	2.0	µg/L	100		61.6	40-140	4.20	25	
Naphthalene	53.9	2.0	µg/L	100		53.9	40-140	3.81	25	
Phenanthrene	70.5	2.0	µg/L	100		70.5	40-140	5.18	25	
Pyrene	68.8	2.0	µg/L	100		68.8	40-140	6.21	25	
n-Decane	40.9	2.0	µg/L	100		40.9	40-140	0.930	25	
n-Docosane	70.8	2.0	µg/L	100		70.8	40-140	3.75	25	
n-Dodecane	53.4	2.0	µg/L	100		53.4	40-140	2.34	25	
n-Eicosane	72.9	2.0	µg/L	100		72.9	40-140	3.36	25	
n-Hexacosane	68.0	2.0	µg/L	100		68.0	40-140	3.98	25	
n-Hexadecane	72.1	2.0	µg/L	100		72.1	40-140	2.65	25	
n-Hexatriacontane	78.0	2.0	µg/L	100		78.0	40-140	5.36	25	
n-Nonadecane	70.4	2.0	µg/L	100		70.4	40-140	3.83	25	
n-Nonane	31.3	2.0	µg/L	100		31.3	30-140	2.32	25	
n-Octacosane	67.3	2.0	µg/L	100		67.3	40-140	3.71	25	
n-Octadecane	74.5	2.0	µg/L	100		74.5	40-140	3.11	25	
n-Tetracosane	68.8	2.0	µg/L	100		68.8	40-140	3.70	25	
n-Tetradecane	63.5	2.0	µg/L	100		63.5	40-140	2.59	25	
n-Triacontane	69.5	2.0	µg/L	100		69.5	40-140	3.64	25	
Naphthalene-aliphatic fraction	ND	2.0	µg/L	100			0-5			
2-Methylnaphthalene-aliphatic fraction	ND	2.0	µg/L	100			0-5			
Surrogate: Chlorooctadecane (COD)	56.8		µg/L	99.8		56.9	40-140			
Surrogate: o-Terphenyl (OTP)	64.6		µg/L	100		64.6	40-140			
Surrogate: 2-Bromonaphthalene	84.7		µg/L	100		84.7	40-140			
Surrogate: 2-Fluorobiphenyl	87.2		µg/L	100		87.2	40-140			

QUALITY CONTROL
Petroleum Hydrocarbons Analyses - VPH - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B070299 - MA VPH										
Blank (B070299-BLK1)				Prepared & Analyzed: 04/03/13						
Unadjusted C5-C8 Aliphatics	ND	100	µg/L							
C5-C8 Aliphatics	ND	100	µg/L							
Unadjusted C9-C12 Aliphatics	ND	100	µg/L							
C9-C12 Aliphatics	ND	100	µg/L							
C9-C10 Aromatics	ND	100	µg/L							
Benzene	ND	1.0	µg/L							
Ethylbenzene	ND	1.0	µg/L							
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L							
Naphthalene	ND	5.0	µg/L							
Toluene	ND	1.0	µg/L							
m+p Xylene	ND	2.0	µg/L							
o-Xylene	ND	1.0	µg/L							
Surrogate: 2,5-Dibromotoluene (FID)	42.8		µg/L	40.0		107	70-130			
Surrogate: 2,5-Dibromotoluene (PID)	42.4		µg/L	40.0		106	70-130			
LCS (B070299-BS1)				Prepared & Analyzed: 04/03/13						
Benzene	112	1.0	µg/L	100		112	70-130			
Butylcyclohexane	91.9	1.0	µg/L	100		91.9	70-130			
Decane	106	1.0	µg/L	100		106	70-130			
Ethylbenzene	113	1.0	µg/L	100		113	70-130			
Methyl tert-Butyl Ether (MTBE)	120	1.0	µg/L	100		120	70-130			
2-Methylpentane	110	1.0	µg/L	100		110	70-130			
Naphthalene	134	5.0	µg/L	100		134 *	70-130			L-07
Nonane	96.7	1.0	µg/L	100		96.7	30-130			
Pentane	108	1.0	µg/L	100		108	70-130			
Toluene	113	1.0	µg/L	100		113	70-130			
1,2,4-Trimethylbenzene	112	1.0	µg/L	100		112	70-130			
2,2,4-Trimethylpentane	94.6	1.0	µg/L	100		94.6	70-130			
m+p Xylene	229	2.0	µg/L	200		114	70-130			
o-Xylene	114	1.0	µg/L	100		114	70-130			
Surrogate: 2,5-Dibromotoluene (FID)	36.3		µg/L	40.0		90.8	70-130			
Surrogate: 2,5-Dibromotoluene (PID)	37.6		µg/L	40.0		94.1	70-130			
LCS Dup (B070299-BSD1)				Prepared & Analyzed: 04/03/13						
Benzene	111	1.0	µg/L	100		111	70-130	0.118	25	
Butylcyclohexane	94.8	1.0	µg/L	100		94.8	70-130	3.14	25	
Decane	108	1.0	µg/L	100		108	70-130	1.49	25	
Ethylbenzene	112	1.0	µg/L	100		112	70-130	0.467	25	
Methyl tert-Butyl Ether (MTBE)	115	1.0	µg/L	100		115	70-130	4.32	25	
2-Methylpentane	109	1.0	µg/L	100		109	70-130	0.634	25	
Naphthalene	127	5.0	µg/L	100		127	70-130	5.34	25	
Nonane	100	1.0	µg/L	100		100	30-130	3.80	25	
Pentane	106	1.0	µg/L	100		106	70-130	1.83	25	
Toluene	113	1.0	µg/L	100		113	70-130	0.320	25	
1,2,4-Trimethylbenzene	111	1.0	µg/L	100		111	70-130	0.831	25	
2,2,4-Trimethylpentane	95.6	1.0	µg/L	100		95.6	70-130	0.990	25	
m+p Xylene	228	2.0	µg/L	200		114	70-130	0.425	25	
o-Xylene	113	1.0	µg/L	100		113	70-130	0.780	25	
Surrogate: 2,5-Dibromotoluene (FID)	35.4		µg/L	40.0		88.4	70-130			
Surrogate: 2,5-Dibromotoluene (PID)	34.1		µg/L	40.0		85.3	70-130			

QUALITY CONTROL
Petroleum Hydrocarbons Analyses - VPH - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B070300 - MA VPH										
Blank (B070300-BLK1)				Prepared & Analyzed: 04/03/13						
Unadjusted C5-C8 Aliphatics	ND	10	mg/Kg wet							
C5-C8 Aliphatics	ND	10	mg/Kg wet							
Unadjusted C9-C12 Aliphatics	ND	10	mg/Kg wet							
C9-C12 Aliphatics	ND	10	mg/Kg wet							
C9-C10 Aromatics	ND	10	mg/Kg wet							
Benzene	ND	0.050	mg/Kg wet							
Ethylbenzene	ND	0.050	mg/Kg wet							
Methyl tert-Butyl Ether (MTBE)	ND	0.050	mg/Kg wet							
Naphthalene	ND	0.25	mg/Kg wet							
Toluene	ND	0.050	mg/Kg wet							
m+p Xylene	ND	0.10	mg/Kg wet							
o-Xylene	ND	0.050	mg/Kg wet							
Surrogate: 2,5-Dibromotoluene (FID)	0.0428		mg/Kg wet	0.0400		107	70-130			
Surrogate: 2,5-Dibromotoluene (PID)	0.0424		mg/Kg wet	0.0400		106	70-130			
LCS (B070300-BS1)				Prepared & Analyzed: 04/03/13						
Benzene	0.112	0.0010	mg/Kg wet	0.100		112	70-130			
Butylcyclohexane	0.0919	0.0010	mg/Kg wet	0.100		91.9	70-130			
Decane	0.106	0.0010	mg/Kg wet	0.100		106	70-130			
Ethylbenzene	0.113	0.0010	mg/Kg wet	0.100		113	70-130			
Methyl tert-Butyl Ether (MTBE)	0.120	0.0010	mg/Kg wet	0.100		120	70-130			
2-Methylpentane	0.110	0.0010	mg/Kg wet	0.100		110	70-130			
Naphthalene	0.134	0.0050	mg/Kg wet	0.100		134	* 70-130			L-07
Nonane	0.0967	0.0010	mg/Kg wet	0.100		96.7	30-130			
Pentane	0.108	0.0010	mg/Kg wet	0.100		108	70-130			
Toluene	0.113	0.0010	mg/Kg wet	0.100		113	70-130			
1,2,4-Trimethylbenzene	0.112	0.0010	mg/Kg wet	0.100		112	70-130			
2,2,4-Trimethylpentane	0.0946	0.0010	mg/Kg wet	0.100		94.6	70-130			
m+p Xylene	0.229	0.0020	mg/Kg wet	0.200		114	70-130			
o-Xylene	0.114	0.0010	mg/Kg wet	0.100		114	70-130			
Surrogate: 2,5-Dibromotoluene (FID)	0.0363		mg/Kg wet	0.0400		90.8	70-130			
Surrogate: 2,5-Dibromotoluene (PID)	0.0376		mg/Kg wet	0.0400		94.1	70-130			
LCS Dup (B070300-BSD1)				Prepared & Analyzed: 04/03/13						
Benzene	0.111	0.0010	mg/Kg wet	0.100		111	70-130	0.118	25	
Butylcyclohexane	0.0948	0.0010	mg/Kg wet	0.100		94.8	70-130	3.14	25	
Decane	0.108	0.0010	mg/Kg wet	0.100		108	70-130	1.49	25	
Ethylbenzene	0.112	0.0010	mg/Kg wet	0.100		112	70-130	0.467	25	
Methyl tert-Butyl Ether (MTBE)	0.115	0.0010	mg/Kg wet	0.100		115	70-130	4.32	25	
2-Methylpentane	0.109	0.0010	mg/Kg wet	0.100		109	70-130	0.634	25	
Naphthalene	0.127	0.0050	mg/Kg wet	0.100		127	70-130	5.34	25	
Nonane	0.100	0.0010	mg/Kg wet	0.100		100	30-130	3.80	25	
Pentane	0.106	0.0010	mg/Kg wet	0.100		106	70-130	1.83	25	
Toluene	0.113	0.0010	mg/Kg wet	0.100		113	70-130	0.320	25	
1,2,4-Trimethylbenzene	0.111	0.0010	mg/Kg wet	0.100		111	70-130	0.831	25	
2,2,4-Trimethylpentane	0.0956	0.0010	mg/Kg wet	0.100		95.6	70-130	0.990	25	
m+p Xylene	0.228	0.0020	mg/Kg wet	0.200		114	70-130	0.425	25	
o-Xylene	0.113	0.0010	mg/Kg wet	0.100		113	70-130	0.780	25	
Surrogate: 2,5-Dibromotoluene (FID)	0.0354		mg/Kg wet	0.0400		88.4	70-130			
Surrogate: 2,5-Dibromotoluene (PID)	0.0341		mg/Kg wet	0.0400		85.3	70-130			

QUALITY CONTROL
Metals Analyses (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes

Batch B070268 - SW-846 7470A Prep
Blank (B070268-BLK1)

Prepared & Analyzed: 04/03/13

Mercury	ND	0.00010	mg/L

LCS (B070268-BS1)

Prepared & Analyzed: 04/03/13

Mercury	0.00179	0.00010	mg/L	0.00200	89.6	80-120

LCS Dup (B070268-BSD1)

Prepared & Analyzed: 04/03/13

Mercury	0.00183	0.00010	mg/L	0.00200	91.5	80-120	2.14	20

Batch B070276 - SW-846 3050B
Blank (B070276-BLK1)

Prepared & Analyzed: 04/03/13

Antimony	ND	2.5	mg/Kg wet
Arsenic	ND	2.5	mg/Kg wet
Barium	ND	2.5	mg/Kg wet
Beryllium	ND	0.25	mg/Kg wet
Cadmium	ND	0.25	mg/Kg wet
Chromium	ND	0.50	mg/Kg wet
Copper	ND	0.50	mg/Kg wet
Lead	ND	0.75	mg/Kg wet
Nickel	ND	0.50	mg/Kg wet
Selenium	ND	2.5	mg/Kg wet
Silver	ND	0.50	mg/Kg wet
Thallium	ND	2.5	mg/Kg wet
Vanadium	ND	1.0	mg/Kg wet
Zinc	ND	1.0	mg/Kg wet

LCS (B070276-BS1)

Prepared & Analyzed: 04/03/13

Antimony	74.1	5.0	mg/Kg wet	92.9	79.8	8.2-191.6
Arsenic	92.6	5.0	mg/Kg wet	94.5	98.0	82.2-117.5
Barium	166	5.0	mg/Kg wet	166	100	83.1-116.3
Beryllium	57.1	0.50	mg/Kg wet	52.6	108	83.8-116.2
Cadmium	54.5	0.50	mg/Kg wet	59.9	90.9	84-115.9
Chromium	67.2	1.0	mg/Kg wet	69.3	96.9	81.4-118.6
Copper	78.2	1.0	mg/Kg wet	78.0	100	83.7-116.2
Lead	88.3	1.5	mg/Kg wet	91.7	96.3	82.4-117.8
Nickel	57.7	1.0	mg/Kg wet	56.6	102	82.2-117.8
Selenium	156	5.0	mg/Kg wet	159	98.3	79.2-120.8
Silver	29.9	1.0	mg/Kg wet	33.9	88.2	66.4-133.9
Thallium	111	5.0	mg/Kg wet	119	93.6	81.1-119.3
Vanadium	55.4	2.0	mg/Kg wet	56.3	98.4	72.8-127.2
Zinc	131	2.0	mg/Kg wet	137	95.4	81-119

QUALITY CONTROL
Metals Analyses (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes

Batch B070276 - SW-846 3050B
LCS Dup (B070276-BSD1)

Prepared & Analyzed: 04/03/13

Antimony	73.8	5.0	mg/Kg wet	92.9		79.5	8.2-191.6	0.406	30	
Arsenic	89.4	5.0	mg/Kg wet	94.5		94.6	82.2-117.5	3.50	30	
Barium	163	5.0	mg/Kg wet	166		98.0	83.1-116.3	2.17	30	
Beryllium	55.8	0.50	mg/Kg wet	52.6		106	83.8-116.2	2.32	30	
Cadmium	53.5	0.50	mg/Kg wet	59.9		89.3	84-115.9	1.84	30	
Chromium	66.3	1.0	mg/Kg wet	69.3		95.7	81.4-118.6	1.26	30	
Copper	77.8	1.0	mg/Kg wet	78.0		99.7	83.7-116.2	0.476	30	
Lead	85.6	1.5	mg/Kg wet	91.7		93.4	82.4-117.8	3.08	30	
Nickel	57.4	1.0	mg/Kg wet	56.6		101	82.2-117.8	0.512	30	
Selenium	149	5.0	mg/Kg wet	159		93.8	79.2-120.8	4.73	30	
Silver	29.4	1.0	mg/Kg wet	33.9		86.7	66.4-133.9	1.76	30	
Thallium	109	5.0	mg/Kg wet	119		91.7	81.1-119.3	2.09	30	
Vanadium	52.6	2.0	mg/Kg wet	56.3		93.4	72.8-127.2	5.14	30	
Zinc	128	2.0	mg/Kg wet	137		93.2	81-119	2.31	30	

MRL Check (B070276-MRL1)

Prepared: 04/03/13 Analyzed: 04/05/13

Lead	0.653	0.71	mg/Kg wet	0.714		91.4	80-120			

Batch B070361 - SW-846 7471
Blank (B070361-BLK1)

Prepared & Analyzed: 04/04/13

Mercury	ND	0.025	mg/Kg wet							

LCS (B070361-BS1)

Prepared & Analyzed: 04/04/13

Mercury	4.36	0.33	mg/Kg wet	4.05		108	71.6-128.1			

LCS Dup (B070361-BSD1)

Prepared & Analyzed: 04/04/13

Mercury	4.33	0.33	mg/Kg wet	4.05		107	71.6-128.1	0.618	30	

Batch B070424 - SW-846 3005A
Blank (B070424-BLK1)

Prepared: 04/04/13 Analyzed: 04/05/13

Antimony	ND	1.0	µg/L							
Arsenic	ND	0.40	µg/L							
Barium	ND	10	µg/L							
Beryllium	ND	0.40	µg/L							
Cadmium	ND	0.50	µg/L							
Chromium	ND	1.0	µg/L							
Copper	ND	5.0	µg/L							
Lead	ND	1.0	µg/L							
Nickel	ND	5.0	µg/L							
Selenium	ND	5.0	µg/L							
Silver	ND	0.50	µg/L							
Thallium	ND	0.20	µg/L							
Vanadium	ND	5.0	µg/L							
Zinc	ND	10	µg/L							

QUALITY CONTROL
Metals Analyses (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes

Batch B070424 - SW-846 3005A
LCS (B070424-BS1)

Prepared: 04/04/13 Analyzed: 04/05/13

Antimony	246	5.0	µg/L	250		98.2	80-120			
Arsenic	251	2.0	µg/L	250		100	80-120			
Barium	247	50	µg/L	250		98.6	80-120			
Beryllium	240	2.0	µg/L	250		95.9	80-120			
Cadmium	246	2.5	µg/L	250		98.5	80-120			
Chromium	255	5.0	µg/L	250		102	80-120			
Copper	249	25	µg/L	250		99.7	80-120			
Lead	265	5.0	µg/L	250		106	80-120			
Nickel	256	25	µg/L	250		102	80-120			
Selenium	255	25	µg/L	250		102	80-120			
Silver	273	2.5	µg/L	250		109	80-120			
Thallium	250	1.0	µg/L	250		99.9	80-120			
Vanadium	258	25	µg/L	250		103	80-120			
Zinc	260	50	µg/L	250		104	80-120			

LCS Dup (B070424-BSD1)

Prepared: 04/04/13 Analyzed: 04/05/13

Antimony	244	5.0	µg/L	250		97.5	80-120	0.794	20	
Arsenic	247	2.0	µg/L	250		99.0	80-120	1.46	20	
Barium	241	50	µg/L	250		96.3	80-120	2.40	20	
Beryllium	238	2.0	µg/L	250		95.3	80-120	0.622	20	
Cadmium	249	2.5	µg/L	250		99.6	80-120	1.13	20	
Chromium	255	5.0	µg/L	250		102	80-120	0.00361	20	
Copper	249	25	µg/L	250		99.6	80-120	0.114	20	
Lead	258	5.0	µg/L	250		103	80-120	2.82	20	
Nickel	250	25	µg/L	250		100	80-120	2.38	20	
Selenium	251	25	µg/L	250		100	80-120	1.72	20	
Silver	267	2.5	µg/L	250		107	80-120	1.96	20	
Thallium	243	1.0	µg/L	250		97.1	80-120	2.86	20	
Vanadium	257	25	µg/L	250		103	80-120	0.603	20	
Zinc	256	50	µg/L	250		102	80-120	1.67	20	

Duplicate (B070424-DUP1)
Source: 13D0093-02

Prepared: 04/04/13 Analyzed: 04/05/13

Antimony	8.97	1.0	µg/L		8.93			0.420	20	
Arsenic	0.697	0.40	µg/L		0.706			1.28	20	
Barium	ND	10	µg/L		ND			NC	20	
Beryllium	ND	0.40	µg/L		ND			NC	20	
Cadmium	ND	0.50	µg/L		ND			NC	20	
Chromium	1.15	1.0	µg/L		1.08			5.98	20	
Copper	9.03	5.0	µg/L		9.08			0.533	20	
Lead	ND	1.0	µg/L		ND			NC	20	
Nickel	5.81	5.0	µg/L		5.81			0.00227	20	
Selenium	ND	5.0	µg/L		ND			NC	20	
Silver	ND	0.50	µg/L		ND			NC	20	
Thallium	ND	0.20	µg/L		ND			NC	20	
Vanadium	89.7	5.0	µg/L		88.2			1.70	20	
Zinc	32.3	10	µg/L		32.3			0.0903	20	

QUALITY CONTROL
Metals Analyses (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes

Batch B070424 - SW-846 3005A
Matrix Spike (B070424-MS1)
Source: 13D0093-02

Prepared: 04/04/13 Analyzed: 04/05/13

Antimony	269	10	µg/L	250	8.93	104	75-125			
Arsenic	265	4.0	µg/L	250	0.706	106	75-125			
Barium	259	100	µg/L	250	5.88	101	75-125			
Beryllium	260	4.0	µg/L	250	ND	104	75-125			
Cadmium	259	5.0	µg/L	250	0.0778	104	75-125			
Chromium	266	10	µg/L	250	1.08	106	75-125			
Copper	272	50	µg/L	250	9.08	105	75-125			
Lead	272	10	µg/L	250	0.866	108	75-125			
Nickel	264	50	µg/L	250	5.81	103	75-125			
Selenium	265	50	µg/L	250	ND	106	75-125			
Silver	288	5.0	µg/L	250	ND	115	75-125			
Thallium	258	2.0	µg/L	250	ND	103	75-125			
Vanadium	361	50	µg/L	250	88.2	109	75-125			
Zinc	307	100	µg/L	250	32.3	110	75-125			

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B070264 - SW-846 9045C										
LCS (B070264-BS1)				Prepared & Analyzed: 04/03/13						
pH	6.00		pH Units	6.00		100	93.7-106			
Batch B070309 - SM2580 A										
Duplicate (B070309-DUP1)				Source: 13D0093-02		Prepared & Analyzed: 04/03/13				
Oxidation/Reduction Potential	133		mV		142			6.55	16.2	
Batch B070313 - SM18-20 4500 H B										
LCS (B070313-BS1)				Prepared & Analyzed: 04/03/13						
pH	6.00		pH Units	6.00		100	99-102			
Duplicate (B070313-DUP1)				Source: 13D0093-02		Prepared & Analyzed: 04/03/13				
pH	6.2		pH Units		6.2			0.161	2.34	H-05
Batch B070584 - SW-846 7196A										
Blank (B070584-BLK1)				Prepared & Analyzed: 04/10/13						
Hexavalent Chromium	ND	0.16	mg/Kg wet							
LCS (B070584-BS1)				Prepared & Analyzed: 04/10/13						
Hexavalent Chromium	61	2.0	mg/Kg wet	76.0		80.9	80-120			
LCS Dup (B070584-BSD1)				Prepared & Analyzed: 04/10/13						
Hexavalent Chromium	62	2.0	mg/Kg wet	76.1		81.9	80-120	1.39	20	
Batch B070673 - SW-846 7196A										
Blank (B070673-BLK1)				Prepared & Analyzed: 04/02/13						
Hexavalent Chromium	ND	0.0040	mg/L							
LCS (B070673-BS1)				Prepared & Analyzed: 04/02/13						
Hexavalent Chromium	0.089	0.0040	mg/L	0.100		89.1	80-120			
LCS Dup (B070673-BSD1)				Prepared & Analyzed: 04/02/13						
Hexavalent Chromium	0.092	0.0040	mg/L	0.100		92.3	80-120	3.50	20	
Matrix Spike (B070673-MS1)				Source: 13D0093-02		Prepared & Analyzed: 04/02/13				
Hexavalent Chromium	0.11	0.0040	mg/L	0.100	ND	108	75-125			

QUALITY CONTROL

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes

Batch B070673 - SW-846 7196A

Matrix Spike Dup (B070673-MSD1)

Source: 13D0093-02

Prepared & Analyzed: 04/02/13

Hexavalent Chromium	0.097	0.0040	mg/L	0.100	ND	97.0	75-125	10.8	20	

FLAG/QUALIFIER SUMMARY

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
	Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.
H-05	Holding time was exceeded. pH analysis should be performed immediately at time of sampling. Nominal 15 minute holding time was exceeded.
L-02	Laboratory fortified blank/laboratory control sample recovery and duplicate recoveries outside of control limits. Data validation is not affected since all results are "not detected" for associated samples in this batch and bias is on the high side.
L-07	Either laboratory fortified blank/laboratory control sample or duplicate recovery is outside of control limits, but the other is within limits. RPD between the two LFB/LCS results is within method specified criteria.
L-14	Compound classified by MA CAM as difficult with acceptable recoveries of 40-160%. Recovery does not meet 70-130% criteria but does meet difficult compound criteria.
O-02	Soil/methanol ratio does not meet method specifications. Insufficient amount of soil. Data validation is not affected since a sufficient amount of preservative is present. Detection limits may be above useful levels.
O-32	A five times dilution was performed as part of the standard analytical procedure.
R-05	Laboratory fortified blank duplicate RPD is outside of control limits. Reduced precision is anticipated for any reported value for this compound.
RL-07	Elevated reporting limit based on lowest point in calibration. MA CAM reporting limit not met.
S-07	One associated surrogate standard recovery is outside of control limits but the other(s) is/are within limits. All recoveries are > 10%.
V-04	Initial calibration did not meet method specifications. Compound was calibrated using a response factor where %RSD is outside of method specified criteria.
V-05	Continuing calibration did not meet method specifications and was biased on the low side for this compound. Increased uncertainty is associated with the reported value which is likely to be biased on the low side.
V-16	Response factor is less than method specified minimum acceptable value. Reduced precision and accuracy may be associated with reported result.
V-19	Initial calibration did not meet method specifications. Compound was calibrated using linear regression with correlation coefficient <0.99.
V-20	Continuing calibration did not meet method specifications and was biased on the high side. Data validation is not affected since sample result was "not detected" for this compound.
W-06	Elevated method reporting limit due to intense color of sample

CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
<i>MADEP-EPH-04-1.1 in Soil</i>	
C9-C18 Aliphatics	CT,NC,WA,ME,ME,NH-P
C19-C36 Aliphatics	CT,NC,WA,ME,ME,NH-P
Unadjusted C11-C22 Aromatics	CT,NC,WA,ME,ME,NH-P
C11-C22 Aromatics	CT,NC,WA,ME,ME,NH-P
Acenaphthene	CT,NC,WA,ME,ME,NH-P
Acenaphthylene	CT,NC,WA,ME,ME,NH-P
Anthracene	CT,NC,WA,ME,ME,NH-P
Benzo(a)anthracene	CT,NC,WA,ME,ME,NH-P
Benzo(a)pyrene	CT,NC,WA,ME,ME,NH-P
Benzo(b)fluoranthene	CT,NC,WA,ME,ME,NH-P
Benzo(g,h,i)perylene	CT,NC,WA,ME,ME,NH-P
Benzo(k)fluoranthene	CT,NC,WA,ME,ME,NH-P
Chrysene	CT,NC,WA,ME,ME,NH-P
Dibenz(a,h)anthracene	CT,NC,WA,ME,ME,NH-P
Fluoranthene	CT,NC,WA,ME,ME,NH-P
Fluorene	CT,NC,WA,ME,ME
Indeno(1,2,3-cd)pyrene	CT,NC,WA,ME,ME,NH-P
2-Methylnaphthalene	CT,NC,WA,ME,ME
Naphthalene	CT,NC,WA,ME,ME,NH-P
Phenanthrene	CT,NC,WA,ME,ME,NH-P
Pyrene	CT,NC,WA,ME,ME,NH-P
<i>MADEP-EPH-04-1.1 in Water</i>	
C9-C18 Aliphatics	CT,NC,WA,ME,ME,NH-P
C19-C36 Aliphatics	CT,NC,WA,ME,ME,NH-P
Unadjusted C11-C22 Aromatics	CT,NC,WA,ME,ME,NH-P
C11-C22 Aromatics	CT,NC,WA,ME,ME,NH-P
Acenaphthene	CT,NC,WA,ME,ME,NH-P
Acenaphthylene	CT,NC,WA,ME,ME,NH-P
Anthracene	CT,NC,WA,ME,ME,NH-P
Benzo(a)anthracene	CT,NC,WA,ME,ME,NH-P
Benzo(a)pyrene	CT,NC,WA,ME,ME,NH-P
Benzo(b)fluoranthene	CT,NC,WA,ME,ME,NH-P
Benzo(g,h,i)perylene	CT,NC,WA,ME,ME,NH-P
Benzo(k)fluoranthene	CT,NC,WA,ME,ME,NH-P
Chrysene	CT,NC,WA,ME,ME,NH-P
Dibenz(a,h)anthracene	CT,NC,WA,ME,ME,NH-P
Fluoranthene	CT,NC,WA,ME,ME,NH-P
Fluorene	CT,NC,WA,ME
Indeno(1,2,3-cd)pyrene	CT,NC,WA,ME,ME,NH-P
2-Methylnaphthalene	CT,NC,WA,ME
Naphthalene	CT,NC,WA,ME,ME,NH-P
Phenanthrene	CT,NC,WA,ME,ME,NH-P
Pyrene	CT,NC,WA,ME,ME,NH-P
<i>MADEP-VPH-04-1.1 in Soil</i>	
Unadjusted C5-C8 Aliphatics	CT,NC,WA,ME,ME,NH-P
C5-C8 Aliphatics	CT,NC,WA,ME,ME,NH-P

CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
MADEP-VPH-04-1.1 in Soil	
Unadjusted C9-C12 Aliphatics	CT,NC,WA,ME,NH-P
C9-C12 Aliphatics	CT,NC,WA,ME,NH-P
C9-C10 Aromatics	CT,NC,WA,ME,NH-P
Benzene	CT,NC,WA,ME,NH-P
Ethylbenzene	CT,NC,WA,ME,NH-P
Methyl tert-Butyl Ether (MTBE)	CT,NC,WA,ME,NH-P
Naphthalene	CT,NC,WA,ME,NH-P
Toluene	CT,NC,WA,ME,NH-P
m+p Xylene	CT,NC,WA,ME,NH-P
o-Xylene	CT,NC,WA,ME,NH-P
MADEP-VPH-04-1.1 in Water	
Unadjusted C5-C8 Aliphatics	CT,NC,WA,ME,NH-P
C5-C8 Aliphatics	CT,NC,WA,ME,NH-P
Unadjusted C9-C12 Aliphatics	CT,NC,WA,ME,NH-P
C9-C12 Aliphatics	CT,NC,WA,ME,NH-P
C9-C10 Aromatics	CT,NC,WA,ME,NH-P
Benzene	CT,NC,WA,ME,NH-P
Ethylbenzene	CT,NC,WA,ME,NH-P
Methyl tert-Butyl Ether (MTBE)	CT,NC,WA,ME,NH-P
Naphthalene	CT,NC,WA,ME,NH-P
Toluene	CT,NC,WA,ME,NH-P
m+p Xylene	CT,NC,WA,ME,NH-P
o-Xylene	CT,NC,WA,ME,NH-P
SM18-20 4500 H B in Water	
pH	CT,MA,RI
SW-846 6010C in Soil	
Antimony	CT,NH,NY,NC,ME,VA
Arsenic	CT,NH,NY,ME,NC,VA
Barium	CT,NH,NY,ME,NC,VA
Beryllium	CT,NH,NY,ME,NC,VA
Cadmium	CT,NH,NY,ME,NC,VA
Chromium	CT,NH,NY,ME,NC,VA
Copper	CT,NH,NY,ME,NC,VA
Lead	CT,NH,NY,AIHA,ME,NC,VA
Nickel	CT,NH,NY,ME,NC,VA
Selenium	CT,NH,NY,ME,NC,VA
Silver	CT,NH,NY,ME,NC,VA
Thallium	CT,NH,NY,ME,NC,VA
Vanadium	CT,NH,NY,ME,NC,VA
Zinc	CT,NH,NY,ME,NC,VA
SW-846 6020A in Water	
Antimony	CT,NH,NY,NC,ME,VA
Arsenic	CT,NH,NY,NC,ME,VA
Barium	CT,NH,NY,NC,ME,VA
Beryllium	CT,NH,NY,NC,ME,VA

CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
SW-846 6020A in Water	
Cadmium	CT,NH,NY,RI,NC,ME,VA
Chromium	CT,NH,NY,NC,ME,VA
Copper	CT,NH,NY,NC,ME,VA
Lead	CT,NH,NY,NC,ME,VA
Nickel	CT,NH,NY,NC,ME,VA
Selenium	CT,NH,NY,NC,ME,VA
Silver	CT,NH,NY,NC,ME,VA
Thallium	CT,NH,NY,NC,ME,VA
Vanadium	CT,NC,NH,NY,ME,VA
Zinc	CT,NH,NY,NC,ME,VA
SW-846 7196A in Soil	
Hexavalent Chromium	NY,CT,NH,NC,ME,VA
SW-846 7196A in Water	
Hexavalent Chromium	CT,NH,NY,NC,ME,VA
SW-846 7470A in Water	
Mercury	CT,NH,NY,NC,ME,VA
SW-846 7471B in Soil	
Mercury	CT,NH,NY,NC,ME,VA
SW-846 8082A in Soil	
Aroclor-1016	CT,NH,NY,NC,ME,VA
Aroclor-1016 [2C]	CT,NH,NY,NC,ME,VA
Aroclor-1221	CT,NH,NY,NC,ME,VA
Aroclor-1221 [2C]	CT,NH,NY,NC,ME,VA
Aroclor-1232	CT,NH,NY,NC,ME,VA
Aroclor-1232 [2C]	CT,NH,NY,NC,ME,VA
Aroclor-1242	CT,NH,NY,NC,ME,VA
Aroclor-1242 [2C]	CT,NH,NY,NC,ME,VA
Aroclor-1248	CT,NH,NY,NC,ME,VA
Aroclor-1248 [2C]	CT,NH,NY,NC,ME,VA
Aroclor-1254	CT,NH,NY,NC,ME,VA
Aroclor-1254 [2C]	CT,NH,NY,NC,ME,VA
Aroclor-1260	CT,NH,NY,NC,ME,VA
Aroclor-1260 [2C]	CT,NH,NY,NC,ME,VA
Aroclor-1262	NC
Aroclor-1262 [2C]	NC
Aroclor-1268	NC
Aroclor-1268 [2C]	NC
SW-846 8082A in Water	
Aroclor-1016	CT,NH,NY,NC,ME,VA
Aroclor-1016 [2C]	CT,NH,NY,NC,ME,VA
Aroclor-1221	CT,NH,NY,NC,ME,VA
Aroclor-1221 [2C]	CT,NH,NY,NC,ME,VA
Aroclor-1232	CT,NH,NY,NC,ME,VA
Aroclor-1232 [2C]	CT,NH,NY,NC,ME,VA
Aroclor-1242	CT,NH,NY,NC,ME,VA

CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
<i>SW-846 8082A in Water</i>	
Aroclor-1242 [2C]	CT,NH,NY,NC,ME,VA
Aroclor-1248	CT,NH,NY,NC,ME,VA
Aroclor-1248 [2C]	CT,NH,NY,NC,ME,VA
Aroclor-1254	CT,NH,NY,NC,ME,VA
Aroclor-1254 [2C]	CT,NH,NY,NC,ME,VA
Aroclor-1260	CT,NH,NY,NC,ME,VA
Aroclor-1260 [2C]	CT,NH,NY,NC,ME,VA
Aroclor-1262	NC
Aroclor-1262 [2C]	NC
Aroclor-1268	NC
Aroclor-1268 [2C]	NC
<i>SW-846 8260C in Soil</i>	
Acetone	CT,NH,NY,ME
Benzene	CT,NH,NY,ME
Bromobenzene	NH,NY,ME
Bromochloromethane	NH,NY,ME
Bromodichloromethane	CT,NH,NY,ME
Bromoform	CT,NH,NY,ME
Bromomethane	CT,NH,NY,ME
2-Butanone (MEK)	CT,NH,NY,ME
n-Butylbenzene	CT,NH,NY,ME
sec-Butylbenzene	CT,NH,NY,ME
tert-Butylbenzene	CT,NH,NY,ME
Carbon Disulfide	CT,NH,NY,ME
Carbon Tetrachloride	CT,NH,NY,ME
Chlorobenzene	CT,NH,NY,ME
Chlorodibromomethane	CT,NH,NY,ME
Chloroethane	CT,NH,NY,ME
Chloroform	CT,NH,NY,ME
Chloromethane	CT,NH,NY,ME
2-Chlorotoluene	CT,NH,NY,ME
4-Chlorotoluene	CT,NH,NY,ME
Dibromomethane	NH,NY,ME
1,2-Dichlorobenzene	CT,NH,NY,ME
1,3-Dichlorobenzene	CT,NH,NY,ME
1,4-Dichlorobenzene	CT,NH,NY,ME
Dichlorodifluoromethane (Freon 12)	NY,ME
1,1-Dichloroethane	CT,NH,NY,ME
1,2-Dichloroethane	CT,NH,NY,ME
1,1-Dichloroethylene	CT,NH,NY,ME
cis-1,2-Dichloroethylene	CT,NH,NY,ME
trans-1,2-Dichloroethylene	CT,NH,NY,ME
1,2-Dichloropropane	CT,NH,NY,ME
1,3-Dichloropropane	NH,NY,ME
2,2-Dichloropropane	NH,NY,ME
1,1-Dichloropropene	NH,NY,ME

CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
<i>SW-846 8260C in Soil</i>	
cis-1,3-Dichloropropene	CT,NH,NY,ME
trans-1,3-Dichloropropene	CT,NH,NY,ME
Ethylbenzene	CT,NH,NY,ME
Hexachlorobutadiene	NH,NY,ME
2-Hexanone (MBK)	CT,NH,NY,ME
Isopropylbenzene (Cumene)	CT,NH,NY,ME
p-Isopropyltoluene (p-Cymene)	NH,NY
Methyl tert-Butyl Ether (MTBE)	NY
Methylene Chloride	CT,NH,NY,ME
4-Methyl-2-pentanone (MIBK)	CT,NH,NY
Naphthalene	NH,NY,ME
n-Propylbenzene	NH,NY
Styrene	CT,NH,NY,ME
1,1,1,2-Tetrachloroethane	CT,NH,NY,ME
1,1,2,2-Tetrachloroethane	CT,NH,NY,ME
Tetrachloroethylene	CT,NH,NY,ME
Toluene	CT,NH,NY,ME
1,2,4-Trichlorobenzene	NH,NY,ME
1,1,1-Trichloroethane	CT,NH,NY,ME
1,1,2-Trichloroethane	CT,NH,NY,ME
Trichloroethylene	CT,NH,NY,ME
Trichlorofluoromethane (Freon 11)	CT,NH,NY,ME
1,2,3-Trichloropropane	NH,NY,ME
1,2,4-Trimethylbenzene	CT,NH,NY,ME
1,3,5-Trimethylbenzene	CT,NH,NY,ME
Vinyl Chloride	CT,NH,NY,ME
m+p Xylene	CT,NH,NY,ME
o-Xylene	CT,NH,NY,ME
<i>SW-846 8260C in Water</i>	
Acetone	CT,NH,NY,ME
tert-Amyl Methyl Ether (TAME)	NH,NY,ME
Benzene	CT,NH,NY,ME
Bromobenzene	ME
Bromochloromethane	NH,NY,ME
Bromodichloromethane	CT,NH,NY,ME
Bromoform	CT,NH,NY,ME
Bromomethane	CT,NH,NY,ME
2-Butanone (MEK)	CT,NH,NY,ME
n-Butylbenzene	NY,ME
sec-Butylbenzene	NY,ME
tert-Butylbenzene	NY,ME
tert-Butyl Ethyl Ether (TBEE)	NH,NY,ME
Carbon Disulfide	CT,NH,NY,ME
Carbon Tetrachloride	CT,NH,NY,ME
Chlorobenzene	CT,NH,NY,ME
Chlorodibromomethane	CT,NH,NY,ME

CERTIFICATIONS

Certified Analyses included in this Report

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

CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
<i>SW-846 8260C in Water</i>	
m+p Xylene	CT,NH,NY,ME
o-Xylene	CT,NH,NY,ME
<i>SW-846 8270D in Soil</i>	
Acenaphthene	CT,NY,NH
Acenaphthylene	CT,NY,NH
Acetophenone	NY,NH
Aniline	NY,NH
Anthracene	CT,NY,NH
Benzo(a)anthracene	CT,NY,NH
Benzo(a)pyrene	CT,NY,NH
Benzo(b)fluoranthene	CT,NY,NH
Benzo(g,h,i)perylene	CT,NY,NH
Benzo(k)fluoranthene	CT,NY,NH
Bis(2-chloroethoxy)methane	CT,NY,NH
Bis(2-chloroethyl)ether	CT,NY,NH
Bis(2-chloroisopropyl)ether	CT,NY,NH
Bis(2-Ethylhexyl)phthalate	CT,NY,NH
4-Bromophenylphenylether	CT,NY,NH
Butylbenzylphthalate	CT,NY,NH
4-Chloroaniline	CT,NY,NH
2-Chloronaphthalene	CT,NY,NH
2-Chlorophenol	CT,NY,NH
Chrysene	CT,NY,NH
Dibenz(a,h)anthracene	CT,NY,NH
Dibenzofuran	CT,NY,NH
Di-n-butylphthalate	CT,NY,NH
1,2-Dichlorobenzene	NY,NH
1,3-Dichlorobenzene	NY,NH
1,4-Dichlorobenzene	NY,NH
3,3-Dichlorobenzidine	CT,NY,NH
2,4-Dichlorophenol	CT,NY,NH
Diethylphthalate	CT,NY,NH
2,4-Dimethylphenol	CT,NY,NH
Dimethylphthalate	CT,NY,NH
2,4-Dinitrophenol	CT,NY,NH
2,4-Dinitrotoluene	CT,NY,NH
2,6-Dinitrotoluene	CT,NY,NH
Di-n-octylphthalate	CT,NY,NH
1,2-Diphenylhydrazine (as Azobenzene)	NY,NH
Fluoranthene	CT,NY,NH
Fluorene	NY,NH
Hexachlorobenzene	CT,NY,NH
Hexachlorobutadiene	CT,NY,NH
Hexachloroethane	CT,NY,NH
Indeno(1,2,3-cd)pyrene	CT,NY,NH
Isophorone	CT,NY,NH

CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
<i>SW-846 8270D in Soil</i>	
2-Methylnaphthalene	CT,NY,NH
2-Methylphenol	CT,NY,NH
3/4-Methylphenol	CT,NY,NH
Naphthalene	CT,NY,NH
Nitrobenzene	CT,NY,NH
2-Nitrophenol	CT,NY,NH
4-Nitrophenol	CT,NY,NH
Pentachlorophenol	CT,NY,NH
Phenanthrene	CT,NY,NH
Phenol	CT,NY,NH
Pyrene	CT,NY,NH
1,2,4-Trichlorobenzene	CT,NY,NH
2,4,5-Trichlorophenol	CT,NY,NH
2,4,6-Trichlorophenol	CT,NY,NH
<i>SW-846 8270D in Water</i>	
Acenaphthene	CT,NY,NH
Acenaphthylene	CT,NY,NH
Aniline	CT,NY
Anthracene	CT,NY,NH
Benzo(a)anthracene	CT,NY,NH
Benzo(a)pyrene	CT,NY,NH
Benzo(b)fluoranthene	CT,NY,NH
Benzo(g,h,i)perylene	CT,NY,NH
Benzo(k)fluoranthene	CT,NY,NH
Bis(2-chloroethoxy)methane	CT,NY,NH
Bis(2-chloroethyl)ether	CT,NY,NH
Bis(2-chloroisopropyl)ether	CT,NY,NH
Bis(2-Ethylhexyl)phthalate	CT,NY,NH
4-Bromophenylphenylether	CT,NY,NH
Butylbenzylphthalate	CT,NY,NH
4-Chloroaniline	CT,NY,NH
2-Chloronaphthalene	CT,NY,NH
2-Chlorophenol	CT,NY,NH
Chrysene	CT,NY,NH
Dibenz(a,h)anthracene	CT,NY,NH
Dibenzofuran	CT,NY,NH
Di-n-butylphthalate	CT,NY,NH
1,2-Dichlorobenzene	CT,NY,NH
1,3-Dichlorobenzene	CT,NY,NH
1,4-Dichlorobenzene	CT,NY,NH
3,3-Dichlorobenzidine	CT,NY,NH
2,4-Dichlorophenol	CT,NY,NH
Diethylphthalate	CT,NY,NH
2,4-Dimethylphenol	CT,NY,NH
Dimethylphthalate	CT,NY,NH
2,4-Dinitrophenol	CT,NY,NH

CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
<i>SW-846 8270D in Water</i>	
2,4-Dinitrotoluene	CT,NY,NH
2,6-Dinitrotoluene	CT,NY,NH
Di-n-octylphthalate	CT,NY,NH
Fluoranthene	CT,NY,NH
Fluorene	NY,NH
Hexachlorobenzene	CT,NY,NH
Hexachlorobutadiene	CT,NY,NH
Hexachloroethane	CT,NY,NH
Indeno(1,2,3-cd)pyrene	CT,NY,NH
Isophorone	CT,NY,NH
2-Methylnaphthalene	CT,NY,NH
2-Methylphenol	CT,NY,NH
3/4-Methylphenol	CT,NY,NH
Naphthalene	CT,NY,NH
Nitrobenzene	CT,NY,NH
2-Nitrophenol	CT,NY,NH
4-Nitrophenol	CT,NY,NH
Pentachlorophenol	CT,NY,NH
Phenanthrene	CT,NY,NH
Phenol	CT,NY,NH
Pyrene	CT,NY,NH
1,2,4-Trichlorobenzene	CT,NY,NH
2,4,5-Trichlorophenol	CT,NY,NH
2,4,6-Trichlorophenol	CT,NY,NH

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

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC	100033	02/1/2014
MA	Massachusetts DEP	M-MA100	06/30/2013
CT	Connecticut Department of Public Health	PH-0567	09/30/2013
NY	New York State Department of Health	10899 NELAP	04/1/2014
NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2014
RI	Rhode Island Department of Health	LAO00112	12/30/2013
NC	North Carolina Div. of Water Quality	652	12/31/2013
NJ	New Jersey DEP	MA007 NELAP	06/30/2013
FL	Florida Department of Health	E871027 NELAP	06/30/2013
VT	Vermont Department of Health Lead Laboratory	LL015036	07/30/2013
WA	State of Washington Department of Ecology	C2065	02/23/2014
ME	State of Maine	2011028	06/9/2013
VA	Commonwealth of Virginia	460217	12/14/2013
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2012

No: 1-040113-110438-0004

Lab: Contest Analytical Laboratory

Lab Contact: Meghan Kelley

Lab Phone: 413-525-2332

COOLER # 1
CASE: 01145

[illegible]

Shipment for Case Complete? Y	Samples Transferred From Chain of Custody #

Analysis Key: Cr+6=Hexavalent Chromium

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
coulier	Carl Johnson	4/12/13 14:55	Paul Howard	4/22/13	14:55						
	Paul Howard	4/21/13	Paul Howard	4/22/13	19:45						

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



Sample Receipt Checklist

CLIENT NAME: Nobis RECEIVED BY: KKM DATE: 4/2/13

- 1) Was the chain(s) of custody relinquished and signed? Yes No No CoC Included
2) Does the chain agree with the samples? Yes No
If not, explain:
3) Are all the samples in good condition? Yes No
If not, explain:

4) How were the samples received:

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

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

Temperature °C by Temp blank _____ Temperature °C by Temp gun 5.6

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

Who was notified _____ Date _____ Time _____

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

Who was notified DM Date 4/2 Time 20:00

7) Location where samples are stored:

19

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

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

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

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

Containers received at Con-Test

	# of containers		# of containers
1 Liter Amber	<u>6</u>	8 oz amber/clear jar	
500 mL Amber		4 oz amber/clear jar	<u>2</u>
250 mL Amber (8oz amber)	<u>3</u>	2 oz amber/clear jar	
1 Liter Plastic		Air Cassette	
500 mL Plastic		Hg/Hopcalite Tube	
250 mL plastic	<u>2</u>	Plastic Bag / Ziploc	
40 mL Vial - type listed below	<u>13</u>	PM 2.5 / PM 10	
Colisure / bacteria bottle		PUF Cartridge	
Dissolved Oxygen bottle		SOC Kit	
Encore		TO-17 Tubes	
Flashpoint bottle		Non-ConTest Container	
Perchlorate Kit		Other glass jar	
Other		Other	

Laboratory Comments:

40 mL vials: # HCl 9 # Methanol 2

Doc# 277 # Bisulfate 2 # DI Water _____

Rev. 3 May 2012 # Thiosulfate _____ Unpreserved _____

Time and Date Frozen:

MADEP MCP Analytical Method Report Certification Form

Laboratory Name: Con-Test Analytical Laboratory

Project #: 13D0093

Project Location: Former Attleboro Dyeworks, Seekonk, MA

RTN:

This Form provides certifications for the following data set: [list Laboratory Sample ID Number(s)]

13D0093-01 thru 13D0093-03

Matrices: Soil

Water

CAM Protocol (check all that below)

8260 VOC CAM II A (X)	7470/7471 Hg CAM IIIB (X)	MassDEP VPH CAM IV A (X)	8081 Pesticides CAM V B ()	7196 Hex Cr CAM VI B (X)	MassDEP APH CAM IX A ()
8270 SVOC CAM II B (X)	7010 Metals CAM III C ()	MassDEP EPH CAM IV A (X)	8151 Herbicides CAM V C ()	8330 Explosives CAM VIII A ()	TO-15 VOC CAM IX B ()
6010 Metals CAM III A (X)	6020 Metals CAM III D (X)	8082 PCB CAM V A (X)	9014 Total Cyanide/PAC CAM VI A ()	6860 Perchlorate CAM VIII B ()	

Affirmative response to Questions A through F is required for "Presumptive Certainty" status

A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?	☒ Yes ☐ No ¹
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	☒ Yes ☐ No ¹
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	☒ Yes ☐ No ¹
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data?	☒ Yes ☐ No ¹
E a	VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications).	☐ Yes ☐ No ¹
E b	APH and TO-15 Methods only: Was the complete analyte list reported for each method?	☐ Yes ☐ No ¹
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all No responses to Questions A through E)?	☒ Yes ☐ No ¹

A response to questions G, H and I below is required for "Presumptive Certainty" status

G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	☐ Yes ☒ No ¹

Data User Note: Data that achieve "Presumptive Certainty" status may not necessarily meet the data usability and representativeness requirements described in 310 CMR 40. 1056 (2)(k) and WSC-07-350.

H	Were all QC performance standards specified in the CAM protocol(s) achieved?	☐ Yes ☒ No ¹
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	☐ Yes ☒ No ¹

¹ All Negative responses must be addressed in an attached Environmental Laboratory case narrative.

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

Signature: 

Position: Laboratory Manager

Printed Name: Daren J. Damboragian

Date: 04/10/13