89 Crawford Street
Leominster, Massachusetts 01453
Tel: 774.450.7177
Fax: 888.835.0617
www.lrt-llc.net

April 23, 2018

U.S. Environmental Protection Agency
Office of Ecosystem Protection
EPA/OEP RGP Applications Coordinator
5 Post Office Square, Suite 100 (OEP06-1)
Boston, Massachusetts 02109-3912

Reference: **Notice of Intent (NOI) - Remediation General Permit (RGP)**
3 Arlington Street
Quincy, MA
LRT Reference # 2-1660

Dear Sir/Madam:

On behalf of Walsh Contracting Corp. (Walsh), Lockwood Remediation Technologies, LLC (LRT) has prepared this Notice of Intent (NOI) for coverage under the United States Environmental Protection Agency's (EPA's) Remediation General Permit (RGP) under EPA's National Pollutant Discharge Elimination System (NPDES) program. This NOI was prepared in accordance with the general requirements of the NPDES and related guidance documentation provided by EPA. The completed NOI form is provided in Appendix A.

Site Information

This NOI has been prepared for the management of water generated during construction activities, proposed at the above-referenced jobsite (the site). On September 28, 2008, MassDEP assigned Release Tracking Number (RTN) 3-28022 to the site for the detection of 120-day reportable detection of lead and nickel in soil and chlorinated volatile organic compounds (CVOCs); tetrachloroethylene, trichloroethylene, cis-1,2,-dichloroethylene, and vinyl chloride in groundwater. In October 2016, a Permanent Solution Statement with Conditions (PSSC) was submitted to MassDEP for RTN 3-28022.

All excavation and dewatering activities are being completed in accordance with the Massachusetts Contingency Plan (MCP), specifically, the Release Abatement Measure (RAM) Plan, which addresses soil and groundwater management during construction of the proposed building.

Please refer to Figure 1 for a Locus Map and an overview of the immediate area surrounding the site. The site, located at 3 Arlington Street in Quincy, is depicted in Figure 2 along with the proposed treated water discharge location.

Work Summary

To complete portions of the excavations in the dry, dewatering may be required. All water generated from the dewatering of the excavations will be pumped to a water treatment system, depicted in Figure 3, prior to discharge to the Neponset River. To characterize water from the proposed excavation area, LRT collected a representative groundwater sample from an onsite monitoring well on April 13, 2018. This sample was analyzed for the parameters in accordance with the NPDES RGP Activity Category III. The laboratory data report for this sample is provided in Appendix B.

Discharge and Receiving Surface Water Information

LRT collected a surface water sample from the Neponset River on April 13, 2018. The sample was submitted for the following analyses: pH, total suspended solids (TSS), total recoverable metals, hardness and ammonia. Laboratory data reports for this sample are provided in Appendix B.

Consultation with Federal Services

LRT reviewed online electronic data viewers and databases from the Massachusetts Geographical Information System (MassGIS), the Massachusetts Division of Fisheries and Wildlife (MassWildlife; Natural Heritage and Endangered Species Program), and the U.S. National Parks Service Natural Historic Places (NPS). Based on this review, the site and the point where the proposed discharge reaches the receiving surface water body are not located within an Area of Critical Environmental Concern (ACEC). The Site and the proposed discharge point are not located within Habitats of Rare Wetland Wildlife, Habitats of Rare Species, Estimated Habitats of Rare Wildlife, or listed as a National Historic Place.

Coverage under NPDES RGP

It is our opinion that the proposed discharge is eligible for coverage under the NPDES RGP. On behalf of Walsh, we are requesting coverage under the NPDES RGP for the discharge of treated wastewater during excavation activities to Neponset River.

The enclosed NOI form provides required information on the general site conditions, discharge, treatment system, receiving water, and consultation with federal services. For this project, Walsh is the operator that has operational control over the construction plans and specifications, including the ability to make modifications to those plans and specifications.

Please feel free to contact us at 774-450-7177 if you have any questions or if you require additional information.

Sincerely,
Lockwood Remediation Technologies, LLC

Tammie Hagie

Tammie Hagie
Estimator

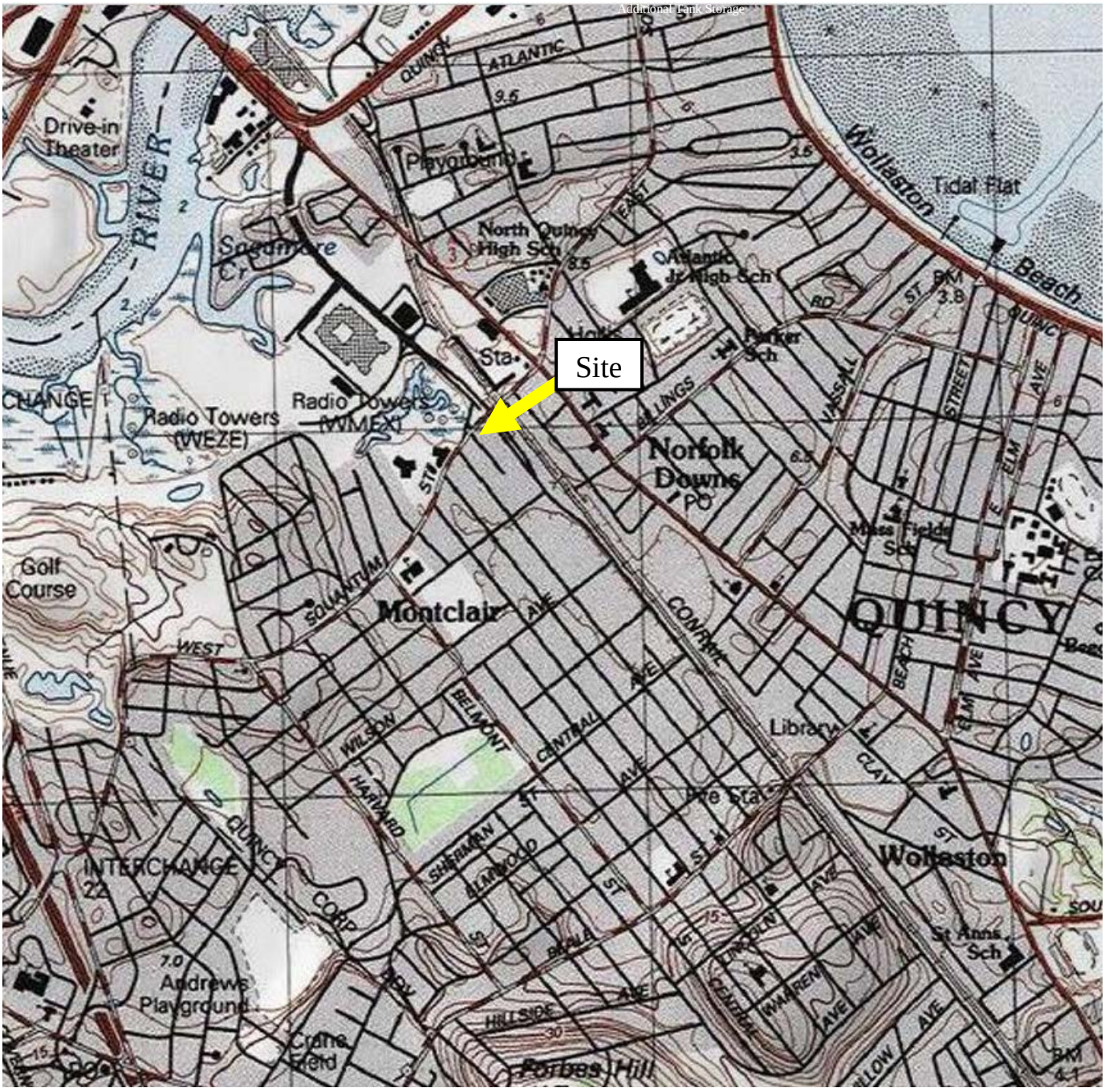
Paul Lockwood

Paul Lockwood
President

Encl: Figure 1 – Locus Plan
Figure 2 – Discharge Location
Figure 3 – Water Treatment System Layout
Appendix A – NOI Form
Appendix B – Laboratory Data
Appendix C – Supplemental Information

cc: Mr. Rob Crear – Walsh Contracting Corp.

Figures



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Notes

1. Figure is not to scale.

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Figure 1 – Locus Plan
3 Arlington Street
Quincy, Massachusetts

Source: USDA FSA, DigitalGlobe, GeoEye

KEY

Outfall
Discharge Location

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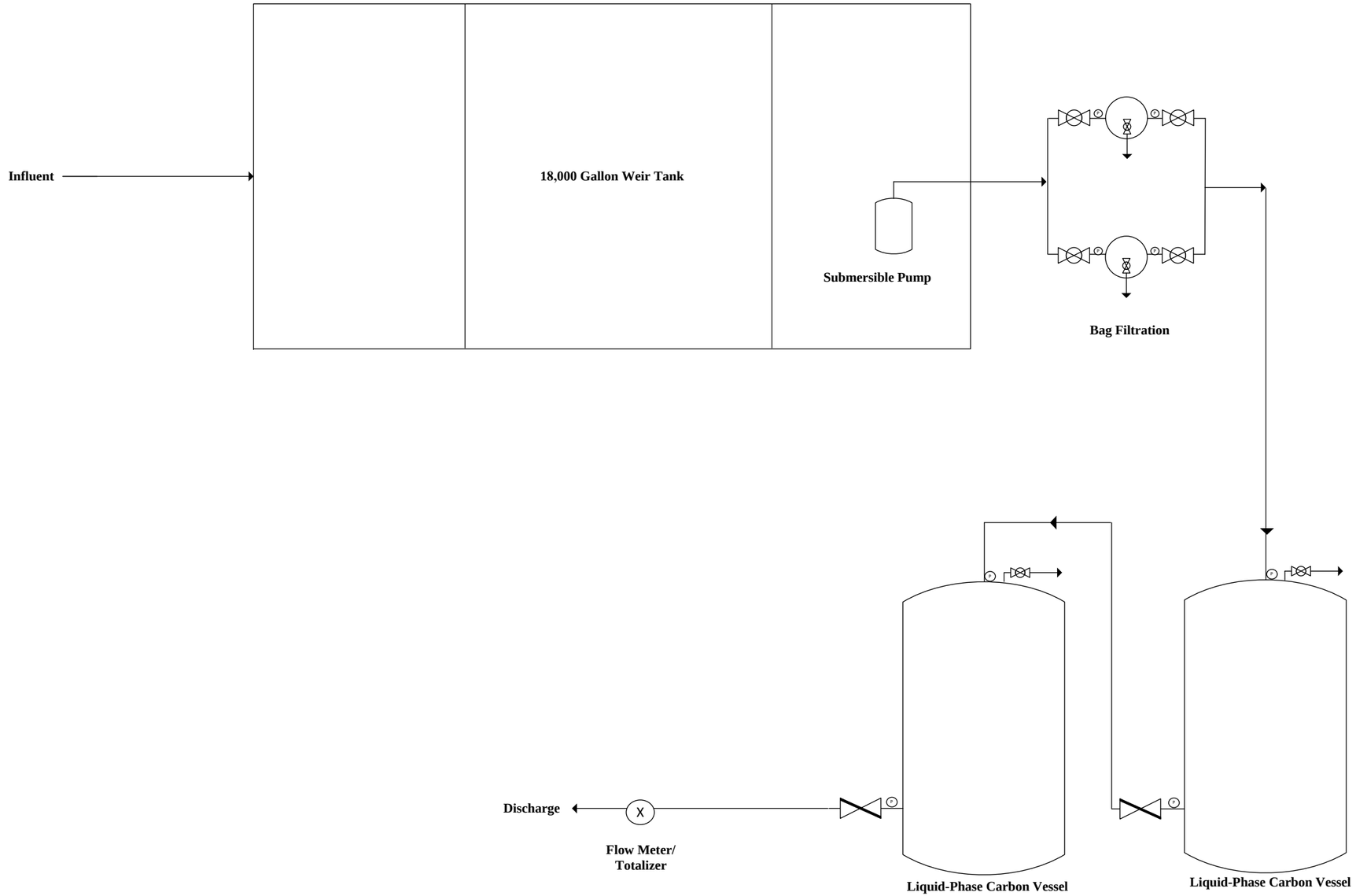
Figure 2 - Discharge Location
3 Arlington Street
Quincy, Massachusetts



Notes:
1. Figure not drawn to scale
2. System rated for 300 GPM

Lockwood Remediation Technologies, LLC
89 Crawford Street
Leominster, MA 01453
Office: 774-450-7177

DESIGNED BY: LRT | DRAWN BY: T. Hagie

DATE: 4/20/18 | REVISION:

Water Treatment System Schematic

3 Arlington Street
Quincy, Massachusetts

PROJECT No. 2-1660

FIGURE No. 3

Appendix A

NOI Form

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

A. General site information:

<table>
<tr><td rowspan="2">1. Name of site:
Quincy Holiday Inn Express</td><td colspan="3">Site address:
Street: 3 Arlington Street</td></tr>
<tr><td>City: Quincy</td><td>State: MA</td><td>Zip: 02171</td></tr>
<tr><td rowspan="4">2. Site owner
Arlington Street Quincy Hotel LLC/XSS LLC MBR

Owner is (check one): ☐ Federal ☐ State/Tribal ☐ Private
☐ Other; if so, specify:</td><td colspan="3">Contact Person: Rob Simmons</td></tr>
<tr><td colspan="2">Telephone: 603-623-8811</td><td>Email: robs@cathartesprivate.com</td></tr>
<tr><td colspan="3">Mailing address:
Street: 1359 Hooksett Road</td></tr>
<tr><td>City: Hooksett</td><td>State: NH</td><td>Zip: 03106</td></tr>
<tr><td rowspan="4">3. Site operator, if different than owner

Walsh Contracting Corp.</td><td colspan="3">Contact Person: Robert Crear</td></tr>
<tr><td colspan="2">Telephone: 508-222-1435</td><td>Email: robcrear@walshcontractingcorp.com</td></tr>
<tr><td colspan="3">Mailing address:
Street: 82 North Avenue</td></tr>
<tr><td>City: Attleboro</td><td>State: MA</td><td>Zip: 02703</td></tr>
<tr><td>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:</td><td colspan="3">5. Other regulatory program(s) that apply to the site (check all that apply):
☒ MA Chapter 21e; list RTN(s):
RTN 3-28022 PSSC submitted 10/2016

☐ NH Groundwater Management Permit or
Groundwater Release Detection Permit:

☐ CERCLA
☐ UIC Program
☐ POTW Pretreatment
☐ CWA Section 404</td></tr>
</table>

B. Receiving water information:

1. Name of receiving water(s):	Waterbody identification of receiving water(s):	Classification of receiving water(s):
Neponset River	MA73-04	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. Fecal coliform. 200/100 ml

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.	N/A
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.	

6. Has the operator received confirmation from the appropriate State for the 7Q10and dilution factor indicated? (check one): ☐ Yes ☒ No
If yes, indicate date confirmation received:

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 ☐ A surface water other than the receiving water; if so, indicate waterbody:	☐ Potable water; if so, indicate municipality or origin: ☐ Other; if so, specify:

2. Source water contaminants:	
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): Neponset River	Outfall location(s): (Latitude, Longitude) 42.274296 -71.031211
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: Quincy DPW will be notified upon EPA approval of NOI 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): April 2018 - March 2019 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	

<table>
<tr><td>2. Activity Category: (check all that apply)</td><td colspan="2">3. Contamination Type Category: (check all that apply)</td></tr>
<tr><td rowspan="4">☐ 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</td><td colspan="2">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</td></tr>
<tr><td colspan="2">b. If Activity Category III, IV, V, VI, VII or VIII: (check either G or H)</td></tr>
<tr><td>☒ G. Sites with Known Contamination</td><td>☐ H. Sites with Unknown Contamination</td></tr>
<tr><td>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>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>

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		X	1	350.1	50	180	180	Report mg/L	---
Chloride		X	1	300.0	100,000	2,700,000	2,700,000	Report µg/l	---
Total Residual Chlorine		X	1	4500 CL	20	95	95	0.2 mg/L	11 ug/L
Total Suspended Solids		X	1	2540D	670	17,000	17,000	30 mg/L	
Antimony	X		1	200.8	<1.0			206 µg/L	
Arsenic		X	1	200.8	1.0	5.7	5.7	104 µg/L	
Cadmium		X	1	200.8	0.20	3.4	3.4	10.2 µg/L	0.2482
Chromium III		X	1	200.8	10	32	32	323 µg/L	
Chromium VI	X		1	200.8	<4.0			323 µg/L	
Copper		X	1	200.8	1.0	57	57	242 µg/L	8.4
Iron		X	1	200.7	50	13,000	13,000	5,000 µg/L	1,000
Lead		X	1	200.8	2.5	8.7	8.7	160 µg/L	2.74
Mercury	X		1	245.1	<0.10			0.739 µg/L	
Nickel		X	1	200.8	5.0	72	72	1,450 µg/L	47.3
Selenium		X	1	200.8	5.0	15	15	235.8 µg/L	5.0
Silver		X	1	200.8	0.20	1.4	1.4	35.1 µg/L	
Zinc		X	1	200.8	20	340	340	420 µg/L	108.6
Cyanide	X		1	335.4	<5.0			178 mg/L	
B. Non-Halogenated VOCs									
Total BTEX	X		1	624.1	<100			100 µg/L	---
Benzene	X		1	624.1	<1.0			5.0 µg/L	---
1,4 Dioxane	X		1	624.1	<50			200 µg/L	---
Acetone	X		1	624.1	<50			7.97 mg/L	---
Phenol	X		1	625.1	<9.6			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	X		1	624.1	<2.0			4.4 µg/L	
1,2 Dichlorobenzene	X		1	624.1	<2.0			600 µg/L	---
1,3 Dichlorobenzene	X		1	624.1	<2.0			320 µg/L	---
1,4 Dichlorobenzene	X		1	624.1	<2.0			5.0 µg/L	---
Total dichlorobenzene								763 µg/L in NH	---
1,1 Dichloroethane		X	1	624.1	0.33	0.37	0.37	70 µg/L	---
1,2 Dichloroethane	X		1	624.1	<2.0			5.0 µg/L	---
1,1 Dichloroethylene	X		1	624.1	<2.0			3.2 µg/L	---
Ethylene Dibromide								0.05 µg/L	---
Methylene Chloride	X		1	624.1	<5.0			4.6 µg/L	---
1,1,1 Trichloroethane	X		1	624.1	<2.0			200 µg/L	---
1,1,2 Trichloroethane	X		1	624.1	<2.0			5.0 µg/L	---
Trichloroethylene		X	1	624.1	2.0	6.2	6.2	5.0 µg/L	---
Tetrachloroethylene		X	1	624.1	2.0	37	37	5.0 µg/L	3.3
cis-1,2 Dichloroethylene		X	1	624.1	1.0	55	55	70 µg/L	---
Vinyl Chloride		X	1	624.1	2.0	3.7	3.7	2.0 µg/L	---
D. Non-Halogenated SVOCs									
Total Phthalates	X		1	625	<190			190 µg/L	
Diethylhexyl phthalate	X		1	625.1	<9.6			101 µg/L	
Total Group I PAHs	X		1	8270D	<1.0			1.0 µg/L	---
Benzo(a)anthracene	X		1	8270D	<0.048			As Total PAHs	
Benzo(a)pyrene	X		1	8270D	<0.096				
Benzo(b)fluoranthene	X		1	8270D	<0.048				
Benzo(k)fluoranthene	X		1	8270D	<0.19				
Chrysene	X		1	8270D	<0.19				
Dibenzo(a,h)anthracene	X		1	8270D	<0.19				
Indeno(1,2,3-cd)pyrene	X		1	8270D	<0.19				

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
Total Group II PAHs	X		1	625.1	<4.8			100 µg/L	---
Naphthalene	X		1	625.1	<4.8			20 µg/L	---
E. Halogenated SVOCs									
Total PCBs								0.000064 µg/L	---
Pentachlorophenol	X		1	8270D	<0.96			1.0 µg/L	---
F. Fuels Parameters									
Total Petroleum Hydrocarbons								5.0 mg/L	---
Ethanol								Report mg/L	---
Methyl-tert-Butyl Ether	X		1	624.1	<2.0			70 µg/L	
tert-Butyl Alcohol	X		1	624.1	<20			120 µg/L in MA 40 µg/L in NH	---
tert-Amyl Methyl Ether	X		1	624.1	<0.50			90 µg/L in MA 140 µg/L in NH	---
Other (i.e., pH, temperature, hardness, salinity, LC_{50}, additional pollutants present); if so, specify:									
pH			1	Grab		7.38	7.38		
Temperature (Influent)			1	Grab		57 F	57 F		
pH (receiving water)			1	Grab		6.97	6.97		
Temperature (receiving water)			1	Grab		54 F	54 F		
Ammonia (receiving water)		X	1	350.1	50	320	320		
Arsenic (receiving water)		X	1	200.8	5.0	12	12		
Chromium (receiving water)		X	1	200.8	50	12	12		
Copper (receiving water)		X	1	200.8	5.0	42	42		
Iron (receiving water)		X	1	200.7	50	4,600	4,600		
Lead (receiving water)		X	1	200.8	2.5	20	20		
Selenium (receiving water)		X	1	200.8	25	34	34		
Hardness (Influent)		X	1	200.7		89,000	89,000		
Hardness (receiving water)		X	1	200.7		58,000	58,000		

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.

Groundwater encountered during excavation activities will be pumped to a water treatment system prior to off-site discharge. Water will first enter a weir tank where the solids will settle out followed by bag filtration and reactivated liquid phase carbon prior to discharge.

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: Is use of a flow meter feasible? (check one): ☒ Yes ☐ No, if so, provide justification:	300 gpm
Provide the proposed maximum effluent flow in gpm.	300 gpm
Provide the average effluent flow in gpm.	150 gpm
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:	A BMPP will be developed and maintained that meets the requirements of this permit. The BMPP will be implemented on-site prior to initiation of discharge.
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. Notification will be provided upon EPA approval of NOI	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: 4/23/18
Print Name and Title: ROBERT CROAK PROJECT MANAGER	

Appendix B

Laboratory Data

Dilution Factor	1.0					
A. Inorganics	TBEL applies if bolded		WQBEL applies if bolded		Compliance Level applies if shown	
Ammonia	**Report**	mg/L	---			
Chloride	**Report**	µg/L	---			
Total Residual Chlorine	0.2	mg/L	**11**	µg/L	50	µg/L
Total Suspended Solids	**30**	mg/L	---			
Antimony	**206**	µg/L	640	µg/L		
Arsenic	**104**	µg/L	10	µg/L		
Cadmium	10.2	µg/L	**0.2482**	µg/L		
Chromium III	**323**	µg/L	78.3	µg/L		
Chromium VI	**323**	µg/L	11.4	µg/L		
Copper	242	µg/L	**8.4**	µg/L		
Iron	5000	µg/L	**1000**	µg/L		
Lead	160	µg/L	**2.74**	µg/L		
Mercury	**0.739**	µg/L	0.91	µg/L		
Nickel	1450	µg/L	**47.3**	µg/L		
Selenium	235.8	µg/L	**5.0**	µg/L		
Silver	**35.1**	µg/L	3.1	µg/L		
Zinc	420	µg/L	**108.6**	µg/L		
Cyanide	**178**	mg/L	5.2	µg/L	---	µg/L
B. Non-Halogenated VOCs						
Total BTEX	**100**	µg/L	---			
Benzene	**5.0**	µg/L	---			
1,4 Dioxane	**200**	µg/L	---			
Acetone	**7970**	µg/L	---			
Phenol	**1,080**	µg/L	300	µg/L		
C. Halogenated VOCs						
Carbon Tetrachloride	**4.4**	µg/L	1.6	µg/L		
1,2 Dichlorobenzene	**600**	µg/L	---			
1,3 Dichlorobenzene	**320**	µg/L	---			
1,4 Dichlorobenzene	**5.0**	µg/L	---			
Total dichlorobenzene	**---**	µg/L	---			
1,1 Dichloroethane	**70**	µg/L	---			
1,2 Dichloroethane	**5.0**	µg/L	---			
1,1 Dichloroethylene	**3.2**	µg/L	---			
Ethylene Dibromide	**0.05**	µg/L	---			
Methylene Chloride	**4.6**	µg/L	---			
1,1,1 Trichloroethane	**200**	µg/L	---			
1,1,2 Trichloroethane	**5.0**	µg/L	---			
Trichloroethylene	**5.0**	µg/L	---			
Tetrachloroethylene	5.0	µg/L	**3.3**	µg/L		
cis-1,2 Dichloroethylene	**70**	µg/L	---			
Vinyl Chloride	**2.0**	µg/L	---			
D. Non-Halogenated SVOCs						
Total Phthalates	**190**	µg/L	---	µg/L		
Diethylhexyl phthalate	**101**	µg/L	2.2	µg/L		

Total Group I Polycyclic Aromatic Hydrocarbons	**1.0**	µg/L	---			
Benzo(a)anthracene	**1.0**	µg/L	0.0038	µg/L	---	µg/L
Benzo(a)pyrene	**1.0**	µg/L	0.0038	µg/L	---	µg/L
Benzo(b)fluoranthene	**1.0**	µg/L	0.0038	µg/L	---	µg/L
Benzo(k)fluoranthene	**1.0**	µg/L	0.0038	µg/L	---	µg/L
Chrysene	**1.0**	µg/L	0.0038	µg/L	---	µg/L
Dibenzo(a,h)anthracene	**1.0**	µg/L	0.0038	µg/L	---	µg/L
Indeno(1,2,3-cd)pyrene	**1.0**	µg/L	0.0038	µg/L	---	µg/L
Total Group II Polycyclic Aromatic Hydrocarbons	**100**	µg/L	---			
Naphthalene	**20**	µg/L	---			
E. Halogenated SVOCs						
Total Polychlorinated Biphenyls	**0.000064**	µg/L	---		0.5	µg/L
Pentachlorophenol	**1.0**	µg/L	---			
F. Fuels Parameters						
Total Petroleum Hydrocarbons	**5.0**	mg/L	---			
Ethanol	**Report**	mg/L	---			
Methyl-tert-Butyl Ether	**70**	µg/L	20	µg/L		
tert-Butyl Alcohol	**120**	µg/L	---			
tert-Amyl Methyl Ether	**90**	µg/L	---			

con-test® ANALYTICAL LABORATORY
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April 18, 2018

Tammie Hagie
Lockwood Remediation Technologies, LLC
89 Crawford Street
Leominster, MA 01453

Project Location: 3 Arlington St., Qunicy, MA
Client Job Number:
Project Number: 2-1660
Laboratory Work Order Number: 18D0621

Enclosed are results of analyses for samples received by the laboratory on April 13, 2018. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Kerry K. McGee
Project Manager

Table of Contents

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

Lockwood Remediation Technologies, LLC
89 Crawford Street
Leominster, MA 01453
ATTN: Tammie Hagie

REPORT DATE: 4/18/2018

PURCHASE ORDER NUMBER:

PROJECT NUMBER: 2-1660

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 18D0621

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

PROJECT LOCATION: 3 Arlington St., Qunicy, MA

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
INFLUENT	18D0621-01	Ground Water		EPA 200.7	
				EPA 200.8	
				EPA 245.1	
				EPA 300.0	
				EPA 335.4	NY11393/MA-MAI138/MA1110
				EPA 350.1	NY11393/MA-MAI138/MA1110
				EPA 624.1	
				EPA 625.1	
				SM21-22 2540D	
				SM21-22 3500 Cr B	
				SM21-22 4500 CL G	
				SW-846 8270D	
				Tri Chrome Calc.	

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CASE NARRATIVE SUMMARY

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

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

EPA 200.8

Qualifications:

DL-15

Sample required a dilution due to low internal standard recovery of the lesser diluted digestion, reporting limit is elevated.

Analyte & Samples(s) Qualified:

Lead
18D0621-01[INFLUENT]

EPA 300.0

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:

Chloride
18D0621-01[INFLUENT], B200961-MS1

EPA 625.1

Qualifications:

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:

Phenol
18D0621-01[INFLUENT], B200854-BLK1, B200854-BS1, B200854-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:

2-Chloronaphthalene
B200854-BSD1

Acenaphthene
B200854-BSD1

Hexachlorobutadiene
B200854-BSD1

Naphthalene
B200854-BSD1

V-04

Initial calibration did not meet method specifications. Compound was calibrated using a response factor where %RSD is outside of method specified criteria. Reported result is estimated.

Analyte & Samples(s) Qualified:

Benzidine
18D0621-01[INFLUENT], B200854-BLK1, B200854-BS1, B200854-BSD1

V-05

Continuing calibration did not meet method specifications and was biased on the low side for this compound. Reported result is estimated.

Analyte & Samples(s) Qualified:

Benzidine
18D0621-01[INFLUENT], B200854-BLK1, B200854-BS1, B200854-BSD1

V-19

Initial calibration did not meet method specifications. Compound was calibrated using linear regression with correlation coefficient <0.99. Reported result is estimated.

Analyte & Samples(s) Qualified:

2,4-Dinitrophenol
18D0621-01[INFLUENT], B200854-BLK1, B200854-BS1, B200854-BSD1

SW-846 8270D

Qualifications:

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B

Analyte is found in the associated laboratory blank as well as in the sample.

Analyte & Samples(s) Qualified:

Bis(2-ethylhexyl)phthalate (SIM)
18D0621-01[INFLUENT], B201014-BLK1

S-17

Surrogate recovery is outside of control limits. Data validation is not affected since all associated results are less than the reporting limit and bias is on the high side.

Analyte & Samples(s) Qualified:

2,4,6-Tribromophenol
18D0621-01[INFLUENT], B201014-BLK1

V-06

Continuing calibration did not meet method specifications and was biased on the high side for this compound. Reported result is estimated.

Analyte & Samples(s) Qualified:

Pentachlorophenol (SIM)
B201014-BS1, B201014-BSD1

V-20

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

Analyte & Samples(s) Qualified:

Pentachlorophenol (SIM)
18D0621-01[INFLUENT], B201014-BLK1

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.

Lisa A. Worthington
Project Manager

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 3 Arlington St., Qunicy, MA | Sample Description: | Work Order: 18D0621

Date Received: 4/13/2018

Field Sample #: INFLUENT | Sampled: 4/13/2018 10:30

Sample ID: 18D0621-01

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	1.7	µg/L	1		EPA 624.1	4/16/18	4/16/18 22:35	EEH
tert-Amyl Methyl Ether (TAME)	ND	0.50	0.28	µg/L	1		EPA 624.1	4/16/18	4/16/18 22:35	EEH
Benzene	ND	1.0	0.34	µg/L	1		EPA 624.1	4/16/18	4/16/18 22:35	EEH
tert-Butyl Alcohol (TBA)	ND	20	2.9	µg/L	1		EPA 624.1	4/16/18	4/16/18 22:35	EEH
Carbon Tetrachloride	ND	2.0	0.39	µg/L	1		EPA 624.1	4/16/18	4/16/18 22:35	EEH
1,2-Dichlorobenzene	ND	2.0	0.31	µg/L	1		EPA 624.1	4/16/18	4/16/18 22:35	EEH
1,3-Dichlorobenzene	ND	2.0	0.33	µg/L	1		EPA 624.1	4/16/18	4/16/18 22:35	EEH
1,4-Dichlorobenzene	ND	2.0	0.39	µg/L	1		EPA 624.1	4/16/18	4/16/18 22:35	EEH
1,2-Dichloroethane	ND	2.0	0.28	µg/L	1		EPA 624.1	4/16/18	4/16/18 22:35	EEH
cis-1,2-Dichloroethylene	55	1.0	0.39	µg/L	1		EPA 624.1	4/16/18	4/16/18 22:35	EEH
1,1-Dichloroethane	0.37	2.0	0.33	µg/L	1	J	EPA 624.1	4/16/18	4/16/18 22:35	EEH
1,1-Dichloroethylene	ND	2.0	0.25	µg/L	1		EPA 624.1	4/16/18	4/16/18 22:35	EEH
1,4-Dioxane	ND	50	26	µg/L	1		EPA 624.1	4/16/18	4/16/18 22:35	EEH
Ethylbenzene	ND	2.0	0.37	µg/L	1		EPA 624.1	4/16/18	4/16/18 22:35	EEH
Methyl tert-Butyl Ether (MTBE)	ND	2.0	0.24	µg/L	1		EPA 624.1	4/16/18	4/16/18 22:35	EEH
Methylene Chloride	ND	5.0	0.42	µg/L	1		EPA 624.1	4/16/18	4/16/18 22:35	EEH
Tetrachloroethylene	37	2.0	0.32	µg/L	1		EPA 624.1	4/16/18	4/16/18 22:35	EEH
Toluene	ND	1.0	0.35	µg/L	1		EPA 624.1	4/16/18	4/16/18 22:35	EEH
1,1,1-Trichloroethane	ND	2.0	0.25	µg/L	1		EPA 624.1	4/16/18	4/16/18 22:35	EEH
1,1,2-Trichloroethane	ND	2.0	0.22	µg/L	1		EPA 624.1	4/16/18	4/16/18 22:35	EEH
Trichloroethylene	6.2	2.0	0.41	µg/L	1		EPA 624.1	4/16/18	4/16/18 22:35	EEH
Vinyl Chloride	3.7	2.0	0.30	µg/L	1		EPA 624.1	4/16/18	4/16/18 22:35	EEH
m+p Xylene	ND	2.0	0.65	µg/L	1		EPA 624.1	4/16/18	4/16/18 22:35	EEH
o-Xylene	ND	2.0	0.35	µg/L	1		EPA 624.1	4/16/18	4/16/18 22:35	EEH

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	89.2	70-130		4/16/18 22:35
Toluene-d8	99.1	70-130		4/16/18 22:35
4-Bromofluorobenzene	94.3	70-130		4/16/18 22:35

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Project Location: 3 Arlington St., Qunicy, MA | Sample Description: | Work Order: 18D0621

Date Received: 4/13/2018

Field Sample #: INFLUENT | Sampled: 4/13/2018 10:30

Sample ID: 18D0621-01

Sample Matrix: Ground Water

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Benzo(a)anthracene (SIM)	ND	0.048	0.048	µg/L	1		SW-846 8270D	4/13/18	4/17/18 12:25	CJM
Benzo(a)pyrene (SIM)	ND	0.096	0.096	µg/L	1		SW-846 8270D	4/13/18	4/17/18 12:25	CJM
Benzo(b)fluoranthene (SIM)	ND	0.048	0.048	µg/L	1		SW-846 8270D	4/13/18	4/17/18 12:25	CJM
Benzo(k)fluoranthene (SIM)	ND	0.19	0.19	µg/L	1		SW-846 8270D	4/13/18	4/17/18 12:25	CJM
Bis(2-ethylhexyl)phthalate (SIM)	0.38	0.96	0.096	µg/L	1	J, B	SW-846 8270D	4/13/18	4/17/18 12:25	CJM
Chrysene (SIM)	ND	0.19	0.19	µg/L	1		SW-846 8270D	4/13/18	4/17/18 12:25	CJM
Dibenz(a,h)anthracene (SIM)	ND	0.19	0.19	µg/L	1		SW-846 8270D	4/13/18	4/17/18 12:25	CJM
Indeno(1,2,3-cd)pyrene (SIM)	ND	0.19	0.19	µg/L	1		SW-846 8270D	4/13/18	4/17/18 12:25	CJM
Pentachlorophenol (SIM)	ND	0.96	0.33	µg/L	1	V-20	SW-846 8270D	4/13/18	4/17/18 12:25	CJM

Surrogates	% Recovery		Recovery Limits	Flag/Qual	
2-Fluorophenol	70.5		15-110		4/17/18 12:25
Phenol-d6	49.7		15-110		4/17/18 12:25
Nitrobenzene-d5	97.0		30-130		4/17/18 12:25
2-Fluorobiphenyl	79.2		30-130		4/17/18 12:25
2,4,6-Tribromophenol	**127**	*	15-110	S-17	4/17/18 12:25
p-Terphenyl-d14	79.7		30-130		4/17/18 12:25

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Project Location: 3 Arlington St., Qunicy, MA | Sample Description: | Work Order: 18D0621

Date Received: 4/13/2018

Field Sample #: INFLUENT | Sampled: 4/13/2018 10:30

Sample ID: 18D0621-01

Sample Matrix: Ground Water

Semivolatile Organic Compounds by - GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acenaphthene	ND	4.8	µg/L	1		EPA 625.1	4/13/18	4/16/18 14:55	BGL
Acenaphthylene	ND	4.8	µg/L	1		EPA 625.1	4/13/18	4/16/18 14:55	BGL
Anthracene	ND	4.8	µg/L	1		EPA 625.1	4/13/18	4/16/18 14:55	BGL
Benzidine	ND	19	µg/L	1	V-04, V-05	EPA 625.1	4/13/18	4/16/18 14:55	BGL
Benzo(g,h,i)perylene	ND	4.8	µg/L	1		EPA 625.1	4/13/18	4/16/18 14:55	BGL
4-Bromophenylphenylether	ND	9.6	µg/L	1		EPA 625.1	4/13/18	4/16/18 14:55	BGL
Butylbenzylphthalate	ND	9.6	µg/L	1		EPA 625.1	4/13/18	4/16/18 14:55	BGL
4-Chloro-3-methylphenol	ND	9.6	µg/L	1		EPA 625.1	4/13/18	4/16/18 14:55	BGL
Bis(2-chloroethyl)ether	ND	9.6	µg/L	1		EPA 625.1	4/13/18	4/16/18 14:55	BGL
Bis(2-chloroisopropyl)ether	ND	9.6	µg/L	1		EPA 625.1	4/13/18	4/16/18 14:55	BGL
2-Chloronaphthalene	ND	9.6	µg/L	1		EPA 625.1	4/13/18	4/16/18 14:55	BGL
2-Chlorophenol	ND	9.6	µg/L	1		EPA 625.1	4/13/18	4/16/18 14:55	BGL
4-Chlorophenylphenylether	ND	9.6	µg/L	1		EPA 625.1	4/13/18	4/16/18 14:55	BGL
Di-n-butylphthalate	ND	9.6	µg/L	1		EPA 625.1	4/13/18	4/16/18 14:55	BGL
1,3-Dichlorobenzene	ND	4.8	µg/L	1		EPA 625.1	4/13/18	4/16/18 14:55	BGL
1,4-Dichlorobenzene	ND	4.8	µg/L	1		EPA 625.1	4/13/18	4/16/18 14:55	BGL
1,2-Dichlorobenzene	ND	4.8	µg/L	1		EPA 625.1	4/13/18	4/16/18 14:55	BGL
3,3-Dichlorobenzidine	ND	9.6	µg/L	1		EPA 625.1	4/13/18	4/16/18 14:55	BGL
2,4-Dichlorophenol	ND	9.6	µg/L	1		EPA 625.1	4/13/18	4/16/18 14:55	BGL
Diethylphthalate	ND	9.6	µg/L	1		EPA 625.1	4/13/18	4/16/18 14:55	BGL
2,4-Dimethylphenol	ND	9.6	µg/L	1		EPA 625.1	4/13/18	4/16/18 14:55	BGL
Dimethylphthalate	ND	9.6	µg/L	1		EPA 625.1	4/13/18	4/16/18 14:55	BGL
4,6-Dinitro-2-methylphenol	ND	9.6	µg/L	1		EPA 625.1	4/13/18	4/16/18 14:55	BGL
2,4-Dinitrophenol	ND	9.6	µg/L	1	V-19	EPA 625.1	4/13/18	4/16/18 14:55	BGL
2,4-Dinitrotoluene	ND	9.6	µg/L	1		EPA 625.1	4/13/18	4/16/18 14:55	BGL
2,6-Dinitrotoluene	ND	9.6	µg/L	1		EPA 625.1	4/13/18	4/16/18 14:55	BGL
Di-n-octylphthalate	ND	9.6	µg/L	1		EPA 625.1	4/13/18	4/16/18 14:55	BGL
1,2-Diphenylhydrazine (as Azobenzene)	ND	9.6	µg/L	1		EPA 625.1	4/13/18	4/16/18 14:55	BGL
Bis(2-Ethylhexyl)phthalate	ND	9.6	µg/L	1		EPA 625.1	4/13/18	4/16/18 14:55	BGL
Fluoranthene	ND	4.8	µg/L	1		EPA 625.1	4/13/18	4/16/18 14:55	BGL
Fluorene	ND	4.8	µg/L	1		EPA 625.1	4/13/18	4/16/18 14:55	BGL
Hexachlorobenzene	ND	9.6	µg/L	1		EPA 625.1	4/13/18	4/16/18 14:55	BGL
Hexachlorobutadiene	ND	9.6	µg/L	1		EPA 625.1	4/13/18	4/16/18 14:55	BGL
Hexachlorocyclopentadiene	ND	9.6	µg/L	1		EPA 625.1	4/13/18	4/16/18 14:55	BGL
Hexachloroethane	ND	9.6	µg/L	1		EPA 625.1	4/13/18	4/16/18 14:55	BGL
Isophorone	ND	9.6	µg/L	1		EPA 625.1	4/13/18	4/16/18 14:55	BGL
Naphthalene	ND	4.8	µg/L	1		EPA 625.1	4/13/18	4/16/18 14:55	BGL
Nitrobenzene	ND	9.6	µg/L	1		EPA 625.1	4/13/18	4/16/18 14:55	BGL
2-Nitrophenol	ND	9.6	µg/L	1		EPA 625.1	4/13/18	4/16/18 14:55	BGL
4-Nitrophenol	ND	9.6	µg/L	1		EPA 625.1	4/13/18	4/16/18 14:55	BGL
N-Nitrosodimethylamine	ND	9.6	µg/L	1		EPA 625.1	4/13/18	4/16/18 14:55	BGL
N-Nitrosodiphenylamine	ND	9.6	µg/L	1		EPA 625.1	4/13/18	4/16/18 14:55	BGL
N-Nitrosodi-n-propylamine	ND	9.6	µg/L	1		EPA 625.1	4/13/18	4/16/18 14:55	BGL
2-Methylnaphthalene	ND	4.8	µg/L	1		EPA 625.1	4/13/18	4/16/18 14:55	BGL

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

Project Location: 3 Arlington St., Qunicy, MA | Sample Description: | Work Order: 18D0621

Date Received: 4/13/2018

Field Sample #: INFLUENT | Sampled: 4/13/2018 10:30

Sample ID: 18D0621-01

Sample Matrix: Ground Water

Semivolatile Organic Compounds by - GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Phenanthrene	ND	4.8	µg/L	1		EPA 625.1	4/13/18	4/16/18 14:55	BGL
2-Methylphenol	ND	9.6	µg/L	1		EPA 625.1	4/13/18	4/16/18 14:55	BGL
Phenol	ND	9.6	µg/L	1	L-04	EPA 625.1	4/13/18	4/16/18 14:55	BGL
3/4-Methylphenol	ND	9.6	µg/L	1		EPA 625.1	4/13/18	4/16/18 14:55	BGL
Pyrene	ND	4.8	µg/L	1		EPA 625.1	4/13/18	4/16/18 14:55	BGL
1,2,4-Trichlorobenzene	ND	4.8	µg/L	1		EPA 625.1	4/13/18	4/16/18 14:55	BGL
2,4,6-Trichlorophenol	ND	9.6	µg/L	1		EPA 625.1	4/13/18	4/16/18 14:55	BGL

Surrogates	% Recovery	Recovery Limits	Flag/Qual			
2-Fluorophenol	60.8	15-110				4/16/18 14:55
Phenol-d6	41.5	15-110				4/16/18 14:55
Nitrobenzene-d5	89.8	30-130				4/16/18 14:55
2-Fluorobiphenyl	75.3	30-130				4/16/18 14:55
2,4,6-Tribromophenol	92.6	15-110				4/16/18 14:55
p-Terphenyl-d14	103	30-130				4/16/18 14:55

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 3 Arlington St., Qunicy, MA Sample Description: Work Order: 18D0621

Date Received: 4/13/2018

Field Sample #: INFLUENT Sampled: 4/13/2018 10:30

Sample ID: 18D0621-01

Sample Matrix: Ground Water

Metals Analyses (Total)

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Antimony	ND	1.0		µg/L	1		EPA 200.8	4/16/18	4/17/18 11:31	MJH
Arsenic	5.7	1.0		µg/L	1		EPA 200.8	4/16/18	4/17/18 11:31	MJH
Cadmium	3.4	0.20		µg/L	1		EPA 200.8	4/16/18	4/17/18 11:31	MJH
Chromium	32	10		µg/L	1		EPA 200.8	4/16/18	4/17/18 11:31	MJH
Chromium, Trivalent	0.032			mg/L	1		Tri Chrome Calc.	4/16/18	4/17/18 12:07	MJH
Copper	57	1.0		µg/L	1		EPA 200.8	4/16/18	4/17/18 11:31	MJH
Iron	13	0.050		mg/L	1		EPA 200.7	4/16/18	4/17/18 12:56	QNW
Lead	8.7	2.5		µg/L	5	DL-15	EPA 200.8	4/16/18	4/17/18 11:48	MJH
Mercury	ND	0.00010		mg/L	1		EPA 245.1	4/16/18	4/17/18 10:46	AMP
Nickel	72	5.0		µg/L	1		EPA 200.8	4/16/18	4/17/18 11:31	MJH
Selenium	15	5.0	2.1	µg/L	1		EPA 200.8	4/16/18	4/17/18 11:31	MJH
Silver	1.4	0.20		µg/L	1		EPA 200.8	4/16/18	4/17/18 11:31	MJH
Zinc	340	20		µg/L	1		EPA 200.8	4/16/18	4/17/18 11:31	MJH
Hardness	89			mg/L	1		EPA 200.7	4/16/18	4/17/18 13:44	QNW

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 3 Arlington St., Qunicy, MA | Sample Description: | Work Order: 18D0621

Date Received: 4/13/2018

Field Sample #: INFLUENT | Sampled: 4/13/2018 10:30

Sample ID: 18D0621-01

Sample Matrix: Ground 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
Chloride	2700	100	mg/L	100	MS-07	EPA 300.0	4/14/18	4/17/18 11:51	KAF
Chlorine, Residual	0.095	0.020	mg/L	1		SM21-22 4500 CL G	4/13/18	4/13/18 21:35	LED
Hexavalent Chromium	ND	0.0040	mg/L	1		SM21-22 3500 Cr B	4/13/18	4/13/18 19:00	LED
Total Suspended Solids	17	0.67	mg/L	1		SM21-22 2540D	4/16/18	4/16/18 12:35	LL

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

Project Location: 3 Arlington St., Qunicy, MA | Sample Description: | Work Order: 18D0621

Date Received: 4/13/2018

Field Sample #: INFLUENT | Sampled: 4/13/2018 10:30

Sample ID: 18D0621-01

Sample Matrix: Ground 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
Cyanide	<0.00500	0.005	mg/L	1		EPA 335.4		4/17/18 0:00	ESA

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Project Location: 3 Arlington St., Qunicy, MA | Sample Description: | Work Order: 18D0621

Date Received: 4/13/2018

Field Sample #: INFLUENT | Sampled: 4/13/2018 10:30

Sample ID: 18D0621-01

Sample Matrix: Ground Water

Miscellaneous Inorganic Analyses

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Ammonia as NH3	0.18	0.05	0.02	mg/L	1		EPA 350.1		4/17/18 0:00	ESA

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Sample Extraction Data

Prep Method: EPA 200.7-EPA 200.7

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
18D0621-01 [INFLUENT]	B201022	50.0	50.0	04/16/18

Prep Method: EPA 200.7-EPA 200.7

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
18D0621-01 [INFLUENT]	B201023	50.0	50.0	04/16/18

Prep Method: EPA 200.8-EPA 200.8

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
18D0621-01 [INFLUENT]	B201024	50.0	50.0	04/16/18

Prep Method: EPA 245.1-EPA 245.1

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
18D0621-01 [INFLUENT]	B201041	6.00	6.00	04/16/18

Prep Method: EPA 300.0-EPA 300.0

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
18D0621-01 [INFLUENT]	B200961	10.0	10.0	04/14/18

Prep Method: SW-846 5030B-EPA 624.1

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
18D0621-01 [INFLUENT]	B201063	5	5.00	04/16/18

Prep Method: SW-846 3510C-EPA 625.1

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
18D0621-01 [INFLUENT]	B200854	1040	1.00	04/13/18

SM21-22 2540D

Lab Number [Field ID]	Batch	Initial [mL]	Date
18D0621-01 [INFLUENT]	B200997	750	04/16/18

SM21-22 3500 Cr B

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
18D0621-01 [INFLUENT]	B200947	50.0	50.0	04/13/18

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

Sample Extraction Data

SM21-22 4500 CL G

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
18D0621-01 [INFLUENT]	B200953	100	100	04/13/18

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

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
18D0621-01 [INFLUENT]	B201014	1040	1.00	04/13/18

Prep Method: EPA 200.8-Tri Chrome Calc.

Lab Number [Field ID]	Batch	Initial [mL]	Date
18D0621-01 [INFLUENT]	B201045	1.00	04/16/18

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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 B201063 - SW-846 5030B										
Blank (B201063-BLK1)				Prepared & Analyzed: 04/16/18						
Acetone	ND	50	µg/L							
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L							
Benzene	ND	1.0	µg/L							
tert-Butyl Alcohol (TBA)	ND	20	µg/L							
Carbon Tetrachloride	ND	2.0	µg/L							
1,2-Dichlorobenzene	ND	2.0	µg/L							
1,3-Dichlorobenzene	ND	2.0	µg/L							
1,4-Dichlorobenzene	ND	2.0	µg/L							
1,2-Dichloroethane	ND	2.0	µg/L							
cis-1,2-Dichloroethylene	ND	1.0	µg/L							
1,1-Dichloroethane	ND	2.0	µg/L							
1,1-Dichloroethylene	ND	2.0	µg/L							
1,4-Dioxane	ND	50	µg/L							
Ethylbenzene	ND	2.0	µg/L							
Methyl tert-Butyl Ether (MTBE)	ND	2.0	µg/L							
Methylene Chloride	ND	5.0	µg/L							
Tetrachloroethylene	ND	2.0	µg/L							
Toluene	ND	1.0	µg/L							
1,1,1-Trichloroethane	ND	2.0	µg/L							
1,1,2-Trichloroethane	ND	2.0	µg/L							
Trichloroethylene	ND	2.0	µg/L							
Vinyl Chloride	ND	2.0	µg/L							
m+p Xylene	ND	2.0	µg/L							
o-Xylene	ND	2.0	µg/L							
Surrogate: 1,2-Dichloroethane-d4	*21.9*		µg/L	25.0		87.5	70-130			
Surrogate: Toluene-d8	*24.8*		µg/L	25.0		99.1	70-130			
Surrogate: 4-Bromofluorobenzene	*23.4*		µg/L	25.0		93.5	70-130			
LCS (B201063-BS1)				Prepared & Analyzed: 04/16/18						
Acetone	187	50	µg/L	200		93.6	70-160			†
tert-Amyl Methyl Ether (TAME)	18.2	0.50	µg/L	20.0		91.0	70-130			
Benzene	19.5	1.0	µg/L	20.0		97.4	65-135			
tert-Butyl Alcohol (TBA)	149	20	µg/L	200		74.6	40-160			†
Carbon Tetrachloride	18.1	2.0	µg/L	20.0		90.4	70-130			
1,2-Dichlorobenzene	20.8	2.0	µg/L	20.0		104	65-135			
1,3-Dichlorobenzene	21.1	2.0	µg/L	20.0		106	70-130			
1,4-Dichlorobenzene	20.4	2.0	µg/L	20.0		102	65-135			
1,2-Dichloroethane	15.0	2.0	µg/L	20.0		75.2	70-130			
cis-1,2-Dichloroethylene	18.5	1.0	µg/L	20.0		92.7	70-130			
1,1-Dichloroethane	18.0	2.0	µg/L	20.0		90.0	70-130			
1,1-Dichloroethylene	14.8	2.0	µg/L	20.0		74.0	50-150			
1,4-Dioxane	181	50	µg/L	200		90.7	40-130			†
Ethylbenzene	20.7	2.0	µg/L	20.0		103	60-140			
Methyl tert-Butyl Ether (MTBE)	18.9	2.0	µg/L	20.0		94.7	70-130			
Methylene Chloride	14.6	5.0	µg/L	20.0		73.0	60-140			
Tetrachloroethylene	20.2	2.0	µg/L	20.0		101	70-130			
Toluene	19.1	1.0	µg/L	20.0		95.6	70-130			
1,1,1-Trichloroethane	18.0	2.0	µg/L	20.0		89.8	70-130			
1,1,2-Trichloroethane	20.4	2.0	µg/L	20.0		102	70-130			
Trichloroethylene	19.6	2.0	µg/L	20.0		98.1	65-135			
Vinyl Chloride	6.70	2.0	µg/L	20.0		33.5	5-195			
m+p Xylene	40.8	2.0	µg/L	40.0		102	70-130			

con-test® ANALYTICAL LABORATORY
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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 B201063 - SW-846 5030B										
LCS (B201063-BS1)				Prepared & Analyzed: 04/16/18						
o-Xylene	20.3	2.0	µg/L	20.0		102	70-130			
Surrogate: 1,2-Dichloroethane-d4	*21.3*		µg/L	25.0		85.4	70-130			
Surrogate: Toluene-d8	*24.6*		µg/L	25.0		98.6	70-130			
Surrogate: 4-Bromofluorobenzene	*23.5*		µg/L	25.0		94.1	70-130			

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

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 B201014 - SW-846 3510C											
Blank (B201014-BLK1)				Prepared: 04/13/18 Analyzed: 04/17/18							
Benzo(a)anthracene (SIM)	ND	0.050	µg/L								
Benzo(a)pyrene (SIM)	ND	0.10	µg/L								
Benzo(b)fluoranthene (SIM)	ND	0.050	µg/L								
Benzo(k)fluoranthene (SIM)	ND	0.20	µg/L								
Bis(2-ethylhexyl)phthalate (SIM)	0.36	1.0	µg/L								B, J
Chrysene (SIM)	ND	0.20	µg/L								
Dibenz(a,h)anthracene (SIM)	ND	0.20	µg/L								
Indeno(1,2,3-cd)pyrene (SIM)	ND	0.20	µg/L								
Pentachlorophenol (SIM)	ND	1.0	µg/L								V-20
Surrogate: 2-Fluorophenol	*122*		µg/L	200		60.8		15-110			
Surrogate: Phenol-d6	*91.2*		µg/L	200		45.6		15-110			
Surrogate: Nitrobenzene-d5	*92.0*		µg/L	100		92.0		30-130			
Surrogate: 2-Fluorobiphenyl	*77.7*		µg/L	101		76.9		30-130			
Surrogate: 2,4,6-Tribromophenol	*250*		µg/L	200		**125**	*	15-110			S-17
Surrogate: p-Terphenyl-d14	*78.5*		µg/L	101		77.8		30-130			
LCS (B201014-BS1)				Prepared: 04/13/18 Analyzed: 04/17/18							
Benzo(a)anthracene (SIM)	102	1.2	µg/L	100		102		40-140			
Benzo(a)pyrene (SIM)	108	2.5	µg/L	100		108		40-140			
Benzo(b)fluoranthene (SIM)	109	1.2	µg/L	100		109		40-140			
Benzo(k)fluoranthene (SIM)	104	5.0	µg/L	100		104		40-140			
Bis(2-ethylhexyl)phthalate (SIM)	91.5	25	µg/L	100		91.5		40-140			
Chrysene (SIM)	98.1	5.0	µg/L	100		98.1		40-140			
Dibenz(a,h)anthracene (SIM)	112	5.0	µg/L	100		112		40-140			
Indeno(1,2,3-cd)pyrene (SIM)	111	5.0	µg/L	100		111		40-140			
Pentachlorophenol (SIM)	124	25	µg/L	100		124		40-140			V-06
Surrogate: 2-Fluorophenol	*132*		µg/L	200		66.0		15-110			
Surrogate: Phenol-d6	*105*		µg/L	200		52.4		15-110			
Surrogate: Nitrobenzene-d5	*97.6*		µg/L	100		97.6		30-130			
Surrogate: 2-Fluorobiphenyl	*87.3*		µg/L	101		86.4		30-130			
Surrogate: 2,4,6-Tribromophenol	*210*		µg/L	200		105		15-110			
Surrogate: p-Terphenyl-d14	*77.8*		µg/L	101		77.1		30-130			
LCS Dup (B201014-BSD1)				Prepared: 04/13/18 Analyzed: 04/17/18							
Benzo(a)anthracene (SIM)	90.1	1.2	µg/L	100		90.1		40-140	12.5	20	
Benzo(a)pyrene (SIM)	95.8	2.5	µg/L	100		95.8		40-140	12.0	20	
Benzo(b)fluoranthene (SIM)	97.3	1.2	µg/L	100		97.3		40-140	10.9	20	
Benzo(k)fluoranthene (SIM)	92.8	5.0	µg/L	100		92.8		40-140	11.5	20	
Bis(2-ethylhexyl)phthalate (SIM)	81.8	25	µg/L	100		81.8		40-140	11.2	20	
Chrysene (SIM)	87.2	5.0	µg/L	100		87.2		40-140	11.8	20	
Dibenz(a,h)anthracene (SIM)	99.0	5.0	µg/L	100		99.0		40-140	12.0	20	
Indeno(1,2,3-cd)pyrene (SIM)	98.0	5.0	µg/L	100		98.0		40-140	12.5	20	‡
Pentachlorophenol (SIM)	106	25	µg/L	100		106		40-140	15.9	20	V-06
Surrogate: 2-Fluorophenol	*122*		µg/L	200		61.0		15-110			
Surrogate: Phenol-d6	*92.7*		µg/L	200		46.4		15-110			
Surrogate: Nitrobenzene-d5	*94.5*		µg/L	100		94.5		30-130			
Surrogate: 2-Fluorobiphenyl	*79.6*		µg/L	101		78.8		30-130			
Surrogate: 2,4,6-Tribromophenol	*185*		µg/L	200		92.7		15-110			
Surrogate: p-Terphenyl-d14	*68.8*		µg/L	101		68.1		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 B200854 - SW-846 3510C										
Blank (B200854-BLK1)				Prepared: 04/13/18 Analyzed: 04/16/18						
Acenaphthene	ND	5.0	µg/L							
Acenaphthylene	ND	5.0	µg/L							
Anthracene	ND	5.0	µg/L							
Benzidine	ND	20	µg/L							V-04, V-05
Benzo(g,h,i)perylene	ND	5.0	µg/L							
4-Bromophenylphenylether	ND	10	µg/L							
Butylbenzylphthalate	ND	10	µg/L							
4-Chloro-3-methylphenol	ND	10	µg/L							
Bis(2-chloroethyl)ether	ND	10	µg/L							
Bis(2-chloroisopropyl)ether	ND	10	µg/L							
2-Chloronaphthalene	ND	10	µg/L							
2-Chlorophenol	ND	10	µg/L							
4-Chlorophenylphenylether	ND	10	µg/L							
Di-n-butylphthalate	ND	10	µg/L							
1,3-Dichlorobenzene	ND	5.0	µg/L							
1,4-Dichlorobenzene	ND	5.0	µg/L							
1,2-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							
4,6-Dinitro-2-methylphenol	ND	10	µg/L							
2,4-Dinitrophenol	ND	10	µg/L							V-19
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							
Bis(2-Ethylhexyl)phthalate	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							
Hexachlorocyclopentadiene	ND	10	µg/L							
Hexachloroethane	ND	10	µg/L							
Isophorone	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							
N-Nitrosodimethylamine	ND	10	µg/L							
N-Nitrosodiphenylamine	ND	10	µg/L							
N-Nitrosodi-n-propylamine	ND	10	µg/L							
2-Methylnaphthalene	ND	5.0	µg/L							
Phenanthrene	ND	5.0	µg/L							
2-Methylphenol	ND	10	µg/L							
Phenol	ND	10	µg/L							L-04
3/4-Methylphenol	ND	10	µg/L							
Pyrene	ND	5.0	µg/L							
1,2,4-Trichlorobenzene	ND	5.0	µg/L							
2,4,6-Trichlorophenol	ND	10	µg/L							
Surrogate: 2-Fluorophenol	*115*		µg/L	200		57.3	15-110			

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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 B200854 - SW-846 3510C										
Blank (B200854-BLK1)				Prepared: 04/13/18 Analyzed: 04/16/18						
Surrogate: Phenol-d6	*77.7*		µg/L	200		38.8	15-110			
Surrogate: Nitrobenzene-d5	*85.2*		µg/L	100		85.2	30-130			
Surrogate: 2-Fluorobiphenyl	*70.7*		µg/L	101		70.0	30-130			
Surrogate: 2,4,6-Tribromophenol	*173*		µg/L	200		86.6	15-110			
Surrogate: p-Terphenyl-d14	*100*		µg/L	101		99.5	30-130			
LCS (B200854-BS1)				Prepared: 04/13/18 Analyzed: 04/16/18						
Acenaphthene	76.5	5.0	µg/L	100		76.5	70-130			
Acenaphthylene	76.3	5.0	µg/L	100		76.3	60-130			
Anthracene	85.0	5.0	µg/L	100		85.0	58-130			
Benzidine	103	20	µg/L	100		103	40-140			V-05, V-04
Benzo(g,h,i)perylene	83.8	5.0	µg/L	100		83.8	13-195			
4-Bromophenylphenylether	86.3	10	µg/L	100		86.3	70-130			
Butylbenzylphthalate	86.1	10	µg/L	100		86.1	43-140			
4-Chloro-3-methylphenol	88.6	10	µg/L	100		88.6	68-130			
Bis(2-chloroethyl)ether	82.2	10	µg/L	100		82.2	52-130			
Bis(2-chloroisopropyl)ether	88.1	10	µg/L	100		88.1	63-139			
2-Chloronaphthalene	70.9	10	µg/L	100		70.9	70-130			
2-Chlorophenol	77.8	10	µg/L	100		77.8	55-130			
4-Chlorophenylphenylether	84.3	10	µg/L	100		84.3	57-145			
Di-n-butylphthalate	84.5	10	µg/L	100		84.5	52-130			
1,3-Dichlorobenzene	60.9	5.0	µg/L	100		60.9	1-172			
1,4-Dichlorobenzene	61.7	5.0	µg/L	100		61.7	20-124			
1,2-Dichlorobenzene	64.3	5.0	µg/L	100		64.3	32-129			
3,3-Dichlorobenzidine	90.6	10	µg/L	100		90.6	18-213			
2,4-Dichlorophenol	83.2	10	µg/L	100		83.2	64-130			
Diethylphthalate	83.3	10	µg/L	100		83.3	47-130			
2,4-Dimethylphenol	85.2	10	µg/L	100		85.2	58-130			
Dimethylphthalate	86.4	10	µg/L	100		86.4	50-130			
4,6-Dinitro-2-methylphenol	73.8	10	µg/L	100		73.8	56-130			
2,4-Dinitrophenol	75.2	10	µg/L	100		75.2	39-173			V-19
2,4-Dinitrotoluene	82.7	10	µg/L	100		82.7	53-130			
2,6-Dinitrotoluene	86.3	10	µg/L	100		86.3	68-137			
Di-n-octylphthalate	86.9	10	µg/L	100		86.9	21-132			
1,2-Diphenylhydrazine (as Azobenzene)	87.0	10	µg/L	100		87.0	40-140			
Bis(2-Ethylhexyl)phthalate	84.0	10	µg/L	100		84.0	43-137			
Fluoranthene	83.3	5.0	µg/L	100		83.3	47-130			
Fluorene	81.2	5.0	µg/L	100		81.2	70-130			
Hexachlorobenzene	85.7	10	µg/L	100		85.7	38-142			
Hexachlorobutadiene	69.2	10	µg/L	100		69.2	68-130			
Hexachlorocyclopentadiene	56.8	10	µg/L	100		56.8	40-140			
Hexachloroethane	63.8	10	µg/L	100		63.8	55-130			
Isophorone	87.9	10	µg/L	100		87.9	52-180			
Naphthalene	75.4	5.0	µg/L	100		75.4	70-130			
Nitrobenzene	78.1	10	µg/L	100		78.1	54-158			
2-Nitrophenol	78.8	10	µg/L	100		78.8	61-163			
4-Nitrophenol	54.6	10	µg/L	100		54.6	35-130			
N-Nitrosodimethylamine	61.2	10	µg/L	100		61.2	40-140			
N-Nitrosodiphenylamine	105	10	µg/L	100		105	40-140			
N-Nitrosodi-n-propylamine	85.8	10	µg/L	100		85.8	59-170			
2-Methylnaphthalene	82.6	5.0	µg/L	100		82.6	40-140			
Phenanthrene	84.8	5.0	µg/L	100		84.8	67-130			

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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 B200854 - SW-846 3510C											
LCS (B200854-BS1)				Prepared: 04/13/18 Analyzed: 04/16/18							
2-Methylphenol	74.3	10	µg/L	100		74.3		30-130			
Phenol	42.9	10	µg/L	100		**42.9**	*	48-130			L-04
3/4-Methylphenol	78.4	10	µg/L	100		78.4		30-130			
Pyrene	80.3	5.0	µg/L	100		80.3		70-130			
1,2,4-Trichlorobenzene	70.5	5.0	µg/L	100		70.5		61-130			
2,4,6-Trichlorophenol	81.8	10	µg/L	100		81.8		69-130			
Surrogate: 2-Fluorophenol	*120*		µg/L	200		59.9		15-110			
Surrogate: Phenol-d6	*87.8*		µg/L	200		43.9		15-110			
Surrogate: Nitrobenzene-d5	*80.7*		µg/L	100		80.7		30-130			
Surrogate: 2-Fluorobiphenyl	*71.5*		µg/L	101		70.8		30-130			
Surrogate: 2,4,6-Tribromophenol	*165*		µg/L	200		82.5		15-110			
Surrogate: p-Terphenyl-d14	*84.6*		µg/L	101		83.8		30-130			
LCS Dup (B200854-BSD1)				Prepared: 04/13/18 Analyzed: 04/16/18							
Acenaphthene	67.3	5.0	µg/L	100		**67.3**	*	70-130	12.8		L-07
Acenaphthylene	67.6	5.0	µg/L	100		67.6		60-130	12.0		
Anthracene	73.1	5.0	µg/L	100		73.1		58-130	15.0		
Benzidine	98.6	20	µg/L	100		98.6		40-140	4.35		V-04, V-05
Benzo(g,h,i)perylene	72.6	5.0	µg/L	100		72.6		13-195	14.3		
4-Bromophenylphenylether	74.3	10	µg/L	100		74.3		70-130	14.9		
Butylbenzylphthalate	75.5	10	µg/L	100		75.5		43-140	13.2		
4-Chloro-3-methylphenol	76.7	10	µg/L	100		76.7		68-130	14.5		
Bis(2-chloroethyl)ether	77.8	10	µg/L	100		77.8		52-130	5.51		
Bis(2-chloroisopropyl)ether	83.8	10	µg/L	100		83.8		63-139	4.95		
2-Chloronaphthalene	63.2	10	µg/L	100		**63.2**	*	70-130	11.5		L-07
2-Chlorophenol	72.8	10	µg/L	100		72.8		55-130	6.64		
4-Chlorophenylphenylether	73.4	10	µg/L	100		73.4		57-145	13.9		
Di-n-butylphthalate	72.1	10	µg/L	100		72.1		52-130	15.9		
1,3-Dichlorobenzene	62.6	5.0	µg/L	100		62.6		1-172	2.77		
1,4-Dichlorobenzene	63.4	5.0	µg/L	100		63.4		20-124	2.77		
1,2-Dichlorobenzene	64.0	5.0	µg/L	100		64.0		32-129	0.515		
3,3-Dichlorobenzidine	81.0	10	µg/L	100		81.0		18-213	11.2		
2,4-Dichlorophenol	73.7	10	µg/L	100		73.7		64-130	12.1		
Diethylphthalate	72.8	10	µg/L	100		72.8		47-130	13.4		
2,4-Dimethylphenol	75.4	10	µg/L	100		75.4		58-130	12.1		
Dimethylphthalate	74.2	10	µg/L	100		74.2		50-130	15.2		
4,6-Dinitro-2-methylphenol	63.8	10	µg/L	100		63.8		56-130	14.6		
2,4-Dinitrophenol	61.7	10	µg/L	100		61.7		39-173	19.8		V-19
2,4-Dinitrotoluene	72.4	10	µg/L	100		72.4		53-130	13.3		
2,6-Dinitrotoluene	76.0	10	µg/L	100		76.0		68-137	12.8		
Di-n-octylphthalate	75.5	10	µg/L	100		75.5		21-132	14.0		
1,2-Diphenylhydrazine (as Azobenzene)	75.0	10	µg/L	100		75.0		40-140	14.9		
Bis(2-Ethylhexyl)phthalate	73.7	10	µg/L	100		73.7		43-137	13.0		
Fluoranthene	70.7	5.0	µg/L	100		70.7		47-130	16.4		
Fluorene	71.1	5.0	µg/L	100		71.1		70-130	13.2		
Hexachlorobenzene	73.4	10	µg/L	100		73.4		38-142	15.6		
Hexachlorobutadiene	65.5	10	µg/L	100		**65.5**	*	68-130	5.58		L-07
Hexachlorocyclopentadiene	52.5	10	µg/L	100		52.5		40-140	7.81		
Hexachloroethane	64.9	10	µg/L	100		64.9		55-130	1.79		
Isophorone	78.1	10	µg/L	100		78.1		52-180	11.7		
Naphthalene	69.2	5.0	µg/L	100		**69.2**	*	70-130	8.58		L-07
Nitrobenzene	71.7	10	µg/L	100		71.7		54-158	8.56		

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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 B200854 - SW-846 3510C											
LCS Dup (B200854-BSD1)				Prepared: 04/13/18 Analyzed: 04/16/18							
2-Nitrophenol	72.6	10	µg/L	100		72.6		61-163	8.21		
4-Nitrophenol	48.7	10	µg/L	100		48.7		35-130	11.3		
N-Nitrosodimethylamine	58.6	10	µg/L	100		58.6		40-140	4.34		
N-Nitrosodiphenylamine	90.2	10	µg/L	100		90.2		40-140	15.1		
N-Nitrosodi-n-propylamine	78.8	10	µg/L	100		78.8		59-170	8.48		
2-Methylnaphthalene	74.4	5.0	µg/L	100		74.4		40-140	10.5	20	
Phenanthrene	72.2	5.0	µg/L	100		72.2		67-130	16.1		
2-Methylphenol	64.1	10	µg/L	100		64.1		30-130	14.7	20	
Phenol	39.9	10	µg/L	100		**39.9**	*	48-130	7.29		L-04
3/4-Methylphenol	71.5	10	µg/L	100		71.5		30-130	9.22	20	
Pyrene	70.5	5.0	µg/L	100		70.5		70-130	13.0		
1,2,4-Trichlorobenzene	66.6	5.0	µg/L	100		66.6		61-130	5.66		
2,4,6-Trichlorophenol	72.0	10	µg/L	100		72.0		69-130	12.8		
Surrogate: 2-Fluorophenol	*116*		µg/L	200		57.9		15-110			
Surrogate: Phenol-d6	*82.2*		µg/L	200		41.1		15-110			
Surrogate: Nitrobenzene-d5	*75.8*		µg/L	100		75.8		30-130			
Surrogate: 2-Fluorobiphenyl	*64.2*		µg/L	101		63.5		30-130			
Surrogate: 2,4,6-Tribromophenol	*148*		µg/L	200		74.1		15-110			
Surrogate: p-Terphenyl-d14	*75.2*		µg/L	101		74.5		30-130			

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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 B201022 - EPA 200.7										
Blank (B201022-BLK1)				Prepared: 04/16/18 Analyzed: 04/17/18						
Iron	ND	0.050	mg/L							
LCS (B201022-BS1)				Prepared: 04/16/18 Analyzed: 04/17/18						
Iron	3.98	0.050	mg/L	4.00		99.4	85-115			
LCS Dup (B201022-BSD1)				Prepared: 04/16/18 Analyzed: 04/17/18						
Iron	3.96	0.050	mg/L	4.00		98.9	85-115	0.509	20	
Batch B201024 - EPA 200.8										
Blank (B201024-BLK1)				Prepared: 04/16/18 Analyzed: 04/17/18						
Antimony	ND	1.0	µg/L							
Arsenic	ND	1.0	µg/L							
Cadmium	ND	0.20	µg/L							
Chromium	ND	10	µg/L							
Copper	ND	1.0	µg/L							
Lead	ND	0.50	µg/L							
Nickel	ND	5.0	µg/L							
Selenium	ND	5.0	µg/L							
Silver	ND	0.20	µg/L							
Zinc	ND	20	µg/L							
LCS (B201024-BS1)				Prepared: 04/16/18 Analyzed: 04/17/18						
Antimony	499	10	µg/L	500		99.7	85-115			
Arsenic	501	10	µg/L	500		100	85-115			
Cadmium	503	2.0	µg/L	500		101	85-115			
Chromium	510	100	µg/L	500		102	85-115			
Copper	997	10	µg/L	1000		99.7	85-115			
Lead	501	5.0	µg/L	500		100	85-115			
Nickel	502	50	µg/L	500		100	85-115			
Selenium	489	50	µg/L	500		97.8	85-115			
Silver	496	2.0	µg/L	500		99.2	85-115			
Zinc	993	200	µg/L	1000		99.3	85-115			
LCS Dup (B201024-BSD1)				Prepared: 04/16/18 Analyzed: 04/17/18						
Antimony	514	10	µg/L	500		103	85-115	3.09	20	
Arsenic	515	10	µg/L	500		103	85-115	2.70	20	
Cadmium	521	2.0	µg/L	500		104	85-115	3.62	20	
Chromium	523	100	µg/L	500		105	85-115	2.59	20	
Copper	1020	10	µg/L	1000		102	85-115	2.66	20	
Lead	505	5.0	µg/L	500		101	85-115	0.821	20	
Nickel	515	50	µg/L	500		103	85-115	2.45	20	
Selenium	509	50	µg/L	500		102	85-115	3.96	20	
Silver	514	2.0	µg/L	500		103	85-115	3.50	20	
Zinc	1020	200	µg/L	1000		102	85-115	2.73	20	

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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 B201041 - EPA 245.1										
Blank (B201041-BLK1)				Prepared: 04/16/18 Analyzed: 04/17/18						
Mercury	ND	0.00010	mg/L							
LCS (B201041-BS1)				Prepared: 04/16/18 Analyzed: 04/17/18						
Mercury	0.00196	0.00010	mg/L	0.00200		97.9	85-115			
LCS Dup (B201041-BSD1)				Prepared: 04/16/18 Analyzed: 04/17/18						
Mercury	0.00196	0.00010	mg/L	0.00200		98.2	85-115	0.312	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 B200947 - SM21-22 3500 Cr B										
Blank (B200947-BLK1)				Prepared & Analyzed: 04/13/18						
Hexavalent Chromium	ND	0.0040	mg/L							
LCS (B200947-BS1)				Prepared & Analyzed: 04/13/18						
Hexavalent Chromium	0.10	0.0040	mg/L	0.100		104	86.6-115			
LCS Dup (B200947-BSD1)				Prepared & Analyzed: 04/13/18						
Hexavalent Chromium	0.11	0.0040	mg/L	0.100		105	86.6-115	1.25	6.61	
Duplicate (B200947-DUP1)	**Source: 18D0621-01**			Prepared & Analyzed: 04/13/18						
Hexavalent Chromium	ND	0.0040	mg/L		ND			NC	20	
Matrix Spike (B200947-MS1)	**Source: 18D0621-01**			Prepared & Analyzed: 04/13/18						
Hexavalent Chromium	0.10	0.0040	mg/L	0.100	ND	101	23.5-142			
Batch B200953 - SM21-22 4500 CL G										
Blank (B200953-BLK1)				Prepared & Analyzed: 04/13/18						
Chlorine, Residual	ND	0.020	mg/L							
LCS (B200953-BS1)				Prepared & Analyzed: 04/13/18						
Chlorine, Residual	1.2	0.020	mg/L	1.34		87.5	82.5-130			
LCS Dup (B200953-BSD1)				Prepared & Analyzed: 04/13/18						
Chlorine, Residual	1.2	0.020	mg/L	1.34		88.1	82.5-130	0.671	6.2	
Batch B200961 - EPA 300.0										
Blank (B200961-BLK1)				Prepared: 04/14/18 Analyzed: 04/17/18						
Chloride	ND	1.0	mg/L							
LCS (B200961-BS1)				Prepared: 04/14/18 Analyzed: 04/17/18						
Chloride	4.8	1.0	mg/L	5.00		95.1	90-110			
LCS Dup (B200961-BSD1)				Prepared: 04/14/18 Analyzed: 04/17/18						
Chloride	4.8	1.0	mg/L	5.00		95.8	90-110	0.737	20	
Duplicate (B200961-DUP1)	**Source: 18D0621-01**			Prepared: 04/14/18 Analyzed: 04/17/18						
Chloride	2700	100	mg/L		2700			0.476	20	
Matrix Spike (B200961-MS1)	**Source: 18D0621-01**			Prepared: 04/14/18 Analyzed: 04/17/18						
Chloride	2900	100	mg/L	500	2700	**45.7**	* 80-120			MS-07

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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 B200997 - SM21-22 2540D										
Blank (B200997-BLK1)				Prepared & Analyzed: 04/16/18						
Total Suspended Solids	ND	2.5	mg/L							
LCS (B200997-BS1)				Prepared & Analyzed: 04/16/18						
Total Suspended Solids	198	10	mg/L	200		99.0	66.7-117			
LCS Dup (B200997-BSD1)				Prepared & Analyzed: 04/16/18						
Total Suspended Solids	186	10	mg/L	200		93.0	66.7-117	6.25	20	

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FLAG/QUALIFIER SUMMARY

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
ND	Not Detected
RL	Reporting Limit is at the level of quantitation (LOQ)
DL	Detection Limit is the lower limit of detection determined by the MDL study
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.
B	Analyte is found in the associated laboratory blank as well as in the sample.
DL-15	Sample required a dilution due to low internal standard recovery of the lesser diluted digestion, reporting limit is elevated.
J	Detected but below the Reporting Limit (lowest calibration standard); therefore, result is an estimated concentration (CLP J-Flag).
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.
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.
S-17	Surrogate recovery is outside of control limits. Data validation is not affected since all associated results are less than the reporting limit and bias is on the high side.
V-04	Initial calibration did not meet method specifications. Compound was calibrated using a response factor where %RSD is outside of method specified criteria. Reported result is estimated.
V-05	Continuing calibration did not meet method specifications and was biased on the low side for this compound. Reported result is estimated.
V-06	Continuing calibration did not meet method specifications and was biased on the high side for this compound. Reported result is estimated.
V-19	Initial calibration did not meet method specifications. Compound was calibrated using linear regression with correlation coefficient <0.99. Reported result is estimated.
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.

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CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
EPA 200.7 in Water	
Iron	CT,MA,NH,NY,RI,NC,ME,VA
Hardness	CT,MA,NH,NY,RI,VA
EPA 200.8 in Water	
Antimony	CT,MA,NH,NY,RI,NC,ME,VA
Arsenic	CT,MA,NH,NY,RI,NC,ME,VA
Cadmium	CT,MA,NH,NY,RI,NC,ME,VA
Chromium	CT,MA,NH,NY,RI,NC,ME,VA
Copper	CT,MA,NH,NY,RI,NC,ME,VA
Lead	CT,MA,NH,NY,RI,NC,ME,VA
Nickel	CT,MA,NH,NY,RI,NC,ME,VA
Selenium	CT,MA,NH,NY,RI,NC,ME,VA
Silver	CT,MA,NH,NY,RI,NC,ME,VA
Zinc	CT,MA,NH,NY,RI,NC,ME,VA
EPA 245.1 in Water	
Mercury	CT,MA,NH,RI,NY,NC,ME,VA
EPA 300.0 in Water	
Chloride	NC,NY,MA,VA,ME,NH,CT,RI
EPA 624.1 in Water	
Acetone	NH,NY
Benzene	CT,MA,NH,NY,RI,NC,ME,VA
Carbon Tetrachloride	CT,MA,NH,NY,RI,NC,ME,VA
1,2-Dichlorobenzene	CT,MA,NH,NY,RI,NC,ME,VA
1,3-Dichlorobenzene	CT,MA,NH,NY,RI,NC,ME,VA
1,4-Dichlorobenzene	CT,MA,NH,NY,RI,NC,ME,VA
1,2-Dichloroethane	CT,MA,NH,NY,RI,NC,ME,VA
1,1-Dichloroethane	CT,MA,NH,NY,RI,NC,ME,VA
1,1-Dichloroethylene	CT,MA,NH,NY,RI,NC,ME,VA
Ethylbenzene	CT,MA,NH,NY,RI,NC,ME,VA
Methyl tert-Butyl Ether (MTBE)	NH,NY,NC
Methylene Chloride	CT,MA,NH,NY,RI,NC,ME,VA
Naphthalene	NC
Tetrachloroethylene	CT,MA,NH,NY,RI,NC,ME,VA
Toluene	CT,MA,NH,NY,RI,NC,ME,VA
1,2,4-Trichlorobenzene	NC
1,1,1-Trichloroethane	CT,MA,NH,NY,RI,NC,ME,VA
1,1,2-Trichloroethane	CT,MA,NH,NY,RI,NC,ME,VA
Trichloroethylene	CT,MA,NH,NY,RI,NC,ME,VA
Vinyl Chloride	CT,MA,NH,NY,RI,NC,ME,VA
m+p Xylene	CT,MA,NH,NY,RI,NC,VA
o-Xylene	CT,MA,NH,NY,RI,NC,VA
EPA 625.1 in Water	
Acenaphthene	CT,MA,NH,NY,NC,RI,ME,VA
Acenaphthylene	CT,MA,NH,NY,NC,RI,ME,VA
Anthracene	CT,MA,NH,NY,NC,RI,ME,VA
Benzidine	CT,MA,NH,NY,NC,RI,ME,VA

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CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
EPA 625.1 in Water	
Benzo(g,h,i)perylene	CT,MA,NH,NY,NC,RI,ME,VA
4-Bromophenylphenylether	CT,MA,NH,NY,NC,RI,ME,VA
Butylbenzylphthalate	CT,MA,NH,NY,NC,RI,ME,VA
4-Chloro-3-methylphenol	CT,MA,NH,NY,NC,RI,VA
Bis(2-chloroethyl)ether	CT,MA,NH,NY,NC,RI,ME,VA
Bis(2-chloroisopropyl)ether	CT,MA,NH,NY,NC,RI,ME,VA
2-Chloronaphthalene	CT,MA,NH,NY,NC,RI,ME,VA
2-Chlorophenol	CT,MA,NH,NY,NC,RI,ME,VA
4-Chlorophenylphenylether	CT,MA,NH,NY,NC,RI,ME,VA
Di-n-butylphthalate	CT,MA,NH,NY,NC,RI,ME,VA
1,3-Dichlorobenzene	MA,NC
1,4-Dichlorobenzene	MA,NC
1,2-Dichlorobenzene	MA,NC
3,3-Dichlorobenzidine	CT,MA,NH,NY,NC,RI,ME,VA
2,4-Dichlorophenol	CT,MA,NH,NY,NC,RI,ME,VA
Diethylphthalate	CT,MA,NH,NY,NC,RI,ME,VA
2,4-Dimethylphenol	CT,MA,NH,NY,NC,RI,ME,VA
Dimethylphthalate	CT,MA,NH,NY,NC,RI,ME,VA
4,6-Dinitro-2-methylphenol	CT,MA,NH,NY,NC,RI,ME,VA
2,4-Dinitrophenol	CT,MA,NH,NY,NC,RI,ME,VA
2,4-Dinitrotoluene	CT,MA,NH,NY,NC,RI,ME,VA
2,6-Dinitrotoluene	CT,MA,NH,NY,NC,RI,ME,VA
Di-n-octylphthalate	CT,MA,NH,NY,NC,RI,ME,VA
1,2-Diphenylhydrazine (as Azobenzene)	NC
Bis(2-Ethylhexyl)phthalate	CT,MA,NH,NY,NC,RI,ME,VA
Fluoranthene	CT,MA,NH,NY,NC,RI,ME,VA
Fluorene	CT,MA,NH,NY,NC,RI,ME,VA
Hexachlorobenzene	CT,MA,NH,NY,NC,RI,ME,VA
Hexachlorobutadiene	CT,MA,NH,NY,NC,RI,ME,VA
Hexachlorocyclopentadiene	CT,MA,NH,NY,NC,RI,ME,VA
Hexachloroethane	CT,MA,NH,NY,NC,RI,ME,VA
Isophorone	CT,MA,NH,NY,NC,RI,ME,VA
Naphthalene	CT,MA,NH,NY,NC,RI,ME,VA
Nitrobenzene	CT,MA,NH,NY,NC,RI,ME,VA
2-Nitrophenol	CT,MA,NH,NY,NC,RI,ME,VA
4-Nitrophenol	CT,MA,NH,NY,NC,RI,ME,VA
N-Nitrosodimethylamine	CT,MA,NH,NY,NC,RI,ME,VA
N-Nitrosodiphenylamine	CT,MA,NH,NY,NC,RI,ME,VA
N-Nitrosodi-n-propylamine	CT,MA,NH,NY,NC,RI,ME,VA
2-Methylnaphthalene	NC
Phenanthrene	CT,MA,NH,NY,NC,RI,ME,VA
2-Methylphenol	NY,NC
Phenol	CT,MA,NH,NY,NC,RI,ME,VA
3/4-Methylphenol	NY,NC
Pyrene	CT,MA,NH,NY,NC,RI,ME,VA
1,2,4-Trichlorobenzene	CT,MA,NH,NY,NC,RI,ME,VA
2,4,6-Trichlorophenol	CT,MA,NH,NY,NC,RI,ME,VA

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CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
EPA 625.1 in Water	
2-Fluorophenol	NC
SM21-22 2540D in Water	
Total Suspended Solids	CT,MA,NH,NY,RI,NC,ME,VA
SM21-22 3500 Cr B in Water	
Hexavalent Chromium	NY,CT,NH,RI,ME,VA,NC
SM21-22 4500 CL G in Water	
Chlorine, Residual	CT,MA,RI,ME
SW-846 8270D in Water	
2-Fluorophenol	NC,VA
Phenol-d6	VA
Nitrobenzene-d5	VA

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

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC - ISO17025:2005	100033	03/1/2020
MA	Massachusetts DEP	M-MA100	06/30/2018
CT	Connecticut Department of Publilc Health	PH-0567	09/30/2019
NY	New York State Department of Health	10899 NELAP	04/1/2019
NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2019
RI	Rhode Island Department of Health	LAO00112	12/30/2018
NC	North Carolina Div. of Water Quality	652	12/31/2018
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	07/30/2018
ME	State of Maine	2011028	06/9/2019
VA	Commonwealth of Virginia	460217	12/14/2018
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2018
VT-DW	Vermont Department of Health Drinking Water	VT-255716	06/12/2018
NC-DW	North Carolina Department of Health	25703	07/31/2018

con-test ANALYTICAL LABORATORY
Phone: 413-525-2332
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Email: info@contestlabs.com

1800621

http://www.contestlabs.com

CHAIN OF CUSTODY RECORD

39 Spruce Street
East Longmeadow, MA 01028

Company Name:	Lockwood Remediation Technologies, LLC
Address:	89 Crawford Street, Leominster, MA
Phone:	774-450-7177
Project Name:	Quincy HIX
Project Location:	3 Arlington Street, Quincy, MA
Project Number:	2-1660
Project Manager:	Paul Lockwood
Con-Test Bid:	
Invoice Recipient:	
Sampled By:	Paul Lockwood

Requested Turnaround Time
7-Day ☐ 10-Day ☐
Other:

Rush-Approval Required
1-Day ☐ 3-Day ☐
2-Day ☑ 4-Day ☐

Data Delivery
Format: PDF ☑ EXCEL ☐
Other:
Enhanced Data Package Required: ☐
Email To: thagie@lrt-llc.net
Fax To #:

Con-Test Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Composite	Grab	Matrix Code	Conc Code	TSS	Ammonia	Chloride and TRC	Sb, As, Cd, Cr III, Cr VI, Cu, Fe, Pb, Hg, Ni, Se, Ag and Zn by 200.8	Cyanide	VOCs by 624	SVOCs by 625/8270 Low	Hardness			
# of Containers								2	1	2	1	1	3	2	2			
[2] Preservation Code								I	S	I	N	X	H	I	I/N			
[3] Container Code								P	P	P	P	P	V	A	P			
1	INFLUENT	4/13 1030	4/13 1030		X	GW	M/L	X	X	X	X	X	X	X	X			

ANALYSIS REQUESTED

Dissolved Metals Samples
○ Field Filtered
○ Lab to Filter

Orthophosphate Samples
○ Field Filtered
○ Lab to Filter

[1] **Matrix Codes:**
GW = Ground Water
WW = Waste Water
DW = Drinking Water
A = Air
S = Soil/Solid
SL = Sludge
O = Other (please define)

[2] **Preservation Codes:**
I = Iced
H = HCL
M = Methanol
N = Nitric Acid
S = Sulfuric Acid
B = Sodium Bisulfate
X = Sodium Hydroxide
T = Sodium Thiosulfate
O = Other (please define)

[3] **Container Codes:**
A = Amber Glass
G = Glass
P = Plastic
ST = Sterile
V = Vial
S = Summa Canister
T = Tedlar Bag
O = Other (please define)

Comments:

Sample pH: 7.38

Sample Temp:

Please use the following codes to indicate possible sample concentration within the **Conc Code** column above:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

Relinquished by: (signature)	Date/Time: 4/13/18 1425
Received by: (signature)	Date/Time: 4/13/18 1425
Relinquished by: (signature)	Date/Time: 4/13/18 1715
Received by: (signature)	Date/Time:
3.3°C	4/13/18 1715
Relinquished by: (signature)	Date/Time:
Received by: (signature)	Date/Time:

Detection Limit Requirements
MA
CT
Other: 2017 NPDES RGP Standards

Program Information

○ MCP Analytical Certification Form Required
○ RCP Analysis Certification Form Required
○ MA State DW Form Required
PWSID # _____

NELAC and AIHA-LAP, LLC Accredited

TURNAROUND TIME (BUSINESS DAYS) STARTS AT 9:00 AM THE DAY AFTER SAMPLE RECEIPT UNLESS THERE ARE QUESTIONS ON THIS CHAIN. IF THIS FORM IS NOT FILLED OUT COMPLETELY OR IS INCORRECT, TURNAROUND TIME CANNOT START UNTIL ALL QUESTIONS HAVE BEEN ANSWERED.

PLEASE BE CAREFUL NOT TO CONTAMINATE THIS DOCUMENT

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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 Corkwood

Received By RLF Date 4/13/18 Time 1115

How were the samples received? In Cooler T No Cooler ____ On Ice T No Ice ____ Direct from Sampling ____ Ambient ____ Melted Ice ____

Were samples within Temperature? 2-6°C T By Gun # 577 Actual Temp - 3.3°C By Blank # ____ Actual Temp - ____

Was Custody Seal Intact? NA Were Samples Tampered with? NA

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 T Project T Analysis ID's T T Sampler Name T Collection Dates/Times T

Are Sample labels filled out and legible? T

Are there Lab to Filters? F Who was notified? ____

Are there Rushes? T Who was notified? Ray, Luke

Are there Short Holds? T Who was notified? Luke

Is there enough Volume? T

Is there Headspace where applicable? F MS/MSD? F

Proper Media/Containers Used? T Is splitting samples required? F

Were trip blanks received? F On COC? NA

Do all samples have the proper pH? Acid T pH<2 Base T pH>12

Vials	#	Containers:	#		#		#
Unp-		1 Liter Amb.	2	1 Liter Plastic		16 oz Amb.	
HCL-	3	500 mL Amb.		500 mL Plastic	5	8oz Amb/Clear	
Meoh-		250 mL Amb.		250 mL Plastic	4	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:

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April 18, 2018

Tammie Hagie
Lockwood Remediation Technologies, LLC
89 Crawford Street
Leominster, MA 01453

Project Location: 3 Arlington St., Quincy, MA
Client Job Number:
Project Number: 2-1660
Laboratory Work Order Number: 18D0623

Enclosed are results of analyses for samples received by the laboratory on April 13, 2018. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Kerry K. McGee
Project Manager

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con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Lockwood Remediation Technologies, LLC
89 Crawford Street
Leominster, MA 01453
ATTN: Tammie Hagie

REPORT DATE: 4/18/2018

PURCHASE ORDER NUMBER:

PROJECT NUMBER: 2-1660

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 18D0623

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

PROJECT LOCATION: 3 Arlington St., Quincy, MA

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
Neponset River	18D0623-01	Ground Water		EPA 200.7	
				EPA 200.8	
				EPA 245.1	
				EPA 350.1	NY11393/MA-MAI138/MA1110
				SM21-22 3500 Cr B	
				Tri Chrome Calc.	

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CASE NARRATIVE SUMMARY

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

EPA 200.8

Qualifications:

DL-15

Sample required a dilution due to low internal standard recovery of the lesser diluted digestion, reporting limit is elevated.

Analyte & Samples(s) Qualified:

Antimony
18D0623-01[Neponset River]

Arsenic
18D0623-01[Neponset River]

Cadmium
18D0623-01[Neponset River]

Chromium
18D0623-01[Neponset River]

Copper
18D0623-01[Neponset River]

Lead
18D0623-01[Neponset River]

Nickel
18D0623-01[Neponset River]

Selenium
18D0623-01[Neponset River]

Silver
18D0623-01[Neponset River]

Zinc
18D0623-01[Neponset River]

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.

Lisa A. Worthington
Project Manager

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 3 Arlington St., Quincy, MA Sample Description: Work Order: 18D0623

Date Received: 4/13/2018

Field Sample #: Neponset River Sampled: 4/13/2018 10:40

Sample ID: 18D0623-01

Sample Matrix: Ground Water

Metals Analyses (Total)

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Antimony	ND	5.0		µg/L	5	DL-15	EPA 200.8	4/16/18	4/17/18 11:52	MJH
Arsenic	12	5.0		µg/L	5	DL-15	EPA 200.8	4/16/18	4/17/18 11:52	MJH
Cadmium	ND	1.0		µg/L	5	DL-15	EPA 200.8	4/16/18	4/17/18 11:52	MJH
Chromium	ND	50		µg/L	5	DL-15	EPA 200.8	4/16/18	4/17/18 11:52	MJH
Chromium, Trivalent	0.012			mg/L	1		Tri Chrome Calc.	4/16/18	4/17/18 12:07	MJH
Copper	42	5.0		µg/L	5	DL-15	EPA 200.8	4/16/18	4/17/18 11:52	MJH
Iron	4.6	0.050		mg/L	1		EPA 200.7	4/16/18	4/17/18 13:01	QNW
Lead	20	2.5		µg/L	5	DL-15	EPA 200.8	4/16/18	4/17/18 11:52	MJH
Mercury	ND	0.00010		mg/L	1		EPA 245.1	4/16/18	4/17/18 10:47	AMP
Nickel	ND	25		µg/L	5	DL-15	EPA 200.8	4/16/18	4/17/18 11:52	MJH
Selenium	34	25	11	µg/L	5	DL-15	EPA 200.8	4/16/18	4/17/18 11:52	MJH
Silver	ND	1.0		µg/L	5	DL-15	EPA 200.8	4/16/18	4/17/18 11:52	MJH
Zinc	ND	100		µg/L	5	DL-15	EPA 200.8	4/16/18	4/17/18 11:52	MJH
Hardness	58			mg/L	1		EPA 200.7	4/16/18	4/17/18 13:44	QNW

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Project Location: 3 Arlington St., Quincy, MA | Sample Description: | Work Order: 18D0623

Date Received: 4/13/2018

Field Sample #: Neponset River | Sampled: 4/13/2018 10:40

Sample ID: 18D0623-01

Sample Matrix: Ground 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
Hexavalent Chromium	ND	0.0040	mg/L	1		SM21-22 3500 Cr B	4/13/18	4/13/18 19:00	LED

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Project Location: 3 Arlington St., Quincy, MA | Sample Description: | Work Order: 18D0623

Date Received: 4/13/2018

Field Sample #: Neponset River | Sampled: 4/13/2018 10:40

Sample ID: 18D0623-01

Sample Matrix: Ground Water

Miscellaneous Inorganic Analyses

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Ammonia as NH3	0.32	0.05	0.02	mg/L	1		EPA 350.1		4/17/18 0:00	EAL

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Sample Extraction Data

Prep Method: EPA 200.7-EPA 200.7

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
18D0623-01 [Neponset River]	B201022	50.0	50.0	04/16/18

Prep Method: EPA 200.7-EPA 200.7

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
18D0623-01 [Neponset River]	B201023	50.0	50.0	04/16/18

Prep Method: EPA 200.8-EPA 200.8

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
18D0623-01 [Neponset River]	B201024	50.0	50.0	04/16/18

Prep Method: EPA 245.1-EPA 245.1

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
18D0623-01 [Neponset River]	B201041	6.00	6.00	04/16/18

SM21-22 3500 Cr B

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
18D0623-01 [Neponset River]	B200947	50.0	50.0	04/13/18

Prep Method: EPA 200.8-Tri Chrome Calc.

Lab Number [Field ID]	Batch	Initial [mL]	Date
18D0623-01 [Neponset River]	B201045	1.00	04/16/18

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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 B201022 - EPA 200.7										
Blank (B201022-BLK1)				Prepared: 04/16/18 Analyzed: 04/17/18						
Iron	ND	0.050	mg/L							
LCS (B201022-BS1)				Prepared: 04/16/18 Analyzed: 04/17/18						
Iron	3.98	0.050	mg/L	4.00		99.4	85-115			
LCS Dup (B201022-BSD1)				Prepared: 04/16/18 Analyzed: 04/17/18						
Iron	3.96	0.050	mg/L	4.00		98.9	85-115	0.509	20	
Batch B201024 - EPA 200.8										
Blank (B201024-BLK1)				Prepared: 04/16/18 Analyzed: 04/17/18						
Antimony	ND	1.0	µg/L							
Arsenic	ND	1.0	µg/L							
Cadmium	ND	0.20	µg/L							
Chromium	ND	10	µg/L							
Copper	ND	1.0	µg/L							
Lead	ND	0.50	µg/L							
Nickel	ND	5.0	µg/L							
Selenium	ND	5.0	µg/L							
Silver	ND	0.20	µg/L							
Zinc	ND	20	µg/L							
LCS (B201024-BS1)				Prepared: 04/16/18 Analyzed: 04/17/18						
Antimony	499	10	µg/L	500		99.7	85-115			
Arsenic	501	10	µg/L	500		100	85-115			
Cadmium	503	2.0	µg/L	500		101	85-115			
Chromium	510	100	µg/L	500		102	85-115			
Copper	997	10	µg/L	1000		99.7	85-115			
Lead	501	5.0	µg/L	500		100	85-115			
Nickel	502	50	µg/L	500		100	85-115			
Selenium	489	50	µg/L	500		97.8	85-115			
Silver	496	2.0	µg/L	500		99.2	85-115			
Zinc	993	200	µg/L	1000		99.3	85-115			
LCS Dup (B201024-BSD1)				Prepared: 04/16/18 Analyzed: 04/17/18						
Antimony	514	10	µg/L	500		103	85-115	3.09	20	
Arsenic	515	10	µg/L	500		103	85-115	2.70	20	
Cadmium	521	2.0	µg/L	500		104	85-115	3.62	20	
Chromium	523	100	µg/L	500		105	85-115	2.59	20	
Copper	1020	10	µg/L	1000		102	85-115	2.66	20	
Lead	505	5.0	µg/L	500		101	85-115	0.821	20	
Nickel	515	50	µg/L	500		103	85-115	2.45	20	
Selenium	509	50	µg/L	500		102	85-115	3.96	20	
Silver	514	2.0	µg/L	500		103	85-115	3.50	20	
Zinc	1020	200	µg/L	1000		102	85-115	2.73	20	

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

QUALITY CONTROL

Metals Analyses (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B201041 - EPA 245.1										
Blank (B201041-BLK1)				Prepared: 04/16/18 Analyzed: 04/17/18						
Mercury	ND	0.00010	mg/L							
LCS (B201041-BS1)				Prepared: 04/16/18 Analyzed: 04/17/18						
Mercury	0.00196	0.00010	mg/L	0.00200		97.9	85-115			
LCS Dup (B201041-BSD1)				Prepared: 04/16/18 Analyzed: 04/17/18						
Mercury	0.00196	0.00010	mg/L	0.00200		98.2	85-115	0.312	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 B200947 - SM21-22 3500 Cr B										
Blank (B200947-BLK1)				Prepared & Analyzed: 04/13/18						
Hexavalent Chromium	ND	0.0040	mg/L							
LCS (B200947-BS1)				Prepared & Analyzed: 04/13/18						
Hexavalent Chromium	0.10	0.0040	mg/L	0.100		104	86.6-115			
LCS Dup (B200947-BSD1)				Prepared & Analyzed: 04/13/18						
Hexavalent Chromium	0.11	0.0040	mg/L	0.100		105	86.6-115	1.25	6.61	

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FLAG/QUALIFIER SUMMARY

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
ND	Not Detected
RL	Reporting Limit is at the level of quantitation (LOQ)
DL	Detection Limit is the lower limit of detection determined by the MDL study
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.
DL-15	Sample required a dilution due to low internal standard recovery of the lesser diluted digestion, reporting limit is elevated.

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

CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
EPA 200.7 in Water	
Iron	CT,MA,NH,NY,RI,NC,ME,VA
Hardness	CT,MA,NH,NY,RI,VA
EPA 200.8 in Water	
Antimony	CT,MA,NH,NY,RI,NC,ME,VA
Arsenic	CT,MA,NH,NY,RI,NC,ME,VA
Cadmium	CT,MA,NH,NY,RI,NC,ME,VA
Chromium	CT,MA,NH,NY,RI,NC,ME,VA
Copper	CT,MA,NH,NY,RI,NC,ME,VA
Lead	CT,MA,NH,NY,RI,NC,ME,VA
Nickel	CT,MA,NH,NY,RI,NC,ME,VA
Selenium	CT,MA,NH,NY,RI,NC,ME,VA
Silver	CT,MA,NH,NY,RI,NC,ME,VA
Zinc	CT,MA,NH,NY,RI,NC,ME,VA
EPA 245.1 in Water	
Mercury	CT,MA,NH,RI,NY,NC,ME,VA
SM21-22 3500 Cr B in Water	
Hexavalent Chromium	NY,CT,NH,RI,ME,VA,NC

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

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC - ISO17025:2005	100033	03/1/2020
MA	Massachusetts DEP	M-MA100	06/30/2018
CT	Connecticut Department of Publilc Health	PH-0567	09/30/2019
NY	New York State Department of Health	10899 NELAP	04/1/2019
NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2019
RI	Rhode Island Department of Health	LAO00112	12/30/2018
NC	North Carolina Div. of Water Quality	652	12/31/2018
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	07/30/2018
ME	State of Maine	2011028	06/9/2019
VA	Commonwealth of Virginia	460217	12/14/2018
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2018
VT-DW	Vermont Department of Health Drinking Water	VT-255716	06/12/2018
NC-DW	North Carolina Department of Health	25703	07/31/2018

con-test ANALYTICAL LABORATORY

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

1800623

http://www.contestlabs.com

Doc # 381 Rev 0 5 8 2015

CHAIN OF CUSTODY RECORD

39 Spruce Street
East Longmeadow, MA 01028

Page _____ of _____

Company Name:	Lockwood Remediation Technologies, LLC
Address:	89 Crawford Street, Leominster, MA
Phone:	774-450-7177
Project Name:	Quincy HIX
Project Location:	3 Arlington Street, Quincy, MA
Project Number:	2-1660
Project Manager:	Paul Lockwood
Con-Test Bid:	
Invoice Recipient:	
Sampled By:	Paul Lockwood

Requested Turnaround Time
7-Day ☐ 10-Day ☐
Other:

Rush-Approval Required
1-Day ☐ 3-Day ☐
2-Day ☑ 4-Day ☐

Data Delivery
Format: PDF ☑ EXCEL ☐
Other:
Enhanced Data Package Required: ☐
Email To: thagie@lrt-llc.net
Fax To #:

ANALYSIS REQUESTED

Con-Test Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Composite	Grab	[1]Matrix Code	Conc Code	Hardness	Ammonia	Total Recoverable Metals: Sb, As, Cd, Cr III, Cr VI, Cu, Fe, Pb, Hg, Ni, Se, Ag and Zn	# of Containers	[2] Preservation Code	[3] Container Code
								2	1	1			
								I/N	S	N			
								P	P	P			
1	Neponset River	4/13 1040	4/13 1040		X	GW	L	X	X	X			

Dissolved Metals Samples
○ Field Filtered
○ Lab to Filter

Orthophosphate Samples
○ Field Filtered
○ Lab to Filter

[1] **Matrix Codes:**
GW = Ground Water
WW = Waste Water
DW = Drinking Water
A = Air
S = Soil/Solid
SL = Sludge
O = Other (please define)

[2] **Preservation Codes:**
I = Iced
H = HCL
M = Methanol
N = Nitric Acid
S = Sulfuric Acid
B = Sodium Bisulfate
X = Sodium Hydroxide
T = Sodium Thiosulfate
O = Other (please define)

[3] **Container Codes:**
A = Amber Glass
G = Glass
P = Plastic
ST = Sterile
V = Vial
S = Summa Canister
T = Tedlar Bag
O = Other (please define)

Comments:

Sample pH: 6.97

Sample Temp:

Please use the following codes to indicate possible sample concentration within the **Conc Code** column above:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

Relinquished by: (signature)	Date/Time: 4/13/18 1425
Received by: (signature)	Date/Time: 4/13/18 1425
Relinquished by: (signature)	Date/Time: 4/13/18 1715
Received by: (signature) 3.3°	Date/Time: 4/13/18 1715
Relinquished by: (signature)	Date/Time:
Received by: (signature)	Date/Time:

Detection Limit Requirements
MA
CT
Other: 2017 NPDES RGP Standards

Program Information
○ MCP Analytical Certification Form Required
○ RCP Analysis Certification Form Required
○ MA State DW Form Required
PWSID # _____

NELAC and AIHA-LAP, LLC Accredited

TURNAROUND TIME (BUSINESS DAYS) STARTS AT 9:00 AM THE DAY AFTER SAMPLE RECEIPT UNLESS THERE ARE QUESTIONS ON THIS CHAIN. IF THIS FORM IS NOT FILLED OUT COMPLETELY OR IS INCORRECT, TURNAROUND TIME CANNOT START UNTIL ALL QUESTIONS HAVE BEEN ANSWERED.

PLEASE BE CAREFUL NOT TO CONTAMINATE THIS DOCUMENT

Table of Contents

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 Lockwood

Received By RLF Date 4/13/18 Time 1715

How were the samples received? In Cooler T No Cooler ____ On Ice T No Ice ____

Direct from Sampling ____ Ambient ____ Melted Ice ____

Were samples within Temperature? 2-6°C T By Gun # 577 Actual Temp - 3.3°C

By Blank # ____ Actual Temp - ____

Was Custody Seal Intact? NA Were Samples Tampered with? NA

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 T 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? F Who was notified? ____

Are there Rushes? T Who was notified? Luke

Are there Short Holds? T Who was notified? Luke

Is there enough Volume? T

Is there Headspace where applicable? NA MS/MSD? F

Proper Media/Containers Used? T Is splitting samples required? F

Were trip blanks received? F On COC? NA

Do all samples have the proper pH? Acid T pH<2 Base NA

Vials	#	Containers:	#		#		#
Unp-		1 Liter Amb.		1 Liter Plastic		16 oz Amb.	
HCL-		500 mL Amb.		500 mL Plastic	1	8oz Amb/Clear	
Meoh-		250 mL Amb.		250 mL Plastic	3	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:

Appendix C

Supplemental Information

MassDEP - Bureau of Waste Site Cleanup

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

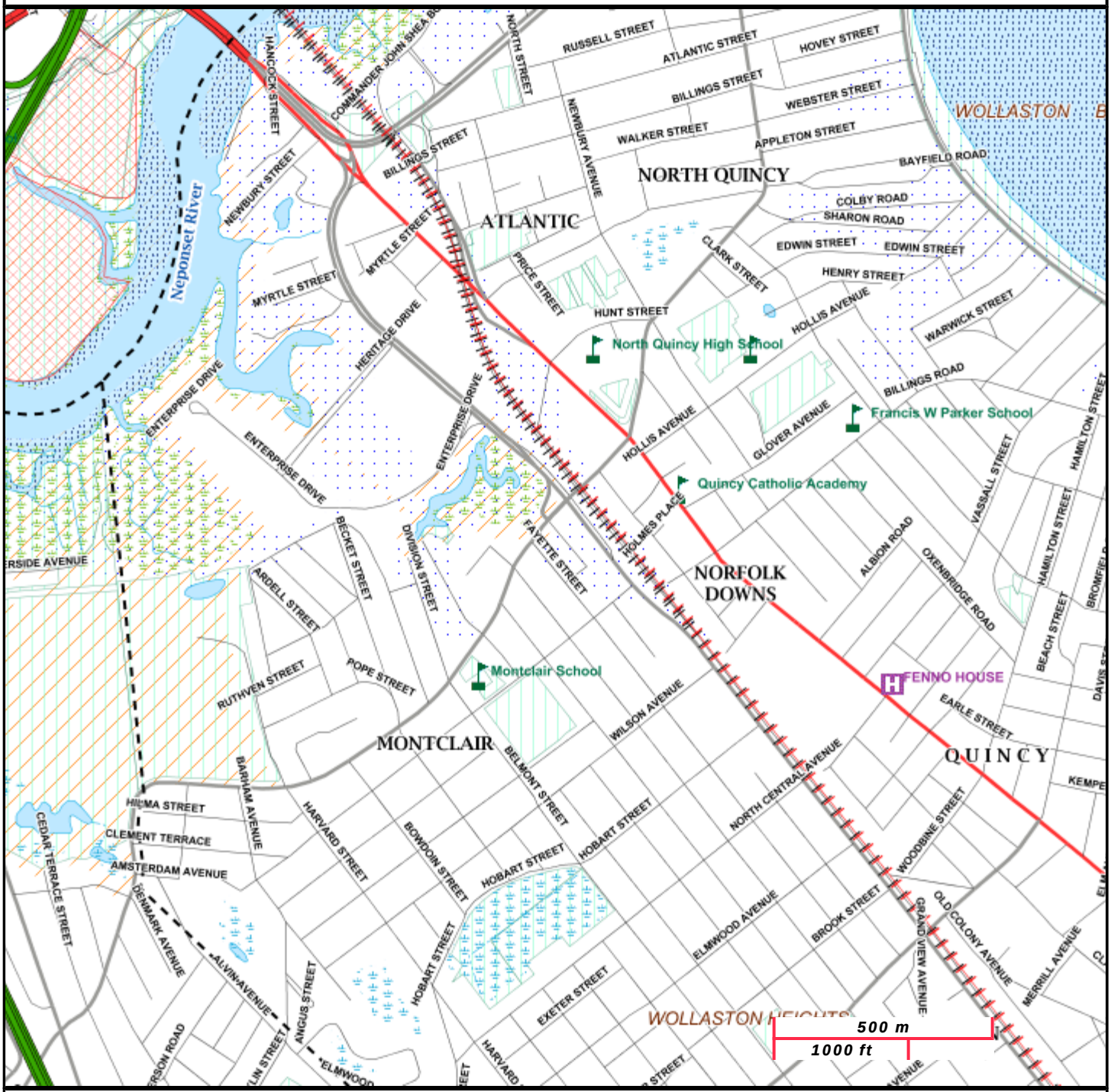
Site Information:

3 ARLINGTON STREET QUINCY, MA

NAD83 UTM Meters:
4682141mN , 332605mE (Zone: 19)
April 23, 2018

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: http://www.mass.gov/mgis/.

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.

United States Department of the Interior

FISH AND WILDLIFE SERVICE
New England Ecological Services Field Office
70 Commercial Street, Suite 300
Concord, NH 03301-5094
Phone: (603) 223-2541 Fax: (603) 223-0104
http://www.fws.gov/newengland

In Reply Refer To:
Consultation Code: 05E1NE00-2018-SLI-1626
Event Code: 05E1NE00-2018-E-03724
Project Name: Quincy HIX

April 20, 2018

Subject: List of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan (http://www.fws.gov/windenergy/eagle_guidance.html). Additionally, wind energy projects should follow the wind energy guidelines (http://www.fws.gov/windenergy/) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm; http://www.towerkill.com; and http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

New England Ecological Services Field Office
70 Commercial Street, Suite 300
Concord, NH 03301-5094
(603) 223-2541

Project Summary

Consultation Code: 05E1NE00-2018-SLI-1626

Event Code: 05E1NE00-2018-E-03724

Project Name: Quincy HIX

Project Type: ** OTHER **

Project Description: 3 Arlington Street, Quincy, MA. Construction/development of property into a hotel. Dewatering and water treatment activities will be conducted. Project timing is approximately April 2018-March 2019

Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/place/42.27345066856867N71.02985999232573W

Counties: Norfolk, MA

Endangered Species Act Species

There is a total of 1 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

---

1. 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.

Mammals

NAME	STATUS
Northern Long-eared Bat *Myotis septentrionalis* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9045	Threatened

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

Documentation of the Results of the ESA Eligibility Determination:

Using information in Appendix IV of the NPDES DGP, this Quincy project is eligible for coverage under this general permit under FWS Criterion B. This project is located in Norfolk County. No designated critical habitats were listed in the project area.

An Endangered Species Consultation was conducted on the U.S. Fish & Wildlife Service New England Field Office ECOS IPaC webpage for the Site:

- The Northern long-eared bat was listed as “Threatened” in Norfolk County

Northern long-eared bats spend winter hibernating in caves and mines. They use areas in various sized caves or mines with constant temperatures, high humidity, and no air currents. During the summer, northern long-eared bats roost singly or in colonies underneath bark, in cavities or in crevices of both live trees and snags (dead trees). There are no caves and mines located at the site. There are trees in the immediate vicinity of the site; however, tree removal is not part of the scope of work related to this Notice of Intent. Therefore, temporary dewatering activities will have “no impact” to the Northern Long-eared Bat.

Massachusetts Cultural Resource Information System

MACRIS

MACRIS Search Results

Search Criteria: Town(s): Quincy; Street No: 3; Street Name: Arlington; Resource Type(s): Area, Building, Burial Ground, Object, Structure;

Inv. No.	Property Name	Street	Town	Year

Documentation of the National Historic Preservation Act Eligibility Determination:

As part of this permit, a determination was made as to whether there were any historic properties or places listed on the national register in the path of the discharge or in the vicinity of the construction of treatment systems or BMPs related to the discharge. A search on the Massachusetts Cultural Resource Information System Database did not list any potential properties on or near the project site in the database. Therefore, the proposed discharge will not have the potential to cause effects on historical properties.