

September 21, 2020

89 Crawford Street

Leominster, Massachusetts 01453

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U.S. Environmental Protection Agency Office of Ecosystem Protection EPA/OEP RGP Applications Coordinator 5 Post Office Square, Suite 100 (OEP06-4) Boston, Massachusetts 02109-3912

Reference: Notice of Intent (NOI) - Remediation General Permit (RGP)

Milford Shell Station 139 Medway Road Milford, Massachusetts

#### Dear Sir/Madam:

On behalf of Nouria Energy Corporation (Nouria), Lockwood Remediation Technologies, LLC (LRT) has prepared this Notice of Intent (NOI) requesting a determination of coverage under the United States Environmental Protection Agency's (EPA's) Remediation General Permit (RGP), pursuant EPA's National Pollutant Discharge Elimination System (NPDES) program. This NOI was prepared in accordance with the general requirements of the NPDES RGP 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 groundwater that will be generated during dewatering activities associated with construction of the existing Shell Station located at 139 Medway Road in Milford, Massachusetts (the Site). A Site Locus is provided as **Figure 1** and a Site Plan satisfying the requirements of RGP Appendix IV Part I.B and I.D is provided as **Figure 2**.

#### **Work Summary**

The work includes the removal and replacement of existing underground storage tanks (USTs). To complete the excavation for the USTs in the dry, dewatering will be required to lower the groundwater table as work is being performed. To do this, filtered sumps will be placed in low spots within the excavation. The water generated during dewatering (Source water) will be pumped to a treatment system prior to discharge to a storm drain with the final outfall in the Stall Brook. A location map detailing the catch basin location and an email detailing the discharge path from the catch basin to the outfall location are provided in **Appendix A**. To characterize groundwater from the proposed excavation area, LRT collected representative groundwater samples from an onsite monitoring well on September 3, 2020 (**Figure 2**). A sample of the receiving water (Stall Brook) was also collected the same day. The samples were analyzed for various parameters in accordance with the NPDES RGP Activity Category III-G.

#### **Discharge and Receiving Surface Water Information**

A summary of the analytical results is provided in **Tables 1 and 2** included within **Appendix A**, and copies of the laboratory data reports are provided in **Appendix B**. Concentrations of total residual chloride (TRC), iron, cadmium, Total Group I PAHs and naphthalene were detected in groundwater at concentrations above the respective NPDES RGP Effluent Limitations. To meet these standards, Source water will undergo treatment that includes bag filtration, carbon filtration and ion exchange prior to discharge. It is assumed that the majority of metal concentrations will be treated through settling and bag filtration. Details of the water treatment system are provided below.

#### **Water Treatment System**

A water treatment system schematic is provided as **Figure 3**. Cutsheets of the system components, product information and Safety Data Sheets (SDS) are included in **Appendix C**.

Source water will be pumped to a treatment system with a design flow of up to 150 gallons per minute (gpm); the average effluent flow of the system is estimated to be 75 gpm, and the maximum flow will not exceed 150 gpm. Source water will enter one 18,000-gallon weir tank at the head of the system and from the weir tank, the water will be pumped to a triple-bag filter skid (with three single bag filters), followed by two carbon vessels plumbed in series. Each carbon vessel will contain 3,000 pounds of reactivated liquid-phase carbon. Discharge from the carbon vessel will pass through a flow/totalizer meter prior to discharge into a storm drain with an outfall in Stall Brook. If required, a cation media vessel filled with 60 cubic feet of cation exchange media will be installed into the treatment train after the carbon vessels. Treated water will be discharged to one location (Discharge Location 1) as depicted on **Figure 2**. Effluent sampling will correspond with this discharge location.

#### **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). In addition, 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. Documentation is included in **Appendix D**.

#### Coverage under NPDES RGP

It is our opinion that the proposed discharge is eligible for coverage under the NPDES RGP. On behalf of Nouria, LRT is requesting coverage under the NPDES RGP for the discharge of treated wastewater to the Stall Brook in support of construction dewatering activities that are to take place at 139 Medway Road.

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, Nouria is considered the Operator and 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

## Jacob Jennings

Jacob Jennings Staff Scientist James Bennett

James Bennett Project Manager

Encl: Figure 1 - Locus Plan

Figure 2 - Site Plan

Figure 3 - Water Treatment System Schematic

Appendix A - NOI Form Appendix B - Laboratory Data

Appendix C - Water Treatment System Appendix D - Supplemental Information

cc:

Cathy Vakalopoulos – Mass DEP James Bennett – LRT

Paul Belanger – Nouria





Source: MassGIS Oliver

#### **Notes**

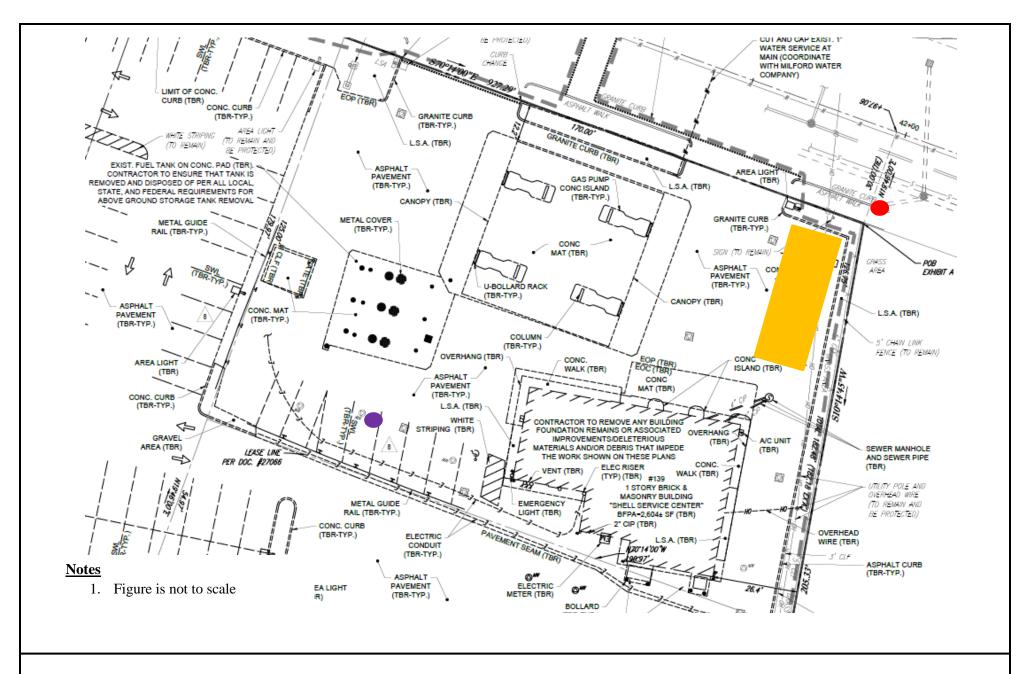
1. Figure is not to scale.





89 Crawford Street Leominster, Massachusetts 01453 Tel: 774.450.7177

Tel: 774.450.7177 Fax: 888.835.0617 www.lrt-llc.net Figure 1 – Locus Plan Milford Shell Station 139 Medway Road Milford, MA





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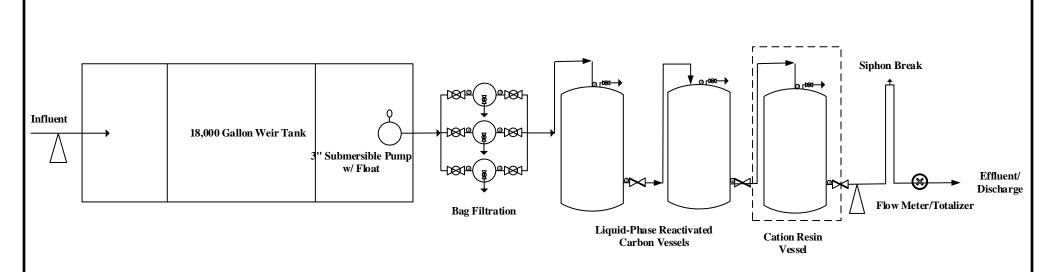
#### Figure 2: Site Plan Milford Shell Station 139 Medway Road Milford, MA

#### **Key**

Discharge location

Water Treatment System location

Water sample Location



#### Notes:

- 1.) Figure is not to scale
- 2.) System rated for 150 GPM

Key: Piping/Hose Sample Port Ball Valve Butterfly Valve Pressure Gauge	$\begin{array}{c} \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\$
Contingency	



Lockwood Remediation Technologies, LLC 89 Crawford Street

Leominster, MA 01453 Office: 774-450-7177

DESIGNED BY: LRT DRAWN BY: JHJ

CHECKED BY: DATE:

## **Water Treatment System Schematic**

Milford Shell Station 139 Medway Road Milford, MA



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

#### A. General site information:

1. Name of site:	Site address:							
	Street:							
	City:		State:	Zip:				
2. Site owner	Contact Person:							
	Telephone:	Email:						
	Mailing address:	l						
	Street:							
Owner is (check one): ☐ Federal ☐ State/Tribal ☐ Private ☐ Other; if so, specify:	City:	Zip:						
3. Site operator, if different than owner	Contact Person:							
	Telephone: Email:							
	Mailing address:							
	Street:							
	City:		State:	Zip:				
4. NPDES permit number assigned by EPA:	5. Other regulatory program(s) that apply to the site (check all that apply):							
	☐ MA Chapter 21e; list RTN(s):	□ CERCL	CLA					
NPDES permit is (check all that apply: □ RGP □ DGP □ CGP	☐ NH Groundwater Management Permit or	☐ UIC Program						
☐ MSGP ☐ Individual NPDES permit ☐ Other; if so, specify:		☐ POTW Pretreatment						
L MISSI L Marriada M DES permit L Suici, ii so. seccir.	Groundwater Release Detection Permit:	□ CWA S						

В.	Receiving	water	information:	
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1. Name of receiving water(s):	waterbody identification of receiving water(	(S): Classific	ssification of receiving water(s):						
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 accord	ance with the instructions in B, above? (check one)	: □ Yes □ No							
Are sensitive receptors present near the site? (check of If yes, specify:	one): □ Yes □ No								
3. Indicate if the receiving water(s) is listed in the Stapollutants indicated. Also, indicate if a final TMDL i 4.6 of the RGP.									
	I. 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.								
5. Indicate the requested dilution factor for the calcul accordance with the instructions in Appendix V for s									
6. Has the operator received confirmation from the ap If yes, indicate date confirmation received:	opropriate State for the 7Q10and dilution factor indi	cated? (check one): ☐ Yes ☐	No						
7. Has the operator attached a summary of receiving (check one): ☐ Yes ☐ No	water sampling results as required in Part 4.2 of the	RGP in accordance with the i	nstruction in Appendix VIII?						
C. Source water information:									
1. Source water(s) is (check any that apply):									
☐ Contaminated groundwater	☐ Contaminated surface water	☐ The receiving water	☐ Potable water; if so, indicate municipality or origin:						
Has the operator attached a summary of influent sampling results as required in Part 4.2 of the RGP	Has the operator attached a summary of influent sampling results as required in Part 4.2 of the	☐ A surface water other							
in accordance with the instruction in Appendix VIII? (check one):	RGP in accordance with the instruction in Appendix VIII? (check one):	than the receiving water; if so, indicate waterbody:	☐ Other; if so, specify:						
□ Yes □ No	□ Yes □ No								

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	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
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.	with the instructions in Appendix VIII? (check one): ☐ Yes ☐ No
3. Has the source water been previously chlorinated or otherwise contains resid	dual chlorine? (check one): □ Yes □ No
D. Discharge information	
1.The discharge(s) is a(n) (check any that apply): $\Box$ Existing discharge $\Box$ New	w discharge □ New source
Outfall(s):	Outfall location(s): (Latitude, Longitude)
Discharges enter the receiving water(s) via (check any that apply): □ Direct di	scharge 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 sew	ver system:
Has notification been provided to the owner of this system? (check one): ☐ Ye	es 🗆 No
Has the operator has received permission from the owner to use such system for obtaining permission:	or discharges? (check one): $\square$ Yes $\square$ No, if so, explain, with an estimated timeframe for
Has the operator attached a summary of any additional requirements the owner	of this system has specified? (check one): $\square$ Yes $\square$ No
Provide the expected start and end dates of discharge(s) (month/year):	
Indicate if the discharge is expected to occur over a duration of: $\square$ less than 1	2 months $\square$ 12 months or more $\square$ is an emergency discharge
Has the operator attached a site plan in accordance with the instructions in D, a	above? (check one): □ Yes □ No

2. Activity Category: (check all that apply)	3. Contamination Type Category: (check all that apply)					
	a. If Activity Category I or II: (check all that apply)					
	<ul> <li>□ A. Inorganics</li> <li>□ B. Non-Halogenated Volatile Organic</li> <li>□ C. Halogenated Volatile Organic Cor</li> <li>□ D. Non-Halogenated Semi-Volatile Organic</li> <li>□ E. Halogenated Semi-Volatile Organi</li> <li>□ F. Fuels Parameters</li> </ul>	mpounds Organic Compounds				
<ul> <li>□ I – Petroleum-Related Site Remediation</li> <li>□ II – Non-Petroleum-Related Site Remediation</li> </ul>	b. If Activity Category III, IV	V, V, VI, VII or VIII: (check either G or H)				
<ul> <li>□ III – Non-Petroleum-Related Site Remediation</li> <li>□ III – Contaminated Site Dewatering</li> <li>□ IV – Dewatering of Pipelines and Tanks</li> <li>□ V – Aquifer Pump Testing</li> <li>□ VI – Well Development/Rehabilitation</li> <li>□ VII – Collection Structure Dewatering/Remediation</li> <li>□ VIII – Dredge-Related Dewatering</li> </ul>	□ G. Sites with Known Contamination  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	□ H. Sites with Unknown Contamination  d. If Category III-H, IV-H, V-H, VI-H, VII-H or VIII-H Contamination Type Categories A through F apply				

#### 4. Influent and Effluent Characteristics

	Known	Known				Inf	luent	Effluent Lir	nitations
Parameter	or believed absent	or believed present	# of samples	Test method (#)	Detection limit (µg/l)	Daily maximum (µg/l)	Daily average (µg/l)	TBEL	WQBEL
A. Inorganics									
Ammonia								Report mg/L	
Chloride								Report µg/l	
Total Residual Chlorine								0.2 mg/L	
Total Suspended Solids								30 mg/L	
Antimony								206 μg/L	
Arsenic								104 μg/L	
Cadmium								10.2 μg/L	
Chromium III								323 µg/L	
Chromium VI								323 μg/L	
Copper								242 μg/L	
Iron								5,000 µg/L	
Lead								160 μg/L	
Mercury								0.739 µg/L	
Nickel								1,450 μg/L	
Selenium								235.8 μg/L	
Silver								35.1 μg/L	
Zinc								420 μg/L	
Cyanide								178 mg/L	
B. Non-Halogenated VOCs			•						
Total BTEX								100 μg/L	
Benzene								5.0 μg/L	
1,4 Dioxane								200 μg/L	
Acetone								7.97 mg/L	
Phenol								1,080 µg/L	

	Known	Known		_		Infl	luent	Effluent Lin	nitations
Parameter	or believed absent	or believed present	# of samples	Test method (#)	Detection limit (µg/l)	Daily maximum (µg/l)	Daily average (µg/l)	TBEL	WQBEL
C. Halogenated VOCs									
Carbon Tetrachloride								4.4 μg/L	
1,2 Dichlorobenzene								600 μg/L	
1,3 Dichlorobenzene								320 µg/L	
1,4 Dichlorobenzene								5.0 μg/L	
Total dichlorobenzene								763 µg/L in NH	
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	
cis-1,2 Dichloroethylene								70 μg/L	
Vinyl Chloride								2.0 μg/L	
D. Non-Halogenated SVO	Cs	_							
Total Phthalates								190 μg/L	
Diethylhexyl phthalate								101 μg/L	
Total Group I PAHs								1.0 μg/L	
Benzo(a)anthracene								_	
Benzo(a)pyrene								_	
Benzo(b)fluoranthene								<u> </u>	
Benzo(k)fluoranthene								As Total PAHs	
Chrysene								_	
Dibenzo(a,h)anthracene								_	
Indeno(1,2,3-cd)pyrene									

	Known	Known				Inf	luent	Effluent Lin	nitations
Parameter	or believed absent	or believed present	# of samples	Test method (#)	Detection limit (µg/l)	Daily maximum (µg/l)	Daily average (µg/l)	TBEL	WQBEL
Total Group II PAHs								100 μg/L	
Naphthalene								20 μg/L	
E. Halogenated SVOCs									
Total PCBs								0.000064 µg/L	
Pentachlorophenol								1.0 μg/L	
	1			•					
F. Fuels Parameters Total Petroleum		1	1	1		1 1		<u> </u>	
Hydrocarbons								5.0 mg/L	
Ethanol								Report mg/L	
Methyl-tert-Butyl Ether								70 μg/L	
tert-Butyl Alcohol								120 μg/L in MA 40 μg/L in NH	
tert-Amyl Methyl Ether								90 μg/L in MA 140 μg/L in NH	
Other (i.e., pH, temperatur	re, hardness,	salinity, LC	50, addition	al pollutar	ats present);	if so, specify:			

## 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.	
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 <b>design flow capacity</b> 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:	
Provide the proposed maximum effluent flow in gpm.	
Provide the average effluent flow in gpm.	
Trovide the average erritaint now in gpin.	
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

r. 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): $\square$ Yes $\square$ 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:
□ <b>FWS Criterion A</b> : 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".
□ <b>FWS Criterion B</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
□ <b>FWS Criterion C</b> : 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) $\square$ the operator $\square$ EPA $\square$ Other; if so, specify:

□ <b>NMFS Criterion</b> : 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): $\square$ Yes $\square$ 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:
□ <b>Criterion A</b> : 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.
□ <b>Criterion C</b> : 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): $\square$ Yes $\square$ No
I. Supplemental information
Describe any supplemental information being provided with the NOI. Include attachments if required or otherwise necessary.
Has the operator attached data, including any laboratory case narrative and chain of custody used to support the application? (check one): ☐ Yes ☐ No
Has the operator attached the certification requirement for the Best Management Practices Plan (BMPP)? (check one): ☐ Yes ☐ No

## J. Certification requirement

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I have no personal knowledge that the information submitted is other than true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.					
BMPP certification statement:					
Notification provided to the app	ropriate State, including a copy of this NOI, if required.	Check one: Yes □	No □		
Notification provided to the mu	nicipality in which the discharge is located, including a copy of this NOI, if requested.	Check one: Yes □	No □		
discharges, including a copy of Permission obtained from the or	ner of a private or municipal storm sewer system, if such system is used for site this NOI, if requested.  where of a private or municipal storm sewer system, if such system is used for site and conditions. If no, attach explanation and timeframe for obtaining permission.	Check one: Yes □			
	ner/operator of the area associated with activities covered by an additional discharge	CHECK OHC. TES	NO LINAL		
•	permit is (check one): □ RGP □ DGP □ CGP □ MSGP □ Individual NPDES permit	Check one: Yes □	No □ NA □		
Signature: AMUU	of Sovereign Consulting, Inc. OBO Paul Belanger of Nouria Energy Date Corporation	te:			
Print Name and Title:					



#### Enter number values in green boxes below

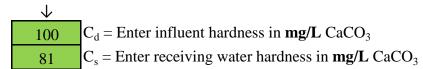
Enter values in the units specified

$\downarrow$	
0.0045	$Q_R = Enter upstream flow in MGD$
0.216	$Q_P = Enter discharge flow in MGD$
0	Downstream 7Q10

Enter a dilution factor, if other than zero



Enter values in the units specified



Enter receiving water concentrations in the units specified

$\downarrow$	_
7.6	pH in <b>Standard Units</b>
18	Temperature in °C
0.28	Ammonia in <b>mg/L</b>
81	Hardness in <b>mg/L</b> CaCO <sub>3</sub>
0	Salinity in <b>ppt</b>
0	Antimony in <b>µg/L</b>
0	Arsenic in <b>µg/L</b>
0	Cadmium in <b>µg/L</b>
1.1	Chromium III in µg/L
0	Chromium VI in <b>µg/L</b>
3.6	Copper in <b>µg/L</b>
2000	Iron in <b>μg/L</b>
1.1	Lead in <b>µg/L</b>
0	Mercury in <b>μg/L</b>
0	Nickel in <b>µg/L</b>
0	Selenium in <b>µg/L</b>
0	Silver in <b>µg/L</b>
27	Zinc in μg/L

## Enter **influent** concentrations in the units specified

$\overline{}$	_
53	TRC in <b>µg/L</b>
0.42	Ammonia in <b>mg/L</b>
0	Antimony in <b>μg/L</b>
8.6	Arsenic in <b>μg/L</b>
6	Cadmium in <b>µg/L</b>
2.9	Chromium III in <b>µg/L</b>
0	Chromium VI in <b>µg/L</b>
13	Copper in <b>µg/L</b>
13000	Iron in μg/L
11	Lead in <b>µg/L</b>
0	Mercury in µg/L
0	Nickel in µg/L
0	Selenium in µg/L
0	Silver in µg/L
150	Zinc in µg/L
0	Cyanide in <b>µg/L</b>
0	Phenol in µg/L
0	Carbon Tetrachloride in µg/L
0	Tetrachloroethylene in µg/L
0	Total Phthalates in µg/L
0	Diethylhexylphthalate in μg/L
0.89	Benzo(a)anthracene in µg/L
1.6	Benzo(a)pyrene in µg/L
3.7	Benzo(b)fluoranthene in µg/L
1	Benzo(k)fluoranthene in µg/L
2.6	Chrysene in µg/L
0	Dibenzo(a,h)anthracene in µg/L
2.1	Indeno(1,2,3-cd)pyrene in $\mu$ g/L
0	Methyl-tert butyl ether in $\mu g/L$

	· ·			
A. Inorganics	TBEL applies if bolded		WQBEL applies if bolded	
Ammonia	Report	mg/L		
Chloride	Report	μg/L		
Total Residual Chlorine	0.2	mg/L	11	μg/L
Total Suspended Solids	30	mg/L		10
Antimony	206	μg/L	653	μg/L
Arsenic	104	μg/L	10	μg/L
Cadmium	10.2	μg/L	0.2755	μg/L
Chromium III	323	μg/L	87.7	μg/L
Chromium VI	323	μg/L	11.7	μg/L
Copper	242	μg/L	9.4	μg/L
Iron	5000	μg/L μg/L	1000	μg/L
Lead	160	μg/L μg/L	3.21	
Mercury	<b>0.739</b>		0.92	μg/L
Nickel		μg/L	53.1	μg/L
	1450	μg/L		μg/L
Selenium	235.8	μg/L	5.1	μg/L
Silver	35.1	μg/L	3.8	μg/L
Zinc	420	μg/L	121.3	μg/L
Cyanide	178	mg/L	5.3	μg/L
B. Non-Halogenated VOCs	100	Ø.		
Total BTEX	100	μg/L		
Benzene	5.0	μg/L		
1,4 Dioxane	200	μg/L		
Acetone	7970	μg/L	206	~/I
Phenol  C. Hologopated VOCs	1,080	μg/L	306	μg/L
C. Halogenated VOCs Carbon Tetrachloride	4.4	ug/I	1.6	ца/І
1,2 Dichlorobenzene	600	μg/L μg/L	1.0	μg/L
1,3 Dichlorobenzene	320	μg/L μg/L		
1,4 Dichlorobenzene	5.0	μg/L μg/L		
Total dichlorobenzene		μg/L μg/L		
1,1 Dichloroethane	70	μg/L 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	3.4	μg/L
cis-1,2 Dichloroethylene	70	μg/L		. 0

Vinyl Chloride	2.0	μg/L		
D. Non-Halogenated SVOCs		10		
Total Phthalates	190	μg/L		μg/L
Diethylhexyl phthalate	101	μg/L	2.2	μg/L
Total Group I Polycyclic		1.0		1.0
Aromatic Hydrocarbons	1.0	μg/L		
Benzo(a)anthracene	1.0	μg/L	0.0039	μg/L
Benzo(a)pyrene	1.0	μg/L	0.0039	μg/L
Benzo(b)fluoranthene	1.0	μg/L	0.0039	μg/L
Benzo(k)fluoranthene	1.0	μg/L	0.0039	μg/L
Chrysene	1.0	μg/L	0.0039	μg/L
Dibenzo(a,h)anthracene	1.0	μg/L	0.0039	μg/L
Indeno(1,2,3-cd)pyrene	1.0	μg/L	0.0039	μg/L
Total Group II Polycyclic		10		10
Aromatic Hydrocarbons	100	μg/L		
Naphthalene	20	μg/L		
E. Halogenated SVOCs		10		
Total Polychlorinated Biphenyls	0.000064	μg/L		
Pentachlorophenol	1.0	μg/L		
F. Fuels Parameters		, 0		
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		



Lockwood Remediation Technologies LLC From: Ruan, Xiaodan (DEP)

To: <u>Vakalopoulos, Catherine (DEP)</u>; <u>Jake Jennings</u>

 Cc:
 Jamie Bennett; Tammie Hagie

 Subject:
 RE: Dilution Calcs Milford Shell Station

 Date:
 Wednesday, September 9, 2020 1:42:59 PM

Attachments: <u>image001.jpg</u>

Hi Jake,

I can confirm that the 7Q10 of 0.0045 MGD and DF of 1.02 with a design flow of 0.216 MGD for the project at 139 Medway Street, Milford MA, are correct.

Here is water quality information in assisting you in filling out the NOI:

Waterbody and ID: Stall Brook does not have a segment ID, so the next waterbody that with a segment ID will be Charles River (MA72-04) within Charles River Watershed

Classification: B

Outstanding Resource Water?: no

State's most recent Integrated List is located

here: <a href="https://www.epa.gov/sites/production/files/2020-01/documents/2016-ma-303d-list-report.pdf">https://www.epa.gov/sites/production/files/2020-01/documents/2016-ma-303d-list-report.pdf</a>, search for "MA72-04" to see the causes of impairments.

TMDLs: there is one approved TMDL (pathogen) for this segment.

Also, if this is not a *current* MCP site, then in addition to submitting the NOI to EPA, you need to apply with MassDEP and submit a \$500 fee (unless fee exempt, e.g., municipality). Please note that beginning on June 30, 2020, MassDEP has started using ePLACE, an online application submittal process where you will set up a user ID and be able to submit NOIs for various projects as well as pay by credit card. The instructions are located on this page: <a href="https://www.mass.gov/how-to/wm-15-npdes-general-permit-notice-of-intent">https://www.mass.gov/how-to/wm-15-npdes-general-permit-notice-of-intent</a>. If this is your first time using ePLACE, technical assistant information is available on the front page of the ePLACE application webpage.

Please let me know if you have any questions.

Thanks, Xiaodan

**From:** Vakalopoulos, Catherine (DEP) <catherine.vakalopoulos@mass.gov>

Sent: Wednesday, September 9, 2020 8:17 AM

To: Jake Jennings < JJennings@lrt-llc.net>; Ruan, Xiaodan (DEP) < xiaodan.ruan@mass.gov>

Cc: Jamie Bennett <jbennett@lrt-llc.net>; Tammie Hagie <thagie@lrt-llc.net>

Subject: Re: Dilution Calcs Milford Shell Station

Hi Xiaodan,

Please let me know if you have time to look at this.

Thanks,

#### Cathy

Cathy Vakalopoulos, Massachusetts Department of Environmental Protection 1 Winter St., Boston, MA 02108, 617-348-4026 Please consider the environment before printing this e-mail

**From:** Jake Jennings < <u>JJennings@lrt-llc.net</u>>

Date: Tuesday, September 8, 2020 at 4:35 PM

**To:** "Vakalopoulos, Catherine (DEP)" < <a href="mailto:catherine.vakalopoulos@mass.gov">catherine.vakalopoulos@mass.gov</a>>, "Ruan, Xiaodan

(DEP)" < xiaodan.ruan@mass.gov >

**Cc:** Jamie Bennett < <u>jbennett@lrt-llc.net</u>>, Tammie Hagie < <u>thagie@lrt-llc.net</u>>

**Subject:** RE: Dilution Calcs Milford Shell Station

CAUTION: This email originated from a sender outside of the Commonwealth of Massachusetts mail system. Do not click on links or open attachments unless you recognize the sender and know the content is safe.

Hi Cathy,

There was an error on the dilution calcs I just sent. Please see attached revised copy.

Thank you,

Jake

#### Lockwood Remediation Technologies, LLC

89 Crawford Street Leominster, MA 01453 O: 774.450.7177 F: 888.835.0617

M: 978.751.5431 jjennings@lrt-llc.net



From: Jake Jennings

Sent: Tuesday, September 8, 2020 4:29 PM

To: catherine.vakalopoulos@state.ma.us; Ruan, Xiaodan (DEP) < xiaodan.ruan@state.ma.us >

**Cc:** Jamie Bennett < <u>ibennett@lrt-llc.net</u>>; Tammie Hagie < <u>thagie@lrt-llc.net</u>>

**Subject:** Dilution Calcs Milford Shell Station

Hi Cathy,

I am working on an new NPDES RGP permit in Milford MA. Please see attached dilution calcs and

stream stats report for you review and approval.

The project:

Milford Shell Station 139 Medway Street Milford, MA

We plan to discharge to a catch basin with a final outfall in Stall Brook a tributary of the Charles river.

Let me know if you have any questions.

Thank you,

Jake Jennings

Lockwood Remediation Technologies, LLC

89 Crawford Street Leominster, MA 01453 O: 774.450.7177

F: 888.835.0617 M: 978.751.5431 jjennings@lrt-llc.net





# DILUTION CALCULATIONS Milford Shell Station Milford, MA

Calculate Dilution Factor (DF) for project based on 7 Day 10 Year (7Q10) Low Flow values

Calculate DF based on EPA formula  $(Q_S + Q_D)/Q_D$ , where  $Q_S$  is 7Q10 in million gallons per day (MGD) and  $Q_D$  is discharge flow in MGD

#### ASSUMPTIONS FOR 150 GPM SYSTEM

7Q10 is 0.00696 cubic feet per second (cfs) - from StreamStats 4.0 A conversion of 7.48 is used to convert cubic feet to gallons A design flow rate of 150 gallons per minute (gpm) is assumed

#### **CALCULATIONS**

7q10 Low Flow Value (Q<sub>s</sub>)

9/8/2020 StreamStats

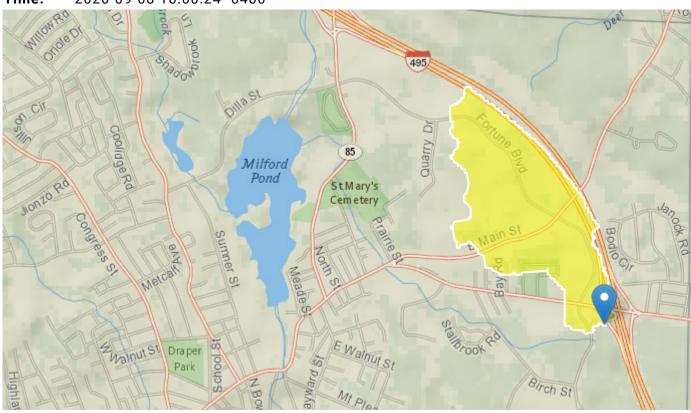
# **StreamStats Report**

Region ID: MA

Workspace ID: MA20200908200007805000

Clicked Point (Latitude, Longitude): 42.14654, -71.48551

Time: 2020-09-08 16:00:24 -0400



Davamatar			
Parameter Code	Parameter Description	Value	Unit
DRNAREA	Area that drains to a point on a stream	0.39	square miles
BSLDEM250	Mean basin slope computed from 1:250K DEM	2.963	percent
DRFTPERSTR	Area of stratified drift per unit of stream length	0.1	square mile per mile
MAREGION	Region of Massachusetts 0 for Eastern 1 for Western	0	dimensionless

9/8/2020 StreamStats

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

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	0.39	square miles	1.61	149
BSLDEM250	Mean Basin Slope from 250K DEM	2.963	percent	0.32	24.6
DRFTPERSTR	Stratified Drift per Stream Length	0.1	square mile per mile	0	1.29
MAREGION	Massachusetts Region	0	dimensionless	0	1

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

One or more of the parameters is outside the suggested range. Estimates were extrapolated with unknown errors

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

Statistic	Value	Unit
7 Day 2 Year Low Flow	0.0202	ft^3/s
7 Day 10 Year Low Flow	0.00696	ft^3/s

Low-Flow Statistics Citations

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

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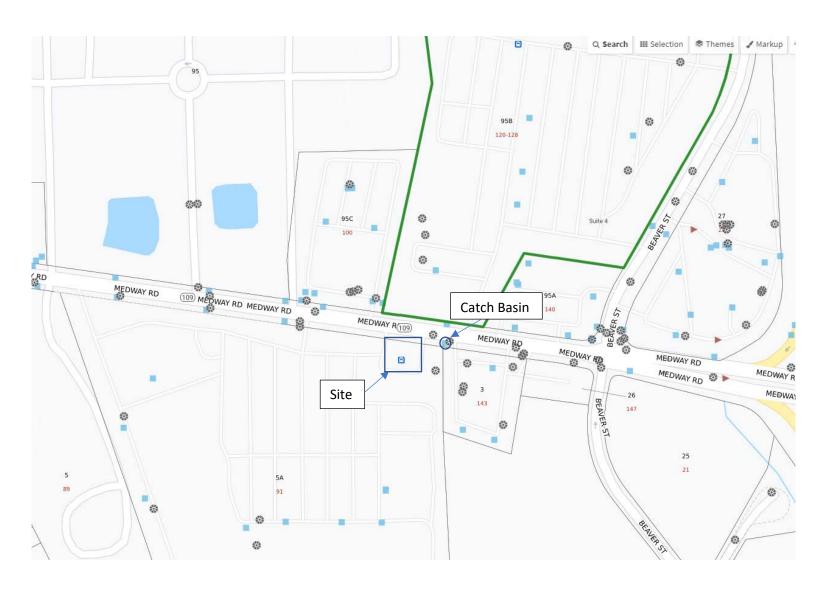
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9/8/2020 StreamStats

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

Application Version: 4.4.0





From: Michael Dean To: **Jake Jennings** 

Subject: RE: RE Phone Call NPDES RGP Outfall Date: Wednesday, September 2, 2020 9:23:44 AM

Attachments: image002.png

image003.jpg

Jake.

Those catch basins drain towards the east and outlet to what is essentially the beginning portion of Stall Brook, we do not have any line work showing the connections, but in this area the drainage flows east. In the map you provided you will see a blue line (towards the east) at the edge of the map, that is the beginning portion of stall brook, which I am pretty sure drains to the Charles river.

#### Mike Dean, P.E.

Town Engineer Planning and Engineering Town of Milford 52 Main Street (Room 5) Milford, MA 01757 508.634.2317





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**From:** Jake Jennings < JJennings@Irt-llc.net> **Sent:** Wednesday, September 2, 2020 9:16 AM **To:** Michael Dean <mdean@townofmilford.com>

Subject: RE Phone Call NPDES RGP Outfall

Hi Michael,

Thank you for speaking to me earlier. As we discussed I am working on a NPDES RGP for discharge of treated groundwater. For the permit I need to locate a catch basin to discharge into that has a final outfall in a receiving water (lake, pond, river or stream). If possible could you provide me with the maps / drawings that depict the run from the catch basin to the outfall.

Site address: 139 Medway Street Milford, MA

I've attached a site location figure for your reference. Let me know if you have any questions.

Thank you very much,

Jake Jennings

#### Lockwood Remediation Technologies, LLC

89 Crawford Street Leominster, MA 01453 O: 774.450.7177 F: 888.835.0617

M: 978.751.5431 jjennings@lrt-llc.net







September 16, 2020

Jake Jennings Lockwood Remediation Technologies, LLC 89 Crawford Street Leominster, MA 01453

Project Location: Shell Milford

Client Job Number: Project Number: 2-2090

Laboratory Work Order Number: 20I0207

Keny K. Mille

Enclosed are results of analyses for samples received by the laboratory on September 3, 2020. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Kerry K. McGee Project Manager

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REPORT DATE: 9/16/2020



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: Jake Jennings

PURCHASE ORDER NUMBER: 2-2090

PROJECT NUMBER: 2-2090

#### ANALYTICAL SUMMARY

20I0207 WORK ORDER NUMBER:

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

PROJECT LOCATION: Shell Milford

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
MW-5	2010207-01	Ground Water		608.3	
				624.1	
				625.1	
				EPA 1664B	
				EPA 200.7	
				EPA 200.8	
				EPA 245.1	
				EPA 300.0	
				EPA 504.1	
				SM19-22 4500 NH3 C	
				SM21-22 2540D	
				SM21-22 3500 Cr B	
				SM21-22 4500 CL G	
				SM21-22 4500 CN E	MA M-MA-086/CT PH-0574/NY11148
				Tri Chrome Calc.	
Receiving Water	20I0207-02	Ground Water		EPA 200.7	
				EPA 200.8	
				EPA 245.1	
				SM19-22 4500 NH3 C	
				SM21-22 3500 Cr B	
				Tri Chrome Calc.	



#### CASE NARRATIVE SUMMARY

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

REVISED REPORT - 9/16/2020 - Compound list for 624.1 updated.



624.1

Qua	lifica	tio	ns:

**RL-11** 

Elevated reporting limit due to high concentration of target compounds.

Analyte & Samples(s) Qualified:

20I0207-01[MW-5]

625.1

Qualifications:

RL-12

Elevated reporting limit due to matrix interference.

Analyte & Samples(s) Qualified:

20I0207-01[MW-5]

S-07

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

Analyte & Samples(s) Qualified:

2,4,6-Tribromophenol (SIM)

20I0207-01[MW-5], B266278-BS1, B266278-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:

2,4-Dinitrophenol

20I0207-01[MW-5]

Benzidine

S052290-CCV1, S052375-CCV1

V-05

Continuing calibration verification (CCV) did not meet method specifications and was biased on the low side for this compound.

Analyte & Samples(s) Qualified:

Benzidine

S052290-CCV1, S052375-CCV1

Hexachlorocyclopentadiene

S052290-CCV1, S052375-CCV1

EPA 300.0

#### Qualifications:

MS-08

Matrix spike recovery outside of control limits. Possibility of sample matrix effects that lead to a low bias for reported result or non-homogeneous sample aliquots cannot be eliminated. Analyte & Samples(s) Qualified:

Chloride

20I0207-01[MW-5], B266082-MS1

SM21-22 4500 CL G

#### 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:

Chlorine, Residual

20I0207-01[MW-5], B265819-MS1

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
Technical Representative



Project Location: Shell Milford Sample Description: Work Order: 2010207

Date Received: 9/3/2020
Field Sample #: MW-5

Sampled: 9/3/2020 12:30

Sample ID: 2010207-01

1,2-Dichloroethane-d4

4-Bromofluorobenzene

Toluene-d8

Sample Flags: RL-11			Volat	ile Organic Con	pounds by G					
								Date	Date/Time	
Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Prepared	Analyzed	Analyst
Acetone	<15.2	200	15.2	$\mu g/L$	4		624.1	9/4/20	9/4/20 7:24	MFF
tert-Amyl Methyl Ether (TAME)	< 0.560	2.00	0.560	$\mu g/L$	4		624.1	9/4/20	9/4/20 7:24	MFF
Benzene	< 0.720	4.00	0.720	$\mu g/L$	4		624.1	9/4/20	9/4/20 7:24	MFF
Bromodichloromethane	< 0.640	8.00	0.640	$\mu g/L$	4		624.1	9/4/20	9/4/20 7:24	MFF
Bromoform	<1.84	8.00	1.84	$\mu g/L$	4		624.1	9/4/20	9/4/20 7:24	MFF
Bromomethane	<5.52	8.00	5.52	$\mu g/L$	4		624.1	9/4/20	9/4/20 7:24	MFF
tert-Butyl Alcohol (TBA)	<16.7	80.0	16.7	$\mu g/L$	4		624.1	9/4/20	9/4/20 7:24	MFF
Carbon Tetrachloride	< 0.440	8.00	0.440	$\mu g/L$	4		624.1	9/4/20	9/4/20 7:24	MFF
Chlorobenzene	< 0.600	8.00	0.600	$\mu g/L$	4		624.1	9/4/20	9/4/20 7:24	MFF
Chlorodibromomethane	< 0.840	8.00	0.840	$\mu g/L$	4		624.1	9/4/20	9/4/20 7:24	MFF
Chloroethane	<1.44	8.00	1.44	$\mu g/L$	4		624.1	9/4/20	9/4/20 7:24	MFF
Chloroform	< 0.680	8.00	0.680	$\mu g/L$	4		624.1	9/4/20	9/4/20 7:24	MFF
Chloromethane	<1.80	8.00	1.80	$\mu g/L$	4		624.1	9/4/20	9/4/20 7:24	MFF
1,2-Dichlorobenzene	< 0.640	8.00	0.640	$\mu g/L$	4		624.1	9/4/20	9/4/20 7:24	MFF
1,3-Dichlorobenzene	< 0.480	8.00	0.480	$\mu g/L$	4		624.1	9/4/20	9/4/20 7:24	MFF
1,4-Dichlorobenzene	< 0.520	8.00	0.520	μg/L	4		624.1	9/4/20	9/4/20 7:24	MFF
1,2-Dichloroethane	<1.64	8.00	1.64	μg/L	4		624.1	9/4/20	9/4/20 7:24	MFF
1,1-Dichloroethane	< 0.640	8.00	0.640	μg/L	4		624.1	9/4/20	9/4/20 7:24	MFF
1,1-Dichloroethylene	<1.28	8.00	1.28	μg/L	4		624.1	9/4/20	9/4/20 7:24	MFF
trans-1,2-Dichloroethylene	<1.24	8.00	1.24	μg/L	4		624.1	9/4/20	9/4/20 7:24	MFF
1,2-Dichloropropane	< 0.800	8.00	0.800	μg/L	4		624.1	9/4/20	9/4/20 7:24	MFF
cis-1,3-Dichloropropene	< 0.520	8.00	0.520	μg/L	4		624.1	9/4/20	9/4/20 7:24	MFF
1,4-Dioxane	<90.0	200	90.0	μg/L	4		624.1	9/4/20	9/4/20 7:24	MFF
trans-1,3-Dichloropropene	< 0.920	8.00	0.920	μg/L	4		624.1	9/4/20	9/4/20 7:24	MFF
Ethanol	<42.2	200	42.2	μg/L	4		624.1	9/4/20	9/4/20 7:24	MFF
Ethylbenzene	121	8.00	0.520	μg/L	4		624.1	9/4/20	9/4/20 7:24	MFF
Methyl tert-Butyl Ether (MTBE)	<1.00	8.00	1.00	μg/L	4		624.1	9/4/20	9/4/20 7:24	MFF
Methylene Chloride	<1.36	20.0	1.36	μg/L	4		624.1	9/4/20	9/4/20 7:24	MFF
1,1,2,2-Tetrachloroethane	< 0.880	8.00	0.880	μg/L	4		624.1	9/4/20	9/4/20 7:24	MFF
Tetrachloroethylene	<0.720	8.00	0.720	μg/L μg/L	4		624.1	9/4/20	9/4/20 7:24	MFF
Toluene	28.2	4.00	0.560	μg/L μg/L	4		624.1	9/4/20	9/4/20 7:24	MFF
1,1,1-Trichloroethane	< 0.800	8.00	0.800	μg/L μg/L	4		624.1	9/4/20	9/4/20 7:24	MFF
1,1,2-Trichloroethane	<0.640	8.00	0.640		4		624.1	9/4/20		
Trichloroethylene	<0.960			μg/L	4		624.1		9/4/20 7:24	MFF MFF
Trichlorofluoromethane (Freon 11)		8.00	0.960	μg/L				9/4/20	9/4/20 7:24	
· · · · · · · · · · · · · · · · · · ·	<1.32	8.00	1.32	μg/L	4		624.1	9/4/20	9/4/20 7:24	MFF
Vinyl Chloride	<1.80	8.00	1.80	μg/L	4		624.1	9/4/20	9/4/20 7:24	MFF
m+p Xylene	292	8.00	1.20	μg/L	4		624.1	9/4/20	9/4/20 7:24	MFF
o-Xylene	46.0	4.00	0.680	$\mu g/L$	4		624.1	9/4/20	9/4/20 7:24	MFF

70-130

70-130

70-130

97.8

98.0

99.0

9/4/20 7:24

9/4/20 7:24

9/4/20 7:24



Project Location: Shell Milford Sample Description: Work Order: 20I0207

Date Received: 9/3/2020 Field Sample #: MW-5

Sampled: 9/3/2020 12:30

Sample ID: 20I0207-01 Sample Matrix: Ground Water

Sample Flags: RL-12		Semi	volatile Organic Co	mpounds by	GC/MS				
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Benzo(a)anthracene (SIM)	0.89	0.20	μg/L	4		625.1	9/10/20	9/11/20 20:15	IMR
Benzo(a)pyrene (SIM)	1.6	0.40	$\mu g/L$	4		625.1	9/10/20	9/11/20 20:15	IMR
Benzo(b)fluoranthene (SIM)	3.7	0.20	$\mu g/L$	4		625.1	9/10/20	9/11/20 20:15	IMR
Benzo(k)fluoranthene (SIM)	1.0	0.80	μg/L	4		625.1	9/10/20	9/11/20 20:15	IMR
Bis(2-ethylhexyl)phthalate (SIM)	<4.0	4.0	μg/L	4		625.1	9/10/20	9/11/20 20:15	IMR
Chrysene (SIM)	2.6	0.80	μg/L	4		625.1	9/10/20	9/11/20 20:15	IMR
Dibenz(a,h)anthracene (SIM)	< 0.40	0.40	μg/L	4		625.1	9/10/20	9/11/20 20:15	IMR
Indeno(1,2,3-cd)pyrene (SIM)	2.1	0.40	μg/L	4		625.1	9/10/20	9/11/20 20:15	IMR
Pentachlorophenol (SIM)	<4.0	4.0	$\mu g/L$	4		625.1	9/10/20	9/11/20 20:15	IMR
Surrogates		% Recovery	Recovery Limits	6	Flag/Qual				
2-Fluorophenol (SIM)		42.0	15-110					9/11/20 20:15	
Phenol-d6 (SIM)		28.2	15-110					9/11/20 20:15	
Nitrobenzene-d5		67.8	30-130					9/11/20 20:15	
2-Fluorobiphenyl		75.5	30-130					9/11/20 20:15	
2,4,6-Tribromophenol (SIM)		114 *	15-110		S-07			9/11/20 20:15	
p-Terphenyl-d14		67.2	30-130					9/11/20 20:15	



Project Location: Shell Milford Sample Description: Work Order: 2010207

Date Received: 9/3/2020
Field Sample #: MW-5

Sampled: 9/3/2020 12:30

Sample ID: 20I0207-01
Sample Matrix: Ground Water

Sample Flags: RL-12	Semivolatile Organic Compounds by - GC/MS

. 5									
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acenaphthene	<20.0	20.0	μg/L	4		625.1	9/10/20	9/11/20 12:17	IMR
Acenaphthylene	<20.0	20.0	μg/L	4		625.1	9/10/20	9/11/20 12:17	IMR
Anthracene	<20.0	20.0	μg/L	4		625.1	9/10/20	9/11/20 12:17	IMR
Benzo(g,h,i)perylene	<20.0	20.0	μg/L	4		625.1	9/10/20	9/11/20 12:17	IMR
Butylbenzylphthalate	<40.0	40.0	μg/L	4		625.1	9/10/20	9/11/20 12:17	IMR
4-Chloro-3-methylphenol	<40.0	40.0	μg/L	4		625.1	9/10/20	9/11/20 12:17	IMR
2-Chlorophenol	<40.0	40.0	μg/L	4		625.1	9/10/20	9/11/20 12:17	IMR
Di-n-butylphthalate	<40.0	40.0	μg/L	4		625.1	9/10/20	9/11/20 12:17	IMR
2,4-Dichlorophenol	<40.0	40.0	μg/L	4		625.1	9/10/20	9/11/20 12:17	IMR
Diethylphthalate	<40.0	40.0	μg/L	4		625.1	9/10/20	9/11/20 12:17	IMR
2,4-Dimethylphenol	<40.0	40.0	μg/L	4		625.1	9/10/20	9/11/20 12:17	IMR
Dimethylphthalate	<40.0	40.0	μg/L	4		625.1	9/10/20	9/11/20 12:17	IMR
4,6-Dinitro-2-methylphenol	<40.0	40.0	μg/L	4		625.1	9/10/20	9/11/20 12:17	IMR
2,4-Dinitrophenol	<40.0	40.0	μg/L	4	V-04	625.1	9/10/20	9/11/20 12:17	IMR
Di-n-octylphthalate	<40.0	40.0	μg/L	4		625.1	9/10/20	9/11/20 12:17	IMR
Bis(2-Ethylhexyl)phthalate	<40.0	40.0	μg/L	4		625.1	9/10/20	9/11/20 12:17	IMR
Fluoranthene	<20.0	20.0	μg/L	4		625.1	9/10/20	9/11/20 12:17	IMR
Fluorene	<20.0	20.0	μg/L	4		625.1	9/10/20	9/11/20 12:17	IMR
Naphthalene	30.7	20.0	μg/L	4		625.1	9/10/20	9/11/20 12:17	IMR
2-Nitrophenol	<40.0	40.0	μg/L	4		625.1	9/10/20	9/11/20 12:17	IMR
4-Nitrophenol	<40.0	40.0	μg/L	4		625.1	9/10/20	9/11/20 12:17	IMR
Phenanthrene	<20.0	20.0	μg/L	4		625.1	9/10/20	9/11/20 12:17	IMR
2-Methylphenol	<40.0	40.0	μg/L	4		625.1	9/10/20	9/11/20 12:17	IMR
Phenol	<40.0	40.0	μg/L	4		625.1	9/10/20	9/11/20 12:17	IMR
3/4-Methylphenol	<80.0	80.0	μg/L	4		625.1	9/10/20	9/11/20 12:17	IMR
Pyrene	<20.0	20.0	μg/L	4		625.1	9/10/20	9/11/20 12:17	IMR
2,4,6-Trichlorophenol	<40.0	40.0	μg/L	4		625.1	9/10/20	9/11/20 12:17	IMR
Surrogates		% Recovery	Recovery Limits	<u> </u>	Flag/Qual				
2-Fluorophenol		41.8	15-110					9/11/20 12:17	
Phenol-d6		28.0	15-110					9/11/20 12:17	
Nitrobenzene-d5		69.0	30-130					9/11/20 12:17	
2-Fluorobiphenyl		75.1	30-130					9/11/20 12:17	
2,4,6-Tribromophenol		82.1	15-110					9/11/20 12:17	
p-Terphenyl-d14		88.2	30-130					9/11/20 12:17	



Project Location: Shell Milford Sample Description: Work Order: 2010207

Date Received: 9/3/2020
Field Sample #: MW-5

Sampled: 9/3/2020 12:30

Sample ID: 20I0207-01
Sample Matrix: Ground Water

### Polychlorinated Biphenyls By GC/ECD

								Date	Date/Time	
Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Prepared	Analyzed	Analyst
Aroclor-1016 [1]	< 0.0920	0.100	0.0920	$\mu g/L$	1		608.3	9/10/20	9/14/20 20:39	JMB
Aroclor-1221 [1]	< 0.0805	0.100	0.0805	$\mu g/L$	1		608.3	9/10/20	9/14/20 20:39	JMB
Aroclor-1232 [1]	< 0.0995	0.100	0.0995	$\mu g/L$	1		608.3	9/10/20	9/14/20 20:39	JMB
Aroclor-1242 [1]	< 0.0865	0.100	0.0865	$\mu g/L$	1		608.3	9/10/20	9/14/20 20:39	JMB
Aroclor-1248 [1]	< 0.0950	0.100	0.0950	$\mu g/L$	1		608.3	9/10/20	9/14/20 20:39	JMB
Aroclor-1254 [1]	< 0.0525	0.100	0.0525	$\mu g/L$	1		608.3	9/10/20	9/14/20 20:39	JMB
Aroclor-1260 [1]	< 0.0980	0.100	0.0980	μg/L	1		608.3	9/10/20	9/14/20 20:39	JMB

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	96.7	30-150		9/14/20 20:39
Decachlorobiphenyl [2]	104	30-150		9/14/20 20:39
Tetrachloro-m-xylene [1]	81.8	30-150		9/14/20 20:39
Tetrachloro-m-xylene [2]	85.2	30-150		9/14/20 20:39



Project Location: Shell Milford Sample Description: Work Order: 2010207

Date Received: 9/3/2020
Field Sample #: MW-5

Sampled: 9/3/2020 12:30

Sample ID: 20I0207-01
Sample Matrix: Ground Water

Metals Analyses (Total)

								Date	Date/Time	
Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Prepared	Analyzed	Analyst
Antimony	ND	1.0		μg/L	1		EPA 200.8	9/8/20	9/9/20 11:26	QNW
Arsenic	8.6	0.80		$\mu g/L$	1		EPA 200.8	9/8/20	9/9/20 11:26	QNW
Cadmium	6.0	0.20		$\mu g/L$	1		EPA 200.8	9/8/20	9/9/20 11:26	QNW
Chromium	2.9	1.0		$\mu g/L$	1		EPA 200.8	9/8/20	9/9/20 11:26	QNW
Chromium, Trivalent	0.0029			mg/L	1		Tri Chrome Calc.	9/8/20	9/9/20 11:26	QNW
Copper	13	1.0		$\mu g/L$	1		EPA 200.8	9/8/20	9/9/20 11:26	QNW
Iron	13	0.050		mg/L	1		EPA 200.7	9/8/20	9/9/20 12:08	TBC
Lead	11	0.50		$\mu g/L$	1		EPA 200.8	9/8/20	9/9/20 11:26	QNW
Mercury	ND	0.00010		mg/L	1		EPA 245.1	9/4/20	9/8/20 11:30	CJV
Nickel	ND	5.0		μg/L	1		EPA 200.8	9/8/20	9/9/20 11:26	QNW
Selenium	ND	5.0	1.6	$\mu g/L$	1		EPA 200.8	9/8/20	9/9/20 11:26	QNW
Silver	ND	0.20		$\mu g/L$	1		EPA 200.8	9/8/20	9/9/20 11:26	QNW
Zinc	150	10		μg/L	1		EPA 200.8	9/8/20	9/9/20 11:26	QNW
Hardness	100	1.4		mg/L	1		EPA 200.7	9/8/20	9/9/20 12:08	TBC



Project Location: Shell Milford Sample Description: Work Order: 2010207

Date Received: 9/3/2020
Field Sample #: MW-5

Sampled: 9/3/2020 12:30

Sample ID: 20I0207-01
Sample Matrix: Ground Water

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

								Date	Date/Time	
Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Prepared	Analyzed	Analyst
Ammonia as N	0.42	0.30	0.14	mg/L	1		SM19-22 4500 NH3 C	9/8/20	9/8/20 16:00	EC
Chloride	960	25		mg/L	25	MS-08	EPA 300.0	9/9/20	9/9/20 13:42	EC
Chlorine, Residual	0.053	0.020		mg/L	1	MS-07	SM21-22 4500 CL G	9/3/20	9/3/20 22:15	AWA
Hexavalent Chromium	ND	0.0040		mg/L	1		SM21-22 3500 Cr B	9/3/20	9/3/20 21:10	CB2
Total Suspended Solids	20	0.83		mg/L	1		SM21-22 2540D	9/8/20	9/8/20 13:45	LL
Silica Gel Treated HEM (SGT-HEM)	ND	1.6		mg/L	1		EPA 1664B	9/10/20	9/10/20 10:25	LL



Project Location: Shell Milford Work Order: 20I0207 Sample Description:

Date Received: 9/3/2020 Field Sample #: MW-5

Sampled: 9/3/2020 12:30

Sample ID: 20I0207-01 Sample Matrix: Ground Water

### **Drinking Water Organics EPA 504.1**

								Date	Date/Time	
Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Prepared	Analyzed	Analyst
1,2-Dibromoethane (EDB) (1)	ND	0.020	0.012	μg/L	1		EPA 504.1	9/10/20	9/10/20 17:00	JMB
Surrogates		% Reco	very	Recovery Limits	s	Flag/Qual				
1 3-Dibromonronane (1)		103		70-130					9/10/20 17:00	



Sample Description: Work Order: 2010207

Date Received: 9/3/2020
Field Sample #: MW-5

Project Location: Shell Milford

Sampled: 9/3/2020 12:30

Sample ID: 20I0207-01
Sample Matrix: Ground Water

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

									Date	Date/Time	
	Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Prepared	Analyzed	Analyst
Cyanide		ND	0.005	0.001	mg/L	1		SM21-22 4500 CN E		9/8/20 15:51	AAL



Sample Description: Work Order: 2010207

Project Location: Shell Milford Date Received: 9/3/2020

Field Sample #: Receiving Water

Sample ID: 20I0207-02

Sampled: 9/3/2020 12:45

Sample Matrix: Ground Water

Metals	Analyses	(Total)
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Amaluta	Results	RL	DL	Units	Dilution	Elag/Oual	Method	Date	Date/Time	Amalwat
Analyte	Results	KL	DL	Units	Dilution	Flag/Qual	Method	Prepared	Analyzed	Analyst
Antimony	ND	1.0		$\mu g/L$	1		EPA 200.8	9/8/20	9/9/20 12:57	QNW
Arsenic	ND	0.80		$\mu g/L$	1		EPA 200.8	9/8/20	9/9/20 12:57	QNW
Cadmium	ND	0.20		$\mu g/L$	1		EPA 200.8	9/8/20	9/9/20 12:57	QNW
Chromium	1.1	1.0		$\mu g/L$	1		EPA 200.8	9/8/20	9/9/20 12:57	QNW
Chromium, Trivalent	0.0011			mg/L	1		Tri Chrome Calc.	9/8/20	9/9/20 12:57	QNW
Copper	3.6	1.0		$\mu g/L$	1		EPA 200.8	9/8/20	9/9/20 12:57	QNW
Iron	2.0	0.050		mg/L	1		EPA 200.7	9/8/20	9/9/20 12:15	TBC
Lead	1.1	0.50		$\mu g/L$	1		EPA 200.8	9/8/20	9/9/20 12:57	QNW
Mercury	ND	0.00010		mg/L	1		EPA 245.1	9/4/20	9/8/20 11:31	CJV
Nickel	ND	5.0		$\mu g/L$	1		EPA 200.8	9/8/20	9/9/20 12:57	QNW
Selenium	ND	5.0	1.6	$\mu g/L$	1		EPA 200.8	9/8/20	9/9/20 12:57	QNW
Silver	ND	0.20		$\mu g/L$	1		EPA 200.8	9/8/20	9/9/20 12:57	QNW
Zinc	27	10		$\mu g/L$	1		EPA 200.8	9/8/20	9/9/20 12:57	QNW
Hardness	81	1.4		mg/L	1		EPA 200.7	9/8/20	9/9/20 12:15	TBC



Project Location: Shell Milford Sample Description: Work Order: 2010207

Date Received: 9/3/2020

Field Sample #: Receiving Water

Sample ID: 2010207-02

Sample Matrix: Ground Water

Sampled: 9/3/2020 12:45

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

								Date	Date/Time	
Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Prepared	Analyzed	Analyst
Ammonia as N	0.28	0.30	0.14	mg/L	1	J	SM19-22 4500 NH3 C	9/8/20	9/8/20 16:00	EC
Hexavalent Chromium	ND	0.0040		mg/L	1		SM21-22 3500 Cr B	9/3/20	9/3/20 21:10	CB2



# **Sample Extraction Data**

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
20I0207-01 [MW-5]	B266188	1000	5.00	09/10/20

Prep Method: SW-846 5030B Analytical Method: 624.1

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
20I0207-01 [MW-5]	B265755	1.25	5.00	09/04/20

Prep Method: SW-846 3510C Analytical Method: 625.1

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
20I0207-01 [MW-5]	B266189	1000	1.00	09/10/20

Prep Method: SW-846 3510C Analytical Method: 625.1

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
20I0207-01 [MW-5]	B266278	1000	1.00	09/10/20

#### EPA 1664B

Lab Number [Field ID]	Batch	Initial [mL]	Date
2010207-01 [MW-5]	B266166	900	09/10/20

Prep Method: EPA 200.7 Analytical Method: EPA 200.7

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
20I0207-01 [MW-5]	B265985	50.0	50.0	09/08/20
20I0207-01 [MW-5]	B265985	50.0		09/08/20
20I0207-02 [Receiving Water]	B265985	50.0	50.0	09/08/20
20I0207-02 [Receiving Water]	B265985	50.0		09/08/20

Prep Method: EPA 200.8 Analytical Method: EPA 200.8

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
20I0207-01 [MW-5]	B265982	10.0	10.0	09/08/20
20I0207-02 [Receiving Water]	B265982	10.0	10.0	09/08/20

Prep Method: EPA 245.1 Analytical Method: EPA 245.1

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
20I0207-01 [MW-5]	B265838	6.00	6.00	09/04/20
20I0207-02 [Receiving Water]	B265838	6.00	6.00	09/04/20

Prep Method: EPA 300.0 Analytical Method: EPA 300.0

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date



# **Sample Extraction Data**

Final [mL]

Date

Initial [mL]

Batch

Prep Method: EPA 300.0	Analytical Method: EPA 300.0
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20I0207-01 [MW-5]	B266082	10.0	10.0	09/09/20	
Prep Method: EPA 504 water Analytical M	lethod: EPA 504.1				
Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date	
2010207-01 [MW-5]	B266195	35.3	35.0	09/10/20	
SM19-22 4500 NH3 C					
Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date	
20I0207-01 [MW-5]	B266002	100	100	09/08/20	
20I0207-02 [Receiving Water]	B266002	100	100	09/08/20	
SM21-22 2540D					
Lab Number [Field ID]	Batch	Initial [mL]		Date	
20I0207-01 [MW-5]	B265934	600	·	09/08/20	·

### SM21-22 3500 Cr B

Lab Number [Field ID]

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date	
20I0207-01 [MW-5]	B265815	50.0	50.0	09/03/20	
20I0207-02 [Receiving Water]	B265815	50.0	50.0	09/03/20	

# SM21-22 4500 CL G

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
20I0207-01 [MW-5]	B265819	100	100	09/03/20

# Prep Method: EPA 200.8 Analytical Method: Tri Chrome Calc.

Lab Number [Field ID]	Batch	Initial [mL]	Date
20I0207-01 [MW-5]	B265982	10.0	09/08/20
20I0207-02 [Receiving Water]	B265982	10.0	09/08/20



### QUALITY CONTROL

Spike

Source

%REC

RPD

# Volatile Organic Compounds by GC/MS - Quality Control

Reporting

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch B265755 - SW-846 5030B										
Blank (B265755-BLK1)				Prepared: 09	/03/20 Analy	yzed: 09/04/2	:0			
Acetone	ND	50.0	μg/L							
ert-Amyl Methyl Ether (TAME)	ND	0.500	$\mu g/L$							
Benzene	ND	1.00	$\mu g/L$							
ert-Butyl Alcohol (TBA)	ND	20.0	$\mu g/L$							
Carbon Tetrachloride	ND	2.00	$\mu g/L$							
,2-Dichlorobenzene	ND	2.00	$\mu g \! / \! L$							
,3-Dichlorobenzene	ND	2.00	$\mu g/L$							
,4-Dichlorobenzene	ND	2.00	$\mu g/L$							
,2-Dichloroethane	ND	2.00	$\mu g/L$							
eis-1,2-Dichloroethylene	ND	1.00	$\mu g/L$							
,1-Dichloroethane	ND	2.00	$\mu g/L$							
,1-Dichloroethylene	ND	2.00	$\mu g/L$							
eis-1,3-Dichloropropene	ND	2.00	$\mu g/L$							
,4-Dioxane	ND	50.0	$\mu \text{g/L}$							
Ethanol	ND	50.0	$\mu \text{g/L}$							
Ethylbenzene	ND	2.00	$\mu \text{g/L}$							
Methyl tert-Butyl Ether (MTBE)	ND	2.00	$\mu g/L$							
Methylene Chloride	ND	5.00	$\mu \text{g/L}$							
Tetrachloroethylene	ND	2.00	$\mu \text{g/L}$							
Toluene	ND	1.00	$\mu \text{g/L}$							
,1,1-Trichloroethane	ND	2.00	$\mu g/L$							
,1,2-Trichloroethane	ND	2.00	$\mu g \! / \! L$							
Trichloroethylene	ND	2.00	$\mu g \! / \! L$							
Vinyl Chloride	ND	2.00	$\mu g \! / \! L$							
n+p Xylene	ND	2.00	$\mu g \! / \! L$							
o-Xylene	ND	1.00	μg/L							
Surrogate: 1,2-Dichloroethane-d4	24.8		μg/L	25.0		99.1	70-130			
Surrogate: Toluene-d8	24.2		μg/L	25.0		96.8	70-130			
Surrogate: 4-Bromofluorobenzene	23.7		μg/L	25.0		94.9	70-130			
LCS (B265755-BS1)				Prepared & A	Analyzed: 09	/03/20				
Acetone	200	50.0	μg/L	200		98.6	70-160			
ert-Amyl Methyl Ether (TAME)	17	0.500	μg/L	20.0		83.8	70-130			
Benzene	18	1.00	μg/L	20.0		89.8	65-135			
ert-Butyl Alcohol (TBA)	150	20.0	μg/L	200		76.6	40-160			
Carbon Tetrachloride	18	2.00	$\mu g/L$	20.0		88.8	70-130			
,2-Dichlorobenzene	19	2.00	μg/L	20.0		96.4	65-135			
,3-Dichlorobenzene	20	2.00	μg/L	20.0		100	70-130			
,4-Dichlorobenzene	19	2.00	μg/L	20.0		92.7	65-135			
,2-Dichloroethane	18	2.00	μg/L	20.0		92.0	70-130			
cis-1,2-Dichloroethylene	17	1.00	μg/L	20.0		86.4	70-130			
,1-Dichloroethane	17	2.00	$\mu g/L$	20.0		87.2	70-130			
,1-Dichloroethylene	19	2.00	$\mu g/L$	20.0		93.8	50-150			
cis-1,3-Dichloropropene	17	2.00	μg/L	20.0		84.7	25-175			
,4-Dioxane	170	50.0	$\mu g/L$	200		82.9	40-130			
Ethanol	180	50.0	μg/L	200		91.6	40-160			
Ethylbenzene	19	2.00	μg/L	20.0		96.0	60-140			
Methyl tert-Butyl Ether (MTBE)	18	2.00	μg/L	20.0		91.8	70-130			
Methylene Chloride	19	5.00	μg/L	20.0		93.6	60-140			
Tetrachloroethylene	19	2.00	μg/L	20.0		97.4	70-130			
Foluene	19	1.00	μg/L	20.0		93.0	70-130			



### QUALITY CONTROL

# Volatile Organic Compounds by GC/MS - Quality Control

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch B265755 - SW-846 5030B										
LCS (B265755-BS1)				Prepared &	Analyzed: 09	/03/20				
1,1,2-Trichloroethane	19	2.00	μg/L	20.0		95.9	70-130			
Trichloroethylene	19	2.00	μg/L	20.0		93.4	65-135			
Vinyl Chloride	16	2.00	μg/L	20.0		82.2	5-195			
m+p Xylene	39	2.00	μg/L	40.0		96.7	70-130			
o-Xylene	20	1.00	$\mu \text{g/L}$	20.0		99.0	70-130			
Surrogate: 1,2-Dichloroethane-d4	24.2		μg/L	25.0		96.7	70-130			
Surrogate: Toluene-d8	25.0		$\mu g/L$	25.0		100	70-130			
Surrogate: 4-Bromofluorobenzene	25.2		$\mu g/L$	25.0		101	70-130			



### QUALITY CONTROL

# Semivolatile Organic Compounds by GC/MS - Quality Control

	<b>.</b>	Reporting	T7 11	Spike	Source	0/853	%REC	DDC	RPD	37
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch B266278 - SW-846 3510C										
Blank (B266278-BLK1)				Prepared &	Analyzed: 09	/11/20				
Benzo(a)anthracene (SIM)	ND	0.050	$\mu g/L$							
Benzo(a)pyrene (SIM)	ND	0.10	$\mu g/L$							
Benzo(b)fluoranthene (SIM)	ND	0.050	$\mu g/L$							
Benzo(k)fluoranthene (SIM)	ND	0.20	$\mu g/L$							
Bis(2-ethylhexyl)phthalate (SIM)	ND	1.0	$\mu g/L$							
Chrysene (SIM)	ND	0.20	$\mu g/L$							
Dibenz(a,h)anthracene (SIM)	ND	0.10	$\mu g/L$							
ndeno(1,2,3-cd)pyrene (SIM)	ND	0.10	$\mu g/L$							
entachlorophenol (SIM)	ND	1.0	$\mu g/L$							
urrogate: 2-Fluorophenol (SIM)	92.8		μg/L	200		46.4	15-110			
Surrogate: Phenol-d6 (SIM)	60.6		$\mu g/L$	200		30.3	15-110			
Surrogate: Nitrobenzene-d5	68.7		$\mu g/L$	100		68.7	30-130			
urrogate: 2-Fluorobiphenyl	65.9		$\mu g/L$	100		65.9	30-130			
Surrogate: 2,4,6-Tribromophenol (SIM)	213		$\mu g/L$	200		107	15-110			
urrogate: p-Terphenyl-d14	68.9		$\mu g/L$	100		68.9	30-130			
.CS (B266278-BS1)				Prepared &	Analyzed: 09/	/11/20				
Benzo(a)anthracene (SIM)	48.4	1.0	μg/L	50.0		96.8	33-143			
Senzo(a)pyrene (SIM)	49.0	2.0	μg/L	50.0		98.1	17-163			
Senzo(b)fluoranthene (SIM)	54.1	1.0	μg/L	50.0		108	24-159			
Benzo(k)fluoranthene (SIM)	51.1	4.0	μg/L	50.0		102	11-162			
Bis(2-ethylhexyl)phthalate (SIM)	48.7	20	μg/L	50.0		97.3	8-158			
Chrysene (SIM)	46.9	4.0	μg/L	50.0		93.9	17-168			
Dibenz(a,h)anthracene (SIM)	59.5	2.0	μg/L	50.0		119	10-227			
ndeno(1,2,3-cd)pyrene (SIM)	61.9	2.0	μg/L	50.0		124	10-171			
entachlorophenol (SIM)	37.1	20	μg/L	50.0		74.1	14-176			
urrogate: 2-Fluorophenol (SIM)	110		μg/L	200		55.2	15-110			
Surrogate: Phenol-d6 (SIM)	72.4		μg/L	200		36.2	15-110			
urrogate: Nitrobenzene-d5	81.0		μg/L	100		81.0	30-130			
urrogate: 2-Fluorobiphenyl	92.1		$\mu g/L$	100		92.1	30-130			
urrogate: 2,4,6-Tribromophenol (SIM)	268		$\mu g/L$	200		134 *	15-110			S-07
urrogate: p-Terphenyl-d14	77.6		$\mu g/L$	100		77.6	30-130			
.CS Dup (B266278-BSD1)				Prepared &	Analyzed: 09	/11/20				
Benzo(a)anthracene (SIM)	42.5	1.0	μg/L	50.0		85.0	33-143	13.0	53	
Benzo(a)pyrene (SIM)	42.3	2.0	$\mu g/L$	50.0		84.7	17-163	14.7	72	
Benzo(b)fluoranthene (SIM)	46.0	1.0	μg/L	50.0		92.1	24-159	16.1	71	
Benzo(k)fluoranthene (SIM)	43.2	4.0	$\mu g/L$	50.0		86.5	11-162	16.6	63	
Bis(2-ethylhexyl)phthalate (SIM)	42.9	20	μg/L	50.0		85.9	8-158	12.5	82	
Phrysene (SIM)	41.0	4.0	$\mu g/L$	50.0		82.0	17-168	13.5	87	
bibenz(a,h)anthracene (SIM)	50.2	2.0	μg/L	50.0		100	10-227	17.0	126	
ndeno(1,2,3-cd)pyrene (SIM)	52.2	2.0	μg/L	50.0		104	10-171	17.0	99	
entachlorophenol (SIM)	30.0	20	$\mu g \! / \! L$	50.0		60.0	14-176	21.0	86	
urrogate: 2-Fluorophenol (SIM)	97.2		μg/L	200		48.6	15-110			
surrogate: Phenol-d6 (SIM)	65.1		$\mu g/L$	200		32.6	15-110			
durrogate: Nitrobenzene-d5	67.6		$\mu g/L$	100		67.6	30-130			
Surrogate: 2-Fluorobiphenyl	79.2		$\mu g/L$	100		79.2	30-130			
Surrogate: 2,4,6-Tribromophenol (SIM)	230		$\mu g/L$	200		115 *	15-110			S-07
Surrogate: p-Terphenyl-d14	67.9		μg/L	100		67.9	30-130			



### QUALITY CONTROL

Spike

Source

%REC

RPD

# Semivolatile Organic Compounds by - GC/MS - Quality Control

Reporting

Analyte	Result	Limit	Units	Level	Result	%REC	%REC Limits	RPD	Limit	Notes
Batch B266189 - SW-846 3510C										
Blank (B266189-BLK1)				Prepared: 09	9/10/20 Analy	yzed: 09/11/2	0			
Acenaphthene	ND	5.00	μg/L							
Acenaphthylene	ND	5.00	$\mu g/L$							
Anthracene	ND	5.00	$\mu g/L$							
Benzo(g,h,i)perylene	ND	5.00	$\mu g/L$							
Butylbenzylphthalate	ND	10.0	$\mu g/L$							
-Chloro-3-methylphenol	ND	10.0	$\mu g/L$							
2-Chlorophenol	ND	10.0	$\mu g/L$							
Di-n-butylphthalate	ND	10.0	$\mu g/L$							
,4-Dichlorophenol	ND	10.0	$\mu g/L$							
Diethylphthalate	ND	10.0	$\mu g/L$							
,4-Dimethylphenol	ND	10.0	$\mu g/L$							
Dimethylphthalate	ND	10.0	$\mu g/L$							
,6-Dinitro-2-methylphenol	ND	10.0	$\mu g/L$							
,4-Dinitrophenol	ND	10.0	$\mu g/L$							
Di-n-octylphthalate	ND	10.0	$\mu g/L$							
Bis(2-Ethylhexyl)phthalate	ND	10.0	μg/L							
luoranthene	ND	5.00	μg/L							
luorene	ND	5.00	μg/L							
Naphthalene	ND	5.00	μg/L							
-Nitrophenol	ND	10.0	μg/L							
-Nitrophenol	ND	10.0	μg/L							
henanthrene	ND	5.00	μg/L							
-Methylphenol	ND	10.0	μg/L							
rhenol	ND	10.0	μg/L							
/4-Methylphenol	ND	20.0	μg/L							
yrene	ND	5.00	μg/L							
,4,6-Trichlorophenol	ND	10.0	μg/L							
urrogate: 2-Fluorophenol	94.1		μg/L	200		47.0	15-110			
urrogate: Phenol-d6	59.0		μg/L	200		29.5	15-110			
urrogate: Nitrobenzene-d5	71.6		μg/L	100		71.6	30-130			
urrogate: 2-Fluorobiphenyl	78.7		μg/L	100		78.7	30-130			
surrogate: 2,4,6-Tribromophenol	175		μg/L	200		87.3	15-110			
urrogate: p-Terphenyl-d14	88.3		μg/L	100		88.3	30-130			
CS (B266189-BS1)				Prepared: 09	9/10/20 Analy	yzed: 09/11/2	0			
cenaphthene	38.7	5.00	μg/L	50.0		77.4	47-145			
cenaphthylene	41.6	5.00	μg/L	50.0		83.2	33-145			
nthracene	42.9	5.00	μg/L	50.0		85.8	27-133			
enzo(g,h,i)perylene	43.6	5.00	μg/L	50.0		87.2	10-219			
tutylbenzylphthalate	36.4	10.0	μg/L	50.0		72.9	10-152			
-Chloro-3-methylphenol	38.8	10.0	μg/L μg/L	50.0		77.7	22-147			
-Chlorophenol	35.8	10.0	μg/L μg/L	50.0		71.5	23-134			
ri-n-butylphthalate	42.4	10.0	μg/L μg/L	50.0		84.7	10-120			
4-Dichlorophenol	39.9	10.0	μg/L μg/L	50.0		79.8	39-135			
iethylphthalate	38.6	10.0	μg/L μg/L	50.0		77.2	10-120			
4-Dimethylphenol	37.4	10.0	μg/L μg/L	50.0		74.8	32-120			
vimethylphthalate		10.0	μg/L μg/L	50.0		83.1	10-120			
,6-Dinitro-2-methylphenol	41.5	10.0	μg/L μg/L	50.0		74.2	10-120			
,4-Dinitrophenol	37.1	10.0	μg/L μg/L	50.0			10-181			
ri-n-octylphthalate	31.3	10.0				62.6				
Bis(2-Ethylhexyl)phthalate	33.4	10.0	μg/L μα/Ι	50.0		66.7	4-146			
Sis(2-Ethylnexyl)phinalate Tuoranthene	36.0		μg/L μα/Ι	50.0		72.0	8-158			
IUOTATIUICIIC	45.9	5.00	μg/L	50.0		91.7	26-137			



### QUALITY CONTROL

# Semivolatile Organic Compounds by - GC/MS - Quality Control

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
atch B266189 - SW-846 3510C										
CS (B266189-BS1)				Prepared: 09	/10/20 Analy	zed: 09/11/2	20			
luorene	43.3	5.00	μg/L	50.0		86.6	59-121			
Iaphthalene	36.1	5.00	$\mu g/L$	50.0		72.3	21-133			
Nitrophenol	39.9	10.0	$\mu g/L$	50.0		79.8	29-182			
Nitrophenol	21.0	10.0	$\mu g/L$	50.0		41.9	10-132			
nenanthrene	43.9	5.00	$\mu g/L$	50.0		87.9	54-120			
Methylphenol	33.4	10.0	$\mu g/L$	50.0		66.9	40-140			
enol	17.6	10.0	μg/L	50.0		35.1	5-120			
4-Methylphenol	32.4	20.0	μg/L	50.0		64.8	40-140			
rene	41.1	5.00	μg/L	50.0		82.2	52-120			
4,6-Trichlorophenol	41.3	10.0	μg/L	50.0		82.7	37-144			
rrogate: 2-Fluorophenol	107		$\mu g/L$	200		53.3	15-110			
rrogate: Phenol-d6	68.7		$\mu g/L$	200		34.3	15-110			
rrogate: Nitrobenzene-d5	80.7		$\mu g/L$	100		80.7	30-130			
rrogate: 2-Fluorobiphenyl	93.5		$\mu g/L$	100		93.5	30-130			
arrogate: 2,4,6-Tribromophenol	198		$\mu g/L$	200		98.9	15-110			
rrogate: p-Terphenyl-d14	101		$\mu g/L$	100		101	30-130			
CS Dup (B266189-BSD1)				Prepared: 09	/10/20 Analy	zed: 09/11/2	20			
enaphthene	37.5	5.00	$\mu g \! / \! L$	50.0		74.9	47-145	3.23	48	
enaphthylene	40.6	5.00	$\mu g \! / \! L$	50.0		81.1	33-145	2.48	74	
nthracene	42.5	5.00	μg/L	50.0		85.0	27-133	0.960	66	
enzo(g,h,i)perylene	42.9	5.00	μg/L	50.0		85.9	10-219	1.50	97	
itylbenzylphthalate	35.7	10.0	μg/L	50.0		71.4	10-152	2.00	60	
Chloro-3-methylphenol	38.3	10.0	μg/L	50.0		76.5	22-147	1.48	73	
Chlorophenol	34.7	10.0	μg/L	50.0		69.4	23-134	2.98	61	
-n-butylphthalate	41.3	10.0	μg/L	50.0		82.6	10-120	2.56	47	
4-Dichlorophenol	38.4	10.0	μg/L	50.0		76.8	39-135	3.86	50	
ethylphthalate	38.2	10.0	μg/L	50.0		76.3	10-120	1.20	100	
4-Dimethylphenol	36.8	10.0	μg/L	50.0		73.5	32-120	1.67	58	
methylphthalate	41.0	10.0	μg/L	50.0		81.9	10-120	1.38	183	
6-Dinitro-2-methylphenol	35.7	10.0	μg/L	50.0		71.5	10-181	3.71	203	
1-Dinitrophenol	30.8	10.0	μg/L	50.0		61.6	10-191	1.61	132	
-n-octylphthalate	32.6	10.0	μg/L	50.0		65.1	4-146	2.40	69	
s(2-Ethylhexyl)phthalate	34.8	10.0	μg/L	50.0		69.5	8-158	3.45	82	
uoranthene	44.9	5.00	$\mu g/L$	50.0		89.8	26-137	2.07	66	
uorene	41.7	5.00	μg/L	50.0		83.4	59-121	3.67	38	
phthalene	34.9	5.00	μg/L	50.0		69.8	21-133	3.55	65	
Nitrophenol	38.3	10.0	μg/L	50.0		76.5	29-182	4.17	55	
Nitrophenol	20.6	10.0	μg/L	50.0		41.2	10-132	1.83	131	
enanthrene	42.9	5.00	μg/L	50.0		85.9	54-120	2.30	39	
Methylphenol	33.1	10.0	μg/L	50.0		66.2	40-140	1.02	30	
enol	17.0	10.0	μg/L	50.0		34.1	5-120	2.89	64	
1-Methylphenol	31.4	20.0	μg/L	50.0		62.8	40-140	3.20	30	
rene	40.4	5.00	μg/L	50.0		80.9	52-120	1.64	49	
4,6-Trichlorophenol	40.9	10.0	μg/L	50.0		81.7	37-144	1.14	58	
urrogate: 2-Fluorophenol	102		μg/L	200		51.2	15-110			
rrogate: Phenol-d6	66.5		$\mu g/L$	200		33.3	15-110			
nrrogate: Nitrobenzene-d5	76.7		$\mu g/L$	100		76.7	30-130			
urrogate: 2-Fluorobiphenyl	91.8		$\mu g/L$	100		91.8	30-130			
urrogate: 2,4,6-Tribromophenol	195		$\mu g/L$	200		97.3	15-110			
ırrogate: p-Terphenyl-d14	100		μg/L	100		100	30-130			



### QUALITY CONTROL

# Polychlorinated Biphenyls By GC/ECD - Quality Control

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch B266188 - SW-846 3510C										
Blank (B266188-BLK1)				Prepared: 09	/10/20 Analy	yzed: 09/14/	20			
Aroclor-1016	ND	0.100	μg/L							
Aroclor-1016 [2C]	ND	0.100	$\mu g/L$							
Aroclor-1221	ND	0.100	$\mu g/L$							
Aroclor-1221 [2C]	ND	0.100	$\mu g/L$							
Aroclor-1232	ND	0.100	$\mu g/L$							
Aroclor-1232 [2C]	ND	0.100	μg/L							
Aroclor-1242	ND	0.100	μg/L							
Aroclor-1242 [2C]	ND	0.100	μg/L							
Aroclor-1248	ND	0.100	μg/L							
Aroclor-1248 [2C]	ND	0.100	μg/L							
Aroclor-1254	ND	0.100	μg/L							
Aroclor-1254 [2C]	ND	0.100	μg/L							
Aroclor-1260	ND	0.100	$\mu \text{g/L}$							
Aroclor-1260 [2C]	ND	0.100	μg/L							
Surrogate: Decachlorobiphenyl	1.03		μg/L	1.00		103	30-150			
Surrogate: Decachlorobiphenyl [2C]	1.08		$\mu g/L$	1.00		108	30-150			
Surrogate: Tetrachloro-m-xylene	0.874		$\mu g/L$	1.00		87.4	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	0.923		$\mu g/L$	1.00		92.3	30-150			
LCS (B266188-BS1)				Prepared: 09	/10/20 Analy	yzed: 09/14/	20			
Aroclor-1016	0.423	0.200	μg/L	0.500		84.7	50-140			
Aroclor-1016 [2C]	0.392	0.200	$\mu g/L$	0.500		78.4	50-140			
Aroclor-1260	0.417	0.200	$\mu g/L$	0.500		83.5	8-140			
Aroclor-1260 [2C]	0.431	0.200	$\mu g/L$	0.500		86.3	8-140			
Surrogate: Decachlorobiphenyl	2.00		μg/L	2.00		99.8	30-150			
Surrogate: Decachlorobiphenyl [2C]	2.12		μg/L	2.00		106	30-150			
Surrogate: Tetrachloro-m-xylene	1.60		μg/L	2.00		80.0	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	1.67		μg/L	2.00		83.5	30-150			
LCS Dup (B266188-BSD1)				Prepared: 09	/10/20 Analy	yzed: 09/14/	20			
Aroclor-1016	0.435	0.200	μg/L	0.500		87.0	50-140	2.67		
Aroclor-1016 [2C]	0.432	0.200	μg/L	0.500		86.4	50-140	9.78		
Aroclor-1260	0.431	0.200	μg/L	0.500		86.1	8-140	3.15		
Aroclor-1260 [2C]	0.458	0.200	$\mu g/L$	0.500		91.6	8-140	5.96		
Surrogate: Decachlorobiphenyl	2.04		μg/L	2.00		102	30-150			
Surrogate: Decachlorobiphenyl [2C]	2.20		μg/L μg/L	2.00		110	30-150			
Surrogate: Tetrachloro-m-xylene	1.66		μg/L	2.00		83.0	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	1.77		μg/L	2.00		88.7	30-150			
Matrix Spike (B266188-MS1)	Sour	rce: 2010207-0	)1	Prepared: 09	/10/20 Analy	yzed: 09/14/	20			
Aroclor-1016	0.265	0.100	μg/L	0.250	ND	106	50-140			
Aroclor-1016 [2C]	0.253	0.100	$\mu \text{g/L}$	0.250	ND	101	50-140			
Aroclor-1260	0.184	0.100	$\mu \text{g/L}$	0.250	ND	73.6	8-140			
Aroclor-1260 [2C]	0.174	0.100	$\mu g/L$	0.250	ND	69.5	8-140			
Surrogate: Decachlorobiphenyl	0.905		μg/L	1.00		90.5	30-150			
Surrogate: Decachlorobiphenyl [2C]	0.980		μg/L	1.00		98.0	30-150			
Surrogate: Tetrachloro-m-xylene	0.791		μg/L	1.00		79.1	30-150			



Surrogate: Tetrachloro-m-xylene [2C]

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

### QUALITY CONTROL

# Polychlorinated Biphenyls By GC/ECD - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B266188 - SW-846 3510C										
Matrix Spike Dup (B266188-MSD1)	Source	ce: 2010207-0	1	Prepared: 09	/10/20 Analy	zed: 09/14/2	20			
Aroclor-1016	0.238	0.100	μg/L	0.250	ND	95.0	50-140	10.8	36	
Aroclor-1016 [2C]	0.258	0.100	$\mu g/L$	0.250	ND	103	50-140	1.66	36	
Aroclor-1260	0.187	0.100	$\mu g/L$	0.250	ND	74.9	8-140	1.81	38	
Aroclor-1260 [2C]	0.183	0.100	$\mu g/L$	0.250	ND	73.4	8-140	5.33	38	
Surrogate: Decachlorobiphenyl	0.928		μg/L	1.00		92.8	30-150			
Surrogate: Decachlorobiphenyl [2C]	0.991		μg/L	1.00		99.1	30-150			
Surrogate: Tetrachloro-m-xylene	0.813		μg/L	1.00		81.3	30-150			

 $\mu g/L$ 

1.00

85.8

30-150



### QUALITY CONTROL

# Metals Analyses (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B265838 - EPA 245.1										
Blank (B265838-BLK1)				Prepared: 09	0/04/20 Anal	yzed: 09/08/2	20			
Mercury	ND	0.00010	mg/L	-						
LCS (B265838-BS1)				Prepared: 09	9/04/20 Anal	vzed: 09/08/2	20			
Mercury	0.00380	0.00010	mg/L	0.00400	<u> </u>	94.9	85-115			
LCS Dup (B265838-BSD1)				Prepared: 00	9/04/20 Anal	vzed: 09/08/	20			
Mercury	0.00383	0.00010	mg/L	0.00400	701/20 711141	95.6	85-115	0.760	20	
	0.00383			0.00100		75.0	05 115	0.700	20	
Batch B265982 - EPA 200.8										
Blank (B265982-BLK1)				Prepared: 09	9/08/20 Anal	yzed: 09/09/2	20			
Antimony	ND	1.0	$\mu g\!/\!L$							
Arsenic	ND	0.80	μg/L							
Cadmium	ND	0.20	μg/L							
Chromium	ND	1.0	μg/L							
Chromium, Trivalent	0.0		mg/L							
Copper	ND	1.0	μg/L							
Lead	ND	0.50	μg/L							
Vickel	ND	5.0	μg/L							
elenium	ND	5.0	μg/L							
ilver	ND	0.20	μg/L							
Zinc	ND	10	μg/L							
LCS (B265982-BS1)				Prepared: 09	0/08/20 Anal	yzed: 09/09/2	20			
Antimony	486	10	$\mu \text{g/L}$	500		97.3	85-115			
Arsenic	496	8.0	μg/L	500		99.1	85-115			
Cadmium	498	2.0	μg/L	500		99.5	85-115			
Chromium	496	10	μg/L	500		99.3	85-115			
Copper	960	10	μg/L	1000		96.0	85-115			
Lead	500	5.0	μg/L	500		100	85-115			
Nickel	503	50	μg/L	500		101	85-115			
Selenium	481	50	μg/L	500		96.2	85-115			
Silver	478	2.0	μg/L	500		95.6	85-115			
Zinc	971	100	μg/L	1000		97.1	85-115			
LCS Dup (B265982-BSD1)				Prepared: 09	0/08/20 Anal	yzed: 09/09/2	20			
Antimony	498	10	$\mu \text{g/L}$	500		99.6	85-115	2.34	20	
Arsenic	507	8.0	$\mu \text{g/L}$	500		101	85-115	2.23	20	
Cadmium	512	2.0	$\mu \text{g/L}$	500		102	85-115	2.93	20	
Chromium	506	10	$\mu \text{g/L}$	500		101	85-115	1.99	20	
Copper	983	10	$\mu \text{g/L}$	1000		98.3	85-115	2.37	20	
Lead	506	5.0	$\mu \text{g/L}$	500		101	85-115	1.11	20	
Nickel	514	50	$\mu \text{g/L}$	500		103	85-115	2.16	20	
Selenium	498	50	$\mu \text{g/L}$	500		99.5	85-115	3.43	20	
Silver	495	2.0	$\mu g/L$	500		98.9	85-115	3.43	20	
Zinc	991	100	μg/L	1000		99.1	85-115	1.98	20	



### QUALITY CONTROL

# Metals Analyses (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B265985 - EPA 200.7										
Blank (B265985-BLK1)				Prepared: 09	0/08/20 Anal	yzed: 09/09/2	20			
Iron	ND	0.050	mg/L							
Hardness	ND	1.4	mg/L							
LCS (B265985-BS1)				Prepared: 09	0/08/20 Anal	yzed: 09/09/2	20			
Iron	4.02	0.050	mg/L	4.00		100	85-115			
Hardness	26	1.4	mg/L	26.4		98.1	85-115			
LCS Dup (B265985-BSD1)				Prepared: 09	0/08/20 Anal	yzed: 09/09/2	20			
Iron	4.16	0.050	mg/L	4.00		104	85-115	3.59	20	
Hardness	27	1.4	mg/L	26.4		102	85-115	3.48	20	



### 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
	Result	Liiiit	Omts	LCVCI	Result	/UICEC	Lillits	KI D	Lillit	110103
Batch B265815 - SM21-22 3500 Cr B										
Blank (B265815-BLK1)				Prepared & A	Analyzed: 09/	/03/20				
Hexavalent Chromium	ND	0.0040	mg/L							
LCS (B265815-BS1)				Prepared & A	Analyzed: 09/	/03/20				
Hexavalent Chromium	0.10	0.0040	mg/L	0.100		103	90-115			
LCS Dup (B265815-BSD1)				Prepared & A	Analyzed: 09	/03/20				
Hexavalent Chromium	0.10	0.0040	mg/L	0.100		103	90-115	0.00	11	
Matrix Spike (B265815-MS1)	Sou	rce: 2010207-(	)2	Prepared & A	Analyzed: 09/	/03/20				
Hexavalent Chromium	0.10	0.0040	mg/L	0.100	ND	101	34.7-148			
Matrix Spike Dup (B265815-MSD1)	Sou	rce: 2010207-(	)2	Prepared & A	Analyzed: 09/	/03/20				
Hexavalent Chromium	0.10	0.0040	mg/L	0.100	ND		34.7-148	2.50	13.2	
Batch B265819 - SM21-22 4500 CL G										
Blank (B265819-BLK1)				Prepared & A	Analyzed: 09	/03/20				
Chlorine, Residual	ND	0.020	mg/L							
LCS (B265819-BS1)				Prepared & A	Analyzed: 09	/03/20				
Chlorine, Residual	0.68	0.020	mg/L	0.641		105	85.3-130			
LCS Dup (B265819-BSD1)				Prepared & A	Analyzed: 09/	/03/20				
Chlorine, Residual	0.67	0.020	mg/L	0.641		105	85.3-130	0.574	13.6	
Ouplicate (B265819-DUP1)	Sou	rce: 2010207-(	)1	Prepared & A	Analyzed: 09/	/03/20				
Chlorine, Residual	0.045	0.020	mg/L	•	0.053			15.8	29.4	
Matrix Spike (B265819-MS1)	Son	rce: 2010207-(	)1	Prepared &	Analyzed: 09	/03/20				
Chlorine, Residual	0.049	0.020	mg/L	1.00		-0.387 *	10-169			MS-07
Batch B265934 - SM21-22 2540D										
Blank (B265934-BLK1)				Prepared & A	Analyzed: 09	/08/20				
Total Suspended Solids	ND	2.5	mg/L	-	-					
LCS (B265934-BS1)				Prepared & A	Analyzed: 09/	/08/20				
Total Suspended Solids	180	10	mg/L	200		90.0	57.4-123			
Batch B266002 - SM19-22 4500 NH3 C										
Blank (B266002-BLK1)				Prepared & A	Analyzed: 09	/08/20				
Ammonia as N	ND	0.30	mg/L							



### 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
-	Result	Limit	Oma	Level	Result	/UKLC	Limits	Ki D	Liiiit	110103
Batch B266002 - SM19-22 4500 NH3 C										
LCS (B266002-BS1)				Prepared &	Analyzed: 09	/08/20				
Ammonia as N	5.0	0.30	mg/L	5.00		101	86.9-110			
LCS Dup (B266002-BSD1)				Prepared &	Analyzed: 09	/08/20				
Ammonia as N	5.0	0.30	mg/L	5.00		101	86.9-110	0.00	9.37	
Batch B266082 - EPA 300.0										
Blank (B266082-BLK1)				Prepared &	Analyzed: 09	/09/20				
Chloride	ND	1.0	mg/L							
LCS (B266082-BS1)				Prepared &	Analyzed: 09	/09/20				
Chloride	10		mg/L	10.0		100	90-110			
LCS Dup (B266082-BSD1)				Prepared &	Analyzed: 09	/09/20				
Chloride	10		mg/L	10.0		100	90-110	0.0319	20	
Duplicate (B266082-DUP1)	Source	e: <b>2010207-</b> 0	)1	Prepared &	Analyzed: 09	/09/20				
Chloride	960	25	mg/L		960	)		0.0980	20	
Matrix Spike (B266082-MS1)	Source	e: <b>2010207-</b> 0	)1	Prepared &	Analyzed: 09	/09/20				
Chloride	1100	25	mg/L	250	960	62.6 *	80-120			MS-08
Batch B266166 - EPA 1664B										
Blank (B266166-BLK1)				Prepared &	Analyzed: 09	/10/20				
Silica Gel Treated HEM (SGT-HEM)	ND	1.4	mg/L							
LCS (B266166-BS1)				Prepared &	Analyzed: 09	/10/20				
Silica Gel Treated HEM (SGT-HEM)	9.1		mg/L	10.0		91.0	64-132			
Duplicate (B266166-DUP1)	Source	e: <b>2010207-</b> 0	)1	Prepared &	Analyzed: 09	/10/20				
Silica Gel Treated HEM (SGT-HEM)	ND	1.6	mg/L		ND	)		NC	18	
Matrix Spike (B266166-MS1)	Source	e: <b>2010207-</b> 0	)1	Prepared &	Analyzed: 09	/10/20				
Silica Gel Treated HEM (SGT-HEM)	73	14	mg/L	100	ND	73.0	64-132			



### QUALITY CONTROL

# **Drinking Water Organics EPA 504.1 - Quality Control**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B266195 - EPA 504 water										
Blank (B266195-BLK1)				Prepared &	Analyzed: 09	/10/20				
1,2-Dibromoethane (EDB)	ND	0.021	μg/L							
Surrogate: 1,3-Dibromopropane	1.08		$\mu g/L$	1.04		103	70-130			
LCS (B266195-BS1)				Prepared &	Analyzed: 09	/10/20				
1,2-Dibromoethane (EDB)	0.218	0.021	μg/L	0.262		83.2	70-130			
Surrogate: 1,3-Dibromopropane	1.10		μg/L	1.05		105	70-130			
LCS Dup (B266195-BSD1)				Prepared &	Analyzed: 09	/10/20				
1,2-Dibromoethane (EDB)	0.216	0.021	μg/L	0.260		82.8	70-130	1.20		
Surrogate: 1,3-Dibromopropane	0.963		μg/L	1.04		92.5	70-130			
MRL Check (B266195-MRL1)				Prepared &	Analyzed: 09	/10/20				
1,2-Dibromoethane (EDB)	0.0220	0.021	μg/L	0.0210		105	0-200			
Surrogate: 1,3-Dibromopropane	1.13		μg/L	1.05		107	70-130			
MRL Check (B266195-MRL2)				Prepared &	Analyzed: 09	/10/20				
1,2-Dibromoethane (EDB)	0.0176	0.021	μg/L	0.0207		85.0	0-200			J
Surrogate: 1,3-Dibromopropane	1.11		μg/L	1.04		107	70-130			



# IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

LCS	

Lab Sample ID:	B266188-BS1		Date(s) Analyzed:	09/14/2020	09/14/2020	_
Instrument ID (1):	ECD 9	_	Instrument ID (2):	ECD 9		
GC Column (1):	ID:	(mm)	GC Column (2):		ID: (m	nm

ANALYTE	COL	COL RT		NDOW	CONCENTRATION	%RPD
7.10/12112	002	111	FROM	TO	OONOLIVITUUTOIV	70111 15
Aroclor-1016	1	0.000	0.000	0.000	0.423	
	2	0.000	0.000	0.000	0.392	6.9
Aroclor-1260	1	0.000	0.000	0.000	0.417	
	2	0.000	0.000	0.000	0.431	2.6



# IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

LCS Dup	

Lab Sample ID: B266188-BSD1			Date(s) Analyzed:	09/14/2020	09/14/202	20
Instrument ID (1):	ment ID (1): ECD 9		Instrument ID (2):	ECD 9		
GC Column (1):	ID:	(mm)	GC Column (2):		ID:	(mm

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
7.10.12.112	002		FROM	TO	00110211111111111111	70111 2
Aroclor-1016	1	0.000	0.000	0.000	0.435	
	2	0.000	0.000	0.000	0.432	1.8
Aroclor-1260	1	0.000	0.000	0.000	0.431	
	2	0.000	0.000	0.000	0.458	6.3



# IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

Matrix Spike

Lab Sample ID: B266188-MS1			Date(s) Analyzed:	09/14/2020 09/14/20		1/2020
Instrument ID (1): ECD 9			Instrument ID (2):	ECD 9		
GC Column (1):	ID:	(mm)	GC Column (2):		ID:	(mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
7.1.0.12112	002		FROM	TO	00110211111111111111	70111 2
Aroclor-1016	1	0.000	0.000	0.000	0.265	
	2	0.000	0.000	0.000	0.253	6.5
Aroclor-1260	1	0.000	0.000	0.000	0.184	
	2	0.000	0.000	0.000	0.174	3.4



# IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

Matrix Spike Dup

Lab Sample ID: B266188-MSI			Date(s) Analyzed:	09/14/2020	09/14/2020	
Instrument ID (1):	ment ID (1): ECD 9		Instrument ID (2):	ECD 9		-
GC Column (1):	ID:	(mm)	GC Column (2):		ID:	(mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
7.1.0.12.1.2	002		FROM	TO	00110211111111111111	70111 2
Aroclor-1016	1	0.000	0.000	0.000	0.238	
	2	0.000	0.000	0.000	0.258	7.2
Aroclor-1260	1	0.000	0.000	0.000	0.187	
	2	0.000	0.000	0.000	0.183	3.8



# IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

I CS	
LCS	

EPA 504.1

La	b Sample ID: B26	6195-BS1	l	Da	ate(s) Analy	zed: 09/10/2020	09/1	0/2020
Ins	strument ID (1):			In	strument ID	(2):		
G	C Column (1):	ID:	(m	nm) G	C Column (2	2):	ID:	(mm)
	ANALYTE	COL	RT	RT WI	NDOW	CONCENTRATION	%RPD	
				FROM	ТО			
	1.2-Dibromoethane (FDB)	1	3.050	0.000	0.000	0.218		



# IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

1.00 D	
LCS Dup	

EPA 504.1

La	b Sample ID: B266	3195-BSD	1	Da	ate(s) Analy	zed: 09/10/2020	09/1	0/2020
Ins	strument ID (1):			In	strument ID	(2):		
G	C Column (1):	ID:	(m	nm) G	C Column (2	2):	ID:	(mm
	ANALYTE	COL	RT	RT WI	NDOW	CONCENTRATION	%RPD	
				FROM	TO			
Ī	1,2-Dibromoethane (EDB)	1	3 058	0.000	0.000	0.216		



#### FLAG/QUALIFIER SUMMARY

*	OC 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.
J	Detected but below the Reporting Limit (lowest calibration standard); therefore, result is an estimated concentration (CLP J-Flag).
MS-07	Matrix spike recovery is outside of control limits. Analysis is in control based on laboratory fortified blank recovery. Possibility of sample matrix effects that lead to low bias for reported result or non-homogeneous sample aliquot cannot be eliminated.
MS-08	Matrix spike recovery outside of control limits. Possibility of sample matrix effects that lead to a low bias for reported result or non-homogeneous sample aliquots cannot be eliminated.
RL-11	Elevated reporting limit due to high concentration of target compounds.
RL-12	Elevated reporting limit due to matrix interference.
S-07	One associated surrogate standard recovery is outside of control limits but the other(s) is/are within limits. All recoveries are > 10%
V-04	Initial calibration did not meet method specifications. Compound was calibrated using a response factor where %RSD is outside of method specified criteria. Reported result is estimated.



#### CERTIFICATIONS

#### Certified Analyses included in this Report

Analyte	Certifications
608.3 in Water	
Aroclor-1016	CT,MA,NH,NY,RI,NC,ME,VA
Aroclor-1016 [2C]	CT,MA,NH,NY,RI,NC,ME,VA
Aroclor-1221	CT,MA,NH,NY,RI,NC,ME,VA
Aroclor-1221 [2C]	CT,MA,NH,NY,RI,NC,ME,VA
Aroclor-1232	CT,MA,NH,NY,RI,NC,ME,VA
Aroclor-1232 [2C]	CT,MA,NH,NY,RI,NC,ME,VA
Aroclor-1242	CT,MA,NH,NY,RI,NC,ME,VA
Aroclor-1242 [2C]	CT,MA,NH,NY,RI,NC,ME,VA
Aroclor-1248	CT,MA,NH,NY,RI,NC,ME,VA
Aroclor-1248 [2C]	CT,MA,NH,NY,RI,NC,ME,VA
Aroclor-1254	CT,MA,NH,NY,RI,NC,ME,VA
Aroclor-1254 [2C]	CT,MA,NH,NY,RI,NC,ME,VA
Aroclor-1260	CT,MA,NH,NY,RI,NC,ME,VA
Aroclor-1260 [2C]	CT,MA,NH,NY,RI,NC,ME,VA
624.1 in Water	
Acetone	CT,NY,MA,NH
tert-Amyl Methyl Ether (TAME)	MA
Benzene	CT,NY,MA,NH,RI,NC,ME,VA
Bromodichloromethane	CT,NY,MA,NH,RI,NC,ME,VA
Bromoform	CT,NY,MA,NH,RI,NC,ME,VA
Bromomethane	CT,NY,MA,NH,RI,NC,ME,VA
tert-Butyl Alcohol (TBA)	NY,MA
Carbon Tetrachloride	CT,NY,MA,NH,RI,NC,ME,VA
Chlorobenzene	CT,NY,MA,NH,RI,NC,ME,VA
Chlorodibromomethane	CT,NY,MA,NH,RI,NC,ME,VA
Chloroethane	CT,NY,MA,NH,RI,NC,ME,VA
Chloroform	CT,NY,MA,NH,RI,NC,ME,VA
Chloromethane	CT,NY,MA,NH,RI,NC,ME,VA
1,2-Dichlorobenzene	CT,NY,MA,NH,RI,NC,ME,VA
1,3-Dichlorobenzene	CT,NY,MA,NH,RI,NC,ME,VA
1,4-Dichlorobenzene	CT,NY,MA,NH,RI,NC,ME,VA
1,2-Dichloroethane	CT,NY,MA,NH,RI,NC,ME,VA
1,1-Dichloroethane	CT,NY,MA,NH,RI,NC,ME,VA
1,1-Dichloroethylene	CT,NY,MA,NH,RI,NC,ME,VA
trans-1,2-Dichloroethylene	CT,NY,MA,NH,RI,NC,ME,VA
1,2-Dichloropropane	CT,NY,MA,NH,RI,NC,ME,VA
cis-1,3-Dichloropropene	CT,NY,MA,NH,RI,NC,ME,VA
1,4-Dioxane	MA
trans-1,3-Dichloropropene	CT,NY,MA,NH,RI,NC,ME,VA
Ethanol	NY,MA,NH
Ethylbenzene	CT,NY,MA,NH,RI,NC,ME,VA
Methyl tert-Butyl Ether (MTBE)	NY,MA,NH,NC
Methylene Chloride	CT,NY,MA,NH,RI,NC,ME,VA
Naphthalene	NY,MA,NC
1,1,2,2-Tetrachloroethane	CT,NY,MA,NH,RI,NC,ME,VA
Tetrachloroethylene	CT,NY,MA,NH,RI,NC,ME,VA



#### CERTIFICATIONS

#### Certified Analyses included in this Repor

Hardness

Certified Analyses included in this Report		
Analyte	Certifications	
624.1 in Water		
Toluene	CT,NY,MA,NH,RI,NC,ME,VA	
1,1,1-Trichloroethane	CT,NY,MA,NH,RI,NC,ME,VA	
1,1,2-Trichloroethane	CT,NY,MA,NH,RI,NC,ME,VA	
Trichloroethylene	CT,NY,MA,NH,RI,NC,ME,VA	
Trichlorofluoromethane (Freon 11)	CT,NY,MA,NH,RI,NC,ME,VA	
Vinyl Chloride	CT,NY,MA,NH,RI,NC,ME,VA	
m+p Xylene	CT,NY,MA,NH,RI,NC	
o-Xylene	CT,NY,MA,NH,RI,NC	
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	
Benzo(g,h,i)perylene	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	
2-Chlorophenol	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	
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	
Di-n-octylphthalate	CT,MA,NH,NY,NC,RI,ME,VA	
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	
Naphthalene	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	
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	
2,4,6-Trichlorophenol	CT,MA,NH,NY,NC,RI,ME,VA	
2-Fluorophenol	NC	
2-Fluorophenol	NC,VA	
Phenol-d6	VA	
Nitrobenzene-d5	VA	
EPA 200.7 in Water		
Iron	CT,MA,NH,NY,RI,NC,ME,VA	

CT,MA,NH,NY,RI,VA



#### CERTIFICATIONS

#### Certified Analyses included in this Report

Analyte	Certifications
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
SM19-22 4500 NH3 C in Water	
Ammonia as N	NY,MA,CT,RI,VA,NC,ME
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
SM21-22 4500 CN E in Water	

Cyanide CT,MA,NH,NY,RI,NC,ME,VA

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

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC - ISO17025:2017	100033	03/1/2022
MA	Massachusetts DEP	M-MA100	06/30/2021
CT	Connecticut Department of Publilc Health	PH-0567	09/30/2021
NY	New York State Department of Health	10899 NELAP	04/1/2021
NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2021
RI	Rhode Island Department of Health	LAO00112	12/30/2020
NC	North Carolina Div. of Water Quality	652	12/31/2020
NJ	New Jersey DEP	MA007 NELAP	06/30/2021
FL	Florida Department of Health	E871027 NELAP	06/30/2021
VT	Vermont Department of Health Lead Laboratory	LL015036	07/30/2021
ME	State of Maine	2011028	06/9/2021
VA	Commonwealth of Virginia	460217	12/14/2020
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2021
VT-DW	Vermont Department of Health Drinking Water	VT-255716	06/12/2021
NC-DW	North Carolina Department of Health	25703	07/31/2021
PA	Commonwealth of Pennsylvania DEP	68-05812	06/30/2021
MI	Dept. of Env, Great Lakes, and Energy	9100	10/1/2020

bord Tol

Doc # 381 Rev 1\_03242017

http://www.contestlabs.com

CHAIN OF CUSTODY RECORD

Phone: 413-525-2332

<sup>2</sup> Preservation Codes: X = Sodium Hydroxide ' Matrix Codes: GW = Ground Water WW = Waste Water DW = Drinking Water = Sodium Bisulfate 5 = Summa Canister Container Codes: Page\_1\_\_of\_\_1\_\_ 0 = Other (please O = Other (please 0 = Other (please A = Amber Glass G = Glass Non Soxhlet = Sulfuric Acid PCB ONLY <sup>2</sup> Preservation Code O Field Filtered = Tedlar Bag Soxhlet O Field Filtered N = Nitric Acid O Lab to Filter O Lab to Filter M = Methanol P = Plastic ST = Sterile <sup>3</sup> Container Code S = Soil SL = Studge = Sodium **Thiosulfate** SOL = Solid # of Containers V = Vial define) = Iced define) A = Air Please use the following codes to indicate possible sample concentration within the Conc Chromium VI z 4ardness EDB × H - High; M - Medium; L - Low; C - Clean; U - Unknown SSJ MELAC and AHALLAP, LLC Acore Chromatogram AIHA-LAP,LLC www.contestiabs.com 39 Spruce Street East Longmeadow, MA 01028 × × bCB.2 ANALYSIS REQUESTED ₹ × Code column above: Other × 5,00/ Cyanide × Cu, Fe, Pb, Hg, Ni, Se, Ag, Zn) □ WRTA otal Metals (Sb, As, Cd, Cr III, Ω. TRC MA MCP Required MCP Certification Form Required RCP Certification Form Required CT RCP Required ορμοιμο × MWRA MA State DW Required School MBTA Special Requirements **StriommA** 9 8 8 8 jjennings@lrt-llc.net thagie@Irt-Ilc.net Matrix Code 8 გ Municipality Brownfield 5-day 10-Day # QISMd Manifelt elec 4-Day EXCEL 3-Day Grab CLP Like Data Pkg Required: × × Composite PDF Government Ending Date/Time Email To: Oue Date: 0f-12-10 (12.4F 94 CB34 12230 ormat: '-Day 1-Day Other: Federal 2-Day City Project Entity Beginning Date/Time Officer Samples are for NPDES RGP Parameters. ockwood Remediation Technologies PH RW Email: info@contestlabs.com de Date/Time: 200 Client Sample ID / Description 06-06-90 Address: 89 Crawford Street, Leominster, MA 01453 Fax: 413-525-6405 bate/Time: Receiving Water ake/Time: Date/Time: Date/Time: Date/Time: Project Manager: Jake Jennings Con-Test Quote Name/Number: COP-ÉST. Project Name, Shall Wilford Relinquished by: Lagrature) Shed by: (signature) Phone: (774) 450-7177 Project Number: 2-2090 /ed by: (signature) Recorded by: (signature) H II: Con-Test Work Order# nvoice Recipient: semiely vineding. Project Location; Sampled By: Comments: Page 42 of 43

**Table of Contents** 

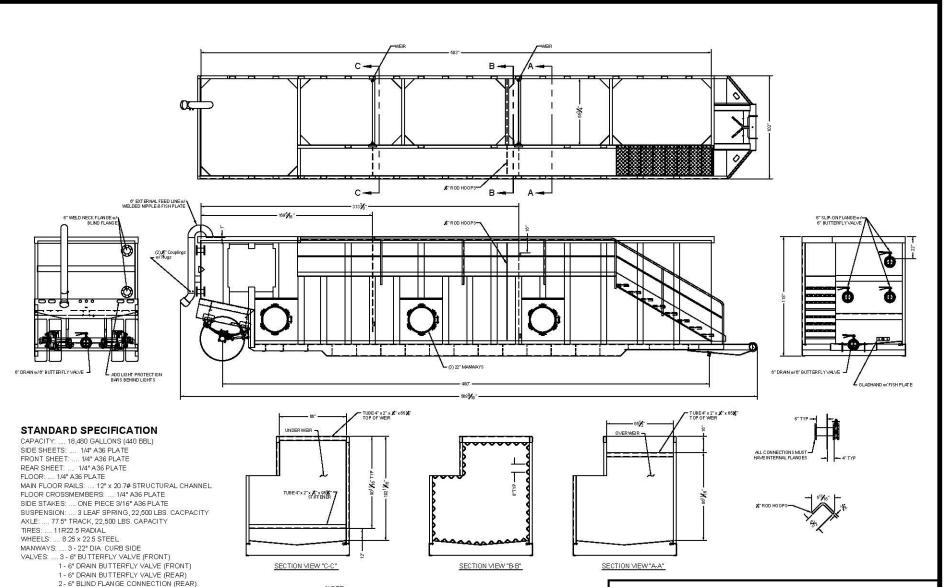
I Have Not Confirmed Sample Container
Numbers With Lab Staff Before Relinquishing
Over Samples\_\_\_\_\_



Doc# 277 Rev 5 2017

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#### NOTE: This drawing is a representation baseline for this model of tank. Variations between this drawing and the actual equipment do exist, primarily with appurtenance locations, sizes and quantities.

INLET PIPING: .... 1 - 6" PIPE SYSTEM (REAR)

# 18,000 gal. Weir Tank



#### Lockwood Remediation Technologies, LLC

89 Crawford Street Leominster, Massachusetts 01453 O: 774-450-7177 F: 888-835-0617

#### **Electric Motor Driven**

Sec. 130

**PAGE 660** AUGUST 2014





# **Submersible Pump**

## Models S3B1-E6 and S3B1



Size 3"

#### **PUMP SPECIFICATIONS**

Suction Head: Aluminum Alloy 356-T6 With Bonded Nitrile Lining;

Maximum Operating Pressure 50 psi (345 kPa).\*
Impeller: Ductile Iron 65-45-12.

Seal Plate: Aluminum Alloy 356-T6 With Bonded Nitrile Lining. Intermediate: Aluminum Alloy 356-T6.

Motor Housing: Aluminum Alloy 356-T6. Motor Shaft: Stainless Steel 416.

Bearings: Upper, Open Single Row Ball Bearing.
Lower, Two Shield, Double Row Ball Bearing.

Shaft Sleeve: Stainless Steel 304

Discharge Flange: Aluminum Alloy 356-T6. Gaskets: Cork with Nitrile Binder (NC710).

O-Rings: Buna-N.

Wetted Hardware: Standard Plated Steel and Stainless Steel.

Strainer: Urethane Coated Steel. 51% Open Area, 0.375" (9,5 mm) Diameter Openings.

Hoisting Bail: Urethane Coated Steel.

Standard Equipment

NEMA Type 3R Rainproof Control Box. (See Section130, Pages 80 and 85.)
Provides On-Off, Circuit Breaker and Motor Overload Protection.

**Optional Equipment** 

Liquid Level Control: (See Sec. 130, Page 150.)

a. Turtle Type Pressure Activated Level Switch.

b. .Float Activated Level Switch.

# Staging Adapter Kit. MOTOR/CABLE SPECIFICATIONS

Motor: Oil Filled Enclosure; 6.0 H.P.; 3450 R.P.M.

Single Phase: 230 Volt, 60 Hz, 34 Full Load AMPS, 7.2 kW (Max.) Three Phase: 200/230/460/575 Volt, 60 Hz, 26.5/23/11.5/9.2

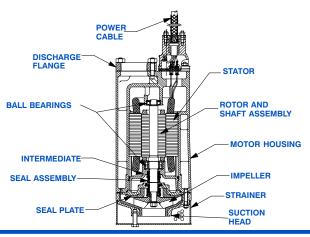
Full Load AMPS, 6.8 kW (Max.)

Power Cable: 4 Wire; Type SO/SOW/SOOW; 10 AWG; 3 Power Conductors, Plus 1 Ground. Nominal Length 50 Feet (15 m). Standard.

(Specify Alternate Length at Time of Order.)

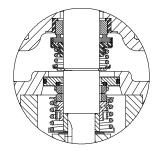
Recommended Generator Size: 15 kW Across the Line Start.

\*Consult Factory for Applications Exceeding Maximum Pressure and/or Temperature Indicated.









#### **SEAL SPECIFICATIONS**

Tandem, Oil Lubricated.

**Upper Seal:** Type 21, Mechanical. Carbon Rotating Face. Ni-Resist Stationary Face. Buna-N Elastomers. Stainless Steel 18-8 Cage and Spring.

Lower Seal: Type 2, Mechanical. Tungsten Titanium Carbide Rotating and Stationary Faces. Stainless Steel 316 Stationary Seat. Fluorocarbon Elastomers (DuPont Viton® or Equivalent). Stainless Steel 303/304 Cage and Spring.

Maximum Temperature of Liquid Pumped, 122°F (50°C).\*



#### GORMAN-RUPP PUMPS

www.grpumps.com

Specifications Subject to Change Without Notice

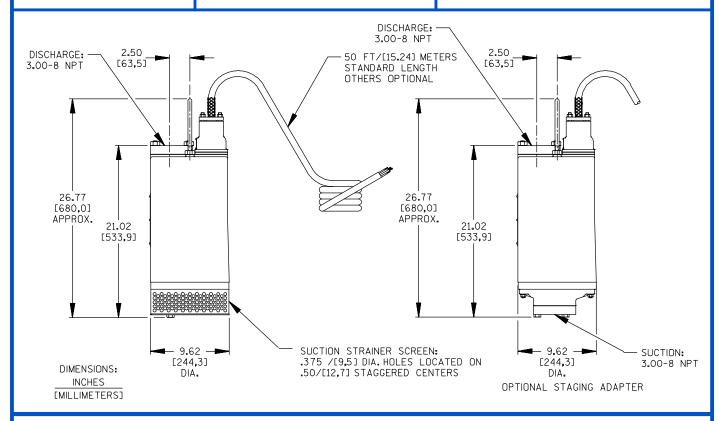
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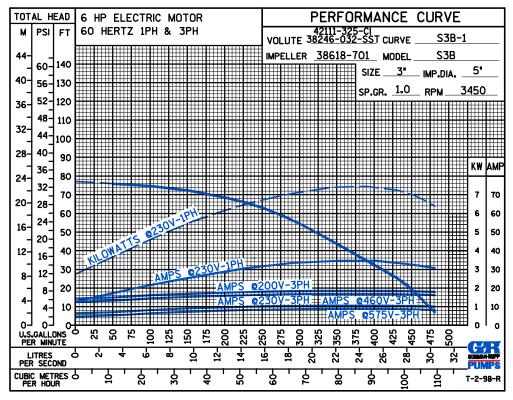
#### **Specification Data**

SECTION 130, PAGE 660

# APPROXIMATE DIMENSIONS and WEIGHTS

NET WEIGHT: SHIPPING WEIGHT: EXPORT CRATE SIZE: 145 LBS. (65,8 KG.) 155 LBS. (70,3 KG.) 7.8 CU. FT. (0,22 CU. M.)





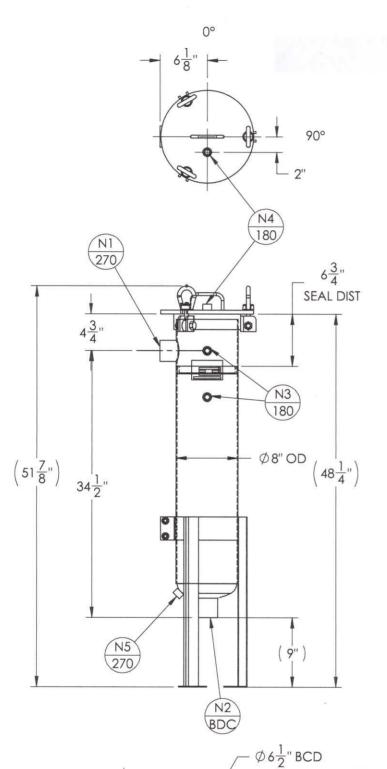


#### **GORMAN-RUPP PUMPS**

www.grpumps.com

Specifications Subject to Change Without Notice

Printed in U.S.A.



		NOZZLE	SCHEDULE		
MARK	QTY	SIZE	/ RATING	DESCI	RIPTION
N1	1	2" 150	# NPT	IN	LET
N2	1	2" 150	)# NPT	OU.	TLET
N3	2	1/2" 30	00# NPT	PRES	SS GA
N4	1	1/2" 30	00# NPT	VE	NT
N5	1	1/2" 30	00# NPT	CLEAN	DRAIN
N6	-		-	DIRT	/ DRAIN
	VESS	SEL DESIG	N CONDITION	S	
CODE:	BES	Т СОММЕ	RCIAL PRACT	ICE	
M.A.W.P.:	150 PSI @	250°F	M.D.M.T.:	-20° F	@ 150 PSI
M.A.E.P.:	15 PSI @	250°F			
CORROSION	ALLOWANCE	: NONE	HYDROTEST	PRESS:	195 PSI
STAMP:	'NC'		SERVICE:	NON I	ETHAL
PWHT:	N/A		RADIOGRAP	HY:	N/A
MATERIAL:	SS 304/	L	GASKET:	BUN	IA-N

DRY WEIGHT: 77.62 #'s FLOODED WEIGHT: 140 #'s SHIPPING WEIGHT: 100 #'s VESSEL VOLUME: 1.0 C.F.





1:1

 $otin \frac{1}{2}$ " TYP.



# Polyester Liquid Filter Bag



#### **Features**

- \* Polyester liquid bag filter are available with a carbon steel ring, stainless steel ring or plastic flanges.
- \* Heavy-duty handle eases installation and removal
- \* Metal ring sewn into bag top for increased durability and positive sealing
- \* Wide array of media fibers to meet needed temperature and micron specifications

## Applications

Polyester liquid filter bags can be used in the filtering of a wide array of industrial and commercial process fluids

#### Sizes

Our liquid filter bags are available for all common liquid bag housings. Dimensions range from 4.12" diameter X 8" length thru 9" diameter X 32" length.

### Micron Ratings

Available fibers range from 1 to 1500 microns

### **Options**

- \* Bag finish or covers for strict migration requirements.
- \* Plastic top O.E.M. replacements
- \* Multi-layered filtering capabilities for higher dirt holding capacities

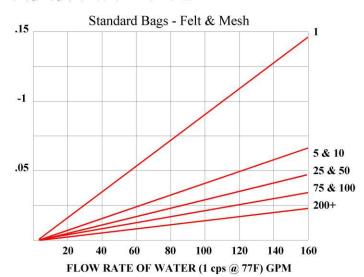
## **Optional Filter Media**

Felt: Nomex, Polyester, Polypropylene

Monofilament: Nylon, Polyester, Polypropylene

Multifilament: Nylon, Polyester

Polypropylene: Oil Removal





89 Crawford Street

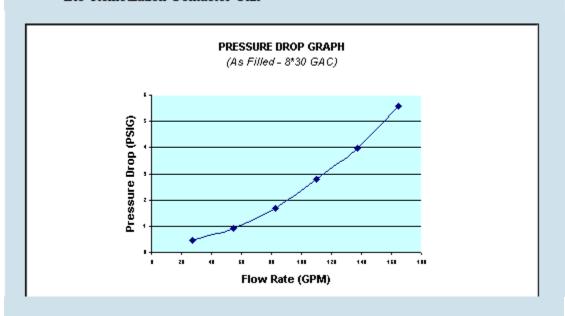
Leominster, Massachusetts 01453

Tel: 774.450.7177 Fax: 888.835.0617 www.lrt-llc.net

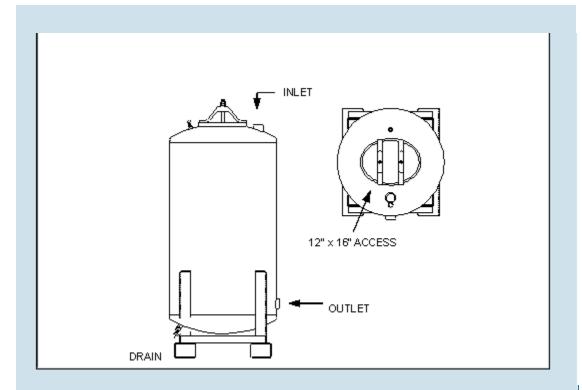
## HPAF SERIES FILTERS MODEL HPAF-3000

The HPAF-3000 filter is a media filter vessel designed to treat liquid streams. While the typical design application is a activated carbon adsorbtion unit, the filter can easily accommodate many medias. Some applications include:

- Dissolved Organic Removal (Activated Carbon)
- Suspended Solids Removal (Sand Filter)
- Dissolved Minerals (Softener Resin)
- Oil and Grease Removal (Organo-Clays)
- Dissolved and Precipitated Metals Removal
- Special Organics (Resin/Carbon Blend)
- Catalytic Reactor (Chlorine and Peroxide Removal)
- Bio-Remediation Contactor Unit







HPAF-3000 SPECIFICATIONS							
Overall Height	8'11"	Vessel/Internal Piping Materials	CS (SA-36) / SCH 40 PVC				
Diameter	60"	Internal Coating	Polyamide Epoxy Resin				
Inlet / Outlet (FNPT)	3"	External Coating	Epoxy Mastic				
Drain / Vent (FNPT)	1" / 1/2"	Maximum Pressure / Temp	75 PSIG / 140° F				
GAC Fill (lbs)	3,000	Cross Sectional Bed Area	19.5 FT <sup>2</sup>				
Shipping / Operational Weight (lbs)	3,525/10,635	Bed Depth/Volume	5.5 FT / 107 FT <sup>3</sup>				



89 Crawford Street

Leominster, Massachusetts 01453

Tel: 774.450.7177 Fax: 888.835.0617 www.lrt-llc.net

# FILTRATION MEDIA: 8x30 RE-ACTIVATED CARBON 4x10 RE-ACTIVATED CARBON

#### GENERAL DESCRIPTION

Select Re-Activated carbon from domestic sources is quality screened during our purchasing process for activity, density and fines. The use of re-activated carbon is recommended as a lower cost alternative for most sites where drinking water quality is not necessary. In many cases our re-activated carbon meets and exceeds imported virgin carbon. In addition all carbon either sold by itself or installed in our filtration units traced by lot number to the installation or sale.

8x30 (Liquid Phase) Standard Specifications:	Standard	Value
lodine Number	ASTM D-4607	800 Minimum
Moisture Content	ASTM D-2867	5% Maximum (as packed)
Particle Size	ASTM D-2862	8x30 US Mesh
Ash		10% Maximum
Total Surface Area (N2BET)		1050 Minimum
Pore Volume (cc/g)		0.75

4*10 (Vapor Phase) Standard Specifications:	Standard	Value		
Carbon Tetrachloride Activity Level	ASTM D-3467	40 Minimum		
Moisture Content	ASTM D-2867	5% Maximum (as packed)		
Particle Size	ASTM D-2862	4x10 US Mesh		
Ash		10% Maximum		
Total Surface Area (N2BET)		1050 Minimum		
Pore Volume (cc/g)		0.75		



**RESINTECH CGS** is a sodium form standard crosslinked gel strong acid cation resin. *CGS* is optimized for residential applications that require good regeneration efficiency and high capacity. *RESINTECH CGS* is intended for use in all residential and commercial softening applications that do not have significant amounts of chlorine in the feedwater. *CGS* is supplied in the sodium form.



#### **FEATURES & BENEFITS**

#### RESIDENTIAL SOFTENING APPLICATIONS

Resin parameters are optimized for residential softeners

#### LOW COLOR THROW

#### SUPERIOR PHYSICAL STABILITY

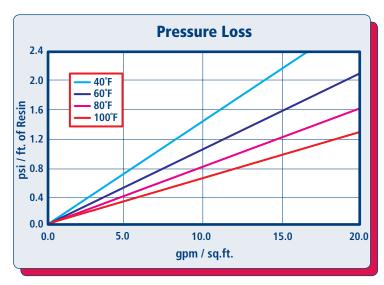
93% plus sphericity and high crush strengths together with carefully controlled particle distribution provides long life and low pressure drop

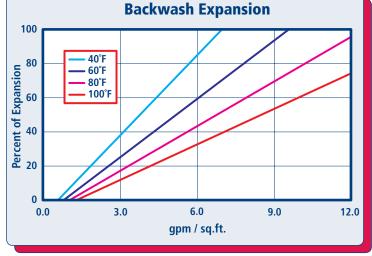
#### COMPLIES WITH US FDA REGULATIONS

Conforms to paragraph 21CFR173.25 of the Food Additives Regulations of the US FDA

Prior to first use for potable water, resin should be backwashed for a minimum of 20 minutes, followed by 10 bed volumes of downflow rinse.

#### **HYDRAULIC PROPERTIES**





#### **PRESSURE LOSS**

The graph above shows the expected pressure loss of *ResinTech CGS* per foot of bed depth as a function of flow rate at various temperatures.

#### **BACKWASH**

The graph above shows the expansion characteristics of *ResinTech CGS* as a function of flow rate at various temperatures.

## RESINTECH® CGS

#### **PHYSICAL PROPERTIES**

Polymer Structure Styrene/DVB

Polymer Type Gel

Functional Group Sulfonic Acid Physical Form Spherical beads

Ionic Form as shipped Sodium

**Total Capacity** 

Sodium form >1.8 meq/mL

**Water Retention** 

Sodium form 40 to 52 percent

Approximate Shipping Weight

Sodium form 50 lbs./cu.ft.

Screen Size Distribution (U.S. mesh) 16 to 50

Maximum Fines Content (<50 mesh) 1 percent

Minimum Sphericity 90 percent

Uniformity Coefficient 1.6 approx.

Resin Color Amber

Note: Physical properties can be certified on a per lot basis, available upon request

#### SUGGESTED OPERATING CONDITIONS

Maximum continuous temperature

Sodium form 250°F

Minimum bed depth 24 inches

Backwash expansion 25 to 50 percent

Maximum pressure loss 25 psi
Operating pH range 0 to 14 SU

**Regenerant Concentration** 

Salt cycle 10 to 15 percent NaCl Regenerant level 4 to 15 lbs./cu.ft. Regenerant flow rate. 0.5 to 1.5 gpm/cu.ft.

Regenerant contact time >20 minutes

Displacement flow rate

Displacement volume

10 to 15 gallons/cu.ft.

Rinse flow rate

Same as service flow

Rinse volume

35 to 60 gallons/cu.ft.

Service flow rate

1 to 10 gpm/cu.ft.

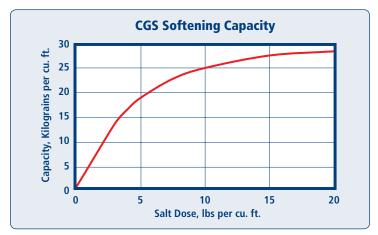
Note: These guidelines describe average low risk operating conditions. They are not intended to be absolute minimums or maximums.

For operation outside these guidelines, contact ResinTech Technical Support

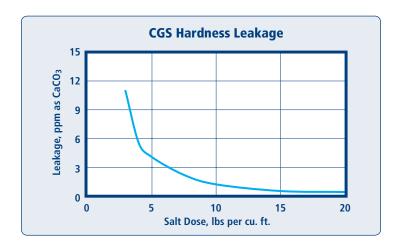
#### **APPLICATIONS**

#### **SOFTENING**

RESINTECH CGS is a standard crosslinked cation resin optimized for residential and commercial applications. This type of resin is easier to regenerate than the higher crosslinked resins. CGS has marginal resistance to chlorine and other oxidants and is not ideal for high temperature and other high stress applications.



Capacity and leakage data are based on the following: 2:1 Ca:Mg ratio, 500 ppm TDS as CaCO3, 0.2% hardness in the salt and 10% brine concentration applied co-currently through the resin over 30 minutes. No engineering downgrade has been applied.





East Coast - West Berlin, NJ p:856.768.9600 • Midwest - Chicago, IL p:708.777.1167 • West Coast - Los Angeles, CA p:323.262.1600

# GROOVED & SMOOTH-END FLOWMETER MODEL MG/MS100 SPECIFICATIONS

#### **PERFORMANCE**

ACCURACY/REPEATABILITY: ±2% of reading

guaranteed throughout full range. ±1% over reduced

range. Repeatability 0.25% or better. RANGE: (see dimensions chart below) HEAD LOSS: (see dimensions chart below)

**MAXIMUM TEMPERATURE**: (Standard Construction)

160°F constant

PRESSURE RATING: 150 psi

#### **MATERIALS**

TUBE: Epoxy-coated carbon steel.

BEARING ASSEMBLY: Impeller shaft is 316 stainless steel.
Ball bearings are 440C stainless steel.

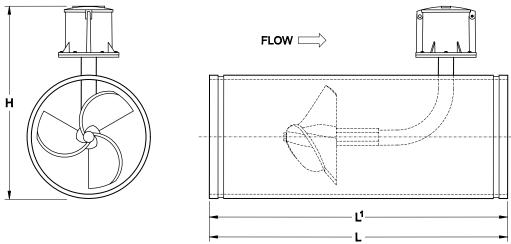
MAGNETS: (Permanent type) Cast or sintered alnico BEARING HOUSING: Brass; Stainless Steel optional IMPELLER: Impellers are manufactured of high-impact plastic, retaining their shape and accuracy over the life of the meter. High temperature impeller is optional.

**REGISTER**: An instantaneous flowrate indicator and six-digit straight-reading totalizer are standard. The register is hermetically sealed within a die cast aluminum case. This protective housing includes a domed acrylic lens and hinged lens cover with locking hasn

**COATING**: Fusion-bonded epoxy

#### **OPTIONS**

- Forward/reverse flow measurement
- · High temperature construction
- "Over Run" bearing assembly for higher-than-normal flowrates
- Electronic Propeller Meter available in all sizes of this model
- A complete line of flow recording/control instrumentation
- Straightening vanes and register extensions available
- · Certified calibration test results



McCrometer reserves the right to change design or specifications without notice	
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MG100 / MS100			DIMENSIONS										
Meter Size (inches)	2	2 ½	3	4	6	8	10	12	14	16	18	20	24
Maximum Flow U.S. GPM	250	250	250	600	1200	1500	1800	2500	3000	4000	5000	6000	8500
Minimum Flow U.S. GPM	40	40	40	50	90	100	125	150	250	275	400	475	700
Head Loss in Inches at Max. Flow	29.50	29.50	29.50	23.00	17.00	6.75	3.75	2.75	2.00	1.75	1.50	1.25	1.00
Shipping Weight, lbs.			17	40	54	68	87	106	140	144	172	181	223
H (inches)	* 5	See	10.9	12.78	13.84	14.84	16.91	18.90	20.53	22.53	25.53	26.53	30.53
L (inches) MG100	Spe	ecial	13	20	20	20	20	20	20	22	22	22	22
L <sup>1</sup> (inches) MS100	N	ote	13	20	22	22	22	22	22	24	24	24	24
O.D. of Meter Tube			3.50	4.500	6.625	8.625	10.750	12.750	14.00	16.00	18.00	20.00	24.00

\*Special Note—Reducing fittings incorporating grooves are supplied to adapt the 3-inch model to smaller line sizes.

Larger flowmeters on special order.



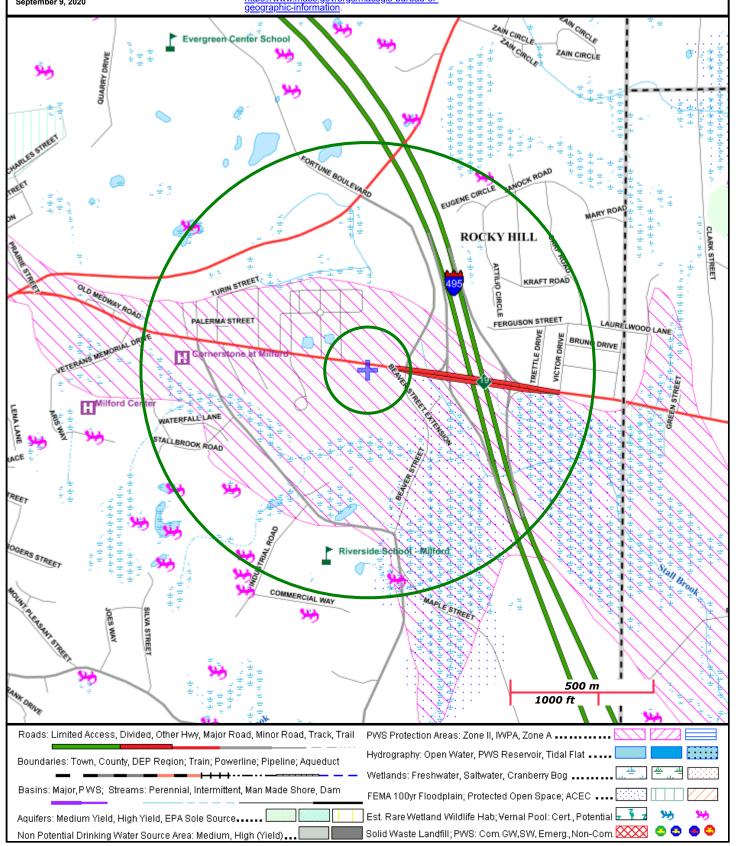
# MassDEP - Bureau of Waste Site Cleanup Phase 1 Site Assessment Map: 500 feet & 0.5 Mile Radii

Site Information: MILFORD SHELL STATION 139 MEDWAY ROAD MILFORD, MA

NAD83 UTM Meters: 4669192mN , 294321mE (Zone: 19) September 9, 2020

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 as be found at: https://www.mass.gov/orgs/massgis-bureau-of-







# 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: September 09, 2020

Consultation Code: 05E1NE00-2020-SLI-3906

Event Code: 05E1NE00-2020-E-12156 Project Name: Milford Shell Station

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: 05E1NE00-2020-SLI-3906

Event Code: 05E1NE00-2020-E-12156

Project Name: Milford Shell Station

Project Type: Water Withdrawal / Depletion

Project Description: Construction Dewatering

#### **Project Location:**

Approximate location of the project can be viewed in Google Maps: <a href="https://www.google.com/maps/place/42.14783136488346N71.48932189968188W">https://www.google.com/maps/place/42.14783136488346N71.48932189968188W</a>



Counties: Worcester, MA

3

## **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<sup>1</sup>, 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. <u>NOAA Fisheries</u>, 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

Threatened

No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/9045">https://ecos.fws.gov/ecp/species/9045</a>

#### **Critical habitats**

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



#### <u>Documentation of the Results of the ESA Eligibility Determination:</u>

Using information in Appendix II of the NPDES RGP, the project is eligible for coverage under this general permit under FWS Criterion B. This project is located in Worcester 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 Worcester County

Based upon a discussion with the U.S. Fish & Wildlife Service (USFWS), temporary dewatering activities at the site are not expected to impact the Northern Long-eared Bat.

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 no trees in the immediate vicinity of the site; and 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): Milford; Street No: 139; Street Name: Medway Rd; Resource Type(s): Area, Building, Burial Ground, Object, Structure;

Inv. No. Property Name Street Town Year

Wednesday, September 9, 2020 Page 1 of 1



#### <u>Documentation of the National Historic Preservation Act Eligibility Determination:</u>

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 and the National Register of Historic Places did not list any potential historic properties on or near the project site in the databases. Therefore, the proposed discharge will not have the potential to cause effects on historical properties.



September 21, 2020

89 Crawford Street Leominster, Massachusetts 01453

Tel: 774.450.7177 Fax: 888.835.0617 www.lrt-llc.net

Mr. William Kingkade Jr. Chairman of the Board of Selectmen Town Hall 52 Main Street Milford, MA 01757

Reference: Notification of Filing of Notice of Intent - Remediation General Permit

139 Medway Street

**Shell Station** 

Milford, Massachusetts

Dear Mr. Kingkade:

On behalf of Nouria Energy Corporation (Nouria), Lockwood Remediation Technologies, LLC (LRT) is providing notification that a Notice of Intent (NOI) has been filed with the United States Environmental Protection Agency (EPA) requesting coverage under the EPA's Remediation General Permit (RGP) for the above-referenced project. The RGP will allow the treatment and discharge of groundwater that is generated during dewatering of excavations to remove and reinstall new underground storage tanks at the existing shell station. Treated water will be discharged to a catch basin on Medway Street which discharges to Stall Brook the work is anticipated to begin in late Fall 2020 or Spring 2021. A copy of the NOI can be provided upon request.

Please contact me at 774-450-7177 with any questions or if you require additional information.

Sincerely, Lockwood Remediation Technologies, LLC

James Bennet

James Bennet Project Manager

cc: Shauna Little – EPA