NOTICE OF INTENT FOR DISCHARGE PURSUANT TO MASSACHUSETTS REMEDIATION GENERAL PERMIT MAG9100000

266 WAVERLY STREET

FRAMINGHAM, MASSACHUSETTS

MAY 16, 2018

Prepared For:

U.S. Environmental Protection Agency
Office of Ecosystem Protection
5 Post Office Square – Suite 100
Mail Code OEP06-01
Boston, MA 02109-3912

On Behalf Of:

MCRT Northeast Construction LLC
200 Summit Drive, Suite 450
Burlington, MA 01803

2269 Massachusetts Avenue
Cambridge, MA 02140
www.mcphailgeo.com
(617) 868-1420

PROJECT NO. 6010.9.03

May 16, 2018

U.S. Environmental Protection Agency
Dewatering GP Processing
Industrial Permit Unit (OEP 06-4)
5 Post Office Square – Suite 100
Mail Code OEP06-01
Boston, MA 02109-3912

Attention: To Whom It May Concern

Reference: 266 Waverly Street, Framingham, Massachusetts
Notice of Intent for Construction Dewatering Discharge Under
Massachusetts Remediation General Permit MAG910000

Ladies and Gentlemen:

On behalf of MCRT Waverly 266 LLC, McPhail Associates, LLC (McPhail) has prepared the attached Notice of Intent (NOI) for coverage under the Remediation General Permit (RGP) MAG910000 for the discharge of construction dewatering effluent into the Beaver Dam Brook which flows into the Fiske Pond via the City of Framingham storm drainage system. The temporary construction dewatering discharge will occur during redevelopment of the of 266 Waverly Street property in Framingham, Massachusetts (subject site). Refer to **Figure 1** entitled: "Project Location Plan" for the general site locus.

These services were performed and this permit application was prepared in accordance with verbal authorization of MCRT Waverly 266 LLC. These services are subject to the limitations contained in **Appendix A**.

The required Notice of Intent Form contained in the RGP permit is included in **Appendix B** and supporting information is included in **Appendix C**. This project is considered Activity Category III-G as defined in the RGP. Category III-G is defined as Contaminated Site Dewatering from Sites with Known Contamination. Based on historical and current soil and groundwater analysis completed at the site and constituents of concern (COCs) detected under subcategory A (Inorganics), thus, Technology Based Effluent Limitations (TBELs) for Type A contamination apply.

Applicant/Operator

The applicant for the Notice of Intent-Dewatering General Permit is:

MCRT Northeast Construction LLC
200 Summit Drive, Suite 450
Burlington, MA 01803

Attention: Britton Bradford

Office: (405) 315-2382
Email: bbradford@mcrtrust.com

Site Location and Existing Conditions

Fronting onto Waverley Street to the north, the subject site is bounded to the west and southwest by Marble Street, to the southeast by Blandin Avenue and to the east by commercial property. The approximately 3-acre project site is occupied by two commercial buildings, one of which is currently vacant. The remainder of the project site is covered by an asphalt paved parking lot and associated driveways as well as by landscaped margins.

Although ground surface which immediately surrounds the subject buildings is generally flat, the surrounding topography of the subject site slopes downward from north to south. The surface of the parking lot that occupies the northern portion of the subject site varies from approximately Elevation +156.5 to +160. At the southern portion of the subject site, ground surface generally ranges from approximately Elevation +156 to Elevation +156.5.

Approximate limits of subject site and existing conditions are detailed on the attached **Figure 2**.

Proposed Scope of Site Development

The proposed development is understood to include the demolition of the existing buildings followed by the construction of a six-story, podium style structure, the footprint of which will occupy the majority of the project site. We understand that the lowest level of the structure will consist of a partially below-grade ventilated parking garage with a floor slab located at approximately 6 feet below ground surface corresponding to about Elevation +153.8. The remainder of the subject site, located outside of the building footprint, will be occupied by an asphalt paved parking lot and landscaping.

It is anticipated that a 4 to 8-foot deep excavation will be necessary to facilitate construction of the below grade parking floor slab. Additionally, construction of the foundation footings beneath the lowest level floor slab will require the excavation of natural soil to Elevation +149.6, which corresponds to depths ranging from approximately 6.5 to 10.5 feet below existing ground surface.

Site Environmental Setting & Surrounding Historical Places

According to an on-line edition of the Massachusetts Geographic Information Systems DEP which was viewed on April 19, 2018, the subject site is not located within the boundaries of a Sole Source Aquifer, Potentially Productive Aquifer or within a Zone II, Interim Wellhead Protection Area as defined by the Massachusetts Department of Environmental Protection. Further, there are no public drinking water supply wells, no Areas of Critical Environmental Concern, no fish habitats, no habitats of Species of Special Concern or Threatened or Endangered Species within specified distances of the subject site.

The GIS Map indicates that there are protected open space areas within 600 feet of the subject site. The closest water body is Farm Pond, which is located approximately 3,000 feet to the west of the subject site. There are no areas designated as solid waste sites (landfill) noted as being located within 3,000 feet of the subject site. A copy of the

Massachusetts GIS Priority Resources Map is included in **Appendix C**. In addition, a report prepared by Environmental Database Resource, Inc. (EDR) was reviewed for this study. Based on EDR's search of FEMA Flood Plain Maps, the subject site is located within a 100 year and 500-year flood plain.

A review of information provided by the U.S. Fish and Wildlife Service in an Information for Planning and Conservation (IPaC) Trust Resource Report for the subject site did not identify the presence of threatened or endangered species at or in the vicinity of the discharge location and/or discharge outfall. Further, the Trust Resource Report did not identify the presence of a critical habitat in the vicinity of the discharge outfall and/or discharge location. Based upon the above, the site is considered a criterion A pursuant to Appendix IV of the RGP. A copy of the IPaC Trust Resource Report and U.S. Fish and Wildlife Service's Nationwide Standard Conservation Measures are included in **Appendix C**.

A review of the online Massachusetts Cultural Resource Information System and the National Register of Historical Places for Suffolk County in Boston, Massachusetts did not identify records or addresses of historic places that exist in the immediate vicinity of the subject site and/or outfall location.

Site and Release History

Historical information pertaining to the subject site indicates that the currently existing buildings were constructed in 1960. The tenants which occupied the building at the southern portion of the subject site included a dry cleaner, a super market, a liquor store, a restaurant, and a motorcycle dealership. The building at the northeastern portion of the subject site has been occupied by a bank, a coffee shop and most recently a pharmacy. Prior to construction of the currently existing buildings, historical Sanborn Maps and Aerial Photographs from 1915 through 1957 indicate that the northern portion of the subject site had been occupied by a residential complex consisting of several 2 ½-story row-style houses and associated garages. During a majority of this time period, a small portion of a manufacturing complex had occupied the southern end of the subject site.

In anticipation of the proposed redevelopment, a series of subsurface exploration programs was completed at the subject site which involved the sampling and laboratory analysis of soil and groundwater samples. The results of laboratory analyses identified releases of lead and arsenic within three localized areas of fill material which were previously reported to the DEP and to which RTN 3-34896 was assigned. Based on analytical testing, Reportable Concentrations of arsenic and lead have not affected groundwater.

Temporary Construction Dewatering

It is anticipated excavations during site construction will extend below groundwater elevation and based on depths of foundations and observed groundwater at the site, the discharge observed will likely be on order of 25 to 50 gallons per minute (gpm). These estimates do not include surface run-off which will be removed from the excavation during periods of precipitation.

Groundwater was observed at the site at approximately 5.5 to 10.1 feet below ground surface. In consideration of the indicated depth of groundwater below the existing ground surface, it is anticipated that, surface water may become trapped and accumulate in excavations after periods of heavy precipitation and may necessitate localized sumping. Dewatering for the site will be short-term and the effluent will be discharged off-site through municipal storm drains.

Given that the area of excavation will occupy a majority of the subject site, temporary on-site collection and recharge of groundwater may not be feasible during construction. As a result, construction dewatering will discharge collected groundwater into the storm drain system under the requested Remediation General Permit. Additionally, a Notice of Intent for dewatering under a NPDES General Permit for Discharges from Construction Activities (CGP) will be filed since the area that is subject to dewatering is greater the 1 acre. In accordance with the provisions of the CGP, a Stormwater Pollution Prevention Plan (SWPPP) will be prepared to address potential stormwater runoff from the subject site as well as the dewatering of groundwater during construction of the proposed subsurface utilities.

A review of available subgrade sanitary and storm sewer system plans accessed from the City of Framingham, indicates the presence of a dedicated stormwater drain systems on Waverly Street and Blandin Avenue which border the site to the north and south. The discharge flow, indicated by the Framingham plans, travels east-southeast beneath Beaver Street and discharges into the Beaver Dam Brook, shown in detail on the enclosed **Figure 3**.

Summary of Groundwater Analysis

As part of environmental due diligence assessment activities in 2015, groundwater testing was performed across the subject site for the presence of volatile organic compounds (VOCs), volatile petroleum hydrocarbons (VPH) and extractable petroleum hydrocarbons (EPH). With the exception of some VOCs, the results of the laboratory testing did not indicate concentrations of the tested compounds in excess of laboratory reporting limits. Groundwater samples that were obtained from monitoring wells located at the southeastern portion of the subject site detected low levels of tectrachloroethene (TCE), acetone, carbon disulfide, and 2-butanone which were below the applicable MCP RCGW-2 reporting thresholds. The results of the laboratory analysis are summarized on **Table 1**.

More recently, on November 20, 2017, groundwater samples were obtained from B-3 (OW) and B-14 (OW) and submitted for RGP Section A Inorganics. The inorganics tested include total metals, total suspended solids (TSS), chloride, total residual chlorine (TRC), pH. A summary of the analytical data is provided on **Table 2.** A copy of the laboratory report is included in **Appendix D**.

In summary, the results of the laboratory analysis detected concentrations of iron which exceed the EPA chronic freshwater criteria for aquatic life.

Per the EPA, a receiving water body sample was obtained from the Beaver Dam Brook as indicated on **Figure 2** and analyzed for Recoverable Metals, pH, Ammonia, and Hardness. The results of the sample we tabulated and assessed using Appendix V of the 2017 NPDES RGP included in **Appendix C** and summarized in **Table 3** and verified by laboratory data analysis located in **Appendix E.** According to those results, TBELs apply to this specific discharge with the exception of a Water Quality Based Effluent Limitation (WQBEL) applying concentrations of total iron. It is noted that a WQBEL is listed for TRC, however, groundwater at the subject site does not have chlorinated additives. Thus, the WQBEL for TRC does not apply to this specific discharge.

Groundwater Treatment

Based on the results of groundwater testing performed at the subject site, the treatment of dewatered groundwater during construction will be necessary prior to its off-site discharge. The detected concentrations of metals, in particular iron, are considered to be likely attributable to total suspended solids. Therefore, a 10,000-gallon capacity settling tank and bag filter in series will be required to settle and filter out suspended soil particles in the discharge during construction dewatering to meet applicable effluent limits established by the US EPA prior to off-site discharge. If petroleum impacted groundwater is encountered during excavation, a granular activated carbon (GAC) filter will be necessary to facilitate groundwater discharge. A schematic of the treatment system is shown on **Figure 4**.

Summary and Conclusions

The purpose of this report is to assess site environmental conditions and groundwater data at 266 Waverly Street located in Framingham, Massachusetts to support the attached Notice of Intent (NOI) for coverage under the Remediation General Permit (RGP) MAG910000 for the discharge of construction dewatering effluent into Fiske Pond by way of the Beaver Dam Brook via the City of Framingham storm drainage system.

The treatment of dewatered groundwater during construction will be necessary prior to its off-site discharge. Specifically, a 10,000-gallon capacity settling tank and bag filter in series will be required to settle and filter out suspended soil particles in the discharge during construction dewatering to meet applicable effluent limits established by the US EPA prior to off-site discharge.

We trust that the above satisfies your present requirements. Should you have any questions or comments concerning the above, please do not hesitate to contact us.

Sincerely,

McPHAIL ASSOCIATES, LLC

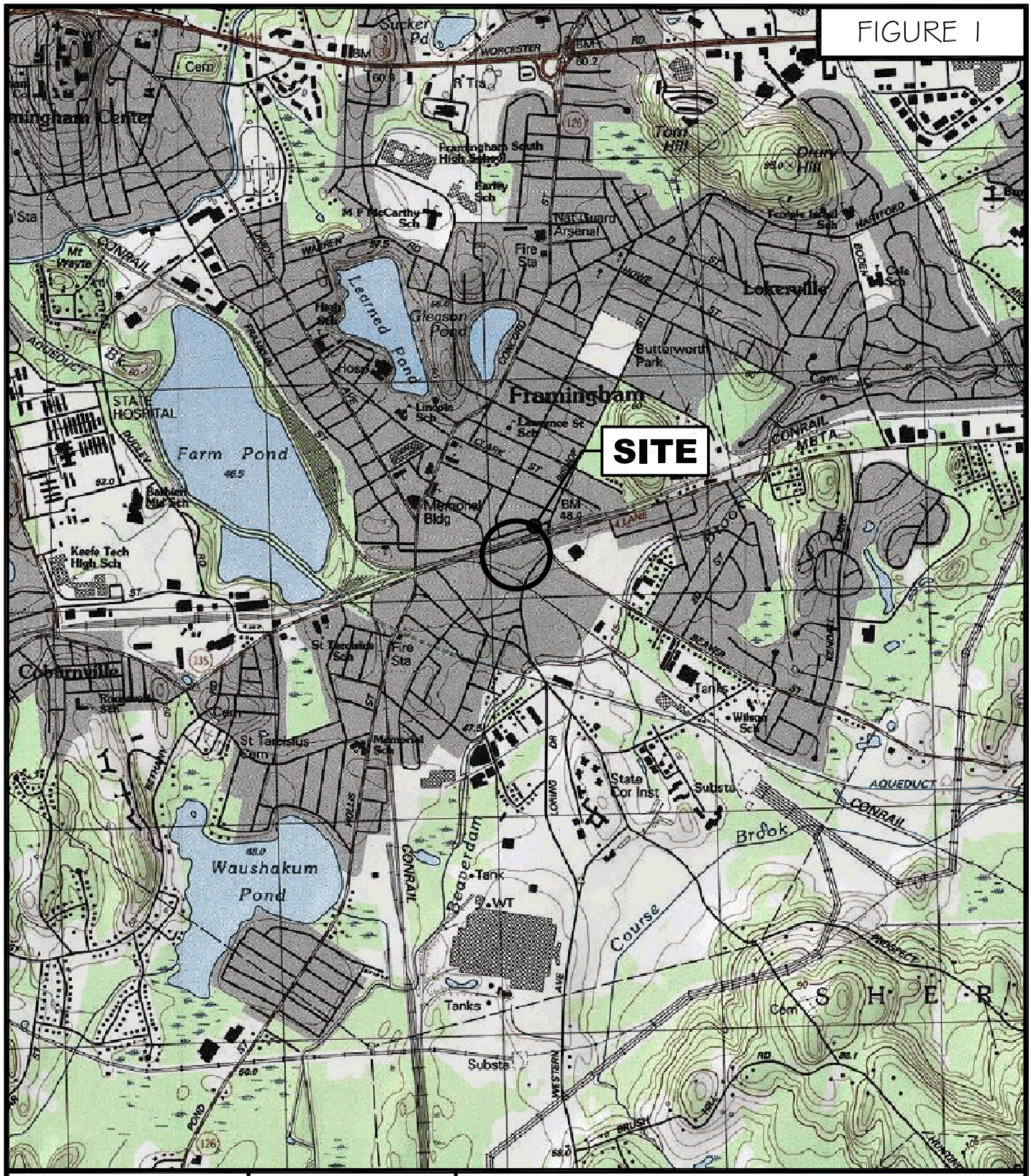
Kirk W. Seaman

William J. Burns, L.S.P.

N:\Working Documents\Reports\6010_RGP_121917 Rev 1.docx

KWS/wjb

FIGURE 1



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PROJECT LOCATION PLAN

266 WAVERLY STREET

FRAMINGHAM MASSACHUSETTS

FIGURE 2

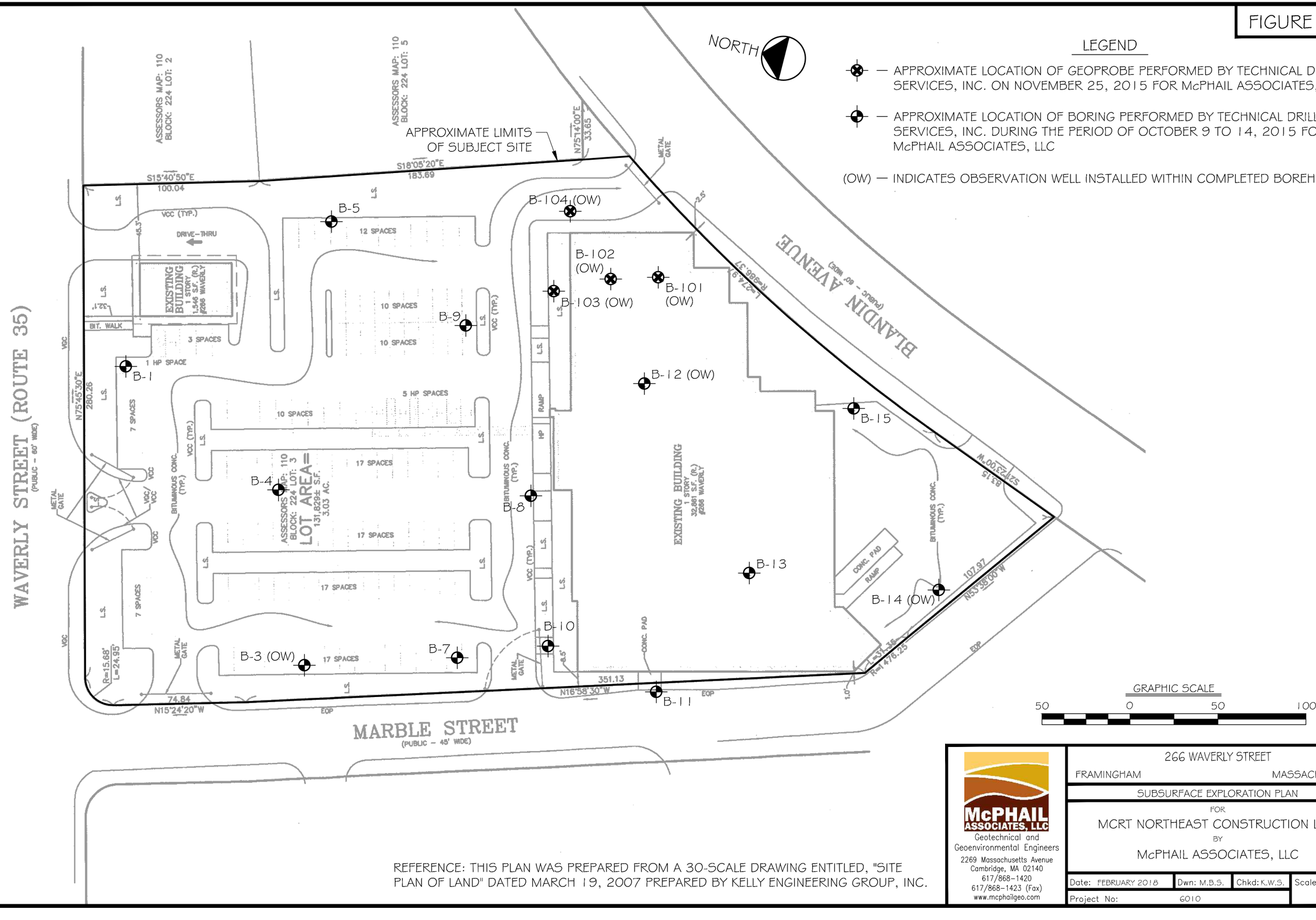
NORTH

LEGEND

— APPROXIMATE LOCATION OF GEOPROBE PERFORMED BY TECHNICAL DRILLING SERVICES, INC. ON NOVEMBER 25, 2015 FOR McPHAIL ASSOCIATES, LLC

— APPROXIMATE LOCATION OF BORING PERFORMED BY TECHNICAL DRILLING SERVICES, INC. DURING THE PERIOD OF OCTOBER 9 TO 14, 2015 FOR McPHAIL ASSOCIATES, LLC

(OW) — INDICATES OBSERVATION WELL INSTALLED WITHIN COMPLETED BOREHOLE



GRAPHIC SCALE

50 0 50 100

REFERENCE: THIS PLAN WAS PREPARED FROM A 30-SCALE DRAWING ENTITLED, "SITE PLAN OF LAND" DATED MARCH 19, 2007 PREPARED BY KELLY ENGINEERING GROUP, INC.

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266 WAVERLY STREET
FRAMINGHAM MASSACHUSETTS

SUBSURFACE EXPLORATION PLAN

FOR
MCRT NORTHEAST CONSTRUCTION LLC
BY
McPHAIL ASSOCIATES, LLC

Date: FEBRUARY 2018	Dwn: M.B.S.	Chkd: K.W.S.	Scale: 1" = 50'
Project No: 6010			

FILE NAME: N:\Acad\JOBS\6010\ORGP\6010-EO2.dwg

FIGURE 3

NORTH

POSSIBLE LOCATIONS FOR DISCHARGE INTO MUNICIPAL STORM DRAIN SYSTEM

APPROXIMATE LOCATION OF OUTFALL INTO BEAVER DAM BROOK (42.275527-71.405218)

POSSIBLE LOCATIONS FOR DISCHARGE INTO MUNICIPAL STORM DRAIN SYSTEM

APPROXIMATE LIMITS OF SUBJECT SITE

REFERENCE: THIS PLAN WAS PREPARED FROM A 100-SCALE DRAWING ENTITLED "FRAMINGHAM DRAINAGE PLAN" DATED 1943 BY OTHERS.

GRAPHIC SCALE

200 0 200 400

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266 WAVERLY STREET

FRAMINGHAM MASSACHUSETTS

STORM DRAIN DISCHARGE FLOW PLAN

FOR

MCRT NORTHEAST CONSTRUCTION LLC

BY

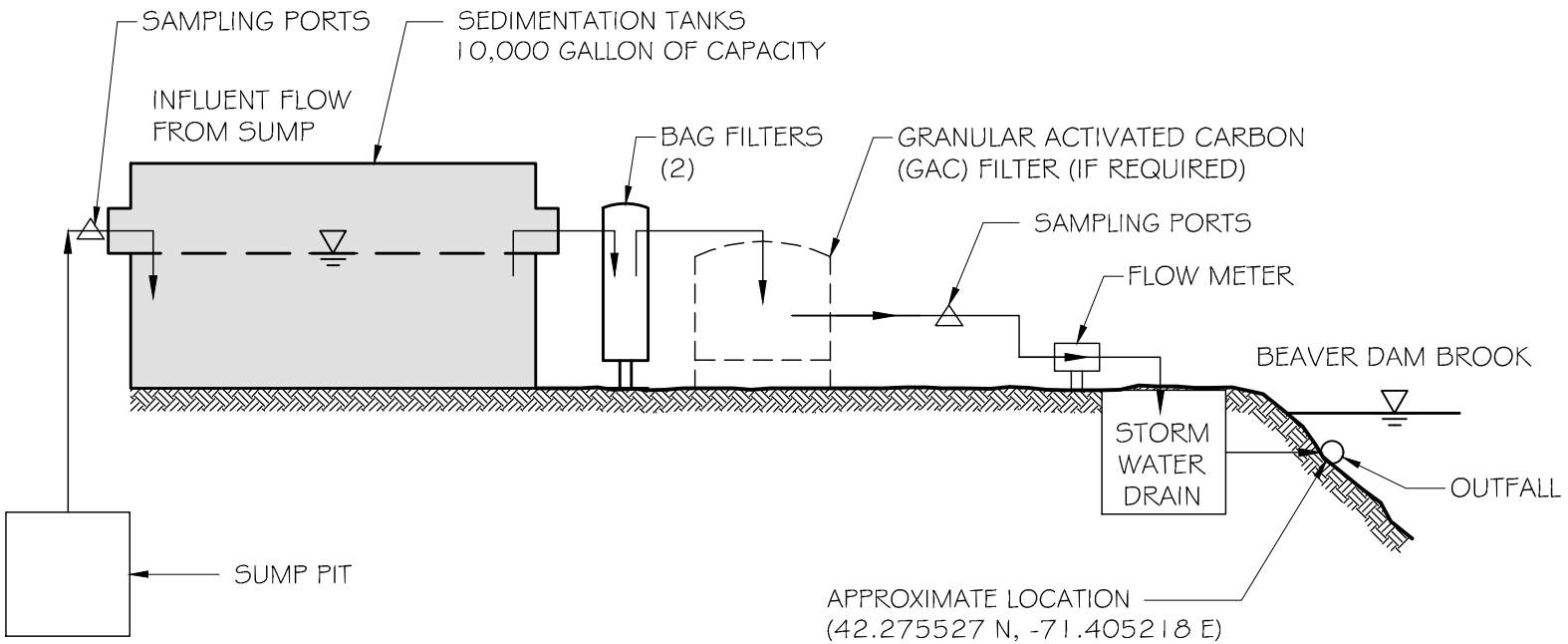
McPHAIL ASSOCIATES, LLC

Date: FEBRUARY 2018	Dwn: F.G.P.	Chkd: K.W.S.	Scale: 1" = 200'
Project No: 6010			

FILE NAME: N:\Acad\JOBS\6010\ORGPlg\6010-FD3.dwg

FILE NAME: N:\Acad\JOBS\6010\RGP\6010-E04.dwg

FIGURE 4



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266 WAVERLY STREET
CAMBRIDGE MASSACHUSETTS

SCHEMATIC OF TREATMENT SYSTEM

FOR
MCRT NORTHEAST CONSTRUCTION LLC
BY
McPHAIL ASSOCIATES, LLC
CONSULTING GEOTECHNICAL ENGINEERS

Date: FEBRUARY 2018	Dwn: M.B.S.	Chkd: K.W.S.	Scale: N.T.S.
Project No: 6010			

TABLE 1
ANALYTICAL RESULTS - HISTORICAL GROUNDWATER

266 Waverley Street;
Framingham, MA
Project No. 6010

LOCATION	RCGW-2 Reporting Thresholds	B-3 (OW)	B-12 (OW)	B-14 (OW)	B-101 (OW)	B-102 (OW)	B-104 (OW)
SAMPLING DATE		10/19/2015	10/19/2015	10/19/2015	11/30/2015	11/30/2015	11/30/2015
LAB SAMPLE ID		L1526732-01	L1526732-02	L1526732-03	L1531325-01	L1531325-02	L1531325-03
Extractable Petroleum Hydrocarbons (ug/l)							
C9-C18 Aliphatics	5000	ND(100)	-	-	-	-	-
C19-C36 Aliphatics	50000	ND(100)	-	-	-	-	-
C11-C22 Aromatics, Adjusted	5000	ND(100)	-	-	-	-	-
MCP Volatile Organics (ug/l)							
Tetrachloroethene	50	-	1.4	ND(1)	2.3	1	ND(1)
Acetone	50000	-	15	5	ND(5)	ND(5)	ND(5)
Carbon disulfide	10000	-	14	ND(2)	ND(2)	ND(2)	ND(2)
2-Butanone	50000	-	ND(5)	5.5	ND(5)	ND(5)	ND(5)
SUM		-	30.4	10.5	2.3	1	ND
Volatile Petroleum Hydrocarbons (ug/l)							
C9-C10 Aromatics	4000	ND(50)	-	ND(50)	-	-	-
C5-C8 Aliphatics, Adjusted	3000	ND(50)	-	ND(50)	-	-	-
C9-C12 Aliphatics, Adjusted	5000	ND(50)	-	ND(50)	-	-	-
Benzene	1000	ND(2)	-	-	-	-	-
Toluene	40000	ND(2)	-	-	-	-	-
Ethylbenzene	5000	ND(2)	-	-	-	-	-
p/m-Xylene	3000	ND(2)	-	-	-	-	-
o-Xylene	3000	ND(2)	-	-	-	-	-
Methyl tert butyl ether	5000	ND(3)	-	-	-	-	-
Naphthalene	700	ND(4)	-	-	-	-	-

ND-not detected in excess of the laboratory method detection limits in ()
Tested compounds not shown do not exceed laboratory detection limits

TABLE 2
ANALYTICAL RESULTS - GROUNDWATER

266 Waverly Street; Framingham, MA
McPhail Job No. 6010

LOCATION		B-3(OW)	B-14(OW)
SAMPLING DATE		11/20/2017	11/20/2017
LAB SAMPLE ID		L1742763-01	L1742763-02
	EPA-ALFCMC		
General Chemistry			
Chromium, Trivalent (ug/l)	74	ND(10)	ND(10)
Cyanide, Total (ug/l)	5.2	ND(5)	ND(5)
Chlorine, Total Residual (ug/l)		ND(20)	ND(20)
pH (SU)		6.6	6.9
Nitrogen, Ammonia (ug/l)		148	ND(75)
Chromium, Hexavalent (ug/l)	11	ND(10)	ND(10)
Chloride (ug/l)	230000	532000	395000
Total Hardness (ug/l)			
Hardness		337000	172000
Total Metals (ug/l)			
Antimony, Total		ND(4)	ND(4)
Arsenic, Total	150	4.4	ND(1)
Cadmium, Total	0.25	ND(0.2)	0.2
Chromium, Total		ND(1)	3.28
Copper, Total		ND(1)	3.98
Iron, Total	1000	22800	1680
Lead, Total	2.5	ND(1)	2.03
Mercury, Total	0.77	ND(0.2)	ND(0.2)
Nickel, Total	52	ND(2)	5.7
Selenium, Total	5	ND(5)	ND(5)
Silver, Total		ND(0.4)	ND(0.4)
Zinc, Total	120	ND(10)	ND(10)

ND-not detected in excess of the laboratory method detection limits in ()
Tested compounds not shown do not exceed laboratory detection limits

TABLE 3
ANALYTICAL RESULTS - SURFACE WATER

266 Waverly Street; Framingham, MA
McPhail Job No. 6010

LOCATION		RECEIVING WATER BODY
SAMPLING DATE		**12/1/2017**
LAB SAMPLE ID		**L1744182-01**
	EPA-ALFCMC	
General Chemistry		
pH (SU)		6.8
Nitrogen, Ammonia (ug/l)		249
Total Hardness (ug/l)		
Hardness		115000
Total Metals (ug/l)		
Arsenic, Total	340	ND(1)
Cadmium, Total	2	ND(0.2)
Chromium, Total		ND(1)
Copper, Total		1.4
Iron, Total		2230
Lead, Total	65	2.23
Nickel, Total	470	2.01

ND-not detected in excess of the laboratory method detection limits in ()
Tested compounds not shown do not exceed laboratory detection limits

APPENDIX A:

LIMITATIONS

LIMITATIONS

The purpose of this report is to present a summary of environmental conditions, including the results of testing of groundwater samples obtained from a groundwater monitoring well on the property located at 266 Waverly in Framingham, Massachusetts in support of an application for approval of temporary construction dewatering discharge of groundwater into surface waters of the Commonwealth of Massachusetts under EPA's Massachusetts Remediation General Permit MAG910000.

The observations were made under the conditions stated in this report. The conclusions presented above were based on these observations. If variations in the nature and extent of subsurface conditions between the spaced subsurface explorations become evident in the future, it will be necessary to re-evaluate the conclusions presented herein after performing on-site observations and noting the characteristics of any variations.

The conclusions submitted in this report are based in part upon analytical data obtained from analysis of groundwater samples, and are contingent upon their validity. The data have been reviewed, and interpretations have been made in the text. It should also be noted that fluctuations in the types and levels of contaminants and variations in their flow paths may occur due to changes in seasonal water table, past practices used in disposal and other factors.

Laboratory analyses have been performed for specific constituents during the course of this assessment, as described in the text. However, it should be noted that additional constituents not searched for during the current study may be present in soil and/or groundwater at the site.

This report and application have been prepared on behalf of and for the exclusive use of Mill Creek Residential. This report and the findings contained herein shall not, in whole or in part, be disseminated or conveyed to any other party, other than the submission to relevant governmental agencies, nor used in whole or in part by any other party without prior written consent of McPhail Associates, LLC.

APPENDIX B:

NOTICE OF INTENT - NPDES REMEDIATION GENERAL PERMIT

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

A. General site information:

<table>
<tr><td rowspan="2">1. Name of site:
266 Waverly Street</td><td colspan="3">Site address: 266 Waverly Street
Street:</td></tr>
<tr><td>City: Framingham</td><td>State: MA</td><td>Zip: 01702</td></tr>
<tr><td rowspan="4">2. Site owner
MCRT Waverly 266 LLC

Owner is (check one): ☐ Federal ☐ State/Tribal ■ Private
☐ Other; if so, specify:</td><td colspan="3">Contact Person: William Endicott</td></tr>
<tr><td colspan="2">Telephone: 339.298.3972</td><td>Email: wendicott@mcrtrust.com</td></tr>
<tr><td colspan="3">Mailing address: 200 Wheeler Road, South Tower, 4th Floor
Street:</td></tr>
<tr><td>City: Burlington</td><td>State: MA</td><td>Zip: 01803</td></tr>
<tr><td rowspan="4">3. Site operator, if different than owner
MCRT Northeast Construction LLC</td><td colspan="3">Contact Person: BRITTON BRADFORD</td></tr>
<tr><td colspan="2">Telephone: 405-315-2382</td><td>Email: bbradford@MCRTrust.com</td></tr>
<tr><td colspan="3">Mailing address:
Street: 200 Summit Drive | Suite 450</td></tr>
<tr><td>City: Burlington</td><td>State: MA</td><td>Zip: 01803</td></tr>
<tr><td>4. NPDES permit number assigned by EPA:
MAR1001CO

NPDES permit is (check all that apply: ☐ RGP ☐ DGP ■ CGP
☐ MSGP ☐ Individual NPDES permit ☐ Other; if so, specify:</td><td colspan="3">5. Other regulatory program(s) that apply to the site (check all that apply):
■ MA Chapter 21e; list RTN(s): 3-34896
☐ NH Groundwater Management Permit or Groundwater Release Detection Permit:
☐ CERCLA
☐ UIC Program
☐ POTW Pretreatment
☐ CWA Section 404</td></tr>
</table>

B. Receiving water information:

1. Name of receiving water(s):	Waterbody identification of receiving water(s):	Classification of receiving water(s):
Beaver Dam Brook (Fisk Pond)	MA82038	B

Receiving water is (check any that apply): ☐ Outstanding Resource Water ☐ Ocean Sanctuary ☐ territorial sea ☐ Wild and Scenic River

2. Has the operator attached a location map in accordance with the instructions in B, above? (check one): ■ Yes ☐ No

Are sensitive receptors present near the site? (check one): ☐ Yes ☐ No
If yes, specify:

3. Indicate if the receiving water(s) is listed in the State's Integrated List of Waters (i.e., CWA Section 303(d)). Include which designated uses are impaired, and any pollutants indicated. Also, indicate if a final TMDL is available for any of the indicated pollutants. For more information, contact the appropriate State as noted in Part 4.6 of the RGP. No TMDL for Fisk Pond

4. Indicate the seven day-ten-year low flow (7Q10) of the receiving water determined in accordance with the instructions in Appendix V for sites located in Massachusetts and Appendix VI for sites located in New Hampshire.	0.291
5. Indicate the requested dilution factor for the calculation of water quality-based effluent limitations (WQBELs) determined in accordance with the instructions in Appendix V for sites in Massachusetts and Appendix VI for sites in New Hampshire.	3.6

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

7. Has the operator attached a summary of receiving water sampling results as required in Part 4.2 of the RGP in accordance with the instruction in Appendix VIII? (check one): ■ Yes ☐ No

C. Source water information:

1. Source water(s) is (check any that apply):

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

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

D. Discharge information

1.The discharge(s) is a(n) (check any that apply): ☐ Existing discharge ■ New discharge ☐ New source	
Outfall(s): Outfall 001 - The location of the effluent port is undetermined at this time due to the potential mobility of the treatment system. The outfall will be within the limits of the project site.	Outfall location(s): (Latitude, Longitude) 42.276987, -71.410901
Discharges enter the receiving water(s) via (check any that apply): ☐ Direct discharge to the receiving water ■ Indirect discharge, if so, specify: Discharge outfall indirectly into Fisk Pond by way of the Beaver Dam Brook ☐ A private storm sewer system ■ A municipal storm sewer system If the discharge enters the receiving water via a private or municipal storm sewer system: Has notification been provided to the owner of this system? (check one): ■ Yes ☐ No Has the operator has received permission from the owner to use such system for discharges? (check one): ■ Yes ☐ No, if so, explain, with an estimated timeframe for obtaining permission: Has the operator attached a summary of any additional requirements the owner of this system has specified? (check one): ☐ Yes ☐ No	
Provide the expected start and end dates of discharge(s) (month/year): May 2018 - April 2019 Indicate if the discharge is expected to occur over a duration of: ■ less than 12 months ☐ 12 months or more ☐ is an emergency discharge	
Has the operator attached a site plan in accordance with the instructions in D, above? (check one): ■ Yes ☐ No	

<table>
<tr><td>2. Activity Category: (check all that apply)</td><td colspan="2">3. Contamination Type Category: (check all that apply)</td></tr>
<tr><td rowspan="5">☐ I – Petroleum-Related Site Remediation
☐ II – Non-Petroleum-Related Site Remediation
■ III – Contaminated Site Dewatering
☐ IV – Dewatering of Pipelines and Tanks
☐ V – Aquifer Pump Testing
☐ VI – Well Development/Rehabilitation
☐ VII – Collection Structure Dewatering/Remediation
☐ VIII – Dredge-Related Dewatering</td><td colspan="2">a. If Activity Category I or II: (check all that apply)

☐ A. Inorganics
☐ B. Non-Halogenated Volatile Organic Compounds
☐ C. Halogenated Volatile Organic Compounds
☐ D. Non-Halogenated Semi-Volatile Organic Compounds
☐ E. Halogenated Semi-Volatile Organic Compounds
☐ F. Fuels Parameters</td></tr>
<tr><td colspan="2">b. If Activity Category III, IV, V, VI, VII or VIII: (check either G or H)</td></tr>
<tr><td>■ G. Sites with Known Contamination</td><td>☐ H. Sites with Unknown Contamination</td></tr>
<tr><td>c. If Category III-G, IV-G, V-G, VI-G, VII-G or VIII-G: (check all that apply)

■ A. Inorganics
■ B. Non-Halogenated Volatile Organic Compounds
■ C. Halogenated Volatile Organic Compounds
☐ D. Non-Halogenated Semi-Volatile Organic Compounds
☐ E. Halogenated Semi-Volatile Organic Compounds
☐ F. Fuels Parameters</td><td>d. If Category III-H, IV-H, V-H, VI-H, VII-H or VIII-H Contamination Type Categories A through F apply</td></tr>
</table>

4. Influent and Effluent Characteristics

Parameter	Known or believed absent	Known or believed present	# of samples	Test method (#)	Detection limit (µg/l)	Influent		Effluent Limitations	
						Daily maximum (µg/l)	Daily average (µg/l)	TBEL	WQBEL
A. Inorganics									
Ammonia	✔		1	121,4500N	0.075	0.148	0.148	Report mg/L	---
Chloride	✔		1	443000	50000	2520000	2520000	Report µg/l	---
Total Residual Chlorine	✔		1	121,4500C	20	<DL	<DL	0.2 mg/L	
Total Suspended Solids		✔	1	1212540D	5000	14000	14000	30 mg/L	
Antimony	✔		1	3200.8	4	3.33	3.33	206 µg/L	
Arsenic		✔	1	3200.8	0.5	6.35	6.35	104 µg/L	
Cadmium	✔		1	3200.8	0.2	<DL	<DL	10.2 µg/L	
Chromium III	✔		1	3200.8	1	1.82	1.82	323 µg/L	
Chromium VI	✔		1	3200.8	1	4	4	323 µg/L	
Copper		✔	1	3200.8	1	8.23	8.23	242 µg/L	
Iron		✔	1	19200.7	50	63	63	5,000 µg/L	
Lead		✔	1	3200.8	0.5	<DL	<DL	160 µg/L	
Mercury	✔		1	3,245.1	0.2	ND	ND	0.739 µg/L	
Nickel		✔	1	3200.8	0.5	1.92	1.92	1,450 µg/L	
Selenium	✔		1	3200.8	5	<DL	<DL	235.8 µg/L	
Silver	✔		1	3200.8	4	<DL	<DL	35.1 µg/L	
Zinc		✔	1	3200.8	10	69.8	39.9	420 µg/L	
Cyanide	✔		1	3200.8	0.005	<DL	<DL	178 mg/L	
B. Non-Halogenated VOCs									
Total BTEX	✔		5	978260C	0.5	<DL	<DL	100 µg/L	---
Benzene	✔		5	978260C	0.50	<DL	<DL	5.0 µg/L	---
1,4 Dioxane	✔		5	978260C	250	<DL	<DL	200 µg/L	---
Acetone		✔	5	978260C	5.0	15	7	7.97 mg/L	---
Phenol	✔		0					1,080 µg/L	

Parameter	Known or believed absent	Known or believed present	# of samples	Test method (#)	Detection limit (µg/l)	Influent		Effluent Limitations	
						Daily maximum (µg/l)	Daily average (µg/l)	TBEL	WQBEL
C. Halogenated VOCs									
Carbon Tetrachloride	✔		5	978260C	1.0	<DL	<DL	4.4 µg/L	
1,2 Dichlorobenzene	✔		5	978260C	1.0	<DL	<DL	600 µg/L	---
1,3 Dichlorobenzene	✔		5	978260C	1.0	<DL	<DL	320 µg/L	---
1,4 Dichlorobenzene	✔		5	978260C	1.0	<DL	<DL	5.0 µg/L	---
Total dichlorobenzene			0					763 µg/L in NH	---
1,1 Dichloroethane	✔		5	978260C	1.0	<DL	<DL	70 µg/L	---
1,2 Dichloroethane	✔		5	978260C	1.0	<DL	<DL	5.0 µg/L	---
1,1 Dichloroethylene			0					3.2 µg/L	---
Ethylene Dibromide			0					0.05 µg/L	---
Methylene Chloride	✔		5	978260C	2.0	<DL	<DL	4.6 µg/L	---
1,1,1 Trichloroethane	✔		5	978260C	1.0	<DL	<DL	200 µg/L	---
1,1,2 Trichloroethane	✔		5	978260C	1.0	<DL	<DL	5.0 µg/L	---
Trichloroethylene	✔		5	978260C	1.0	<DL	<DL	5.0 µg/L	---
Tetrachloroethylene		✔	5	978260C	1.0	2.3	1.34	5.0 µg/L	
cis-1,2 Dichloroethylene	✔		5	978260C	1.0	<DL	<DL	70 µg/L	---
Vinyl Chloride	✔		5	978260C	1.0			2.0 µg/L	---
D. Non-Halogenated SVOCs									
Total Phthalates			0					190 µg/L	
Diethylhexyl phthalate			0					101 µg/L	
Total Group I PAHs			0					1.0 µg/L	---
Benzo(a)anthracene			0					As Total PAHs	
Benzo(a)pyrene			0						
Benzo(b)fluoranthene			0						
Benzo(k)fluoranthene			0						
Chrysene			0						
Dibenzo(a,h)anthracene			0						
Indeno(1,2,3-cd)pyrene			0						

Parameter	Known or believed absent	Known or believed present	# of samples	Test method (#)	Detection limit (µg/l)	Influent		Effluent Limitations	
						Daily maximum (µg/l)	Daily average (µg/l)	TBEL	WQBEL
Total Group II PAHs			0					100 µg/L	---
Naphthalene	✔		6	978260C	2.0	<DL	<DL	20 µg/L	---
E. Halogenated SVOCs									
Total PCBs			0					0.000064 µg/L	---
Pentachlorophenol			0					1.0 µg/L	---
F. Fuels Parameters									
Total Petroleum Hydrocarbons			0					5.0 mg/L	---
Ethanol			0					Report mg/L	---
Methyl-tert-Butyl Ether	✔		5	978260C	2	<DL	<DL	70 µg/L	
tert-Butyl Alcohol	✔		5	978260C	2	<DL	<DL	120 µg/L in MA 40 µg/L in NH	---
tert-Amyl Methyl Ether	✔		5	978260C	2	<DL	<DL	90 µg/L in MA 140 µg/L in NH	---
Other (i.e., pH, temperature, hardness, salinity, LC_{50}, additional pollutants present); if so, specify:									
pH - Influent		✔	2	1214500C	N/A	6.9	6.6		
Hardness - Influent		✔	2	3005A	0.660	337000	254500		
Temp - Receiving Water		✔	1	YSI		7.9 C			
pH - Influent		✔	1	1214500C	N/A	6.8	6.8		
Hardness - Influent		✔	1	3005A	0.660	115000	115000		
Carbon Disulfide		✔	1	8260C	2.0	14	14		
2-Butanone		✔	1	8260C	5.0	<DL	<DL		

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.
Settling tank and bag filters, if necessary, Granular Activated Carbon (GAC) filter

Identify each major treatment component (check any that apply):
■ Fractionation tanks☐ Equalization tank ☐ Oil/water separator ☐ Mechanical filter ☐ Media filter
☐ Chemical feed tank ☐ Air stripping unit ■ Bag filter ☐ Other; if so, specify:

Indicate if either of the following will occur (check any that apply):
☐ Chlorination ☐ De-chlorination

3. Provide the **design flow capacity** in gallons per minute (gpm) of the most limiting component. Indicate the most limiting component: Frac Tank Is use of a flow meter feasible? (check one): ■ Yes ☐ No, if so, provide justification:	50
Provide the proposed maximum effluent flow in gpm.	50
Provide the average effluent flow in gpm.	25
If Activity Category IV applies, indicate the estimated total volume of water that will be discharged:	

4. Has the operator attached a schematic of flow in accordance with the instructions in E, above? (check one): ■ Yes ☐ No

F. Chemical and additive information

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

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

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

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

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

G. Endangered Species Act eligibility determination

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

■ **FWS Criterion A**: No endangered or threatened species or critical habitat are in proximity to the discharges or related activities or come in contact with the "action area".

☐ **FWS Criterion B**: Formal or informal consultation with the FWS under section 7 of the ESA resulted in either a no jeopardy opinion (formal consultation) or a written concurrence by FWS on a finding that the discharges and related activities are "not likely to adversely affect" listed species or critical habitat (informal consultation). Has the operator completed consultation with FWS? (check one): ☐ Yes ☐ No; if no, is consultation underway? (check one): ☐ Yes ☐ No

☐ **FWS Criterion C**: Using the best scientific and commercial data available, the effect of the discharges and related activities on listed species and critical habitat have been evaluated. Based on those evaluations, a determination is made by EPA, or by the operator and affirmed by EPA, that the discharges and related activities will have "no effect" on any federally threatened or endangered listed species or designated critical habitat under the jurisdiction of the FWS. This determination was made by: (check one) ☐ the operator ☐ EPA ☐ Other; if so, specify:

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

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

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

H. National Historic Preservation Act eligibility determination

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

■ **Criterion A**: No historic properties are present. The discharges and discharge-related activities (e.g., BMPs) do not have the potential to cause effects on historic properties.

☐ **Criterion B**: Historic properties are present. Discharges and discharge related activities do not have the potential to cause effects on historic properties.

☐ **Criterion C**: Historic properties are present. The discharges and discharge-related activities have the potential to have an effect or will have an adverse effect on historic properties.

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

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

I. Supplemental information

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

n/a

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

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

J. Certification requirement

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

BMPP certification statement: A BMPP meeting the requirements of this general permit will be developed and implemented prior to the initiation of discharge.	
Notification provided to the appropriate State, including a copy of this NOI, if required.	Check one: Yes ■ No ☐
Notification provided to the municipality in which the discharge is located, including a copy of this NOI, if requested.	Check one: Yes ■ No ☐
Notification provided to the owner of a private or municipal storm sewer system, if such system is used for site discharges, including a copy of this NOI, if requested.	Check one: Yes ■ No ☐ NA ☐
Permission obtained from the owner of a private or municipal storm sewer system, if such system is used for site discharges. If yes, attach additional conditions. If no, attach explanation and timeframe for obtaining permission.	Check one: Yes ☐ No ☐ NA ■
Notification provided to the owner/operator of the area associated with activities covered by an additional discharge permit(s). Additional discharge permit is (check one): ☐ RGP ☐ DGP ☐ CGP ☐ MSGP ☐ Individual NPDES permit ☐ Other; if so, specify:	Check one: Yes ■ No ☐ NA ☐
Signature: DocuSigned by: 59998D9A869D445...	Date: 5/16/2018
Print Name and Title: Britton Bradford	

APPENDIX C:

DEP PRIORITY RESOURCES MAP

USGS STREAMFLOW STATISTICS REPORT

DILUTION FACTOR AND WQBEL CALCULATIONS

ADDITIONAL NOI SUPPORT INFORMATION

MassDEP - Bureau of W aste Site Cleanup

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

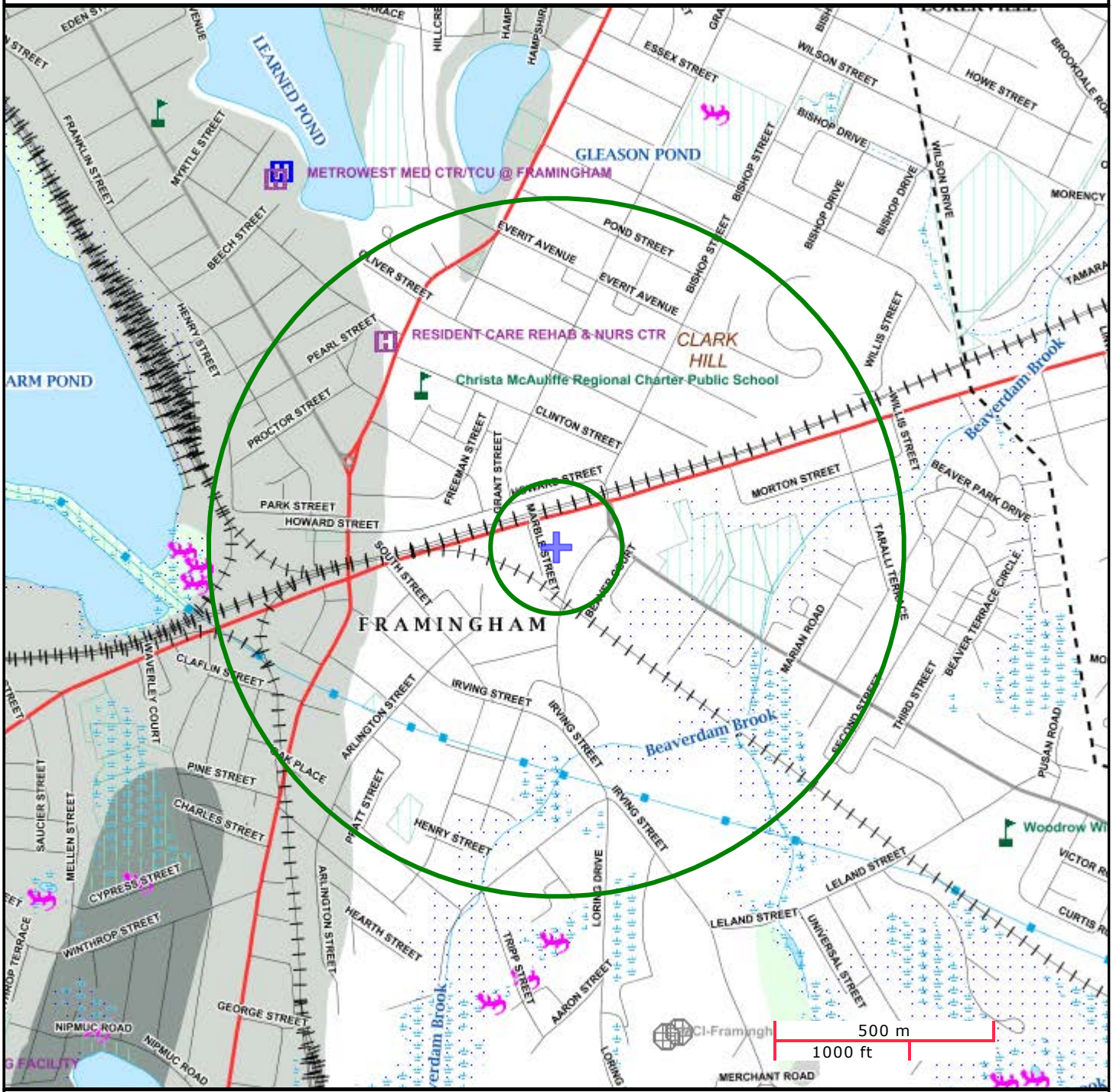
Site Information:

266 WAVERLY STREET FRAMINGHAM, MA

NAD83 UTM Meters:
4683387mN , 301194mE (Zone: 19)
December 6, 2017

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

MassDEP
Commonwealth of Massachusetts
Department of Environmental Protection



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

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

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

Aquifers: Medium Yield, High Yield, EPA Sole Source

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

PWS Protection Areas: Zone II, IWPA, Zone A

Hydrography: Open Water, PWS Reservoir, Tidal Flat

Wetlands: Freshwater, Saltwater, Cranberry Bog

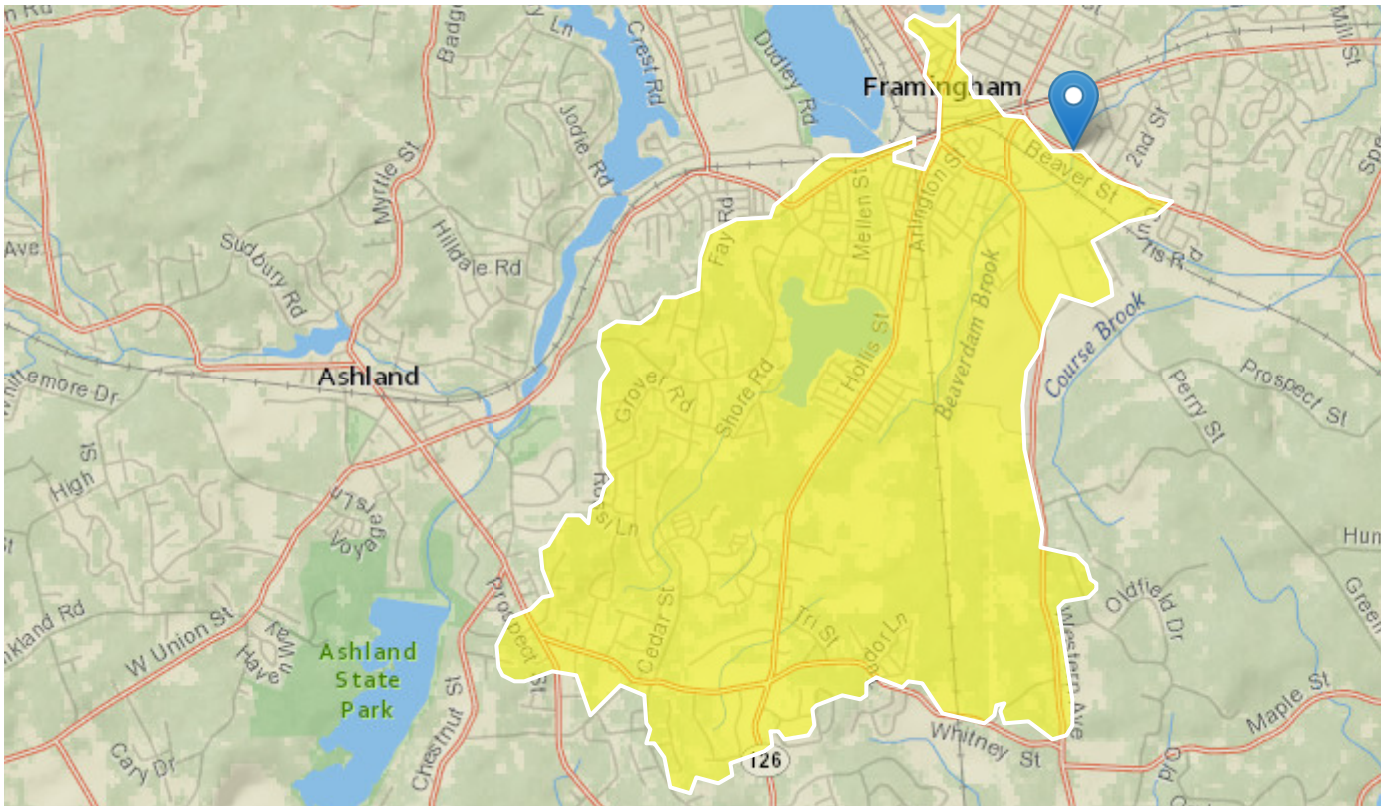
FEMA 100yr Floodplain; Protected Open Space; ACEC

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

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

Mill Creek Residential StreamStats Report

Region ID: MA
Workspace ID: MA20171130125546294000
Clicked Point (Latitude, Longitude): 42.27551, -71.40527
Time: 2017-11-30 07:56:03 -0500



Basin Characteristics

Parameter Code	Parameter Description	Value	Unit
DRNAREA	Area that drains to a point on a stream	5.08	square miles
BSLDEM250	Mean basin slope computed from 1:250K DEM	1.903	percent
DRFTPERSTR	Area of stratified drift per unit of stream length	0.35	square mile per mile
MAREGION	Region of Massachusetts 0 for Eastern 1 for Western	0	dimensionless

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

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	5.08	square miles	1.61	149
BSLDEM250	Mean Basin Slope from 250K DEM	1.903	percent	0.32	24.6
DRFTPERSTR	Stratified Drift per Stream Length	0.35	square mile per mile	0	1.29

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
MAREGION	Massachusetts Region	0	dimensionless	0	1

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

PII: Prediction Interval-Lower, PIu: Prediction Interval-Upper, SEp: Standard Error of Prediction, SE: Standard Error (other -- see report)

Statistic	Value	Unit	PII	PIu	SE	SEp
7 Day 2 Year Low Flow	0.652	ft^3/s	0.22	1.86	49.5	49.5
7 Day 10 Year Low Flow	0.291	ft^3/s	0.0774	1.02	70.8	70.8

Low-Flow Statistics Citations

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

Massachusetts Cultural Resource Information System

MACRIS

MACRIS Search Results

Search Criteria: Town(s): Framingham; Street No: 266; Street Name: Waverly St; Resource Type(s): Area, Building, Burial Ground, Object, Structure;

Inv. No.	Property Name	Street	Town	Year

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: November 30, 2017
Consultation Code: 05E1NE00-2018-SLI-0457
Event Code: 05E1NE00-2018-E-01042
Project Name: Mill Creek Residential

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

To Whom It May Concern:

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

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

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

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the

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

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

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

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

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

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

Attachment(s):

- Official Species List

Official Species List

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

This species list is provided by:

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

Project Summary

Consultation Code: 05E1NE00-2018-SLI-0457

Event Code: 05E1NE00-2018-E-01042

Project Name: Mill Creek Residential

Project Type: DEVELOPMENT

Project Description: >1 Acre

Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/place/42.27716587926126N71.41087579326293W

Counties: Middlesex, MA

Endangered Species Act Species

There is a total of 1 threatened, endangered, or candidate species on this species list. Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species. 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.

Mammals

NAME	STATUS
Northern Long-eared Bat *Myotis septentrionalis*	Threatened

No critical habitat has been designated for this species.

Species profile: https://ecos.fws.gov/ecp/species/9045

Critical habitats

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

APPENDIX D:

LABORATORY ANALYTIC DATA - GROUNDWATER

ANALYTICAL REPORT

Lab Number:	L1526732
Client:	McPhail Associates 2269 Massachusetts Avenue Cambridge, MA 02140
ATTN:	Ambrose Donovan
Phone:	(617) 868-1420
Project Name:	266 WAVERLY ST.
Project Number:	6010.9.00
Report Date:	10/26/15

Certifications & Approvals: MA (M-MA086), NY (11148), CT (PH-0574), NH (2003), NJ NELAP (MA935), RI (LAO00065), ME (MA00086), PA (68-03671), VA (460195), MD (348), IL (200077), NC (666), TX (T104704476), DOD (L2217), USDA (Permit #P-330-11-00240).

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

Project Name: 266 WAVERLY ST.
Project Number: 6010.9.00

Lab Number: L1526732
Report Date: 10/26/15

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1526732-01	B-3 (OW)	WATER	FRAMINGHAM, MA	10/19/15 13:00	10/20/15
L1526732-02	B-12 (OW)	WATER	FRAMINGHAM, MA	10/19/15 16:15	10/20/15
L1526732-03	B-14 (OW)	WATER	FRAMINGHAM, MA	10/19/15 13:30	10/20/15

Project Name: 266 WAVERLY ST. **Lab Number:** L1526732

Project Number: 6010.9.00 **Report Date:** 10/26/15

MADEP MCP Response Action Analytical Report Certification

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

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

A response to questions G, H and I is required for "Presumptive Certainty" status		
G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	YES
H	Were all QC performance standards specified in the CAM protocol(s) achieved?	NO
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	NO

For any questions answered "No", please refer to the case narrative section on the following page(s).

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

Project Name:	266 WAVERLY ST.	**Lab Number:**	L1526732
Project Number:	6010.9.00	**Report Date:**	10/26/15

Case Narrative

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

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

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

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

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

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

Project Name:	266 WAVERLY ST.	**Lab Number:**	L1526732
Project Number:	6010.9.00	**Report Date:**	10/26/15

Case Narrative (continued)

MCP Related Narratives

Volatile Organics

In reference to question H:

The initial calibration, associated with L1526732-02 and -03, did not meet the method required minimum response factor on the lowest calibration standard for 1,4-dioxane (0.00205), as well as the average response factor for 1,4-dioxane.

The continuing calibration standard, associated with L1526732-02 and -03, is outside the acceptance criteria for several compounds; however, it is within overall method allowances. A copy of the continuing calibration standard is included as an addendum to this report.

VPH

In reference to question I:

L1526732-03: The sample was analyzed for a subset of MCP analytes per the Chain of Custody.

EPH

In reference to question I:

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

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

Authorized Signature: Lisa Westerlind

Title: Technical Director/Representative Date: 10/26/15

ORGANICS

VOLATILES

Project Name: 266 WAVERLY ST. **Lab Number:** L1526732

Project Number: 6010.9.00 **Report Date:** 10/26/15

SAMPLE RESULTS

Lab ID: L1526732-02
Client ID: B-12 (OW)
Sample Location: FRAMINGHAM, MA
Matrix: Water
Analytical Method: 97,8260C
Analytical Date: 10/26/15 08:11
Analyst: MM

Date Collected: 10/19/15 16:15
Date Received: 10/20/15
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Methylene chloride	ND		ug/l	2.0	--	1
1,1-Dichloroethane	ND		ug/l	1.0	--	1
Chloroform	ND		ug/l	1.0	--	1
Carbon tetrachloride	ND		ug/l	1.0	--	1
1,2-Dichloropropane	ND		ug/l	1.0	--	1
Dibromochloromethane	ND		ug/l	1.0	--	1
1,1,2-Trichloroethane	ND		ug/l	1.0	--	1
Tetrachloroethene	1.4		ug/l	1.0	--	1
Chlorobenzene	ND		ug/l	1.0	--	1
Trichlorofluoromethane	ND		ug/l	2.0	--	1
1,2-Dichloroethane	ND		ug/l	1.0	--	1
1,1,1-Trichloroethane	ND		ug/l	1.0	--	1
Bromodichloromethane	ND		ug/l	1.0	--	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	--	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	--	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	--	1
1,1-Dichloropropene	ND		ug/l	2.0	--	1
Bromoform	ND		ug/l	2.0	--	1
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Benzene	ND		ug/l	0.50	--	1
Toluene	ND		ug/l	1.0	--	1
Ethylbenzene	ND		ug/l	1.0	--	1
Chloromethane	ND		ug/l	2.0	--	1
Bromomethane	ND		ug/l	2.0	--	1
Vinyl chloride	ND		ug/l	1.0	--	1
Chloroethane	ND		ug/l	2.0	--	1
1,1-Dichloroethene	ND		ug/l	1.0	--	1
trans-1,2-Dichloroethene	ND		ug/l	1.0	--	1
Trichloroethene	ND		ug/l	1.0	--	1
1,2-Dichlorobenzene	ND		ug/l	1.0	--	1

Project Name: 266 WAVERLY ST. **Lab Number:** L1526732

Project Number: 6010.9.00 **Report Date:** 10/26/15

SAMPLE RESULTS

Lab ID: L1526732-02 Date Collected: 10/19/15 16:15

Client ID: B-12 (OW) Date Received: 10/20/15

Sample Location: FRAMINGHAM, MA Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/l	1.0	--	1
1,4-Dichlorobenzene	ND		ug/l	1.0	--	1
Methyl tert butyl ether	ND		ug/l	2.0	--	1
p/m-Xylene	ND		ug/l	2.0	--	1
o-Xylene	ND		ug/l	1.0	--	1
Xylene (Total)	ND		ug/l	1.0	--	1
cis-1,2-Dichloroethene	ND		ug/l	1.0	--	1
1,2-Dichloroethene (total)	ND		ug/l	1.0	--	1
Dibromomethane	ND		ug/l	2.0	--	1
1,2,3-Trichloropropane	ND		ug/l	2.0	--	1
Styrene	ND		ug/l	1.0	--	1
Dichlorodifluoromethane	ND		ug/l	2.0	--	1
Acetone	15		ug/l	5.0	--	1
Carbon disulfide	14		ug/l	2.0	--	1
2-Butanone	ND		ug/l	5.0	--	1
4-Methyl-2-pentanone	ND		ug/l	5.0	--	1
2-Hexanone	ND		ug/l	5.0	--	1
Bromochloromethane	ND		ug/l	2.0	--	1
Tetrahydrofuran	ND		ug/l	2.0	--	1
2,2-Dichloropropane	ND		ug/l	2.0	--	1
1,2-Dibromoethane	ND		ug/l	2.0	--	1
1,3-Dichloropropane	ND		ug/l	2.0	--	1
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Bromobenzene	ND		ug/l	2.0	--	1
n-Butylbenzene	ND		ug/l	2.0	--	1
sec-Butylbenzene	ND		ug/l	2.0	--	1
tert-Butylbenzene	ND		ug/l	2.0	--	1
o-Chlorotoluene	ND		ug/l	2.0	--	1
p-Chlorotoluene	ND		ug/l	2.0	--	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.0	--	1
Hexachlorobutadiene	ND		ug/l	0.60	--	1
Isopropylbenzene	ND		ug/l	2.0	--	1
p-Isopropyltoluene	ND		ug/l	2.0	--	1
Naphthalene	ND		ug/l	2.0	--	1
n-Propylbenzene	ND		ug/l	2.0	--	1
1,2,3-Trichlorobenzene	ND		ug/l	2.0	--	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	--	1
1,3,5-Trimethylbenzene	ND		ug/l	2.0	--	1
1,2,4-Trimethylbenzene	ND		ug/l	2.0	--	1

Project Name: 266 WAVERLY ST. **Lab Number:** L1526732

Project Number: 6010.9.00 **Report Date:** 10/26/15

SAMPLE RESULTS

Lab ID: L1526732-02 Date Collected: 10/19/15 16:15

Client ID: B-12 (OW) Date Received: 10/20/15

Sample Location: FRAMINGHAM, MA Field Prep: Not Specified

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	99		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	112		70-130
Dibromofluoromethane	105		70-130

Project Name: 266 WAVERLY ST. **Lab Number:** L1526732

Project Number: 6010.9.00 **Report Date:** 10/26/15

SAMPLE RESULTS

Lab ID: L1526732-03
Client ID: B-14 (OW)
Sample Location: FRAMINGHAM, MA
Matrix: Water
Analytical Method: 97,8260C
Analytical Date: 10/26/15 07:39
Analyst: MM

Date Collected: 10/19/15 13:30
Date Received: 10/20/15
Field Prep: Not Specified

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

Project Name: 266 WAVERLY ST. **Lab Number:** L1526732

Project Number: 6010.9.00 **Report Date:** 10/26/15

SAMPLE RESULTS

Lab ID: L1526732-03 Date Collected: 10/19/15 13:30

Client ID: B-14 (OW) Date Received: 10/20/15

Sample Location: FRAMINGHAM, MA Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/l	1.0	--	1
1,4-Dichlorobenzene	ND		ug/l	1.0	--	1
Methyl tert butyl ether	ND		ug/l	2.0	--	1
p/m-Xylene	ND		ug/l	2.0	--	1
o-Xylene	ND		ug/l	1.0	--	1
Xylene (Total)	ND		ug/l	1.0	--	1
cis-1,2-Dichloroethene	ND		ug/l	1.0	--	1
1,2-Dichloroethene (total)	ND		ug/l	1.0	--	1
Dibromomethane	ND		ug/l	2.0	--	1
1,2,3-Trichloropropane	ND		ug/l	2.0	--	1
Styrene	ND		ug/l	1.0	--	1
Dichlorodifluoromethane	ND		ug/l	2.0	--	1
Acetone	5.0		ug/l	5.0	--	1
Carbon disulfide	ND		ug/l	2.0	--	1
2-Butanone	5.5		ug/l	5.0	--	1
4-Methyl-2-pentanone	ND		ug/l	5.0	--	1
2-Hexanone	ND		ug/l	5.0	--	1
Bromochloromethane	ND		ug/l	2.0	--	1
Tetrahydrofuran	ND		ug/l	2.0	--	1
2,2-Dichloropropane	ND		ug/l	2.0	--	1
1,2-Dibromoethane	ND		ug/l	2.0	--	1
1,3-Dichloropropane	ND		ug/l	2.0	--	1
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Bromobenzene	ND		ug/l	2.0	--	1
n-Butylbenzene	ND		ug/l	2.0	--	1
sec-Butylbenzene	ND		ug/l	2.0	--	1
tert-Butylbenzene	ND		ug/l	2.0	--	1
o-Chlorotoluene	ND		ug/l	2.0	--	1
p-Chlorotoluene	ND		ug/l	2.0	--	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.0	--	1
Hexachlorobutadiene	ND		ug/l	0.60	--	1
Isopropylbenzene	ND		ug/l	2.0	--	1
p-Isopropyltoluene	ND		ug/l	2.0	--	1
Naphthalene	ND		ug/l	2.0	--	1
n-Propylbenzene	ND		ug/l	2.0	--	1
1,2,3-Trichlorobenzene	ND		ug/l	2.0	--	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	--	1
1,3,5-Trimethylbenzene	ND		ug/l	2.0	--	1
1,2,4-Trimethylbenzene	ND		ug/l	2.0	--	1

Project Name: 266 WAVERLY ST. **Lab Number:** L1526732

Project Number: 6010.9.00 **Report Date:** 10/26/15

SAMPLE RESULTS

Lab ID: L1526732-03 Date Collected: 10/19/15 13:30

Client ID: B-14 (OW) Date Received: 10/20/15

Sample Location: FRAMINGHAM, MA Field Prep: Not Specified

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	94		70-130
Toluene-d8	105		70-130
4-Bromofluorobenzene	117		70-130
Dibromofluoromethane	101		70-130

Project Name: 266 WAVERLY ST. **Lab Number:** L1526732

Project Number: 6010.9.00 **Report Date:** 10/26/15

Method Blank Analysis
Batch Quality Control

Analytical Method: 97,8260C
Analytical Date: 10/26/15 07:06
Analyst: MM

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics - Westborough Lab for sample(s): 02-03 Batch: WG834118-3					
Methylene chloride	ND		ug/l	2.0	--
1,1-Dichloroethane	ND		ug/l	1.0	--
Chloroform	ND		ug/l	1.0	--
Carbon tetrachloride	ND		ug/l	1.0	--
1,2-Dichloropropane	ND		ug/l	1.0	--
Dibromochloromethane	ND		ug/l	1.0	--
1,1,2-Trichloroethane	ND		ug/l	1.0	--
Tetrachloroethene	ND		ug/l	1.0	--
Chlorobenzene	ND		ug/l	1.0	--
Trichlorofluoromethane	ND		ug/l	2.0	--
1,2-Dichloroethane	ND		ug/l	1.0	--
1,1,1-Trichloroethane	ND		ug/l	1.0	--
Bromodichloromethane	ND		ug/l	1.0	--
trans-1,3-Dichloropropene	ND		ug/l	0.50	--
cis-1,3-Dichloropropene	ND		ug/l	0.50	--
1,3-Dichloropropene, Total	ND		ug/l	0.50	--
1,1-Dichloropropene	ND		ug/l	2.0	--
Bromoform	ND		ug/l	2.0	--
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	--
Benzene	ND		ug/l	0.50	--
Toluene	ND		ug/l	1.0	--
Ethylbenzene	ND		ug/l	1.0	--
Chloromethane	ND		ug/l	2.0	--
Bromomethane	ND		ug/l	2.0	--
Vinyl chloride	ND		ug/l	1.0	--
Chloroethane	ND		ug/l	2.0	--
1,1-Dichloroethene	ND		ug/l	1.0	--
trans-1,2-Dichloroethene	ND		ug/l	1.0	--
Trichloroethene	ND		ug/l	1.0	--

Project Name: 266 WAVERLY ST. **Lab Number:** L1526732

Project Number: 6010.9.00 **Report Date:** 10/26/15

Method Blank Analysis
Batch Quality Control

Analytical Method: 97,8260C
Analytical Date: 10/26/15 07:06
Analyst: MM

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics - Westborough Lab for sample(s): 02-03 Batch: WG834118-3					
1,2-Dichlorobenzene	ND		ug/l	1.0	--
1,3-Dichlorobenzene	ND		ug/l	1.0	--
1,4-Dichlorobenzene	ND		ug/l	1.0	--
Methyl tert butyl ether	ND		ug/l	2.0	--
p/m-Xylene	ND		ug/l	2.0	--
o-Xylene	ND		ug/l	1.0	--
Xylene (Total)	ND		ug/l	1.0	--
cis-1,2-Dichloroethene	ND		ug/l	1.0	--
1,2-Dichloroethene (total)	ND		ug/l	1.0	--
Dibromomethane	ND		ug/l	2.0	--
1,2,3-Trichloropropane	ND		ug/l	2.0	--
Styrene	ND		ug/l	1.0	--
Dichlorodifluoromethane	ND		ug/l	2.0	--
Acetone	ND		ug/l	5.0	--
Carbon disulfide	ND		ug/l	2.0	--
2-Butanone	ND		ug/l	5.0	--
4-Methyl-2-pentanone	ND		ug/l	5.0	--
2-Hexanone	ND		ug/l	5.0	--
Bromochloromethane	ND		ug/l	2.0	--
Tetrahydrofuran	ND		ug/l	2.0	--
2,2-Dichloropropane	ND		ug/l	2.0	--
1,2-Dibromoethane	ND		ug/l	2.0	--
1,3-Dichloropropane	ND		ug/l	2.0	--
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	--
Bromobenzene	ND		ug/l	2.0	--
n-Butylbenzene	ND		ug/l	2.0	--
sec-Butylbenzene	ND		ug/l	2.0	--
tert-Butylbenzene	ND		ug/l	2.0	--
o-Chlorotoluene	ND		ug/l	2.0	--

Project Name: 266 WAVERLY ST. **Lab Number:** L1526732

Project Number: 6010.9.00 **Report Date:** 10/26/15

Method Blank Analysis
Batch Quality Control

Analytical Method: 97,8260C
Analytical Date: 10/26/15 07:06
Analyst: MM

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics - Westborough Lab for sample(s): 02-03 Batch: WG834118-3					
p-Chlorotoluene	ND		ug/l	2.0	--
1,2-Dibromo-3-chloropropane	ND		ug/l	2.0	--
Hexachlorobutadiene	ND		ug/l	0.60	--
Isopropylbenzene	ND		ug/l	2.0	--
p-Isopropyltoluene	ND		ug/l	2.0	--
Naphthalene	ND		ug/l	2.0	--
n-Propylbenzene	ND		ug/l	2.0	--
1,2,3-Trichlorobenzene	ND		ug/l	2.0	--
1,2,4-Trichlorobenzene	ND		ug/l	2.0	--
1,3,5-Trimethylbenzene	ND		ug/l	2.0	--
1,2,4-Trimethylbenzene	ND		ug/l	2.0	--
Ethyl ether	ND		ug/l	2.0	--
Isopropyl Ether	ND		ug/l	2.0	--
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0	--
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	--
1,4-Dioxane	ND		ug/l	250	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	93		70-130
Toluene-d8	104		70-130
4-Bromofluorobenzene	124		70-130
Dibromofluoromethane	103		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: 266 WAVERLY ST.
Project Number: 6010.9.00

Lab Number: L1526732
Report Date: 10/26/15

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 02-03 Batch: WG834118-1 WG834118-2								
Methylene chloride	87		103		70-130	17		20
1,1-Dichloroethane	101		98		70-130	3		20
Chloroform	100		96		70-130	4		20
Carbon tetrachloride	93		93		70-130	0		20
1,2-Dichloropropane	105		100		70-130	5		20
Dibromochloromethane	93		96		70-130	3		20
1,1,2-Trichloroethane	101		102		70-130	1		20
Tetrachloroethene	100		99		70-130	1		20
Chlorobenzene	99		100		70-130	1		20
Trichlorofluoromethane	90		87		70-130	3		20
1,2-Dichloroethane	96		93		70-130	3		20
1,1,1-Trichloroethane	95		93		70-130	2		20
Bromodichloromethane	97		94		70-130	3		20
trans-1,3-Dichloropropene	99		100		70-130	1		20
cis-1,3-Dichloropropene	100		99		70-130	1		20
1,1-Dichloropropene	98		94		70-130	4		20
Bromoform	99		94		70-130	5		20
1,1,2,2-Tetrachloroethane	111		110		70-130	1		20
Benzene	100		97		70-130	3		20
Toluene	100		102		70-130	2		20
Ethylbenzene	100		101		70-130	1		20

Lab Control Sample Analysis
Batch Quality Control

Project Name: 266 WAVERLY ST.
Project Number: 6010.9.00

Lab Number: L1526732
Report Date: 10/26/15

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 02-03 Batch: WG834118-1 WG834118-2								
Chloromethane	99		99		70-130	0		20
Bromomethane	110		90		70-130	20		20
Vinyl chloride	101		96		70-130	5		20
Chloroethane	101		99		70-130	2		20
1,1-Dichloroethene	84		96		70-130	13		20
trans-1,2-Dichloroethene	105		102		70-130	3		20
Trichloroethene	100		95		70-130	5		20
1,2-Dichlorobenzene	105		102		70-130	3		20
1,3-Dichlorobenzene	104		97		70-130	7		20
1,4-Dichlorobenzene	106		101		70-130	5		20
Methyl tert butyl ether	99		96		70-130	3		20
p/m-Xylene	104		102		70-130	2		20
o-Xylene	104		105		70-130	1		20
cis-1,2-Dichloroethene	100		96		70-130	4		20
Dibromomethane	105		102		70-130	3		20
1,2,3-Trichloropropane	109		98		70-130	11		20
Styrene	105		105		70-130	0		20
Dichlorodifluoromethane	91		89		70-130	2		20
Acetone	98		112		70-130	13		20
Carbon disulfide	78		90		70-130	14		20
2-Butanone	104		93		70-130	11		20

Lab Control Sample Analysis
Batch Quality Control

Project Name: 266 WAVERLY ST.
Project Number: 6010.9.00

Lab Number: L1526732
Report Date: 10/26/15

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 02-03 Batch: WG834118-1 WG834118-2								
4-Methyl-2-pentanone	109		104		70-130	5		20
2-Hexanone	97		97		70-130	0		20
Bromochloromethane	113		109		70-130	4		20
Tetrahydrofuran	103		93		70-130	10		20
2,2-Dichloropropane	100		98		70-130	2		20
1,2-Dibromoethane	102		107		70-130	5		20
1,3-Dichloropropane	101		96		70-130	5		20
1,1,1,2-Tetrachloroethane	95		97		70-130	2		20
Bromobenzene	108		96		70-130	12		20
n-Butylbenzene	111		107		70-130	4		20
sec-Butylbenzene	106		102		70-130	4		20
tert-Butylbenzene	104		99		70-130	5		20
o-Chlorotoluene	105		99		70-130	6		20
p-Chlorotoluene	103		99		70-130	4		20
1,2-Dibromo-3-chloropropane	88		95		70-130	8		20
Hexachlorobutadiene	118		108		70-130	9		20
Isopropylbenzene	103		98		70-130	5		20
p-Isopropyltoluene	105		98		70-130	7		20
Naphthalene	80		79		70-130	1		20
n-Propylbenzene	105		99		70-130	6		20
1,2,3-Trichlorobenzene	95		94		70-130	1		20

Lab Control Sample Analysis
Batch Quality Control

Project Name: 266 WAVERLY ST.
Project Number: 6010.9.00

Lab Number: L1526732
Report Date: 10/26/15

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 02-03 Batch: WG834118-1 WG834118-2								
1,2,4-Trichlorobenzene	90		86		70-130	5		20
1,3,5-Trimethylbenzene	104		97		70-130	7		20
1,2,4-Trimethylbenzene	105		99		70-130	6		20
Ethyl ether	89		92		70-130	3		20
Isopropyl Ether	97		94		70-130	3		20
Ethyl-Tert-Butyl-Ether	94		92		70-130	2		20
Tertiary-Amyl Methyl Ether	99		96		70-130	3		20
1,4-Dioxane	**62**	Q	130		70-130	**71**	Q	20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	93		95		70-130
Toluene-d8	101		104		70-130
4-Bromofluorobenzene	103		98		70-130
Dibromofluoromethane	98		100		70-130

PETROLEUM HYDROCARBONS

Project Name: 266 WAVERLY ST. **Lab Number:** L1526732

Project Number: 6010.9.00 **Report Date:** 10/26/15

SAMPLE RESULTS

Lab ID:	L1526732-01	Date Collected:	10/19/15 13:00
Client ID:	B-3 (OW)	Date Received:	10/20/15
Sample Location:	FRAMINGHAM, MA	Field Prep:	Not Specified
Matrix:	Water		
Analytical Method:	100,VPH-04-1.1		
Analytical Date:	10/22/15 18:25		
Analyst:	KD		

Quality Control Information

Condition of sample received:	Satisfactory
Aqueous Preservative:	Laboratory Provided Preserved Container
Sample Temperature upon receipt:	Received on Ice

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,5-Dibromotoluene-PID	105		70-130
2,5-Dibromotoluene-FID	109		70-130

Project Name: 266 WAVERLY ST. **Lab Number:** L1526732

Project Number: 6010.9.00 **Report Date:** 10/26/15

SAMPLE RESULTS

Lab ID:	L1526732-01	Date Collected:	10/19/15 13:00
Client ID:	B-3 (OW)	Date Received:	10/20/15
Sample Location:	FRAMINGHAM, MA	Field Prep:	Not Specified
Matrix:	Water	Extraction Method:	EPA 3510C
Analytical Method:	98,EPH-04-1.1	Extraction Date:	10/21/15 22:40
Analytical Date:	10/23/15 00:46	Cleanup Method1:	EPH-04-1
Analyst:	SR	Cleanup Date1:	10/22/15

Quality Control Information

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

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Extractable Petroleum Hydrocarbons - Westborough Lab						
C9-C18 Aliphatics	ND		ug/l	100	--	1
C19-C36 Aliphatics	ND		ug/l	100	--	1
C11-C22 Aromatics	ND		ug/l	100	--	1
C11-C22 Aromatics, Adjusted	ND		ug/l	100	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Chloro-Octadecane	75		40-140
o-Terphenyl	60		40-140
2-Fluorobiphenyl	65		40-140
2-Bromonaphthalene	68		40-140

Project Name: 266 WAVERLY ST. **Lab Number:** L1526732

Project Number: 6010.9.00 **Report Date:** 10/26/15

SAMPLE RESULTS

Lab ID:	L1526732-03	Date Collected:	10/19/15 13:30
Client ID:	B-14 (OW)	Date Received:	10/20/15
Sample Location:	FRAMINGHAM, MA	Field Prep:	Not Specified
Matrix:	Water		
Analytical Method:	100,VPH-04-1.1		
Analytical Date:	10/21/15 12:42		
Analyst:	KD		

Quality Control Information

Condition of sample received:	Satisfactory
Aqueous Preservative:	Laboratory Provided Preserved Container
Sample Temperature upon receipt:	Received on Ice

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Petroleum Hydrocarbons - Westborough Lab						
C5-C8 Aliphatics	ND		ug/l	50.0	--	1
C9-C12 Aliphatics	ND		ug/l	50.0	--	1
C9-C10 Aromatics	ND		ug/l	50.0	--	1
C5-C8 Aliphatics, Adjusted	ND		ug/l	50.0	--	1
C9-C12 Aliphatics, Adjusted	ND		ug/l	50.0	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,5-Dibromotoluene-PID	119		70-130
2,5-Dibromotoluene-FID	117		70-130

Project Name: 266 WAVERLY ST.
Project Number: 6010.9.00

Lab Number: L1526732
Report Date: 10/26/15

Method Blank Analysis
Batch Quality Control

Analytical Method: 98,EPH-04-1.1
Analytical Date: 10/22/15 22:39
Analyst: SR

Extraction Method: EPA 3510C
Extraction Date: 10/21/15 22:40
Cleanup Method: EPH-04-1
Cleanup Date: 10/22/15

Parameter	Result	Qualifier	Units	RL	MDL
Extractable Petroleum Hydrocarbons - Westborough Lab for sample(s): 01 Batch: WG833002-1					
C9-C18 Aliphatics	ND		ug/l	100	--
C19-C36 Aliphatics	ND		ug/l	100	--
C11-C22 Aromatics	ND		ug/l	100	--
C11-C22 Aromatics, Adjusted	ND		ug/l	100	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
Chloro-Octadecane	74		40-140
o-Terphenyl	58		40-140
2-Fluorobiphenyl	59		40-140
2-Bromonaphthalene	61		40-140

Project Name: 266 WAVERLY ST. **Lab Number:** L1526732

Project Number: 6010.9.00 **Report Date:** 10/26/15

Method Blank Analysis
Batch Quality Control

Analytical Method: 100,VPH-04-1.1
Analytical Date: 10/21/15 10:18
Analyst: KD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Petroleum Hydrocarbons - Westborough Lab for sample(s): 03 Batch: WG833261-3					
C5-C8 Aliphatics	ND		ug/l	50.0	--
C9-C12 Aliphatics	ND		ug/l	50.0	--
C9-C10 Aromatics	ND		ug/l	50.0	--
C5-C8 Aliphatics, Adjusted	ND		ug/l	50.0	--
C9-C12 Aliphatics, Adjusted	ND		ug/l	50.0	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2,5-Dibromotoluene-PID	117		70-130
2,5-Dibromotoluene-FID	114		70-130

Project Name: 266 WAVERLY ST. **Lab Number:** L1526732

Project Number: 6010.9.00 **Report Date:** 10/26/15

Method Blank Analysis
Batch Quality Control

Analytical Method: 100,VPH-04-1.1
Analytical Date: 10/22/15 10:08
Analyst: KD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Petroleum Hydrocarbons - Westborough Lab for sample(s): 01 Batch: WG833545-3					
C5-C8 Aliphatics	ND		ug/l	50.0	--
C9-C12 Aliphatics	ND		ug/l	50.0	--
C9-C10 Aromatics	ND		ug/l	50.0	--
C5-C8 Aliphatics, Adjusted	ND		ug/l	50.0	--
C9-C12 Aliphatics, Adjusted	ND		ug/l	50.0	--
Benzene	ND		ug/l	2.00	--
Toluene	ND		ug/l	2.00	--
Ethylbenzene	ND		ug/l	2.00	--
p/m-Xylene	ND		ug/l	2.00	--
o-Xylene	ND		ug/l	2.00	--
Methyl tert butyl ether	ND		ug/l	3.00	--
Naphthalene	ND		ug/l	4.00	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2,5-Dibromotoluene-PID	106		70-130
2,5-Dibromotoluene-FID	107		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: 266 WAVERLY ST.
Project Number: 6010.9.00

Lab Number: L1526732
Report Date: 10/26/15

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Extractable Petroleum Hydrocarbons - Westborough Lab Associated sample(s): 01 Batch: WG833002-2 WG833002-3								
C9-C18 Aliphatics	70		67		40-140	4		25
C19-C36 Aliphatics	93		84		40-140	10		25
C11-C22 Aromatics	70		66		40-140	6		25
Naphthalene	53		54		40-140	2		25
2-Methylnaphthalene	58		58		40-140	0		25
Acenaphthylene	56		56		40-140	0		25
Acenaphthene	60		58		40-140	3		25
Fluorene	62		60		40-140	3		25
Phenanthrene	67		62		40-140	8		25
Anthracene	80		73		40-140	9		25
Fluoranthene	72		66		40-140	9		25
Pyrene	74		68		40-140	8		25
Benzo(a)anthracene	73		66		40-140	10		25
Chrysene	77		70		40-140	10		25
Benzo(b)fluoranthene	74		67		40-140	10		25
Benzo(k)fluoranthene	72		67		40-140	7		25
Benzo(a)pyrene	80		73		40-140	9		25
Indeno(1,2,3-cd)Pyrene	62		56		40-140	10		25
Dibenzo(a,h)anthracene	70		62		40-140	12		25
Benzo(ghi)perylene	76		68		40-140	11		25
Nonane (C9)	45		46		30-140	2		25

Lab Control Sample Analysis
Batch Quality Control

Project Name: 266 WAVERLY ST.
Project Number: 6010.9.00

Lab Number: L1526732
Report Date: 10/26/15

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Extractable Petroleum Hydrocarbons - Westborough Lab Associated sample(s): 01 Batch: WG833002-2 WG833002-3								
Decane (C10)	56		55		40-140	2		25
Dodecane (C12)	63		63		40-140	0		25
Tetradecane (C14)	68		67		40-140	1		25
Hexadecane (C16)	76		72		40-140	5		25
Octadecane (C18)	85		78		40-140	9		25
Nonadecane (C19)	86		79		40-140	8		25
Eicosane (C20)	90		81		40-140	11		25
Docosane (C22)	88		81		40-140	8		25
Tetracosane (C24)	90		81		40-140	11		25
Hexacosane (C26)	89		81		40-140	9		25
Octacosane (C28)	91		82		40-140	10		25
Triacontane (C30)	89		81		40-140	9		25
Hexatriacontane (C36)	90		82		40-140	9		25

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
Chloro-Octadecane	88		80		40-140
o-Terphenyl	76		67		40-140
2-Fluorobiphenyl	70		64		40-140
2-Bromonaphthalene	72		64		40-140
% Naphthalene Breakthrough	0		0		
% 2-Methylnaphthalene Breakthrough	0		0		

Lab Control Sample Analysis
Batch Quality Control

Project Name: 266 WAVERLY ST.
Project Number: 6010.9.00

Lab Number: L1526732
Report Date: 10/26/15

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Petroleum Hydrocarbons - Westborough Lab Associated sample(s): 03 Batch: WG833261-1 WG833261-2								
C5-C8 Aliphatics	102		100		70-130	2		25
C9-C12 Aliphatics	96		92		70-130	4		25
C9-C10 Aromatics	113		112		70-130	1		25
Benzene	103		102		70-130	1		25
Toluene	105		105		70-130	0		25
Ethylbenzene	108		107		70-130	1		25
p/m-Xylene	107		106		70-130	1		25
o-Xylene	107		106		70-130	1		25
Methyl tert butyl ether	98		100		70-130	1		25
Naphthalene	112		114		70-130	2		25
1,2,4-Trimethylbenzene	113		112		70-130	1		25
Pentane	104		103		70-130	1		25
2-Methylpentane	102		100		70-130	2		25
2,2,4-Trimethylpentane	99		98		70-130	1		25
n-Nonane	97		93		30-130	4		25
n-Decane	91		89		70-130	3		25
n-Butylcyclohexane	105		101		70-130	4		25

Lab Control Sample Analysis
Batch Quality Control

Project Name: 266 WAVERLY ST.
Project Number: 6010.9.00

Lab Number: L1526732
Report Date: 10/26/15

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Petroleum Hydrocarbons - Westborough Lab Associated sample(s): 03 Batch: WG833261-1 WG833261-2								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2,5-Dibromotoluene-PID	98		97		70-130
2,5-Dibromotoluene-FID	96		94		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: 266 WAVERLY ST.
Project Number: 6010.9.00

Lab Number: L1526732
Report Date: 10/26/15

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Petroleum Hydrocarbons - Westborough Lab Associated sample(s): 01 Batch: WG833545-1 WG833545-2								
C5-C8 Aliphatics	102		101		70-130	1		25
C9-C12 Aliphatics	105		105		70-130	0		25
C9-C10 Aromatics	105		106		70-130	1		25
Benzene	102		102		70-130	0		25
Toluene	102		103		70-130	1		25
Ethylbenzene	105		106		70-130	1		25
p/m-Xylene	104		105		70-130	1		25
o-Xylene	104		105		70-130	1		25
Methyl tert butyl ether	106		106		70-130	0		25
Naphthalene	113		111		70-130	2		25
1,2,4-Trimethylbenzene	105		106		70-130	1		25
Pentane	99		99		70-130	0		25
2-Methylpentane	102		102		70-130	0		25
2,2,4-Trimethylpentane	104		103		70-130	1		25
n-Nonane	100		99		30-130	1		25
n-Decane	92		91		70-130	1		25
n-Butylcyclohexane	102		102		70-130	0		25

Lab Control Sample Analysis
Batch Quality Control

Project Name: 266 WAVERLY ST.
Project Number: 6010.9.00

Lab Number: L1526732
Report Date: 10/26/15

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Petroleum Hydrocarbons - Westborough Lab Associated sample(s): 01 Batch: WG833545-1 WG833545-2								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2,5-Dibromotoluene-PID	118		114		70-130
2,5-Dibromotoluene-FID	119		116		70-130

Project Name: 266 WAVERLY ST.
Project Number: 6010.9.00

Lab Number: L1526732
Report Date: 10/26/15

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information Custody Seal

Cooler	
A	Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1526732-01A	Vial HCl preserved	A	N/A	3.9	Y	Absent	VPH-DELUX-10(14)
L1526732-01B	Vial HCl preserved	A	N/A	3.9	Y	Absent	VPH-DELUX-10(14)
L1526732-01C	Amber 1000ml HCl preserved	A	<2	3.9	Y	Absent	EPH-10(14)
L1526732-01D	Amber 1000ml HCl preserved	A	<2	3.9	Y	Absent	EPH-10(14)
L1526732-02A	Vial HCl preserved	A	N/A	3.9	Y	Absent	MCP-8260-10(14)
L1526732-02B	Vial HCl preserved	A	N/A	3.9	Y	Absent	MCP-8260-10(14)
L1526732-03A	Vial HCl preserved	A	N/A	3.9	Y	Absent	MCP-8260-10(14)
L1526732-03B	Vial HCl preserved	A	N/A	3.9	Y	Absent	VPH-10(14)

Container Comments

L1526732-03B

*Values in parentheses indicate holding time in days

Project Name:	266 WAVERLY ST.	**Lab Number:**	L1526732
Project Number:	6010.9.00	**Report Date:**	10/26/15

GLOSSARY

Acronyms

EDL - Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).

EPA - Environmental Protection Agency.

LCS - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LCSD - Laboratory Control Sample Duplicate: Refer to LCS.

LFB - Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

MDL - Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

MS - Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.

MSD - Matrix Spike Sample Duplicate: Refer to MS.

NA - Not Applicable.

NC - Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.

NI - Not Ignitable.

NP - Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.

RL - Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

RPD - Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.

SRM - Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.

STLP - Semi-dynamic Tank Leaching Procedure per EPA Method 1315.

TIC - Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Footnotes

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

Terms

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

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

Data Qualifiers

A - Spectra identified as "Aldol Condensation Product".

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

Report Format: Data Usability Report

Project Name:	266 WAVERLY ST.	**Lab Number:**	L1526732
Project Number:	6010.9.00	**Report Date:**	10/26/15

Data Qualifiers

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

Report Format: Data Usability Report

Project Name:	266 WAVERLY ST.	**Lab Number:**	L1526732
Project Number:	6010.9.00	**Report Date:**	10/26/15

REFERENCES

97 EPA Test Methods (SW-846) with QC Requirements & Performance Standards for the Analysis of EPA SW-846 Methods under the Massachusetts Contingency Plan, WSC-CAM-IIA, IIB, IIIA, IIIB, IIIC, IIID, VA, VB, VC, VIA, VIB, VIIIA and VIIIB, July 2010.

98 Method for the Determination of Extractable Petroleum Hydrocarbons (EPH), MassDEP, May 2004, Revision 1.1 with QC Requirements & Performance Standards for the Analysis of EPH under the Massachusetts Contingency Plan, WSC-CAM-IVB, July 2010.

100 Method for the Determination of Volatile Petroleum Hydrocarbons (VPH), MassDEP, May 2004, Revision 1.1 with QC Requirements & Performance Standards for the Analysis of VPH under the Massachusetts Contingency Plan, WSC-CAM-IVA, July 2010.

LIMITATION OF LIABILITIES

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

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

Certification Information

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

Westborough Facility
EPA 8260C: 1,2,4,5-Tetramethylbenzene, 4-Ethyltoluene, Iodomethane (methyl iodide) (soil), Methyl methacrylate (soil), Azobenzene.
EPA 8270D: Dimethylnaphthalene,1,4-Diphenylhydrazine.
EPA 625: 4-Chloroaniline, 4-Methylphenol.
SM4500: Soil: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility
EPA 8270D: Biphenyl.
EPA 2540D: TSS
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

The following analytes are included in our Massachusetts DEP Scope of Accreditation, Westborough Facility:

Drinking Water
EPA 200.8: Sb,As,Ba,Be,Cd,Cr,Cu,Pb,Ni,Se,Tl; **EPA 200.7**: Ba,Be,Ca,Cd,Cr,Cu,Na; **EPA 245.1:** Mercury;
EPA 300.0: Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B**
EPA 332: Perchlorate.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT, Enterolert-QT.**

Non-Potable Water
EPA 200.8: Al,Sb,As,Be,Cd,Cr,Cu,Pb,Mn,Ni,Se,Ag,Tl,Zn;
EPA 200.7: Al,Sb,As,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Mo,Ni,K,Se,Ag,Na,Sr,Ti,Tl,V,Zn;
EPA 245.1, SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2340B, SM2320B, SM4500CL-E, SM4500F-BC, SM426C, SM4500NH3-BH, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **SM4500NO3-F,**
EPA 353.2: Nitrate-N**, SM4500NH3-BC-NES, EPA 351.1, SM4500P-E, SM4500P-B, E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, SM14 510AC, EPA 420.1, SM4500-CN-CE, SM2540D.**
EPA 624: Volatile Halocarbons & Aromatics,
EPA 608: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9222D-MF**.

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

CHAIN OF CUSTODY

PAGE 1 OF 1

Date Rec'd in Lab: 10/20/15

ALPHA Job #: L1526732

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

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

Project Information

Project Name: 60402.7.02 266 Waverley

Project Location: Framingham, MA

Project #: 6010.7.02

Project Manager: Bill Burns

ALPHA Quote #:

Report Information - Data Deliverables

☐ ADEx ☑ EMAIL

Billing Information

☐ Same as Client info PO #:

Client Information

Client: McPhail Associates

Address:

Phone: 617-868-1420

Email:

Regulatory Requirements & Project Information Requirements

☑ Yes ☐ No MA MCP Analytical Methods ☐ Yes ☑ No CT RCP Analytical Methods

☐ Yes ☑ No Matrix Spike Required on this SDG? (Required for MCP Inorganics)

☐ Yes ☑ No GW1 Standards (Info Required for Metals & EPH with Targets)

☐ Yes ☑ No NPDES RGP

☐ Other State /Fed Program _____ Criteria _____

Turn-Around Time

☑ Standard ☐ RUSH (only confirmed if pre-approved!)

Date Due: 10/27/15

Additional Project Information:

ANALYSIS

VOC: ☑ 8260 ☐ 624 ☐ 524.2

SVOC: ☐ ABN ☐ PAH

METALS: ☐ MCP 13 ☐ MCP 14 ☐ RCP 15

METALS: ☐ RCRA5 ☐ RCRA8 ☐ PP13

EPH: ☐ Ranges & Targets ☑ Ranges Only

VPH: ☑ Ranges & Targets ☐ Ranges Only

☐ PCB ☐ PEST

TPH: ☐ Quant Only ☐ Fingerprint

VPH STD

SAMPLE INFO

Filtration
☐ Field
☐ Lab to do

Preservation
☐ Lab to do

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler Initials	VOC	SVOC	METALS	METALS	EPH	VPH	PCB	TPH	VPH STD	Sample Comments	TOTAL # BOTTLES
26732-01	B-3 (ow)	10/19/15	13:00							X	X					4
-02	B-12 (ow)	10/19/15	16:15			X										2
-03	B-14 (ow)	10/19/15	13:30			X								X		2

Container Type	V									A	V			V		
Preservative	B									B	B			B		

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

Preservative
A= None
B= HCl
C= HNO_3
D= H_2SO_4
E= NaOH
F= MeOH
G= $NaHSO_4$
H = $Na_2S_2O_3$
I= Ascorbic Acid
J = NH_4Cl
K= Zn Acetate
O= Other

Relinquished By:	Date/Time	Received By:	Date/Time
	10/20 8:00	SAL	10.20.15 16:57
	10/20/15 13:48	Richard Scott	10/20/15 18:57

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

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

CHAIN OF CUSTODY

PAGE 1 OF 1

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

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

Date Rec'd in Lab: 10/20/15

ALPHA Job #: L1526732

Client Information

Client:

Address:

Phone:

Email:

Additional Project Information:

Project Information

Project Name: 60402.7.02 266 Waverley

Project Location: Framingham, MA

Project #: 6010.7.02

Project Manager: Bill Burns

ALPHA Quote #:

Turn-Around Time

☑ Standard ☐ RUSH (only confirmed if pre-approved!)

Date Due: 10/27/15

Report Information - Data Deliverables

☐ ADEx ☑ EMAIL

Billing Information

☐ Same as Client info PO #:

Regulatory Requirements & Project Information Requirements

☑ Yes ☐ No MA MCP Analytical Methods ☐ Yes ☑ No CT RCP Analytical Methods

☐ Yes ☑ No Matrix Spike Required on this SDG? (Required for MCP Inorganics)

☐ Yes ☑ No GW1 Standards (Info Required for Metals & EPH with Targets)

☐ Yes ☑ No NPDES RGP

☐ Other State /Fed Program _____ Criteria _____

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler Initials	VOC: ☑ 8260 ☐ 624 ☐ 524.2	SVOC: ☐ ABN ☐ PAH	METALS: ☐ MCP 13 ☐ MCP 14 ☐ RCP 15	METALS: ☐ RCRA5 ☐ RCRA8 ☐ PP13	EPH: ☐ Ranges & Targets ☑ Ranges Only	VPH: ☑ Ranges & Targets ☐ Ranges Only	☐ PCB ☐ PEST	TPH: ☐ Quant Only ☐ Fingerprint	VPH STD	Sample Comments	TOTAL # BOTTLES
26732.01	B-3 (ow)									X	X					4
.02	B-12 (ow)					X										2
.03	B-14 (ow)					X							X			2

SAMPLE INFO
Filtration
☐ Field
☐ Lab to do
Preservation
☐ Lab to do

Container Type	V				A	V			V							
Preservative	B				B	B			B							

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

Preservative
A= None
B= HCl
C= HNO_3
D= H_2SO_4
E= NaOH
F= MeOH
G= $NaHSO_4$
H = $Na_2S_2O_3$
I= Ascorbic Acid
J = NH_4Cl
K= Zn Acetate
O= Other

Relinquished By:	Date/Time	Received By:	Date/Time
	10/20 8:00	SAL	10.20.15 16:53
	10/20/15 13:48	Richard Scott	10/20/15 18:[illegible]

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

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

7A
Volatile Organics CONTINUING CALIBRATION CHECK

Lab Name: Alpha Analytical Labs

SDG No.: L1526732

Instrument ID: Jack.i Calibration Date: 26-OCT-2015 Time: 05:29

Lab File ID: 1026A02 Init. Calib. Date(s): 12-OCT-2 12-OCT-2

Sample No: 8260 CCAL Init. Calib. Times : 11:05 14:19

Compound	$\overline{RRF}$	RRF	MIN RRF	%D	MAX %D	
dichlorodifluoromethane	.64845	.58862	.1	-9	20	
chloromethane	.97727	.96984	.1	-1	20	
vinyl chloride	.82783	.83698	.1	1	20	
bromomethane	.32615	.3586	.1	10	20	
chloroethane	.41172	.41638	.1	1	20	
trichlorofluoromethane	.9394	.84419	.1	-10	20	
ethyl ether	.29204	.2608	.05	-11	20	
1,1,-dichloroethene	.56977	.47983	.1	-16	20	
carbon disulfide	1.7088	1.3274	.1	-22	20	F
freon-113	.58548	.5088	.1	-13	20	
iodomethane	100	40.944	.05	-59	20	F
acrolein	.06061	.06023	.05	-1	20	
methylene chloride	.59702	.52132	.1	-13	20	
acetone	100	98.270	.1	-2	20	
trans-1,2-dichloroethene	.63117	.66417	.1	5	20	
methyl acetate	.3058	.32026	.1	5	20	
methyl tert butyl ether	1.2511	1.2435	.1	-1	20	
tert butyl alcohol	.02869	.03237	.05	13	20	F
Diisopropyl Ether	2.7426	2.6619	.01	-3	20	
1,1-dichloroethane	1.3683	1.3838	.2	1	20	
acrylonitrile	.19629	.1921	.05	-2	20	
Halothane	.57072	.55342	.05	-3	20	
Ethyl-Tert-Butyl-Ether	1.9844	1.8684	.05	-6	20	
vinyl acetate	1.4429	1.4050	.05	-3	20	
cis-1,2-dichloroethene	.76984	.76784	.1	0	20	
2,2-dichloropropane	.96888	.97049	.05	0	20	
cyclohexane	1.5098	1.5254	.01	1	30	
bromochloromethane	.30597	.34514	.05	13	20	
chloroform	1.1667	1.1654	.2	0	20	
carbontetrachloride	.93122	.86713	.1	-7	20	
tetrahydrofuran	.16797	.17379	.05	3	20	
ethyl acetate	.46515	.44445	.05	-4	20	
1,1,1-trichloroethane	1.0560	1.0016	.1	-5	20	
1,1-dichloropropene	.90464	.8854	.05	-2	20	
2-butanone	.19059	.19854	.1	4	20	
benzene	2.7957	2.7914	.5	0	20	
Tertiary-Amyl Methyl Ether	1.4021	1.3944	.05	-1	20	
1,2-dichloroethane	.80995	.78026	.1	-4	20	

FORM VII MCP-8260-10

7A
CONTINUING CALIBRATION CHECK

Lab Name: Alpha Analytical Labs

SDG No.: L1526732

Instrument ID: Jack.i Calibration Date: 26-OCT-2015 Time: 05:29

Lab File ID: 1026A02 Init. Calib. Date(s): 12-OCT-2 12-OCT-2

Sample No: 8260 CCAL Init. Calib. Times : 11:05 14:19

Compound	$\overline{RRF}$	RRF	MIN RRF	%D	MAX %D	
methyl cyclohexane	1.2391	1.2373	.01	0	30	
trichloroethene	.71123	.70748	.2	-1	20	
dibromomethane	.35257	.37019	.05	5	20	
1,2-dichloropropane	.73853	.77674	.1	5	20	
bromodichloromethane	.80055	.77428	.2	-3	20	
1,4-dioxane	.00297	.00185	.05	-38	20	F
2-chloroethylvinyl ether	.27066	.17574	.05	-35	20	F
cis-1,3-dichloropropene	.94696	.94724	.2	0	20	
toluene	2.1705	2.1693	.4	0	20	
tetrachloroethene	1.0234	1.0182	.2	-1	20	
4-methyl-2-pentanone	.15137	.16528	.1	9	20	
trans-1,3-dichloropropene	.8899	.87914	.1	-1	20	
1,1,2-trichloroethane	.45228	.45769	.1	1	20	
ethyl-methacrylate	.72126	.7397	.01	3	30	
chlorodibromomethane	.66722	.6232	.1	-7	20	
1,3-dichloropropane	.95209	.95837	.05	1	20	
1,2-dibromoethane	.51877	.53127	.1	2	20	
2-hexanone	.32965	.31898	.1	-3	20	
chlorobenzene	2.4227	2.4079	.5	-1	20	
ethyl benzene	4.0737	4.0929	.1	0	20	
1,1,1,2-tetrachloroethane	.83842	.79952	.05	-5	20	
p/m xylene	1.6470	1.7141	.1	4	20	
o xylene	1.5375	1.5984	.3	4	20	
bromoform	.64153	.63762	.1	-1	20	
styrene	2.4785	2.6124	.3	5	20	
isopropylbenzene	8.2002	8.4321	.1	3	20	
bromobenzene	1.9059	2.0517	.05	8	20	
1,4-dichlorobutane	2.2647	2.3156	.01	2	30	
n-propylbenzene	6.1637	6.4713	.05	5	20	
1,1,2,2,-tetrachloroethane	1.0394	1.1523	.3	11	20	
4-ethyltoluene	8.9079	9.0961	.05	2	20	
2-chlorotoluene	6.1637	6.4713	.05	5	20	
1,2,3-trichloropropane	.89186	.97613	.05	9	20	
1,3,5-trimethybenzene	6.8613	7.1661	.05	4	20	
trans-1,4-dichloro-2-butene	.34856	.34488	.05	-1	20	
4-chorotoluene	5.4477	5.6247	.05	3	20	
tert-butylbenzene	6.1050	6.3627	.05	4	20	
1,2,4-trimethylbenzene	6.7124	7.0258	.05	5	20	

FORM VII MCP-8260-10

7A
CONTINUING CALIBRATION CHECK

Lab Name: Alpha Analytical Labs

SDG No.: L1526732

Instrument ID: Jack.i Calibration Date: 26-OCT-2015 Time: 05:29

Lab File ID: 1026A02 Init. Calib. Date(s): 12-OCT-2 12-OCT-2

Sample No: 8260 CCAL Init. Calib. Times : 11:05 14:19

Compound	$\overline{RRF}$	RRF	MIN RRF	%D	MAX %D	
sec-butylbenzene	8.5387	9.0935	.01	6	20	
p-isopropyltoluene	7.6423	8.0538	.05	5	20	
1,3-dichlorobenzene	3.8379	4.0114	.6	5	20	
1,4-dichlorobenzene	3.6705	3.8928	.5	6	20	
p-diethylbenzene	4.2929	4.6497	.05	8	20	
n-butylbenzene	5.5099	6.1328	.05	11	20	
1,2-dichlorobenzene	3.3135	3.4801	.4	5	20	
1,2,4,5-tetramethylbenzene	5.6130	6.2020	.05	10	20	
1,2-dibromo-3-chloropropane	.13751	.12113	.05	-12	20	
1,3,5-trichlorobenzene	.92433	.9992	.05	8	20	
1,2,4-trichlorobenzene	100	90.403	.2	-10	20	
hexachlorobutadiene	.64557	.76364	.05	18	20	
naphthalene	100	79.545	.05	-20	20	F
1,2,3-trichlorobenzene	100	94.972	.05	-5	20	
dibromofluoromethane	.24936	.24356	.05	-2	20	
1,2-dichloroethane-d4	.27078	.25253	.05	-7	20	
toluene-d8	1.1679	1.1811	.01	1	20	
4-bromofluorobenzene	.86106	.89	.05	3	20	

FORM VII MCP-8260-10

ANALYTICAL REPORT

Lab Number:	L1531325
Client:	McPhail Associates 2269 Massachusetts Avenue Cambridge, MA 02140
ATTN:	Ambrose Donovan
Phone:	(617) 868-1420
Project Name:	266 WAVERLY ST.
Project Number:	6010.9.01
Report Date:	12/04/15

Certifications & Approvals: MA (M-MA086), NY (11148), CT (PH-0574), NH (2003), NJ NELAP (MA935), RI (LAO00065), ME (MA00086), PA (68-03671), VA (460195), MD (348), IL (200077), NC (666), TX (T104704476), DOD (L2217), USDA (Permit #P-330-11-00240).

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

Project Name: 266 WAVERLY ST.
Project Number: 6010.9.01

Lab Number: L1531325
Report Date: 12/04/15

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1531325-01	B-101 (OW)	WATER	FRAMINGHAM, MA	11/30/15 14:15	11/30/15
L1531325-02	B-102 (OW)	WATER	FRAMINGHAM, MA	11/30/15 13:35	11/30/15
L1531325-03	B-104 (OW)	WATER	FRAMINGHAM, MA	11/30/15 14:45	11/30/15

Project Name: 266 WAVERLY ST. **Lab Number:** L1531325

Project Number: 6010.9.01 **Report Date:** 12/04/15

MADEP MCP Response Action Analytical Report Certification

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

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

A response to questions G, H and I is required for "Presumptive Certainty" status		
G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	YES
H	Were all QC performance standards specified in the CAM protocol(s) achieved?	NO
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	YES

For any questions answered "No", please refer to the case narrative section on the following page(s).

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

Project Name: 266 WAVERLY ST. **Lab Number:** L1531325
Project Number: 6010.9.01 **Report Date:** 12/04/15

Case Narrative

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

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

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

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

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

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

Project Name: 266 WAVERLY ST. **Lab Number:** L1531325
Project Number: 6010.9.01 **Report Date:** 12/04/15

Case Narrative (continued)

MCP Related Narratives

Volatile Organics

In reference to question H:

The initial calibration, associated with L1531325-01 through -03, did not meet the method required minimum response factor on the lowest calibration standard for 1,4-dioxane (0.00308), as well as the average response factor for 1,4-dioxane.

The continuing calibration standard, associated with L1531325-01 through -03, is outside the acceptance criteria for several compounds; however, it is within overall method allowances. A copy of the continuing calibration standard is included as an addendum to this report.

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

Authorized Signature: Kelly Stenstrom

Title: Technical Director/Representative Date: 12/04/15

ORGANICS

VOLATILES

Project Name: 266 WAVERLY ST. **Lab Number:** L1531325

Project Number: 6010.9.01 **Report Date:** 12/04/15

SAMPLE RESULTS

Lab ID: L1531325-01
Client ID: B-101 (OW)
Sample Location: FRAMINGHAM, MA
Matrix: Water
Analytical Method: 97,8260C
Analytical Date: 12/03/15 13:42
Analyst: MM

Date Collected: 11/30/15 14:15
Date Received: 11/30/15
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Methylene chloride	ND		ug/l	2.0	--	1
1,1-Dichloroethane	ND		ug/l	1.0	--	1
Chloroform	ND		ug/l	1.0	--	1
Carbon tetrachloride	ND		ug/l	1.0	--	1
1,2-Dichloropropane	ND		ug/l	1.0	--	1
Dibromochloromethane	ND		ug/l	1.0	--	1
1,1,2-Trichloroethane	ND		ug/l	1.0	--	1
Tetrachloroethene	2.3		ug/l	1.0	--	1
Chlorobenzene	ND		ug/l	1.0	--	1
Trichlorofluoromethane	ND		ug/l	2.0	--	1
1,2-Dichloroethane	ND		ug/l	1.0	--	1
1,1,1-Trichloroethane	ND		ug/l	1.0	--	1
Bromodichloromethane	ND		ug/l	1.0	--	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	--	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	--	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	--	1
1,1-Dichloropropene	ND		ug/l	2.0	--	1
Bromoform	ND		ug/l	2.0	--	1
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Benzene	ND		ug/l	0.50	--	1
Toluene	ND		ug/l	1.0	--	1
Ethylbenzene	ND		ug/l	1.0	--	1
Chloromethane	ND		ug/l	2.0	--	1
Bromomethane	ND		ug/l	2.0	--	1
Vinyl chloride	ND		ug/l	1.0	--	1
Chloroethane	ND		ug/l	2.0	--	1
1,1-Dichloroethene	ND		ug/l	1.0	--	1
trans-1,2-Dichloroethene	ND		ug/l	1.0	--	1
Trichloroethene	ND		ug/l	1.0	--	1
1,2-Dichlorobenzene	ND		ug/l	1.0	--	1

Project Name: 266 WAVERLY ST. **Lab Number:** L1531325

Project Number: 6010.9.01 **Report Date:** 12/04/15

SAMPLE RESULTS

Lab ID: L1531325-01 Date Collected: 11/30/15 14:15

Client ID: B-101 (OW) Date Received: 11/30/15

Sample Location: FRAMINGHAM, MA Field Prep: Not Specified

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

Project Name: 266 WAVERLY ST. **Lab Number:** L1531325

Project Number: 6010.9.01 **Report Date:** 12/04/15

SAMPLE RESULTS

Lab ID: L1531325-01 Date Collected: 11/30/15 14:15

Client ID: B-101 (OW) Date Received: 11/30/15

Sample Location: FRAMINGHAM, MA Field Prep: Not Specified

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	110		70-130
Toluene-d8	91		70-130
4-Bromofluorobenzene	98		70-130
Dibromofluoromethane	110		70-130

Project Name: 266 WAVERLY ST. **Lab Number:** L1531325

Project Number: 6010.9.01 **Report Date:** 12/04/15

SAMPLE RESULTS

Lab ID: L1531325-02
Client ID: B-102 (OW)
Sample Location: FRAMINGHAM, MA
Matrix: Water
Analytical Method: 97,8260C
Analytical Date: 12/03/15 14:15
Analyst: MM

Date Collected: 11/30/15 13:35
Date Received: 11/30/15
Field Prep: Not Specified

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

Project Name: 266 WAVERLY ST. **Lab Number:** L1531325

Project Number: 6010.9.01 **Report Date:** 12/04/15

SAMPLE RESULTS

Lab ID: L1531325-02 Date Collected: 11/30/15 13:35

Client ID: B-102 (OW) Date Received: 11/30/15

Sample Location: FRAMINGHAM, MA Field Prep: Not Specified

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

Project Name: 266 WAVERLY ST. **Lab Number:** L1531325

Project Number: 6010.9.01 **Report Date:** 12/04/15

SAMPLE RESULTS

Lab ID: L1531325-02 Date Collected: 11/30/15 13:35

Client ID: B-102 (OW) Date Received: 11/30/15

Sample Location: FRAMINGHAM, MA Field Prep: Not Specified

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	111		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	110		70-130
Dibromofluoromethane	93		70-130

Project Name: 266 WAVERLY ST. **Lab Number:** L1531325

Project Number: 6010.9.01 **Report Date:** 12/04/15

SAMPLE RESULTS

Lab ID: L1531325-03
Client ID: B-104 (OW)
Sample Location: FRAMINGHAM, MA
Matrix: Water
Analytical Method: 97,8260C
Analytical Date: 12/03/15 14:47
Analyst: MM

Date Collected: 11/30/15 14:45
Date Received: 11/30/15
Field Prep: Not Specified

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

Project Name: 266 WAVERLY ST. **Lab Number:** L1531325

Project Number: 6010.9.01 **Report Date:** 12/04/15

SAMPLE RESULTS

Lab ID: L1531325-03 Date Collected: 11/30/15 14:45

Client ID: B-104 (OW) Date Received: 11/30/15

Sample Location: FRAMINGHAM, MA Field Prep: Not Specified

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

Project Name: 266 WAVERLY ST. **Lab Number:** L1531325

Project Number: 6010.9.01 **Report Date:** 12/04/15

SAMPLE RESULTS

Lab ID: L1531325-03 Date Collected: 11/30/15 14:45

Client ID: B-104 (OW) Date Received: 11/30/15

Sample Location: FRAMINGHAM, MA Field Prep: Not Specified

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	105		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	96		70-130
Dibromofluoromethane	98		70-130

Project Name: 266 WAVERLY ST. **Lab Number:** L1531325

Project Number: 6010.9.01 **Report Date:** 12/04/15

Method Blank Analysis
Batch Quality Control

Analytical Method: 97,8260C
Analytical Date: 12/03/15 08:51
Analyst: MM

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics - Westborough Lab for sample(s): 01-03 Batch: WG846351-3					
Methylene chloride	ND		ug/l	2.0	--
1,1-Dichloroethane	ND		ug/l	1.0	--
Chloroform	ND		ug/l	1.0	--
Carbon tetrachloride	ND		ug/l	1.0	--
1,2-Dichloropropane	ND		ug/l	1.0	--
Dibromochloromethane	ND		ug/l	1.0	--
1,1,2-Trichloroethane	ND		ug/l	1.0	--
Tetrachloroethene	ND		ug/l	1.0	--
Chlorobenzene	ND		ug/l	1.0	--
Trichlorofluoromethane	ND		ug/l	2.0	--
1,2-Dichloroethane	ND		ug/l	1.0	--
1,1,1-Trichloroethane	ND		ug/l	1.0	--
Bromodichloromethane	ND		ug/l	1.0	--
trans-1,3-Dichloropropene	ND		ug/l	0.50	--
cis-1,3-Dichloropropene	ND		ug/l	0.50	--
1,3-Dichloropropene, Total	ND		ug/l	0.50	--
1,1-Dichloropropene	ND		ug/l	2.0	--
Bromoform	ND		ug/l	2.0	--
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	--
Benzene	ND		ug/l	0.50	--
Toluene	ND		ug/l	1.0	--
Ethylbenzene	ND		ug/l	1.0	--
Chloromethane	ND		ug/l	2.0	--
Bromomethane	ND		ug/l	2.0	--
Vinyl chloride	ND		ug/l	1.0	--
Chloroethane	ND		ug/l	2.0	--
1,1-Dichloroethene	ND		ug/l	1.0	--
trans-1,2-Dichloroethene	ND		ug/l	1.0	--
Trichloroethene	ND		ug/l	1.0	--

Project Name: 266 WAVERLY ST. **Lab Number:** L1531325

Project Number: 6010.9.01 **Report Date:** 12/04/15

Method Blank Analysis
Batch Quality Control

Analytical Method: 97,8260C
Analytical Date: 12/03/15 08:51
Analyst: MM

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics - Westborough Lab for sample(s): 01-03 Batch: WG846351-3					
1,2-Dichlorobenzene	ND		ug/l	1.0	--
1,3-Dichlorobenzene	ND		ug/l	1.0	--
1,4-Dichlorobenzene	ND		ug/l	1.0	--
Methyl tert butyl ether	ND		ug/l	2.0	--
p/m-Xylene	ND		ug/l	2.0	--
o-Xylene	ND		ug/l	1.0	--
Xylene (Total)	ND		ug/l	1.0	--
cis-1,2-Dichloroethene	ND		ug/l	1.0	--
1,2-Dichloroethene (total)	ND		ug/l	1.0	--
Dibromomethane	ND		ug/l	2.0	--
1,2,3-Trichloropropane	ND		ug/l	2.0	--
Styrene	ND		ug/l	1.0	--
Dichlorodifluoromethane	ND		ug/l	2.0	--
Acetone	ND		ug/l	5.0	--
Carbon disulfide	ND		ug/l	2.0	--
2-Butanone	ND		ug/l	5.0	--
4-Methyl-2-pentanone	ND		ug/l	5.0	--
2-Hexanone	ND		ug/l	5.0	--
Bromochloromethane	ND		ug/l	2.0	--
Tetrahydrofuran	ND		ug/l	2.0	--
2,2-Dichloropropane	ND		ug/l	2.0	--
1,2-Dibromoethane	ND		ug/l	2.0	--
1,3-Dichloropropane	ND		ug/l	2.0	--
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	--
Bromobenzene	ND		ug/l	2.0	--
n-Butylbenzene	ND		ug/l	2.0	--
sec-Butylbenzene	ND		ug/l	2.0	--
tert-Butylbenzene	ND		ug/l	2.0	--
o-Chlorotoluene	ND		ug/l	2.0	--

Project Name: 266 WAVERLY ST. **Lab Number:** L1531325

Project Number: 6010.9.01 **Report Date:** 12/04/15

Method Blank Analysis
Batch Quality Control

Analytical Method: 97,8260C
Analytical Date: 12/03/15 08:51
Analyst: MM

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics - Westborough Lab for sample(s): 01-03 Batch: WG846351-3					
p-Chlorotoluene	ND		ug/l	2.0	--
1,2-Dibromo-3-chloropropane	ND		ug/l	2.0	--
Hexachlorobutadiene	ND		ug/l	0.60	--
Isopropylbenzene	ND		ug/l	2.0	--
p-Isopropyltoluene	ND		ug/l	2.0	--
Naphthalene	ND		ug/l	2.0	--
n-Propylbenzene	ND		ug/l	2.0	--
1,2,3-Trichlorobenzene	ND		ug/l	2.0	--
1,2,4-Trichlorobenzene	ND		ug/l	2.0	--
1,3,5-Trimethylbenzene	ND		ug/l	2.0	--
1,2,4-Trimethylbenzene	ND		ug/l	2.0	--
Ethyl ether	ND		ug/l	2.0	--
Isopropyl Ether	ND		ug/l	2.0	--
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0	--
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	--
1,4-Dioxane	ND		ug/l	250	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	101		70-130
Toluene-d8	105		70-130
4-Bromofluorobenzene	111		70-130
Dibromofluoromethane	107		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: 266 WAVERLY ST.
Project Number: 6010.9.01

Lab Number: L1531325
Report Date: 12/04/15

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 01-03 Batch: WG846351-1 WG846351-2								
Methylene chloride	107		102		70-130	5		20
1,1-Dichloroethane	106		96		70-130	10		20
Chloroform	104		95		70-130	9		20
Carbon tetrachloride	106		96		70-130	10		20
1,2-Dichloropropane	100		90		70-130	11		20
Dibromochloromethane	91		93		70-130	2		20
1,1,2-Trichloroethane	109		95		70-130	14		20
Tetrachloroethene	106		102		70-130	4		20
Chlorobenzene	93		94		70-130	1		20
Trichlorofluoromethane	112		96		70-130	15		20
1,2-Dichloroethane	105		96		70-130	9		20
1,1,1-Trichloroethane	107		97		70-130	10		20
Bromodichloromethane	103		93		70-130	10		20
trans-1,3-Dichloropropene	98		92		70-130	6		20
cis-1,3-Dichloropropene	105		94		70-130	11		20
1,1-Dichloropropene	105		96		70-130	9		20
Bromoform	97		96		70-130	1		20
1,1,2,2-Tetrachloroethane	102		100		70-130	2		20
Benzene	106		95		70-130	11		20
Toluene	98		97		70-130	1		20
Ethylbenzene	98		97		70-130	1		20

Lab Control Sample Analysis
Batch Quality Control

Project Name: 266 WAVERLY ST.
Project Number: 6010.9.01

Lab Number: L1531325
Report Date: 12/04/15

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 01-03 Batch: WG846351-1 WG846351-2								
Chloromethane	106		93		70-130	13		20
Bromomethane	82		78		70-130	5		20
Vinyl chloride	109		97		70-130	12		20
Chloroethane	106		96		70-130	10		20
1,1-Dichloroethene	103		94		70-130	9		20
trans-1,2-Dichloroethene	101		90		70-130	12		20
Trichloroethene	103		96		70-130	7		20
1,2-Dichlorobenzene	100		102		70-130	2		20
1,3-Dichlorobenzene	96		104		70-130	8		20
1,4-Dichlorobenzene	98		98		70-130	0		20
Methyl tert butyl ether	102		93		70-130	9		20
p/m-Xylene	96		97		70-130	1		20
o-Xylene	101		96		70-130	5		20
cis-1,2-Dichloroethene	104		101		70-130	3		20
Dibromomethane	102		95		70-130	7		20
1,2,3-Trichloropropane	98		104		70-130	6		20
Styrene	100		97		70-130	3		20
Dichlorodifluoromethane	115		102		70-130	12		20
Acetone	114		92		70-130	**21**	Q	20
Carbon disulfide	99		90		70-130	10		20
2-Butanone	111		94		70-130	17		20

Lab Control Sample Analysis
Batch Quality Control

Project Name: 266 WAVERLY ST.
Project Number: 6010.9.01

Lab Number: L1531325
Report Date: 12/04/15

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 01-03 Batch: WG846351-1 WG846351-2								
4-Methyl-2-pentanone	100		88		70-130	13		20
2-Hexanone	94		94		70-130	0		20
Bromochloromethane	120		102		70-130	16		20
Tetrahydrofuran	103		88		70-130	16		20
2,2-Dichloropropane	105		98		70-130	7		20
1,2-Dibromoethane	104		101		70-130	3		20
1,3-Dichloropropane	96		91		70-130	5		20
1,1,1,2-Tetrachloroethane	99		104		70-130	5		20
Bromobenzene	101		104		70-130	3		20
n-Butylbenzene	95		97		70-130	2		20
sec-Butylbenzene	99		97		70-130	2		20
tert-Butylbenzene	94		94		70-130	0		20
o-Chlorotoluene	94		97		70-130	3		20
p-Chlorotoluene	99		102		70-130	3		20
1,2-Dibromo-3-chloropropane	96		106		70-130	10		20
Hexachlorobutadiene	92		110		70-130	18		20
Isopropylbenzene	98		99		70-130	1		20
p-Isopropyltoluene	98		100		70-130	2		20
Naphthalene	89		86		70-130	3		20
n-Propylbenzene	98		98		70-130	0		20
1,2,3-Trichlorobenzene	104		96		70-130	8		20

Lab Control Sample Analysis
Batch Quality Control

Project Name: 266 WAVERLY ST.
Project Number: 6010.9.01

Lab Number: L1531325
Report Date: 12/04/15

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 01-03 Batch: WG846351-1 WG846351-2								
1,2,4-Trichlorobenzene	89		93		70-130	4		20
1,3,5-Trimethylbenzene	98		98		70-130	0		20
1,2,4-Trimethylbenzene	98		100		70-130	2		20
Ethyl ether	105		91		70-130	14		20
Isopropyl Ether	104		94		70-130	10		20
Ethyl-Tert-Butyl-Ether	102		94		70-130	8		20
Tertiary-Amyl Methyl Ether	101		94		70-130	7		20
1,4-Dioxane	130		113		70-130	14		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	117		96		70-130
Toluene-d8	100		100		70-130
4-Bromofluorobenzene	97		103		70-130
Dibromofluoromethane	112		102		70-130

Project Name: 266 WAVERLY ST.
Project Number: 6010.9.01

Lab Number: L1531325
Report Date: 12/04/15

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information Custody Seal

Cooler	
A	Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1531325-01A	Vial HCl preserved	A	N/A	4.6	Y	Absent	MCP-8260-10(14)
L1531325-01B	Vial HCl preserved	A	N/A	4.6	Y	Absent	MCP-8260-10(14)
L1531325-02A	Vial HCl preserved	A	N/A	4.6	Y	Absent	MCP-8260-10(14)
L1531325-02B	Vial HCl preserved	A	N/A	4.6	Y	Absent	MCP-8260-10(14)
L1531325-03A	Vial HCl preserved	A	N/A	4.6	Y	Absent	MCP-8260-10(14)
L1531325-03B	Vial HCl preserved	A	N/A	4.6	Y	Absent	MCP-8260-10(14)

*Values in parentheses indicate holding time in days

Project Name:	266 WAVERLY ST.	**Lab Number:**	L1531325
Project Number:	6010.9.01	**Report Date:**	12/04/15

GLOSSARY

Acronyms

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

Footnotes

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

Terms

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

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

Data Qualifiers

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

Report Format: Data Usability Report

Project Name:	266 WAVERLY ST.	**Lab Number:**	L1531325
Project Number:	6010.9.01	**Report Date:**	12/04/15

Data Qualifiers

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

Report Format: Data Usability Report

Project Name:	266 WAVERLY ST.	**Lab Number:**	L1531325
Project Number:	6010.9.01	**Report Date:**	12/04/15

REFERENCES

97 EPA Test Methods (SW-846) with QC Requirements & Performance Standards for the Analysis of EPA SW-846 Methods under the Massachusetts Contingency Plan, WSC-CAM-IIA, IIB, IIIA, IIIB, IIIC, IIID, VA, VB, VC, VIA, VIB, VIIIA and VIIIB, July 2010.

LIMITATION OF LIABILITIES

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

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

Certification Information

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

Westborough Facility
EPA 8260C: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene; Iodomethane (methyl iodide) (soil); Methyl methacrylate (soil); Azobenzene.
EPA 8270D: Dimethylnaphthalene,1,4-Diphenylhydrazine.
EPA 625: 4-Chloroaniline, 4-Methylphenol.
SM4500: Soil: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility
EPA 8270D: Biphenyl.
EPA 2540D: TSS
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

The following analytes are included in our Massachusetts DEP Scope of Accreditation, Westborough Facility:

Drinking Water
EPA 200.8: Sb,As,Ba,Be,Cd,Cr,Cu,Pb,Ni,Se,Tl; **EPA 200.7**: Ba,Be,Ca,Cd,Cr,Cu,Na; **EPA 245.1:** Mercury;
EPA 300.0: Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B**
EPA 332: Perchlorate.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT, Enterolert-QT.**

Non-Potable Water
EPA 200.8: Al,Sb,As,Be,Cd,Cr,Cu,Pb,Mn,Ni,Se,Ag,Tl,Zn;
EPA 200.7: Al,Sb,As,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Mo,Ni,K,Se,Ag,Na,Sr,Ti,Tl,V,Zn;
EPA 245.1, SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2340B, SM2320B, SM4500CL-E, SM4500F-BC, SM426C, SM4500NH3-BH, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **SM4500NO3-F,**
EPA 353.2: Nitrate-N**, SM4500NH3-BC-NES, EPA 351.1, SM4500P-E, SM4500P-B, E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, SM14 510AC, EPA 420.1, SM4500-CN-CE, SM2540D.**
EPA 624: Volatile Halocarbons & Aromatics,
EPA 608: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9222D-MF**.

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

CHAIN OF CUSTODY

PAGE _____ OF _____

ALPHA ANALYTICAL
8 Walkup Drive, Westboro, MA 01581, Tel: 508-898-9220
320 Forbes Blvd, Mansfield, MA 02048, Tel: 508-822-9300

Date Rec'd in Lab: 11/30/15

ALPHA Job #: L1531325

Client Information

Client: McPhail Assoc.
Address: 2269 Mass. Ave.
Phone: 617-868-1420.
Email:

Project Information

Project Name: 266 Waverly ST.
Project Location: Framingham MA.
Project #: 6010.9.01
Project Manager: WSP
ALPHA Quote #:

Turn-Around Time

☑ Standard ☐ RUSH (only confirmed if pre-approved)
Date Due: 12-7-15.

Additional Project Information:

Report Information - Data Deliverables

☐ ADEx ☐ EMAIL

Billing Information

☐ Same as Client info PO #:

Regulatory Requirements & Project Information Requirements

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

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler Initials	ANALYSIS: VOC: ☑ 8260 ☐ 624 ☐ 524.2	SVOC: ☐ ABN ☐ PAH	METALS: ☐ MCP 13 ☐ MCP 14 ☐ RCP 15	METALS: ☐ RCRA5 ☐ RCRA8 ☐ PP13	EPH: ☐ Ranges & Targets ☐ Ranges Only	VPH: ☐ Ranges & Targets ☐ Ranges Only	☐ PCB ☐ PEST	TPH: ☐ Quant Only ☐ Fingerprint	SAMPLE INFO: Filtration ☐ Field ☐ Lab to do; Preservation ☐ Lab to do	Sample Comments	TOTAL # BOTTLES
31325 01	B-101 (ow)	11/30	2:15	GW	RL	X										2
02	B-102 (ow)	11/30	1:35		RL	X										
03	B-104 (ow)	11/30	2:45		RL	X										

Container Type	V															
Preservative	B															

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

Preservative
A= None
B= HCl
C= HNO_3
D= H_2SO_4
E= NaOH
F= MeOH
G= $NaHSO_4$
H = $Na_2S_2O_3$
I= Ascorbic Acid
J = NH_4Cl
K= Zn Acetate
O= Other

Relinquished By:	Date/Time	Received By:	Date/Time
	11/30 14:00		11/30 16:45
	11 30 15 17:30		11/30/15 17:30

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

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

7A
Volatile Organics CONTINUING CALIBRATION CHECK

Lab Name: Alpha Analytical Labs

SDG No.: L1531325

Instrument ID: Jack.i Calibration Date: 03-DEC-2015 Time: 07:14

Lab File ID: 1203A03 Init. Calib. Date(s): 01-DEC-2 01-DEC-2

Sample No: 8260 CCAL Init. Calib. Times : 06:46 12:26

Compound	$\overline{RRF}$	RRF	MIN RRF	%D	MAX %D	
dichlorodifluoromethane	.85007	.97747	.1	15	20	
chloromethane	1.1658	1.2419	.1	7	20	
vinyl chloride	.93576	1.0186	.1	9	20	
bromomethane	.40472	.3318	.1	-18	20	
chloroethane	.54712	.57739	.1	6	20	
trichlorofluoromethane	1.3724	1.5392	.1	12	20	
ethyl ether	.38185	.40209	.05	5	20	
1,1,-dichloroethene	.66444	.68517	.1	3	20	
carbon disulfide	2.1093	2.0819	.1	-1	20	
freon-113	.72307	.82984	.1	15	20	
iodomethane	100	135	.05	35	20	F
acrolein	.11613	.1197	.05	3	20	
methylene chloride	.67616	.72127	.1	7	20	
acetone	100	114	.1	14	20	
trans-1,2-dichloroethene	.7762	.7827	.1	1	20	
methyl acetate	.42708	.47771	.1	12	20	
methyl tert butyl ether	2.0304	2.0664	.1	2	20	
tert butyl alcohol	.04096	.07202	.05	76	20	F
Diisopropyl Ether	3.4695	3.6041	.01	4	20	
1,1-dichloroethane	1.6449	1.7395	.2	6	20	
acrylonitrile	.24572	.25663	.05	4	20	
Halothane	.61386	.6517	.05	6	20	
Ethyl-Tert-Butyl-Ether	2.8605	2.9075	.05	2	20	
vinyl acetate	2.0492	2.0884	.05	2	20	
cis-1,2-dichloroethene	.85019	.88191	.1	4	20	
2,2-dichloropropane	1.4342	1.5106	.05	5	20	
cyclohexane	1.6792	1.8638	.01	11	30	
bromochloromethane	.38276	.45934	.05	20	20	F
chloroform	1.5739	1.6404	.2	4	20	
carbontetrachloride	1.3580	1.4348	.1	6	20	
tetrahydrofuran	.22298	.2299	.05	3	20	
ethyl acetate	.64425	.70635	.05	10	20	
1,1,1-trichloroethane	1.4939	1.6011	.1	7	20	
1,1-dichloropropene	1.1646	1.2243	.05	5	20	
2-butanone	.26445	.29374	.1	11	20	
benzene	3.2721	3.4563	.5	6	20	
Tertiary-Amyl Methyl Ether	2.0863	2.1029	.05	1	20	
1,2-dichloroethane	1.2944	1.3611	.1	5	20	

FORM VII MCP-8260-10

7A
CONTINUING CALIBRATION CHECK

Lab Name: Alpha Analytical Labs

SDG No.: L1531325

Instrument ID: Jack.i Calibration Date: 03-DEC-2015 Time: 07:14

Lab File ID: 1203A03 Init. Calib. Date(s): 01-DEC-2 01-DEC-2

Sample No: 8260 CCAL Init. Calib. Times : 06:46 12:26

Compound	$\overline{RRF}$	RRF	MIN RRF	%D	MAX %D	
methyl cyclohexane	1.4450	1.4849	.01	3	30	
trichloroethene	.89042	.91609	.2	3	20	
dibromomethane	.44967	.45658	.05	2	20	
1,2-dichloropropane	.9204	.92096	.1	0	20	
bromodichloromethane	1.1301	1.1668	.2	3	20	
1,4-dioxane	.00364	.00473	.05	30	20	F
2-chloroethylvinyl ether	.43827	.46209	.05	5	20	
cis-1,3-dichloropropene	1.3144	1.3789	.2	5	20	
toluene	2.6315	2.5841	.4	-2	20	
tetrachloroethene	1.2062	1.2800	.2	6	20	
4-methyl-2-pentanone	.24418	.24462	.1	0	20	
trans-1,3-dichloropropene	1.3576	1.3285	.1	-2	20	
1,1,2-trichloroethane	.54835	.59587	.1	9	20	
ethyl-methacrylate	.91009	.89296	.01	-2	30	
chlorodibromomethane	.92172	.83552	.1	-9	20	
1,3-dichloropropane	1.2713	1.2260	.05	-4	20	
1,2-dibromoethane	.71299	.74538	.1	5	20	
2-hexanone	.47776	.44714	.1	-6	20	
chlorobenzene	3.1179	2.9101	.5	-7	20	
ethyl benzene	5.0010	4.8833	.1	-2	20	
1,1,1,2-tetrachloroethane	1.0866	1.0770	.05	-1	20	
p/m xylene	2.1461	2.0673	.1	-4	20	
o xylene	1.9963	2.0125	.3	1	20	
bromoform	.92096	.89496	.1	-3	20	
styrene	3.2122	3.2096	.3	0	20	
isopropylbenzene	9.7585	9.5466	.1	-2	20	
bromobenzene	2.2383	2.2714	.05	1	20	
1,4-dichlorobutane	2.8820	2.7730	.01	-4	30	
n-propylbenzene	10.857	10.605	.05	-2	20	
1,1,2,2,-tetrachloroethane	100	102	.3	2	20	
4-ethyltoluene	10.097	9.7374	.05	-4	20	
2-chlorotoluene	7.5175	7.0949	.05	-6	20	
1,2,3-trichloropropane	1.1583	1.1341	.05	-2	20	
1,3,5-trimethybenzene	8.1846	7.9971	.05	-2	20	
trans-1,4-dichloro-2-butene	.55418	.61178	.05	10	20	
4-chorotoluene	6.6049	6.5355	.05	-1	20	
tert-butylbenzene	7.1418	6.6825	.05	-6	20	
1,2,4-trimethylbenzene	8.0321	7.8511	.05	-2	20	

FORM VII MCP-8260-10

7A
CONTINUING CALIBRATION CHECK

Lab Name: Alpha Analytical Labs

SDG No.: L1531325

Instrument ID: Jack.i Calibration Date: 03-DEC-2015 Time: 07:14

Lab File ID: 1203A03 Init. Calib. Date(s): 01-DEC-2 01-DEC-2

Sample No: 8260 CCAL Init. Calib. Times : 06:46 12:26

Compound	$\overline{RRF}$	RRF	MIN RRF	%D	MAX %D
sec-butylbenzene	9.8044	9.7502	.01	-1	20
p-isopropyltoluene	8.5180	8.3744	.05	-2	20
1,3-dichlorobenzene	4.3138	4.1469	.6	-4	20
1,4-dichlorobenzene	4.3560	4.2592	.5	-2	20
p-diethylbenzene	4.5827	4.6982	.05	3	20
n-butylbenzene	6.3467	6.0520	.05	-5	20
1,2-dichlorobenzene	3.7309	3.7278	.4	0	20
1,2,4,5-tetramethylbenzene	6.2945	6.2153	.05	-1	20
1,2-dibromo-3-chloropropane	.2079	.19914	.05	-4	20
1,3,5-trichlorobenzene	1.3086	1.3618	.05	4	20
1,2,4-trichlorobenzene	1.6086	1.4351	.2	-11	20
hexachlorobutadiene	.71722	.65897	.05	-8	20
naphthalene	100	88.648	.05	-11	20
1,2,3-trichlorobenzene	100	104	.05	4	20
dibromofluoromethane	.25412	.28351	.05	12	20
1,2-dichloroethane-d4	.35087	.40954	.05	17	20
toluene-d8	1.1602	1.1549	.01	0	20
4-bromofluorobenzene	.84995	.82418	.05	-3	20

FORM VII MCP-8260-10

ANALYTICAL REPORT

Lab Number:	L1742763
Client:	McPhail Associates 2269 Massachusetts Avenue Cambridge, MA 02140
ATTN:	Ambrose Donovan
Phone:	(617) 868-1420
Project Name:	266 WAVERLY STREET
Project Number:	6010.9.03
Report Date:	11/28/17

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

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

Project Name: 266 WAVERLY STREET
Project Number: 6010.9.03

Lab Number: L1742763
Report Date: 11/28/17

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1742763-01	B-3(OW)	WATER	FRAMINGHAM, MA	11/20/17 10:25	11/20/17
L1742763-02	B-14(OW)	WATER	FRAMINGHAM, MA	11/20/17 09:15	11/20/17

Project Name:	266 WAVERLY STREET	**Lab Number:**	L1742763
Project Number:	6010.9.03	**Report Date:**	11/28/17

Case Narrative

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

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

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

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

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

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

Project Name:	266 WAVERLY STREET	**Lab Number:**	L1742763
Project Number:	6010.9.03	**Report Date:**	11/28/17

Case Narrative (continued)

Chlorine, Total Residual

The WG1065019-4 MS recovery, performed on L1742763-02, is outside the acceptance criteria (141%); however, the associated LCS recovery is within criteria. No further action was taken.

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

Authorized Signature: Lisa Westerlind

Title: Technical Director/Representative Date: 11/28/17

METALS

Project Name: 266 WAVERLY STREET
Project Number: 6010.9.03
Lab Number: L1742763
Report Date: 11/28/17

SAMPLE RESULTS

Lab ID: L1742763-01
Client ID: B-3(OW)
Sample Location: FRAMINGHAM, MA
Matrix: Water
Date Collected: 11/20/17 10:25
Date Received: 11/20/17
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Antimony, Total	ND		mg/l	0.00400	--	1	11/22/17 15:00	11/28/17 10:26	EPA 3005A	3,200.8	AM
Arsenic, Total	0.00440		mg/l	0.00100	--	1	11/22/17 15:00	11/28/17 10:26	EPA 3005A	3,200.8	AM
Cadmium, Total	ND		mg/l	0.00020	--	1	11/22/17 15:00	11/28/17 10:26	EPA 3005A	3,200.8	AM
Chromium, Total	ND		mg/l	0.00100	--	1	11/22/17 15:00	11/28/17 10:26	EPA 3005A	3,200.8	AM
Copper, Total	ND		mg/l	0.00100	--	1	11/22/17 15:00	11/28/17 10:26	EPA 3005A	3,200.8	AM
Iron, Total	22.8		mg/l	0.050	--	1	11/22/17 15:00	11/28/17 00:11	EPA 3005A	19,200.7	PS
Lead, Total	ND		mg/l	0.00100	--	1	11/22/17 15:00	11/28/17 10:26	EPA 3005A	3,200.8	AM
Mercury, Total	ND		mg/l	0.00020	--	1	11/22/17 11:40	11/27/17 12:04	EPA 245.1	3,245.1	MG
Nickel, Total	ND		mg/l	0.00200	--	1	11/22/17 15:00	11/28/17 10:26	EPA 3005A	3,200.8	AM
Selenium, Total	ND		mg/l	0.00500	--	1	11/22/17 15:00	11/28/17 10:26	EPA 3005A	3,200.8	AM
Silver, Total	ND		mg/l	0.00040	--	1	11/22/17 15:00	11/28/17 10:26	EPA 3005A	3,200.8	AM
Zinc, Total	ND		mg/l	0.01000	--	1	11/22/17 15:00	11/28/17 10:26	EPA 3005A	3,200.8	AM
Total Hardness by SM 2340B - Mansfield Lab											
Hardness	337		mg/l	0.660	NA	1	11/22/17 15:00	11/28/17 00:11	EPA 3005A	19,200.7	PS
General Chemistry - Mansfield Lab											
Chromium, Trivalent	ND		mg/l	0.010	--	1		11/28/17 10:26	NA	107,-	

Project Name: 266 WAVERLY STREET
Project Number: 6010.9.03
Lab Number: L1742763
Report Date: 11/28/17

SAMPLE RESULTS

Lab ID: L1742763-02
Client ID: B-14(OW)
Sample Location: FRAMINGHAM, MA
Matrix: Water
Date Collected: 11/20/17 09:15
Date Received: 11/20/17
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Antimony, Total	ND		mg/l	0.00400	--	1	11/22/17 15:00	11/28/17 10:30	EPA 3005A	3,200.8	AM
Arsenic, Total	ND		mg/l	0.00100	--	1	11/22/17 15:00	11/28/17 10:30	EPA 3005A	3,200.8	AM
Cadmium, Total	0.00020		mg/l	0.00020	--	1	11/22/17 15:00	11/28/17 10:30	EPA 3005A	3,200.8	AM
Chromium, Total	0.00328		mg/l	0.00100	--	1	11/22/17 15:00	11/28/17 10:30	EPA 3005A	3,200.8	AM
Copper, Total	0.00398		mg/l	0.00100	--	1	11/22/17 15:00	11/28/17 10:30	EPA 3005A	3,200.8	AM
Iron, Total	1.68		mg/l	0.050	--	1	11/22/17 15:00	11/28/17 00:16	EPA 3005A	19,200.7	PS
Lead, Total	0.00203		mg/l	0.00100	--	1	11/22/17 15:00	11/28/17 10:30	EPA 3005A	3,200.8	AM
Mercury, Total	ND		mg/l	0.00020	--	1	11/22/17 11:40	11/27/17 12:06	EPA 245.1	3,245.1	MG
Nickel, Total	0.00570		mg/l	0.00200	--	1	11/22/17 15:00	11/28/17 10:30	EPA 3005A	3,200.8	AM
Selenium, Total	ND		mg/l	0.00500	--	1	11/22/17 15:00	11/28/17 10:30	EPA 3005A	3,200.8	AM
Silver, Total	ND		mg/l	0.00040	--	1	11/22/17 15:00	11/28/17 10:30	EPA 3005A	3,200.8	AM
Zinc, Total	ND		mg/l	0.01000	--	1	11/22/17 15:00	11/28/17 10:30	EPA 3005A	3,200.8	AM
Total Hardness by SM 2340B - Mansfield Lab											
Hardness	172		mg/l	0.660	NA	1	11/22/17 15:00	11/28/17 00:16	EPA 3005A	19,200.7	PS
General Chemistry - Mansfield Lab											
Chromium, Trivalent	ND		mg/l	0.010	--	1		11/28/17 10:30	NA	107,-	

Project Name: 266 WAVERLY STREET **Lab Number:** L1742763

Project Number: 6010.9.03 **Report Date:** 11/28/17

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01-02 Batch: WG1065685-1										
Mercury, Total	ND		mg/l	0.00020	--	1	11/22/17 11:40	11/27/17 11:27	3,245.1	MG

Prep Information

Digestion Method: EPA 245.1

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01-02 Batch: WG1065767-1										
Antimony, Total	ND		mg/l	0.00400	--	1	11/22/17 15:00	11/28/17 09:16	3,200.8	AM
Arsenic, Total	ND		mg/l	0.00100	--	1	11/22/17 15:00	11/28/17 09:16	3,200.8	AM
Cadmium, Total	ND		mg/l	0.00020	--	1	11/22/17 15:00	11/28/17 09:16	3,200.8	AM
Chromium, Total	ND		mg/l	0.00100	--	1	11/22/17 15:00	11/28/17 09:16	3,200.8	AM
Copper, Total	ND		mg/l	0.00100	--	1	11/22/17 15:00	11/28/17 09:16	3,200.8	AM
Lead, Total	ND		mg/l	0.00050	--	1	11/22/17 15:00	11/28/17 09:16	3,200.8	AM
Nickel, Total	ND		mg/l	0.00200	--	1	11/22/17 15:00	11/28/17 09:16	3,200.8	AM
Selenium, Total	ND		mg/l	0.00500	--	1	11/22/17 15:00	11/28/17 09:16	3,200.8	AM
Silver, Total	ND		mg/l	0.00040	--	1	11/22/17 15:00	11/28/17 09:16	3,200.8	AM
Zinc, Total	ND		mg/l	0.01000	--	1	11/22/17 15:00	11/28/17 09:16	3,200.8	AM

Prep Information

Digestion Method: EPA 3005A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01-02 Batch: WG1065768-1										
Iron, Total	ND		mg/l	0.050	--	1	11/22/17 15:00	11/27/17 21:51	19,200.7	PS

Prep Information

Digestion Method: EPA 3005A

Project Name: 266 WAVERLY STREET
Project Number: 6010.9.03
Lab Number: L1742763
Report Date: 11/28/17

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Hardness by SM 2340B - Mansfield Lab for sample(s): 01-02 Batch: WG1065768-1										
Hardness	ND		mg/l	0.660	NA	1	11/22/17 15:00	11/27/17 21:51	19,200.7	PS

Prep Information

Digestion Method: EPA 3005A

Lab Control Sample Analysis
Batch Quality Control

Project Name: 266 WAVERLY STREET
Project Number: 6010.9.03

Lab Number: L1742763
Report Date: 11/28/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-02 Batch: WG1065685-2								
Mercury, Total	106		-		85-115	-		
Total Metals - Mansfield Lab Associated sample(s): 01-02 Batch: WG1065767-2								
Antimony, Total	99		-		85-115	-		
Arsenic, Total	111		-		85-115	-		
Cadmium, Total	106		-		85-115	-		
Chromium, Total	107		-		85-115	-		
Copper, Total	106		-		85-115	-		
Lead, Total	110		-		85-115	-		
Nickel, Total	104		-		85-115	-		
Selenium, Total	114		-		85-115	-		
Silver, Total	102		-		85-115	-		
Zinc, Total	109		-		85-115	-		
Total Metals - Mansfield Lab Associated sample(s): 01-02 Batch: WG1065768-2								
Iron, Total	100		-		85-115	-		
Total Hardness by SM 2340B - Mansfield Lab Associated sample(s): 01-02 Batch: WG1065768-2								
Hardness	100		-		85-115	-		

Matrix Spike Analysis
Batch Quality Control

Project Name: 266 WAVERLY STREET
Project Number: 6010.9.03

Lab Number: L1742763
Report Date: 11/28/17

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-02 QC Batch ID: WG1065685-3 QC Sample: L1742961-01 Client ID: MS Sample												
Mercury, Total	ND	0.005	0.00523	105		-	-		70-130	-		20
Total Metals - Mansfield Lab Associated sample(s): 01-02 QC Batch ID: WG1065685-5 QC Sample: L1742961-02 Client ID: MS Sample												
Mercury, Total	ND	0.005	0.00544	109		-	-		70-130	-		20
Total Metals - Mansfield Lab Associated sample(s): 01-02 QC Batch ID: WG1065767-3 QC Sample: L1742684-01 Client ID: MS Sample												
Antimony, Total	ND	0.5	0.5993	120		-	-		70-130	-		20
Arsenic, Total	0.00582	0.12	0.1474	118		-	-		70-130	-		20
Cadmium, Total	ND	0.051	0.05540	109		-	-		70-130	-		20
Chromium, Total	0.00732	0.2	0.2254	109		-	-		70-130	-		20
Copper, Total	0.00711	0.25	0.2701	105		-	-		70-130	-		20
Lead, Total	0.00469	0.51	0.6130	119		-	-		70-130	-		20
Nickel, Total	0.00859	0.5	0.5328	105		-	-		70-130	-		20
Selenium, Total	ND	0.12	0.1364	114		-	-		70-130	-		20
Silver, Total	ND	0.05	0.05287	106		-	-		70-130	-		20
Zinc, Total	ND	0.5	0.5292	106		-	-		70-130	-		20

Matrix Spike Analysis
Batch Quality Control

Project Name: 266 WAVERLY STREET
Project Number: 6010.9.03

Lab Number: L1742763
Report Date: 11/28/17

Parameter	Native Sample	MS Added	MS Found	MS %Recovery		MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-02 QC Batch ID: WG1065767-5 QC Sample: L1742701-01 Client ID: MS Sample										
Antimony, Total	ND	0.5	0.5222	104		-	-	70-130	-	20
Arsenic, Total	0.00134	0.12	0.1369	113		-	-	70-130	-	20
Cadmium, Total	ND	0.051	0.05265	103		-	-	70-130	-	20
Chromium, Total	0.00170	0.2	0.2137	106		-	-	70-130	-	20
Copper, Total	0.00536	0.25	0.2641	103		-	-	70-130	-	20
Lead, Total	0.00174	0.51	0.5679	111		-	-	70-130	-	20
Nickel, Total	ND	0.5	0.5165	103		-	-	70-130	-	20
Selenium, Total	ND	0.12	0.1382	115		-	-	70-130	-	20
Silver, Total	ND	0.05	0.04986	100		-	-	70-130	-	20
Zinc, Total	ND	0.5	0.5553	111		-	-	70-130	-	20
Total Metals - Mansfield Lab Associated sample(s): 01-02 QC Batch ID: WG1065768-3 QC Sample: L1742684-01 Client ID: MS Sample										
Iron, Total	1.22	1	1.73	**51**	Q	-	-	75-125	-	20
Total Hardness by SM 2340B - Mansfield Lab Associated sample(s): 01-02 QC Batch ID: WG1065768-3 QC Sample: L1742684-01 Client ID: MS Sample										
Hardness	472	66.2	507	**53**	Q	-	-	75-125	-	20
Total Metals - Mansfield Lab Associated sample(s): 01-02 QC Batch ID: WG1065768-7 QC Sample: L1742701-01 Client ID: MS Sample										
Iron, Total	0.969	1	1.84	87		-	-	75-125	-	20
Total Hardness by SM 2340B - Mansfield Lab Associated sample(s): 01-02 QC Batch ID: WG1065768-7 QC Sample: L1742701-01 Client ID: MS Sample										
Hardness	336	66.2	370	**51**	Q	-	-	75-125	-	20

Lab Duplicate Analysis
Batch Quality Control

Project Name: 266 WAVERLY STREET
Project Number: 6010.9.03

Lab Number: L1742763
Report Date: 11/28/17

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-02 QC Batch ID: WG1065685-4 QC Sample: L1742961-01 Client ID: DUP Sample						
Mercury, Total	ND	ND	mg/l	NC		20
Total Metals - Mansfield Lab Associated sample(s): 01-02 QC Batch ID: WG1065685-6 QC Sample: L1742961-02 Client ID: DUP Sample						
Mercury, Total	ND	ND	mg/l	NC		20
Total Metals - Mansfield Lab Associated sample(s): 01-02 QC Batch ID: WG1065767-4 QC Sample: L1742684-01 Client ID: DUP Sample						
Antimony, Total	ND	ND	mg/l	NC		20
Arsenic, Total	0.00582	0.00568	mg/l	3		20
Cadmium, Total	ND	ND	mg/l	NC		20
Chromium, Total	0.00732	0.00556	mg/l	**27**	Q	20
Copper, Total	0.00711	0.00576	mg/l	**21**	Q	20
Lead, Total	0.00469	0.00457	mg/l	3		20
Nickel, Total	0.00859	0.00745	mg/l	14		20
Selenium, Total	ND	ND	mg/l	NC		20
Silver, Total	ND	ND	mg/l	NC		20
Zinc, Total	ND	ND	mg/l	NC		20

Lab Duplicate Analysis
Batch Quality Control

Project Name: 266 WAVERLY STREET
Project Number: 6010.9.03

Lab Number: L1742763
Report Date: 11/28/17

Parameter	Native Sample	Duplicate Sample	Units	RPD		RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-02 QC Batch ID: WG1065767-6 QC Sample: L1742701-01 Client ID: DUP Sample						
Antimony, Total	ND	ND	mg/l	NC		20
Arsenic, Total	0.00134	0.00138	mg/l	3		20
Cadmium, Total	ND	ND	mg/l	NC		20
Chromium, Total	0.00170	0.00160	mg/l	6		20
Copper, Total	0.00536	0.00499	mg/l	7		20
Lead, Total	0.00174	0.00165	mg/l	5		20
Nickel, Total	ND	ND	mg/l	NC		20
Selenium, Total	ND	ND	mg/l	NC		20
Silver, Total	ND	ND	mg/l	NC		20
Zinc, Total	ND	ND	mg/l	NC		20
Total Metals - Mansfield Lab Associated sample(s): 01-02 QC Batch ID: WG1065768-4 QC Sample: L1742684-01 Client ID: DUP Sample						
Iron, Total	1.22	0.824	mg/l	**39**	Q	20
Total Hardness by SM 2340B - Mansfield Lab Associated sample(s): 01-02 QC Batch ID: WG1065768-4 QC Sample: L1742684-01 Client ID: DUP Sample						
Hardness	472	466	mg/l	1		20
Total Metals - Mansfield Lab Associated sample(s): 01-02 QC Batch ID: WG1065768-8 QC Sample: L1742701-01 Client ID: DUP Sample						
Iron, Total	0.969	0.986	mg/l	2		20

Lab Duplicate Analysis
Batch Quality Control

Project Name: 266 WAVERLY STREET
Project Number: 6010.9.03

Lab Number: L1742763
Report Date: 11/28/17

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Total Hardness by SM 2340B - Mansfield Lab Associated sample(s): 01-02 QC Batch ID: WG1065768-8 QC Sample: L1742701-01 Client ID: DUP Sample					
Hardness	336	325	mg/l	3	20

INORGANICS
&
MISCELLANEOUS

Project Name: 266 WAVERLY STREET
Project Number: 6010.9.03
Lab Number: L1742763
Report Date: 11/28/17

SAMPLE RESULTS

Lab ID: L1742763-01
Client ID: B-3(OW)
Sample Location: FRAMINGHAM, MA
Matrix: Water
Date Collected: 11/20/17 10:25
Date Received: 11/20/17
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Cyanide, Total	ND		mg/l	0.005	--	1	11/21/17 10:00	11/21/17 13:21	121,4500CN-CE	LH
Chlorine, Total Residual	ND		mg/l	0.02	--	1	-	11/20/17 22:09	121,4500CL-D	AS
pH (H)	6.6		SU	-	NA	1	-	11/22/17 23:04	121,4500H+-B	UN
Nitrogen, Ammonia	0.148		mg/l	0.075	--	1	11/21/17 01:30	11/21/17 17:23	121,4500NH3-BH	AT
Chromium, Hexavalent	ND		mg/l	0.010	--	1	11/21/17 03:42	11/21/17 04:03	1,7196A	UN
Anions by Ion Chromatography - Westborough Lab										
Chloride	532.		mg/l	25.0	--	50	-	11/22/17 19:09	44,300.0	AU

Project Name: 266 WAVERLY STREET
Project Number: 6010.9.03

Lab Number: L1742763
Report Date: 11/28/17

SAMPLE RESULTS

Lab ID: L1742763-02
Client ID: B-14(OW)
Sample Location: FRAMINGHAM, MA
Matrix: Water

Date Collected: 11/20/17 09:15
Date Received: 11/20/17
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Cyanide, Total	ND		mg/l	0.005	--	1	11/22/17 10:55	11/22/17 13:43	121,4500CN-CE	LH
Chlorine, Total Residual	ND		mg/l	0.02	--	1	-	11/20/17 22:09	121,4500CL-D	AS
pH (H)	6.9		SU	-	NA	1	-	11/22/17 23:04	121,4500H+-B	UN
Nitrogen, Ammonia	ND		mg/l	0.075	--	1	11/21/17 01:30	11/21/17 17:24	121,4500NH3-BH	AT
Chromium, Hexavalent	ND		mg/l	0.010	--	1	11/21/17 03:42	11/21/17 04:04	1,7196A	UN
Anions by Ion Chromatography - Westborough Lab										
Chloride	395.		mg/l	25.0	--	50	-	11/22/17 19:21	44,300.0	AU

Project Name: 266 WAVERLY STREET **Lab Number:** L1742763

Project Number: 6010.9.03 **Report Date:** 11/28/17

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab for sample(s): 01-02 Batch: WG1065019-1										
Chlorine, Total Residual	ND		mg/l	0.02	--	1	-	11/20/17 22:09	121,4500CL-D	AS
General Chemistry - Westborough Lab for sample(s): 01-02 Batch: WG1065071-1										
Nitrogen, Ammonia	ND		mg/l	0.075	--	1	11/21/17 01:30	11/21/17 17:00	121,4500NH3-BH	AT
General Chemistry - Westborough Lab for sample(s): 01-02 Batch: WG1065103-1										
Chromium, Hexavalent	ND		mg/l	0.010	--	1	11/21/17 03:42	11/21/17 04:01	1,7196A	UN
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG1065186-1										
Cyanide, Total	ND		mg/l	0.005	--	1	11/21/17 10:00	11/21/17 13:09	121,4500CN-CE	LH
General Chemistry - Westborough Lab for sample(s): 02 Batch: WG1065659-1										
Cyanide, Total	ND		mg/l	0.005	--	1	11/22/17 10:55	11/22/17 13:26	121,4500CN-CE	LH
Anions by Ion Chromatography - Westborough Lab for sample(s): 01-02 Batch: WG1066529-1										
Chloride	ND		mg/l	0.500	--	1	-	11/22/17 17:33	44,300.0	AU

Lab Control Sample Analysis
Batch Quality Control

Project Name: 266 WAVERLY STREET
Project Number: 6010.9.03
Lab Number: L1742763
Report Date: 11/28/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-02 Batch: WG1065019-2								
Chlorine, Total Residual	101		-		90-110	-		
General Chemistry - Westborough Lab Associated sample(s): 01-02 Batch: WG1065071-2								
Nitrogen, Ammonia	92		-		80-120	-		20
General Chemistry - Westborough Lab Associated sample(s): 01-02 Batch: WG1065103-2								
Chromium, Hexavalent	95		-		85-115	-		20
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG1065186-2								
Cyanide, Total	105		-		90-110	-		
General Chemistry - Westborough Lab Associated sample(s): 02 Batch: WG1065659-2								
Cyanide, Total	102		-		90-110	-		
General Chemistry - Westborough Lab Associated sample(s): 01-02 Batch: WG1065903-1								
pH	100		-		99-101	-		5
Anions by Ion Chromatography - Westborough Lab Associated sample(s): 01-02 Batch: WG1066529-2								
Chloride	101		-		90-110	-		

Matrix Spike Analysis
Batch Quality Control

Project Name: 266 WAVERLY STREET
Project Number: 6010.9.03

Lab Number: L1742763
Report Date: 11/28/17

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG1065019-4 QC Sample: L1742763-02 Client ID: B-14(OW)												
Chlorine, Total Residual	ND	0.248	0.35	**141**	Q	-	-		80-120	-		20
General Chemistry - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG1065071-4 QC Sample: L1742701-02 Client ID: MS Sample												
Nitrogen, Ammonia	0.219	4	3.92	92		-	-		80-120	-		20
General Chemistry - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG1065103-4 QC Sample: L1742763-02 Client ID: B-14(OW)												
Chromium, Hexavalent	ND	0.1	0.100	100		-	-		85-115	-		20
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1065186-4 QC Sample: L1742684-02 Client ID: MS Sample												
Cyanide, Total	ND	0.2	0.183	92		-	-		90-110	-		30
General Chemistry - Westborough Lab Associated sample(s): 02 QC Batch ID: WG1065659-4 QC Sample: L1743025-02 Client ID: MS Sample												
Cyanide, Total	0.008	0.2	0.191	91		-	-		90-110	-		30
Anions by Ion Chromatography - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG1066529-3 QC Sample: L1742701-01 Client ID: MS Sample												
Chloride	496	100	603	107		-	-		90-110	-		18

Lab Duplicate Analysis
Batch Quality Control

Project Name: 266 WAVERLY STREET
Project Number: 6010.9.03

Lab Number: L1742763
Report Date: 11/28/17

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG1065019-3 QC Sample: L1742763-01 Client ID: B-3(OW)						
Chlorine, Total Residual	ND	ND	mg/l	NC		20
General Chemistry - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG1065071-3 QC Sample: L1742701-02 Client ID: DUP Sample						
Nitrogen, Ammonia	0.219	0.214	mg/l	2		20
General Chemistry - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG1065103-3 QC Sample: L1742763-02 Client ID: B-14(OW)						
Chromium, Hexavalent	ND	ND	mg/l	NC		20
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1065186-3 QC Sample: L1742684-01 Client ID: DUP Sample						
Cyanide, Total	0.006	0.006	mg/l	5		30
General Chemistry - Westborough Lab Associated sample(s): 02 QC Batch ID: WG1065659-3 QC Sample: L1743025-01 Client ID: DUP Sample						
Cyanide, Total	0.006	0.006	mg/l	3		30
General Chemistry - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG1065903-2 QC Sample: L1742905-01 Client ID: DUP Sample						
pH	7.4	7.5	SU	1		5
Anions by Ion Chromatography - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG1066529-4 QC Sample: L1742701-01 Client ID: DUP Sample						
Chloride	496	490	mg/l	1		18

Project Name: 266 WAVERLY STREET
Project Number: 6010.9.03

Lab Number: L1742763
Report Date: 11/28/17

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1742763-01A	Plastic 250ml NaOH preserved	A	>12	>12	2.3	Y	Absent		TCN-4500(14)
L1742763-01B	Plastic 250ml H2SO4 preserved	A	<2	<2	2.3	Y	Absent		NH3-4500(28)
L1742763-01C	Plastic 500ml HNO3 preserved	A	<2	<2	2.3	Y	Absent		CD-2008T(180),NI-2008T(180),ZN-2008T(180),CU-2008T(180),FE-UI(180),HARDU(180),AG-2008T(180),AS-2008T(180),HG-U(28),SE-2008T(180),CR-2008T(180),PB-2008T(180),SB-2008T(180)
L1742763-01D	Plastic 950ml unpreserved	A	7	7	2.3	Y	Absent		CL-300(28),HEXCR-7196(1),TRC-4500(1),PH-4500(.01)
L1742763-01E	Plastic 950ml unpreserved	A	7	7	2.3	Y	Absent		CL-300(28),HEXCR-7196(1),TRC-4500(1),PH-4500(.01)
L1742763-02A	Plastic 250ml NaOH preserved	A	>12	>12	2.3	Y	Absent		TCN-4500(14)
L1742763-02B	Plastic 250ml H2SO4 preserved	A	<2	<2	2.3	Y	Absent		NH3-4500(28)
L1742763-02C	Plastic 500ml HNO3 preserved	A	<2	<2	2.3	Y	Absent		CD-2008T(180),NI-2008T(180),ZN-2008T(180),CU-2008T(180),FE-UI(180),HARDU(180),AG-2008T(180),AS-2008T(180),HG-U(28),SE-2008T(180),CR-2008T(180),PB-2008T(180),SB-2008T(180)
L1742763-02D	Plastic 950ml unpreserved	A	7	7	2.3	Y	Absent		CL-300(28),HEXCR-7196(1),TRC-4500(1),PH-4500(.01)
L1742763-02E	Plastic 950ml unpreserved	A	7	7	2.3	Y	Absent		CL-300(28),HEXCR-7196(1),TRC-4500(1),PH-4500(.01)

*Values in parentheses indicate holding time in days

Project Name:	266 WAVERLY STREET	**Lab Number:**	L1742763
Project Number:	6010.9.03	**Report Date:**	11/28/17

GLOSSARY

Acronyms

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

Footnotes

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

Terms

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

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

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

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

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

Data Qualifiers

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

Report Format: Data Usability Report

Project Name:	266 WAVERLY STREET	**Lab Number:**	L1742763
Project Number:	6010.9.03	**Report Date:**	11/28/17

Data Qualifiers

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

C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The lower value for the two columns has been reported due to obvious interference.

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

J - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

ND - Not detected at the reporting limit (RL) for the sample.

Report Format: Data Usability Report

Project Name:	266 WAVERLY STREET	**Lab Number:**	L1742763
Project Number:	6010.9.03	**Report Date:**	11/28/17

REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.

3 Methods for the Determination of Metals in Environmental Samples, Supplement I. EPA/600/R-94/111. May 1994.

19 Inductively Coupled Plasma Atomic Emission Spectrometric Method for Trace Element Analysis of Water and Wastes. Appendix C, Part 136, 40 CFR (Code of Federal Regulations). July 1, 1999 edition.

44 Methods for the Determination of Inorganic Substances in Environmental Samples, EPA/600/R-93/100, August 1993.

107 Alpha Analytical - In-house calculation method.

121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.

LIMITATION OF LIABILITIES

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

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

Certification Information

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

Westborough Facility
EPA 624: m/p-xylene, o-xylene
EPA 8260C: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), Methyl methacrylate, 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270D: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.
EPA 300: DW: Bromide
EPA 6860: NPW and SCM: Perchlorate
EPA 9010: NPW and SCM: Amenable Cyanide Distillation
EPA 9012B: NPW: Total Cyanide
EPA 9050A: NPW: Specific Conductance
SM3500: NPW: Ferrous Iron
SM4500: NPW: Amenable Cyanide, Dissolved Oxygen; SCM: Total Phosphorus, TKN, NO2, NO3.
SM5310C: DW: Dissolved Organic Carbon

Mansfield Facility
SM 2540D: TSS
EPA 3005A NPW
EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
Biological Tissue Matrix: EPA 3050B

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

Westborough Facility:

Drinking Water
EPA 300.0: Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B**
EPA 332: Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D**.

Non-Potable Water
SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **SM4500NO3-F, EPA 353.2**: Nitrate-N**, EPA 351.1, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D.**
EPA 624: Volatile Halocarbons & Aromatics,
EPA 608: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9221E.**

Mansfield Facility:

Drinking Water
EPA 200.7: Ba, Be, Cd, Cr, Cu, Ni, Na, Ca. **EPA 200.8:** Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Ni, Se, TL. **EPA 245.1** Hg.

Non-Potable Water
EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.
EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn.
EPA 245.1 Hg.
SM2340B

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

CHAIN OF CUSTODY

PAGE 1 OF 1

ALPHA ANALYTICAL

Westborough, MA TEL: 508-898-9220 FAX: 508-898-9193
Mansfield, MA TEL: 508-822-9300 FAX: 508-822-3288

Date Rec'd in Lab: 11/20/17

ALPHA Job #: L1742763

Project Information

Project Name: 266 Waverly Street

Project Location: Framingham MA

Project #: 6010.9.00

Project Manager: WJB/AJD

ALPHA Quote #:

Client Information

Client: McPhail Associates LLC

Address: 2269 Massachusetts Ave

Cambridge, MA 02140

Phone: 617 868 1420

Fax:

Email: wb@mcphailgeo.com

☐ These samples have been Previously analyzed by Alpha

Turn-Around Time

☒ Standard ☐ Rush (ONLY IF PRE-APPROVED)

Due Date: Time:

Report Information Data Deliverables

☐ FAX ☐ EMAIL

☒ ADEx ☐ Add'l Deliverables

Billing Information

☒ Same as Client info PO #:

Regulatory Requirements/Report Limits

State/Fed Program	Criteria
EPA NPDES RGP	

MCP PRESUMPTIVE CERTAINTY-CT REASONABLE CONFIDENCE PROTOCOLS

☐ Yes	☒ No	Are MCP Analytical Methods Required?
☐ Yes	☒ No	Are CT RCP (Reasonable Confidence Protocols) Required?

Other Project Specific Requirements/Comments/Detection Limits:

SAMPLE HANDLING
Filtration
☐ Done
☐ Not Needed
☐ Lab to do
Preservation
☐ Lab to do
(Please specify below)

ANALYSIS

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	Ammonia	pH/Hardness/Temp	Cyanide	Total Metals	TRC/Chloride	Sample Specific Comments	TOTAL # BOTTLES
42763-01	B-3 (OW)	11/20/17	1025	GW	TMC	☒	☒	☒	☒	☒		5
02	B-14 (OW)	11/20/17	915	GW	TMC	☒	☒	☒	☒	☒		5

	Ammonia	pH/Hardness/Temp	Cyanide	Total Metals	TRC/Chloride
Container Type	P	P	P	P	P
Preservative	D	A	E	C	A

PLEASE ANSWER QUESTIONS ABOVE!

IS YOUR PROJECT MA MCP or CT RCP?

FORM NO: 01-01(I) (rev. 5-JAN-12)

Relinquished By:	Date/Time	Received By:	Date/Time
Tom Cance	11/20/17 1215	[signature] AAL	11/20/17 1615
[signature] AAL	11/20/17 1800	Danielle Mott	11/20/17 1800

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Payment Terms.

APPENDIX E:

LABORATORY ANALYTICAL DATA – SURFACE WATER

ANALYTICAL REPORT

Lab Number:	L1744182
Client:	McPhail Associates 2269 Massachusetts Avenue Cambridge, MA 02140
ATTN:	Ambrose Donovan
Phone:	(617) 868-1420
Project Name:	MILL CREEK RESIDENTIAL
Project Number:	6010.9.00
Report Date:	12/07/17

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

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

Project Name: MILL CREEK RESIDENTIAL
Project Number: 6010.9.00

Lab Number: L1744182
Report Date: 12/07/17

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1744182-01	RECEIVING WATER BODY	WATER	FRAMINGHAM, MA	12/01/17 07:30	12/01/17

Project Name: MILL CREEK RESIDENTIAL **Lab Number:** L1744182
Project Number: 6010.9.00 **Report Date:** 12/07/17

Case Narrative

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

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

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

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

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

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

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

Authorized Signature:  Cristin Walker

Title: Technical Director/Representative Date: 12/07/17

METALS

Project Name: MILL CREEK RESIDENTIAL
Lab Number: L1744182
Project Number: 6010.9.00
Report Date: 12/07/17

SAMPLE RESULTS

Lab ID: L1744182-01
Client ID: RECEIVING WATER BODY
Sample Location: FRAMINGHAM, MA
Matrix: Water

Date Collected: 12/01/17 07:30
Date Received: 12/01/17
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Arsenic, Total	ND		mg/l	0.00100	--	1	12/04/17 09:50	12/06/17 09:31	EPA 3005A	3,200.8	AM
Cadmium, Total	ND		mg/l	0.00020	--	1	12/04/17 09:50	12/06/17 09:31	EPA 3005A	3,200.8	AM
Chromium, Total	ND		mg/l	0.00100	--	1	12/04/17 09:50	12/06/17 09:31	EPA 3005A	3,200.8	AM
Copper, Total	0.00140		mg/l	0.00100	--	1	12/04/17 09:50	12/06/17 09:31	EPA 3005A	3,200.8	AM
Iron, Total	2.23		mg/l	0.050	--	1	12/04/17 09:50	12/06/17 10:54	EPA 3005A	19,200.7	BV
Lead, Total	0.00223		mg/l	0.00100	--	1	12/04/17 09:50	12/06/17 09:31	EPA 3005A	3,200.8	AM
Nickel, Total	0.00201		mg/l	0.00200	--	1	12/04/17 09:50	12/06/17 09:31	EPA 3005A	3,200.8	AM
Total Hardness by SM 2340B - Mansfield Lab											
Hardness	115		mg/l	0.660	NA	1	12/04/17 09:50	12/06/17 10:54	EPA 3005A	19,200.7	BV

Project Name: MILL CREEK RESIDENTIAL **Lab Number:** L1744182

Project Number: 6010.9.00 **Report Date:** 12/07/17

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01 Batch: WG1068680-1										
Iron, Total	ND		mg/l	0.050	--	1	12/04/17 09:50	12/06/17 09:35	19,200.7	BV

Prep Information

Digestion Method: EPA 3005A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Hardness by SM 2340B - Mansfield Lab for sample(s): 01 Batch: WG1068680-1										
Hardness	ND		mg/l	0.660	NA	1	12/04/17 09:50	12/06/17 09:35	19,200.7	BV

Prep Information

Digestion Method: EPA 3005A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01 Batch: WG1068683-1										
Arsenic, Total	ND		mg/l	0.00100	--	1	12/04/17 09:50	12/06/17 09:08	3,200.8	AM
Cadmium, Total	ND		mg/l	0.00020	--	1	12/04/17 09:50	12/06/17 09:08	3,200.8	AM
Chromium, Total	ND		mg/l	0.00100	--	1	12/04/17 09:50	12/06/17 09:08	3,200.8	AM
Copper, Total	ND		mg/l	0.00100	--	1	12/04/17 09:50	12/06/17 09:08	3,200.8	AM
Lead, Total	ND		mg/l	0.00100	--	1	12/04/17 09:50	12/06/17 09:08	3,200.8	AM
Nickel, Total	ND		mg/l	0.00200	--	1	12/04/17 09:50	12/06/17 09:08	3,200.8	AM

Prep Information

Digestion Method: EPA 3005A

Lab Control Sample Analysis

Batch Quality Control

Project Name: MILL CREEK RESIDENTIAL

Project Number: 6010.9.00

Lab Number: L1744182

Report Date: 12/07/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01 Batch: WG1068680-2								
Iron, Total	105		-		85-115	-		
Total Hardness by SM 2340B - Mansfield Lab Associated sample(s): 01 Batch: WG1068680-2								
Hardness	111		-		85-115	-		
Total Metals - Mansfield Lab Associated sample(s): 01 Batch: WG1068683-2								
Arsenic, Total	114		-		85-115	-		
Cadmium, Total	108		-		85-115	-		
Chromium, Total	106		-		85-115	-		
Copper, Total	107		-		85-115	-		
Lead, Total	112		-		85-115	-		
Nickel, Total	104		-		85-115	-		

Matrix Spike Analysis
Batch Quality Control

Project Name: MILL CREEK RESIDENTIAL
Project Number: 6010.9.00

Lab Number: L1744182
Report Date: 12/07/17

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1068680-3 QC Sample: L1743841-01 Client ID: MS Sample												
Iron, Total	0.208	1	1.28	107		-	-		75-125	-		20
Total Hardness by SM 2340B - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1068680-3 QC Sample: L1743841-01 Client ID: MS Sample												
Hardness	61.6	66.2	128	100		-	-		75-125	-		20
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1068680-7 QC Sample: L1744182-01 Client ID: RECEIVING WATER BODY												
Iron, Total	2.23	1	3.24	101		-	-		75-125	-		20
Total Hardness by SM 2340B - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1068680-7 QC Sample: L1744182-01 Client ID: RECEIVING WATER BODY												
Hardness	115	66.2	184	104		-	-		75-125	-		20
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1068683-3 QC Sample: L1744182-01 Client ID: RECEIVING WATER BODY												
Arsenic, Total	ND	0.12	0.1430	119		-	-		70-130	-		20
Cadmium, Total	ND	0.051	0.05455	107		-	-		70-130	-		20
Chromium, Total	ND	0.2	0.2164	108		-	-		70-130	-		20
Copper, Total	0.00140	0.25	0.2814	112		-	-		70-130	-		20
Lead, Total	0.00223	0.51	0.5831	114		-	-		70-130	-		20
Nickel, Total	0.00201	0.5	0.5285	105		-	-		70-130	-		20

Lab Duplicate Analysis
Batch Quality Control

Project Name: MILL CREEK RESIDENTIAL
Project Number: 6010.9.00

Lab Number: L1744182
Report Date: 12/07/17

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1068680-8 QC Sample: L1744182-01 Client ID: RECEIVING WATER BODY						
Iron, Total	2.23	2.24	mg/l	0		20
Total Hardness by SM 2340B - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1068680-8 QC Sample: L1744182-01 Client ID: RECEIVING WATER BODY						
Hardness	115	116	mg/l	1		20
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1068683-4 QC Sample: L1744182-01 Client ID: RECEIVING WATER BODY						
Arsenic, Total	ND	ND	mg/l	NC		20
Cadmium, Total	ND	ND	mg/l	NC		20
Chromium, Total	ND	ND	mg/l	NC		20
Copper, Total	0.00140	0.00147	mg/l	5		20
Lead, Total	0.00223	0.00229	mg/l	3		20
Nickel, Total	0.00201	ND	mg/l	NC		20

INORGANICS
&
MISCELLANEOUS

Project Name: MILL CREEK RESIDENTIAL
Project Number: 6010.9.00

Lab Number: L1744182
Report Date: 12/07/17

SAMPLE RESULTS

Lab ID: L1744182-01
Client ID: RECEIVING WATER BODY
Sample Location: FRAMINGHAM, MA
Matrix: Water

Date Collected: 12/01/17 07:30
Date Received: 12/01/17
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
pH (H)	6.8		SU	-	NA	1	-	12/02/17 00:21	1,9040C	AS
Nitrogen, Ammonia	0.249		mg/l	0.075	--	1	12/02/17 15:00	12/05/17 22:36	121,4500NH3-BH	AT

Project Name: MILL CREEK RESIDENTIAL **Lab Number:** L1744182

Project Number: 6010.9.00 **Report Date:** 12/07/17

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG1068417-1										
Nitrogen, Ammonia	ND		mg/l	0.075	--	1	12/02/17 15:00	12/05/17 22:30	121,4500NH3-BH	AT

Lab Control Sample Analysis

Batch Quality Control

Project Name: MILL CREEK RESIDENTIAL

Project Number: 6010.9.00

Lab Number: L1744182

Report Date: 12/07/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG1068321-1								
pH	101		-		99-101	-		5
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG1068417-2								
Nitrogen, Ammonia	100		-		80-120	-		20

Matrix Spike Analysis
Batch Quality Control

Project Name: MILL CREEK RESIDENTIAL
Project Number: 6010.9.00

Lab Number: L1744182
Report Date: 12/07/17

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1068417-4 QC Sample: L1744068-01 Client ID: MS Sample												
Nitrogen, Ammonia	2.03	4	6.13	102		-	-		80-120	-		20

Lab Duplicate Analysis
Batch Quality Control

Project Name: MILL CREEK RESIDENTIAL
Project Number: 6010.9.00

Lab Number: L1744182
Report Date: 12/07/17

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1068321-2 QC Sample: L1744178-01 Client ID: DUP Sample						
pH	8.1	8.0	SU	1		5
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1068417-3 QC Sample: L1744068-01 Client ID: DUP Sample						
Nitrogen, Ammonia	2.03	2.13	mg/l	5		20

Project Name: MILL CREEK RESIDENTIAL
Project Number: 6010.9.00

Lab Number: L1744182
Report Date: 12/07/17

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1744182-01A	Plastic 250ml HNO3 preserved	A	<2	<2	5.0	Y	Absent		CD-2008T(180),NI-2008T(180),CU-2008T(180),FE-UI(180),HARDU(180),AS-2008T(180),CR-2008T(180),PB-2008T(180)
L1744182-01B	Plastic 250ml HNO3 preserved	A	<2	<2	5.0	Y	Absent		CD-2008T(180),NI-2008T(180),CU-2008T(180),FE-UI(180),HARDU(180),AS-2008T(180),CR-2008T(180),PB-2008T(180)
L1744182-01C	Plastic 250ml H2SO4 preserved	A	<2	<2	5.0	Y	Absent		NH3-4500(28)
L1744182-01D	Plastic 500ml unpreserved	A	7	7	5.0	Y	Absent		PH-9040(1)

*Values in parentheses indicate holding time in days

Project Name:	MILL CREEK RESIDENTIAL	**Lab Number:**	L1744182
Project Number:	6010.9.00	**Report Date:**	12/07/17

GLOSSARY

Acronyms

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

Footnotes

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

Terms

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

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

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

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

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

Data Qualifiers

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

Report Format: Data Usability Report

Project Name:	MILL CREEK RESIDENTIAL	**Lab Number:**	L1744182
Project Number:	6010.9.00	**Report Date:**	12/07/17

Data Qualifiers

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

C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The lower value for the two columns has been reported due to obvious interference.

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

J - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

ND - Not detected at the reporting limit (RL) for the sample.

Report Format: Data Usability Report

Project Name:	MILL CREEK RESIDENTIAL	**Lab Number:**	L1744182
Project Number:	6010.9.00	**Report Date:**	12/07/17

REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.

3 Methods for the Determination of Metals in Environmental Samples, Supplement I. EPA/600/R-94/111. May 1994.

19 Inductively Coupled Plasma Atomic Emission Spectrometric Method for Trace Element Analysis of Water and Wastes. Appendix C, Part 136, 40 CFR (Code of Federal Regulations). July 1, 1999 edition.

121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.

LIMITATION OF LIABILITIES

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

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

Certification Information

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

Westborough Facility
EPA 624: m/p-xylene, o-xylene
EPA 8260C: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), Methyl methacrylate, 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270D: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.
EPA 300: DW: Bromide
EPA 6860: NPW and SCM: Perchlorate
EPA 9010: NPW and SCM: Amenable Cyanide Distillation
EPA 9012B: NPW: Total Cyanide
EPA 9050A: NPW: Specific Conductance
SM3500: NPW: Ferrous Iron
SM4500: NPW: Amenable Cyanide, Dissolved Oxygen; SCM: Total Phosphorus, TKN, NO2, NO3.
SM5310C: DW: Dissolved Organic Carbon

Mansfield Facility
SM 2540D: TSS
EPA 3005A NPW
EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
Biological Tissue Matrix: EPA 3050B

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

Westborough Facility:

Drinking Water
EPA 300.0: Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B**
EPA 332: Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D**.

Non-Potable Water
SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **SM4500NO3-F, EPA 353.2**: Nitrate-N**, EPA 351.1, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D.**
EPA 624: Volatile Halocarbons & Aromatics,
EPA 608: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9221E.**

Mansfield Facility:

Drinking Water
EPA 200.7: Ba, Be, Cd, Cr, Cu, Ni, Na, Ca. **EPA 200.8:** Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Ni, Se, TL. **EPA 245.1** Hg.

Non-Potable Water
EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.
EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn.
EPA 245.1 Hg.
SM2340B

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

CHAIN OF CUSTODY

PAGE 1 OF 1

Date Rec'd in Lab: 12/1/17

ALPHA Job #: L1744182

ALPHA ANALYTICAL
8 Walkup Drive, Westboro, MA 01581, Tel: 508-898-9220
320 Forbes Blvd, Mansfield, MA 02048, Tel: 508-822-9300

Client Information

Client: McPhail Associates LLC
Address: 2269 Mass Ave
Cambridge MA
Phone: 617 868 1420
Email: KSeaman@mcphailgeo.com

Project Information

Project Name: Mill Creek Residential
Project Location: Framingham
Project #: 6010.9.00
Project Manager: VJB/KWS
ALPHA Quote #:

Report Information - Data Deliverables

☒ ADEx ☐ EMAIL

Billing Information

☐ Same as Client info PO #:

Regulatory Requirements & Project Information Requirements

☐ Yes ☐ No MA MCP Analytical Methods ☐ Yes ☐ No CT RCP Analytical Methods
☐ Yes ☐ No Matrix Spike Required on this SDG? (Required for MCP Inorg)
☐ Yes ☐ No GW1 Standards (Info Required for Metals & EPH with Targ)
☒ Yes ☐ No NPDES RGP
☐ Other State /Fed Program _____ Criteria _____

Turn-Around Time

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

Additional Project Information:

See Email for Metals to test for

ANALYSIS

VOC: ☐ 8260 ☐ 624 ☐ 524.2
SVOC: ☐ ABN ☐ PAH
METALS: ☐ MCP 13 ☐ MCP 14 ☐ RCP 15
METALS: ☐ RCRA5 ☐ RCRA8 ☐ PP13
EPH: ☐ Ranges & Targets ☐ Ranges Only
VPH: ☐ Ranges & Targets ☐ Ranges Only
☐ PCB ☐ PEST
TPH: ☐ Quant Only ☐ Fingerprint
RGP Metals
Pb/Hardness/Temp
Ammonia

SAMPLE INFO
Filtration
☐ Field
☐ Lab to do
Preservation
☐ Lab to do

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler Initials	Sample Comments	TOTAL # BOTTLES
44182 - 01	Receiving Water Body	12/1	7:30	SW	KWS	X X X	4
Container Type						P P P	11
Preservative						C* D	

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

Preservative
A= None
B= HCl
C= HNO_3
D= H_2SO_4
E= NaOH
F= MeOH
G= $NaHSO_4$
H = $Na_2S_2O_3$
I= Ascorbic Acid
J = NH_4Cl
K= Zn Acetate
O= Other

Relinquished By:	Date/Time	Received By:	Date/Time
KSeaman	12/1 3:00pm	AA	12/1/17 1600
AA	12/1/17 1710		12/1/17 1710

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

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

APPENDIX F:

BEST MANAGEMENT PRACTICE PLAN

A Notice of Intent for a Remediation General Permit (RGP) under the National Pollutant Discharge Elimination System (NPDES) has been submitted to the US Environmental Protection Agency (EPA) in anticipation of temporary construction dewatering that will occur during redevelopment of 399 Congress Avenue in Boston, Massachusetts. This Best Management Practices Plan (BMPP) has been prepared as an Appendix to the RGP and will be posted at the site during the time period that temporary construction dewatering is occurring at the site.

Water Treatment and Management

During construction of the proposed building foundation, dewatering effluent is anticipated to be pumped from localized sumps and trenches within the excavation directly into a settling tank. The effluent will then flow through the necessary treatment systems and discharge through hoses or piping connected into the storm water drains located beneath Congress Street, E Service Road, and Seaport Blvd. Based upon a review of the City of Boston stormwater drainage plan, the above referenced stormwater drain system ultimately discharges into the Boston Inner Harbor. Dewatering effluent treatment will consist of a settling tank, bag filters to remove suspended soil particulates. If further treatment is necessary, effluent discharge will be passed through ion resin media vessels prior to off-site discharge to lower concentrations of metals below applicable TBELs. pH adjustment will be conducted, if necessary, through the addition of hydrochloric acid, caustic soda and carbon dioxide.

Discharge Monitoring and Compliance

Sampling and testing will be conducted at the influent to the system and the treated effluent as required by the RGP. During the first week of discharge, the operator must sample the untreated influent and treated effluent two times: one (1) sample of untreated influent and one (1) sample of treated effluent be collected on the first day of discharge, and one (1) sample of untreated influent and one (1) sample of treated effluent must be collected on one additional non-consecutive day within the first week of discharge. Samples must be analyzed in accordance with 40 CFR §136 unless otherwise specified by the RGP, with a maximum 5-day turnaround time and results must be reviewed no more than 48 hours from receipt of the results of each sampling event. After the first week, samples may be analyzed with up to a ten (10)-day turnaround time and results must be reviewed no more than 72 hours from receipt of the results. If the treatment system is operating as designed and achieving the effluent limitations outlined in the RGP, on-going sampling shall be conducted weekly for three (3) additional weeks beginning no earlier than 24 hours following initial sampling, and monthly as described below. Any adjustments/reductions in monitoring frequency must be approved by EPA in writing.

In accordance with Part 4.1 of the RGP, the operator will perform routine monthly monitoring for both influent and effluent beginning no more than 30 days following the completion of the sampling requirements for new discharges or discharges that have been interrupted. The routine monthly monitoring is to be conducted through the end of the scheduled discharge. The routine monthly monitoring must continue for five (5) consecutive months prior to submission of any request for modification of monitoring frequency.

Dewatering activity for the Site is classified as Category III-G: Sites with Known Contamination. Monitoring shall include analysis of influent and effluent for contaminates specified by the EPA.

Monitoring will include checking the condition of the treatment system, assessing the need for treatment system adjustments based on monitoring data, observing, and recording daily flow rates and discharge quantities, and verifying the flow path of the discharged effluent.

The total monthly flow will be monitored by checking and documenting the flow through the flow meter to be installed on the system. Flow will be maintained below the "system design flow" by regularly monitoring flow and adjusting the amount of construction dewatering as needed. Monthly monitoring reports will be compiled and maintained at the site.

System Maintenance

Schedule regular maintenance and periodic cleaning of the treatment system will be conducted to verify proper operation and shall be conducted in accordance with Section 1.11 of the project earthwork specifications. Regular maintenance will include checking the condition of the treatment system equipment such as the settling tanks, bag filters, hoses, pumps, and flow meters. Equipment will be monitored daily for potential issues and unscheduled maintenance requirements.

Employees who have direct or indirect responsibility for ensuring compliance with the RGP will be trained by the Contractor.

Miscellaneous Items

It is anticipated that the erosion control measures and the nature of the site will minimize potential runoff to or from the site. The project specifications also include requirements for erosion control. Site security for the treatment system will be addressed within the overall site security plan.

No adverse effects on designated uses of surrounding surface water bodies is anticipated. The nearest surface water body is the Boston Inner Harbor which is located approximately 700 feet to the north of the subject site. Dewatering effluent will be pumped into a settling tank. Water within the settling tank will pumped through bag filters and, if necessary, ion exchange chambers prior to discharge into the storm drains.

Management of Treatment System Materials

Dewatering effluent will be pumped directly into the treatment system from the excavation with use of hoses and localized sumps to minimize handling. The Contractor will establish staging areas for equipment or materials storage that may be possible sources of pollution away from any dewatering activities, to the extent practicable.

Sediment from the tank used in the treatment system will be characterized and removed from the site to an appropriate receiving facility, in accordance with applicable laws and regulations. Bag will be replaced/disposed of as necessary.