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

30 W HOWELL STREET

DORCHESTER, MASSACHUSETTS

FEBRUARY 5, 2019

Prepared For:
United States Environmental Protection Agency
Office of Ecosystem Protection
5 Post Office Square, Suite 100
Mail Code OEP06-01
Boston, MA 02109-3912

On Behalf Of:
Jiten Hotel Management
495 Westgate Drive
Brockton, MA 02301
&
Lee Kennedy Company
122 Quincy Shore Drive
Quincy, MA 02171

PROJECT NO. 5737

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

February 5, 2019

United States Environmental Protection Agency
Office of Ecosystem Protection
5 Post Office Square, Suite 100
Mail Code OEP06-01
Boston, MA 02109-3912

Attention: EPA RGP Applications Coordinator

Reference: 30 W Howell Street, Dorchester, MA;
Notice of Intent for Temporary Construction Dewatering Discharge;
Massachusetts Remediation General Permit MAG910000

Ladies and Gentlemen:

In accordance with the provisions of the Remediation General Permit (RGP) MAG910000 that has been prepared for the Commonwealth of Massachusetts, the following is a summary of the site and groundwater quality information in support of a Notice of Intent for the temporary discharge of groundwater into the Bass River via the City of Boston storm drain system. The temporary discharge of construction dewatering will occur as part of the proposed redevelopment of the above referenced property. Refer to **Figure 1,** Project Location Plan for the general site locus.

These services were performed and this permit application was prepared in accordance with our proposal dated November 29, 2018, and the subsequent authorization of the Jiten Hotel Management. These services are subject to the limitations contained in **Appendix A**.

The required Notice of Intent (NOI) 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 Know Contamination. Based on historical and current soil and groundwater analysis completed at the site and constituents of concern (COCs) detected, subcategories A (Inorganics), D (Non-Halogenated Semi-Volatile Organic Compounds), and F (Fuel Parameters) apply.

Thus, Technology Based Effluent Limitations (TBELs) for Type A, D, and F contamination apply. Water Quality Based Effluent Limitations (WQBELs) were calculated in accordance with Appendix V of the RGP for the parameters detected.

Applicant/Operator

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

Lee Kennedy Company
122 Quincy Shore Drive
Quincy, MA 02171

Attention: Mr. Dan Lebiedz

Existing Conditions

Fronting onto West Howell Street to the east, the subject site, identified as 30 West Howell Street, is bounded by a hotel and a portion of the South Bay Shopping Center to the north, a newly constructed residential building to the south and additional portions of the South Bay Shopping Center to the west. Currently, the site is an active construction site. The site was formerly occupied by a vacant 1-story garage structure which was surrounded by an asphalt-paved lot. The subject site property is surrounded by a chain link fence and is approximately 0.5 acres.

Proposed Scope of Site Development

The proposed development is understood to include a 6-story hotel occupying an approximate 15,000 square-foot plan area. The remainder of the site will consist of surface parking and landscaped areas.

In addition, a new private roadway will be installed between the 6-story hotel and an active construction site. Several new utilities, including water, sewer, gas, electrical, and telecommunication lines, will be installed beneath the roadway.

Dewatering may be necessary for the excavation and placement of utilities and foundation structures during site development.

Site Environmental Setting and Surrounding Historical Places

Based on an on-line edition of the Massachusetts Geographic Information Systems MassDEP MCP Numerical Ranking System Map, the project 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.

Furthermore, per documentation provided by the U.S. Fish and Wildlife Information for Planning and Consultation (IPaC), the proposed site discharge does appear to adversely affect threatened, endangered, or candidate species. Thus, due to the brackish water and the IPaC report (**Appendix C**), FWS Criterion A and NMFS Criterion in section G of the RGP applies.

The Resource Map indicates that there are no water bodies or wetland areas at the subject site. No areas designated as solid waste sites (landfills) are noted as being located within 1,000 feet of the site. The closest body of water is the Dorchester Old Harbor located approximately 3,000 feet to the east of the subject site. However, the proposed discharge

location and thus the receiving water body, is noted as the Bass River which is classified as Brackish and flows east into the Fort Point Channel of the Boston Harbor. A copy of the Massachusetts DEP Phase I Site Assessment Map is included in **Appendix C**.

As further discussed below, treated construction dewatering effluent will be discharged into the City of Boston dedicated storm drain system that flows into the Bass River. The dewatering of groundwater at the site will be temporary and intermittent. Groundwater discharged as part of the proposed project will be controlled and monitored. Treatment systems will consist of temporary structures. Therefore, based on the anticipated duration of construction dewatering and the location of its discharge into the Bass River, construction dewatering activities are not considered to affect historical listings. Hence, the site meets Permit Eligibility Criterion A in accordance with Appendix III of the RGP.

Site & Release History

It is understood that the subject site was undeveloped prior to 1950 and that the subject site has been owned by entities associated with the Banquer family since 1956. The former subject site building is depicted on Sanborn Fire Insurance Maps between 1964 and 2002 as a Motor Freight Station with portions of the building being utilized as a garage and office. The use of the subject site building is not indicated to have changed between the 1964 and 2002 Sanborn Fire Insurance Maps. Occupants of the subject site are understood to have included Yale Transportation between 1956 and 1977, Hudson Bus Lines between 1977 and 1978, (no records for 1978 to 1982), and the City of Boston School Committee as school bus storage from 1983 to 1993.

Prior to April 2014, MCP reporting and assessment activities related to the MCP site listed under Release Tracking Number (RTN) 3-4151 were performed by others. Specifically, on January 15, 1993, the Department of Environmental Protection (DEP) was notified of the presence of non-aqueous phase liquid (NAPL). Subsequent to DEP notification, MCP reports that were prepared by others for the RTN 3-4151 site included a Phase I Limited Site Investigation dated July 30, 1997, a Release Abatement Measure (RAM) Plan dated July 1, 1998, subsequent RAM Status Reports, a Tier II Extension Submittal dated September 1, 1998 and a Class A-3 Response Action Outcome (RAO) Statement dated December 2000. Along with the submitted RAO, an Activity and Use Limitation (AUL) was filed for an approximate 50,879 square-foot portion of the property.

Subsequently, during April 2014, McPhail Associates, LLC (McPhail) was retained by Allstate Road (Edens), LLC to provide L.S.P. services for the RTN 3-4151 site. Since April 2014, McPhail has obtained additional subsurface data and monitored the presence of NAPL at the site. Based on previous data collected by others and recently collected data by McPhail, it was concluded that the previous AUL covered an area that was much larger than the area of the residual NAPL. In June 2016, McPhail filed a revised AUL and submitted a Revised Permanent Solution Statement with Conditions for the subject site. The revised AUL applies to a smaller Portion of the Property and restricts uses which would disturb soil at the Portion of the Property at a depth greater than 6 feet below ground surface.

Construction Site Dewatering

It is anticipated small excavation during site construction will extend below groundwater elevation and the discharge observed will likely be on order of 5 to 25 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 between elevations +7.2 and +10.3 at different portions of the site. In consideration of the indicated depth of groundwater below the existing ground surface, it is not anticipated that groundwater will adversely impact the proposed foundation construction in the areas with no below grade space. However, 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 either be recharged on-site or legally discharged off-site.

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.

A review of available subgrade sanitary and storm sewer system plans accessed from the BWSC indicates the presence of a dedicated stormwater drain system located beneath Enterprise Street. The discharge flow, indicated by BWSC plans, goes west and north beneath the South Bay Shopping Center and then follows the MBTA railway line north where the storm drain discharges into the Bass River of the Fort Point Channel as shown on the enclosed **Figure 3**.

Summary of Groundwater Analysis

McPhail Associates, LLC obtained samples of groundwater at the development parcels from monitoring well E-102 (OW) on December 12, 2018. Analytical results of the testing of groundwater samples obtained in 2018 are summarized in **Table 1** and the laboratory data are enclosed in **Appendix D**. In addition, a surface water sample was obtained from an upstream location of the discharge into the Bass River receiving water also on December 21, 2018. The approximate location of sample collection is indicated on the enclosed **Figure 3**, and analytical test results are included in the enclosed **Appendix E**.

Above referenced groundwater was submitted to a certified laboratory for analysis for the presence of compounds required under the EPA's RGP application, including total suspended solids (TSS), pH, total residual chlorine, total petroleum hydrocarbons (TPH), volatile organic compounds (VOCs) including total benzene, toluene, ethylbenzene and xylenes (BTEX), semi-volatile organic compounds (SVOCs), and total recoverable metals. The results of the laboratory analysis are summarized in **Table 2** and laboratory data is included

in **Appendix D**. The receiving water sample was analyzed for the presence of total metals, hardness and ammonia nitrogen. Additionally, at the time of sample collection, the temperature and pH of the surface water sample were analyzed. Receiving water data and laboratory data are included in **Appendix E**.

In summary, groundwater testing performed at the subject site has detected concentrations of suspended solids, ammonia, arsenic, chloride, iron, nickel, and non-halogenated semi-volatile organic compounds (SVOCs). Water Quality-Based Effluent Limits (WQBELs) were calculated for each of the detected compounds. With the exception of Total Residual Chlorine (TRC) and SVOCs, Type A and F compounds do not exceed the applicable Technology Based Effluent Limits (TBELs). For detected compounds, based on calculations performed in accordance with Appendix V of the RGP, WQBELs apply to TRC, benzo(a)anthracene, benzo(a)pyrene, benzo(a)fluoranthene, and dibenzo(a,h)anthracene. It is noted that the WQBEL for TRC will not likely apply to this specific discharge because chlorination of the groundwater has not been nor will be completed at the site. Documentation of NOI support calculations is included in **Appendix C**.

Non-aqueous phase liquid (NAPL) may be encountered at the site during excavations as indicated from release site history. Petroleum constituents have been detected in fill material in this area as well as the underlying natural soil at depths which extend to approximately 10 feet below ground surface. Elevated levels of dissolved petroleum hydrocarbons are not expected to be encountered in groundwater, however, it is possible that measurable levels of NAPL will be encountered within the soil pore space near the surface of groundwater.

In accordance with the RGP, and given that the Site is a remediation site, the proposed dewatering associated with this permit application is considered Contaminated/Formerly Contaminated Site Dewatering (Category III). The Site has been fully characterized and data utilized in characterization meets minimum data validation requirements; therefore, the Site contamination is considered "Known" (Contamination Type G). Accordingly, the known contaminations fall in the following categories; A (Inorganics), D (Non-Halogenated Semi-Organic Compounds), and F (Fuel Parameters. This project is considered Activity Category III-G; A, D, and F as defined in the RGP. Based on the activity category, and in accordance with the RGP, contamination Type A, D, and F as defined in Table 4 of the RGP applies. Thus, Technology Based Effluent Limitations (TBELs) for all above contamination categories apply. Water Quality Based Effluent Limitations (WQBELs) were calculated in accordance with Appendix V of the RGP for the parameters detected.

Groundwater Treatment

Based upon the anticipated rates of construction dewatering in conjunction with the results of the above referenced groundwater analyses, it is our opinion that one 5,000-gallon capacity settling tank, bag filters, a granular activated carbon (GAC) filter in series will be used to settle out and remove particulate matter as well as to remove free phase petroleum

product and SVOCs in groundwater to meet the effluent limits established by the US EPA prior to discharge.

A schematic of the treatment system is shown on **Figure 4**.

A Best Management Practices Plan (BMPP) has been prepared as **Appendix F** to the RGP and will be posted at the site during the time period that temporary construction dewatering is occurring at the site.

Summary and Conclusions

The purpose of this report is to summarize site environmental conditions and groundwater data to support a Notice of Intent to discharge under the Remediation General Permit, for off-site discharge of dewatered groundwater which will be encountered at 30 W Howell Street in Dorchester, Massachusetts. The groundwater testing results reported in this application have been provided to the site owner.

Based on the results of the above referenced groundwater analyses, treatment of construction dewatering will be necessary to meet the effluent limits established by the US EPA prior to off-site discharge. The proposed construction dewatering effluent treatment system will consist of a one 5,000-gallon capacity settling tank, bag filters, and granular activated carbon (GAC) filters in series. However, should the effluent monitoring results identify concentrations of contaminants that are in excess of the limits established by the RGP, an ion resin exchange filter or additional mitigative measures will be implemented to meet the allowable discharge limits.

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,

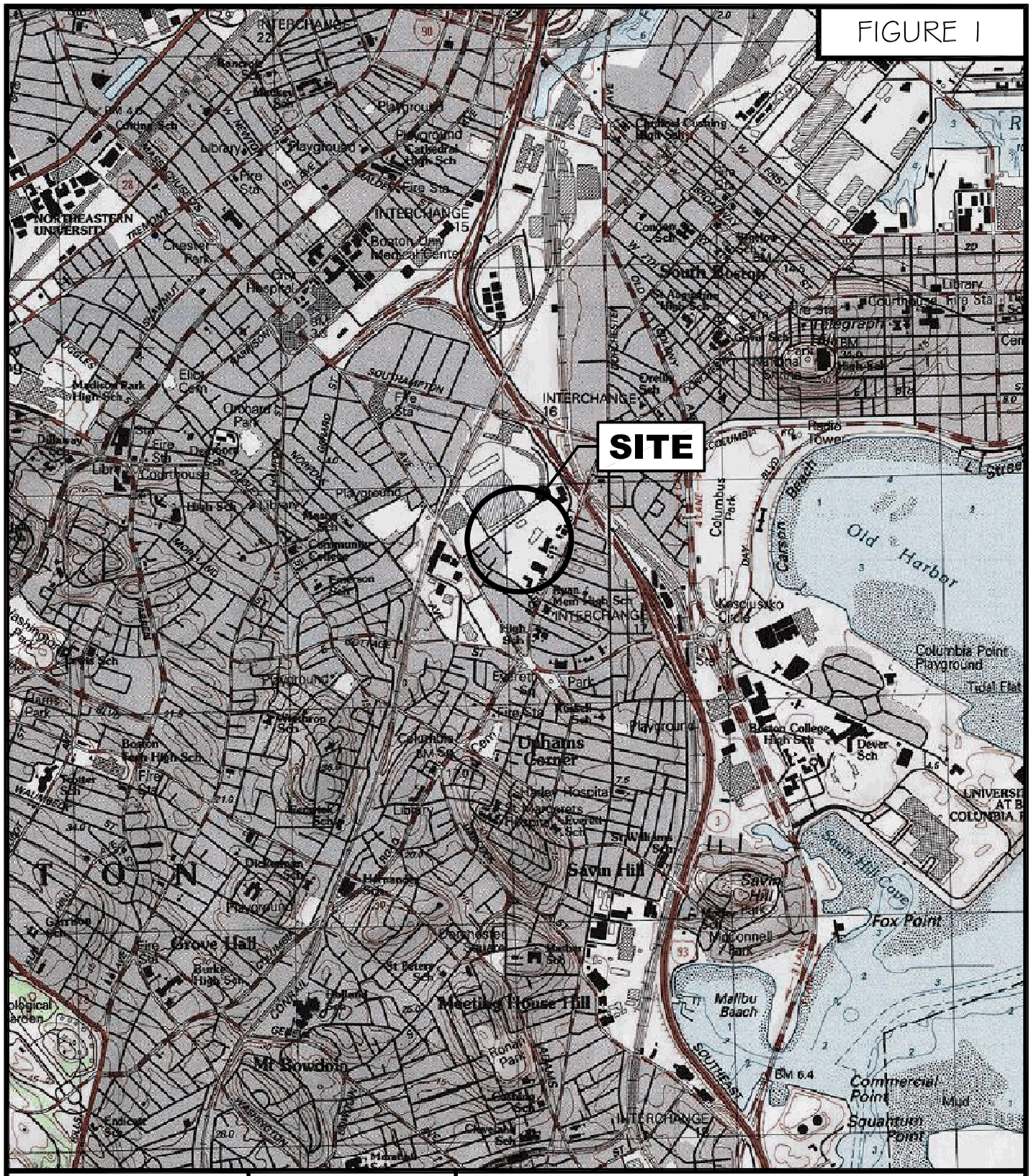
McPHAIL ASSOCIATES, LLC

Kirk W. Seaman

Ben E. Downing, PE.

N:\Working Documents\Reports\5737-30 W. Howell RGP App 010418.docx

FIGURE 1



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N

SCALE 1:25,000

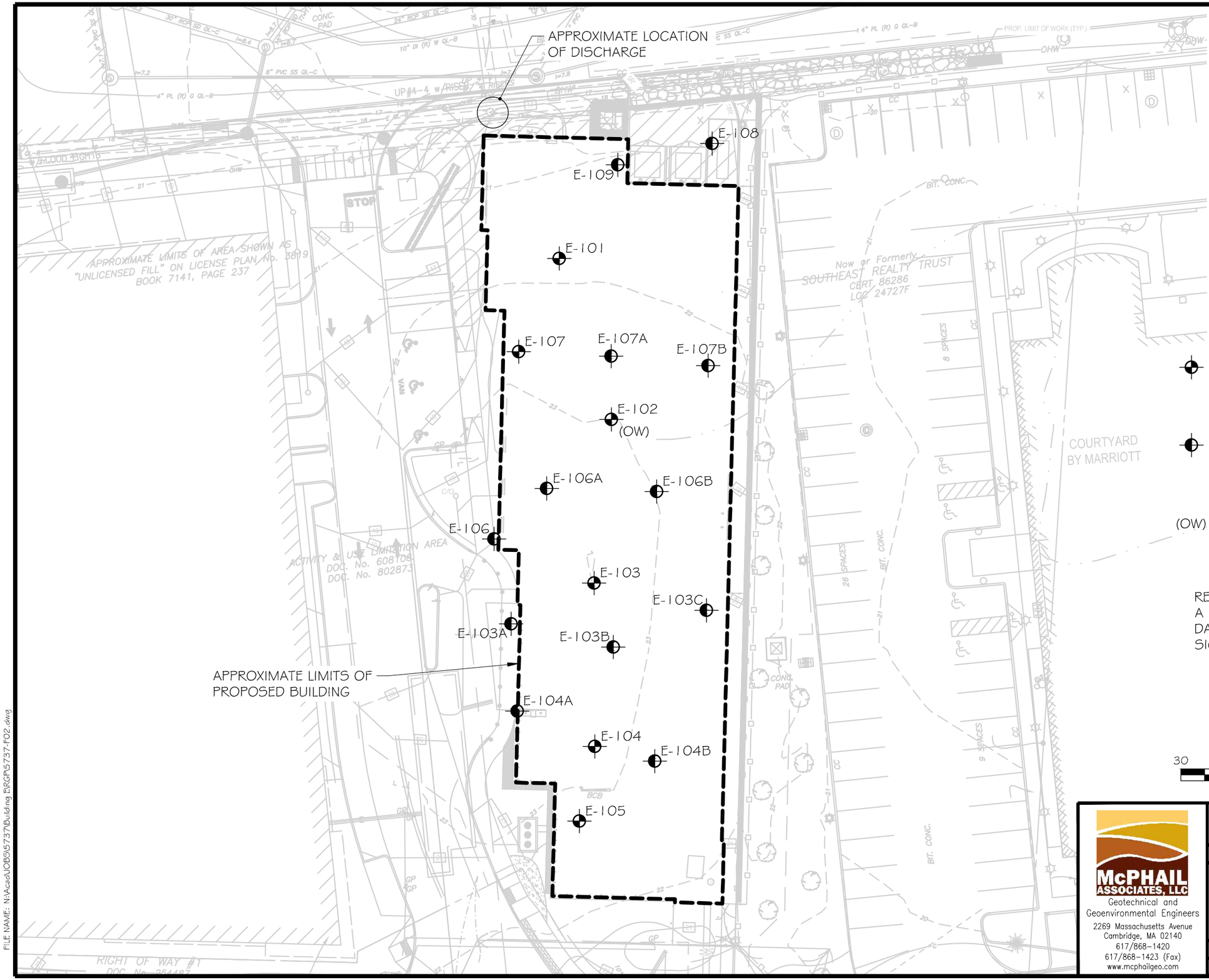
PROJECT LOCATION PLAN

SOUTH BAY EXPANSION

30 WEST HOWELL STREET

BOSTON MASSACHUSETTS

FIGURE 2



LEGEND

— APPROXIMATE LOCATION OF BORING PERFORMED BY TECHNICAL DRILLING SERVICES, INC. ON DECEMBER 7, 2018 FOR McPHAIL ASSOCIATES, LLC

— APPROXIMATE LOCATION OF BORING PERFORMED BY TECHNICAL DRILLING SERVICES, INC. ON JANUARY 3, 2019 FOR McPHAIL ASSOCIATES, LLC

(OW) — INDICATES OBSERVATION WELL INSTALLED WITHIN COMPLETED BOREHOLE

REFERENCE: THIS PLAN WAS PREPARED FROM A 20-SCALE DRAWING ENTITLED, "UTILITY PLAN" DATED NOVEMBER 16, 2018 PREPARED BY SIGNATURE ARCHITECTS INCORPORATED

GRAPHIC SCALE

30 0 30 60

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HOME 2 SOUTH BAY HOTEL

BOSTON MASSACHUSETTS

SUBSURFACE EXPLORATION PLAN

FOR

JITEN HOTEL MANAGEMENT

BY

McPHAIL ASSOCIATES, LLC

Date: JANUARY 2019	Dwn: F.G.P.	Chkd: K.W.S.	Scale: 1" = 30'
Project No: 5737			

FILE NAME: N:\Acad\JOBS\5737\Building ERGP\5737-F02.dwg

FIGURE 2A

REFERENCE: THIS PLAN WAS PREPARED FROM AN UNTITLED 240-SCALE DRAWING DATED DECEMBER 18, 2018 AND JANUARY 3, 2019 PROVIDED BY BOSTON WATER AND SEWER

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HOME 2 SOUTH BAY HOTEL

BOSTON MASSACHUSETTS

DISCHARGE FLOW PLAN

FOR

JITEN HOTEL MANAGEMENT

BY

McPHAIL ASSOCIATES, LLC

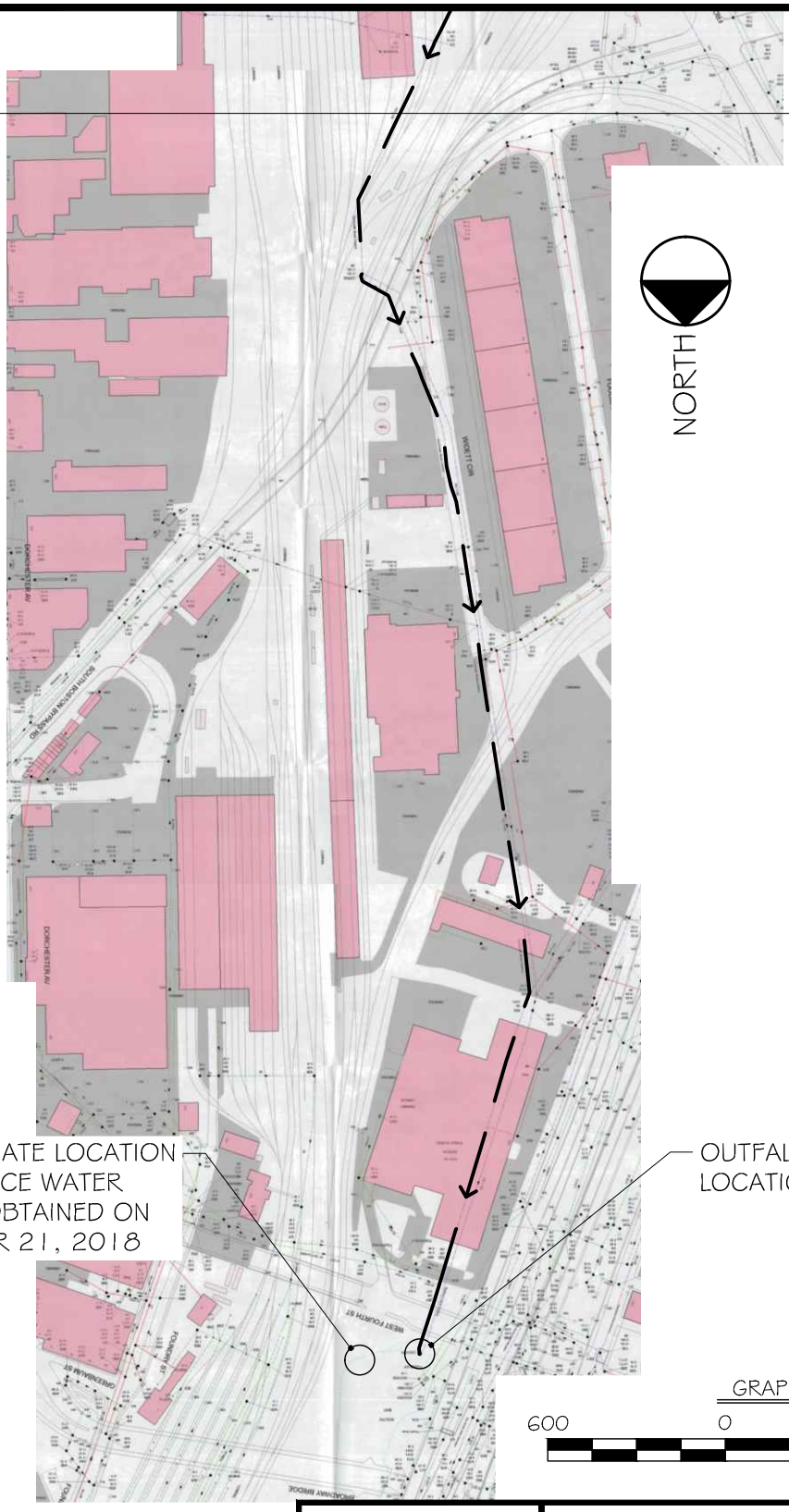
Date: JANUARY 2019	Dwn: F.G.P.	Chkd: K.W.S.	Scale: 1" = 600'
Project No: 5737			

FILE NAME: N:\AcadJOBS\5737\Building ERGP\5737-F03A#03B.dwg

FIGURE 2B

MATCH LINE

MATCH LINE



REFERENCE: THIS PLAN WAS PREPARED FROM AN UNTITLED 240-SCALE DRAWING DATED DECEMBER 18, 2018 AND JANUARY 3, 2019 PROVIDED BY BOSTON WATER AND SEWER

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HOME 2 SOUTH BAY HOTEL

BOSTON MASSACHUSETTS

DISCHARGE FLOW PLAN

FOR

JITEN HOTEL MANAGEMENT

BY

McPHAIL ASSOCIATES, LLC

Date: JANUARY 2019	Dwn: F.G.P.	Chkd: K.W.S.	Scale: 1" = 600'
Project No: 5737			

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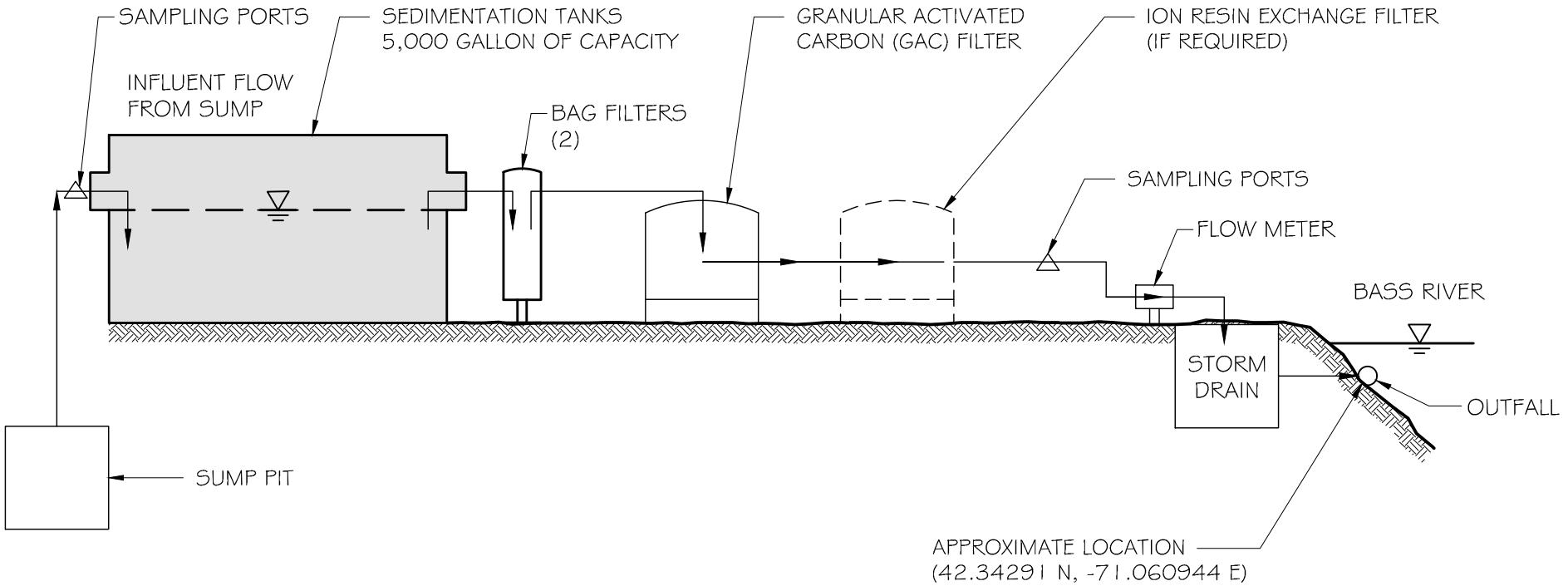
FILE NAME: N:\Acad\JOBS\5737\Building E\RGP\5737-F04.dwg

FIGURE 4



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HOME 2 SOUTH BAY HOTEL

BOSTON MASSACHUSETTS

SCHEMETIC OF TREATMENT SYSTEM

FOR

JITEN HOTEL MANAGEMENT

BY

McPHAIL ASSOCIATES, LLC

CONSULTING GEOTECHNICAL ENGINEERS

Date: JANUARY 2019	Dwn: F.G.P.	Chkd: K.W.S.	Scale: N.T.S.
Project No: 5737			

TABLE 1

CHEMICAL TEST RESULTS - GROUNDWATER
30 W Howell Street; Dorchester, Massachusetts
McPhail Job No. 5737

LOCATION	**E-102 (OW)**
SAMPLING DATE	**12/14/2018**
LAB SAMPLE ID	**L1851775-01**
SAMPLE TYPE	**WATER**
General Chemistry (ug/l)	
SALINITY	ND(2)
Chloride	96400
Hardness	773000
Solids, Total Suspended	12000
Cyanide, Total	ND(5)
Chlorine, Total Residual	ND(20)
pH (H)	7.1
Nitrogen, Ammonia	1890
TPH, SGT-HEM	ND(4000)
Phenolics, Total	ND(30)
Total Metals (ug/l)	
Antimony, Total	ND(4)
Arsenic, Total	1.03
Cadmium, Total	ND(0.2)
Chromium, Total	ND(1)
Chromium, Trivalent	ND(10)
Chromium, Hexavalent	ND(10)
Copper, Total	ND(1)
Iron, Total	4700
Lead, Total	ND(1)
Mercury, Total	ND(0.2)
Nickel, Total	19.4
Selenium, Total	ND(5)
Silver, Total	ND(0.4)
Zinc, Total	ND(10)
Semivolatile Organics Compounds (ug/l)	
Bis(2-ethylhexyl)phthalate	ND(11)
Butyl benzyl phthalate	ND(25)
Di-n-butylphthalate	ND(25)
Di-n-octylphthalate	ND(25)
Diethyl phthalate	ND(25)
Dimethyl phthalate	ND(25)
SUM	-
Semivolatile Organic Compounds (ug/l)	
Acenaphthene	8.8
Fluoranthene	0.96
Naphthalene	0.82
Benzo(a)anthracene	0.2
Benzo(a)pyrene	0.15
Benzo(b)fluoranthene	0.24
Benzo(k)fluoranthene	ND(0.1)
Chrysene	0.23
Acenaphthylene	ND(0.1)
Anthracene	0.96
Benzo(ghi)perylene	ND(0.1)
Fluorene	11
Phenanthrene	18
Dibenzo(a,h)anthracene	ND(0.1)
Indeno(1,2,3-cd)pyrene	ND(0.1)
Pyrene	1
SUM	42.36
Volatile Organics Compounds (ug/l)	
Benzene	ND(1)
Toluene	ND(1)
Ethylbenzene	ND(1)
p/m-Xylene	ND(2)
o-xylene	ND(1)
Xylenes, Total	ND(1)
Acetone	ND(10)
Methyl tert butyl Ether	ND(10)
Tert-Butyl Alcohol	ND(100)
Tertiary-Amyl Methyl Ether	ND(20)
1,4-Dioxane	ND(50)
SUM	-

ND - Not detected above laboratory
method detection limits in ()
Bold - Exceeds MCP Standards

TABLE 2

ANALYTICAL TEST RESULTS--SURFACE WATER
30 W Howell Street; Dorchester, Massachusetts
McPhail Job No. 5737

LOCATION	BASS RIVER SURFACE WATER
SAMPLING DATE	**12/21/2017**
LAB SAMPLE ID	**L1852943-01**
SAMPLE TYPE	**Water**
General Chemistry	
pH	7.8
Total Metals (ug/l)	
Antimony, Total	ND(40)
Arsenic, Total	ND(10)
Cadmium, Total	2
Chromium, Total	ND(10)
Copper, Total	ND(10)
Iron, Total	160
Lead, Total	ND(10)
Mercury, Total	ND(0.2)
Nickel, Total	ND(20)
Selenium, Total	ND(50)
Silver, Total	ND(4)
Zinc, Total	ND(100)
Total Hardness (ug/l)	
Hardness	3500000

ND - Not detected in excess of the laboratory method detection limit
Blank - Not analyzed

APPENDIX A:

LIMITATIONS

LIMITATIONS

The purpose of this report is to present the results of testing of groundwater samples obtained from a monitoring well located at 30 W Howell Street in Dorchester, Massachusetts, in support of an application for approval of construction site dewatering discharge 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 laboratory test 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 this assessment, as described in the text.

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

APPENDIX B:

NOTICE OF INTENT TRANSMITTAL FORM
BOSTON WATER & SEWER DEWATERING DISCHARGE 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:
30 W Howell Street</td><td colspan="3">Site address: 30 W Howell Street
Street:</td></tr>
<tr><td>City: Dorchester</td><td>State: MA</td><td>Zip: 02125</td></tr>
<tr><td rowspan="4">2. Site owner
SB Partners Three, LLC
c/o Jiten Hotel Management

Owner is (check one): ☐ Federal ☐ State/Tribal ■ Private
☐ Other; if so, specify:</td><td colspan="3">Contact Person: Mr. Jiten Patel</td></tr>
<tr><td colspan="2">Telephone: 508-427-1667 ext. 422</td><td>Email: jiten@jitenhm.com</td></tr>
<tr><td colspan="3">Mailing address: 495 Westgate Drive
Street:</td></tr>
<tr><td>City: Brockton, MA</td><td>State: MA</td><td>Zip: 02301</td></tr>
<tr><td rowspan="4">3. Site operator, if different than owner
Lee Kennedy Company</td><td colspan="3">Contact Person: Mr. Dan Lebiedz</td></tr>
<tr><td colspan="2">Telephone: 617 265 0815</td><td>Email: dlebiedz@leekennedy.com</td></tr>
<tr><td colspan="3">Mailing address:
Street: 122 Quincy Shore Drive</td></tr>
<tr><td>City: Quincy</td><td>State: MA</td><td>Zip: 02171</td></tr>
<tr><td>4. NPDES permit number assigned by EPA:

NPDES permit is (check all that apply: ☐ RGP ☐ DGP ☐ CGP
☐ MSGP ☐ Individual NPDES permit ☐ Other; if so, specify:</td><td colspan="3">5. Other regulatory program(s) that apply to the site (check all that apply):
■ MA Chapter 21e; list RTN(s): RTN 3-4151
☐ 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):
Bass River (Fort Point Channel)	MA70-02	SB

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.

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
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.	0

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: Chloride, Ammonia, TSS, Arsenic, Iron, Nickel and SVOCs	
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): CSO70	Outfall location(s): (Latitude, Longitude) 42.342877, -71.061007
Discharges enter the receiving water(s) via (check any that apply): ■ Direct discharge to the receiving water ☐ Indirect discharge, if so, specify: ☐ A private storm sewer system ■ A municipal storm sewer system If the discharge enters the receiving water via a private or municipal storm sewer system: Has notification been provided to the owner of this system? (check one): ☐ Yes ■ No Has the operator has received permission from the owner to use such system for discharges? (check one): ☐ Yes ■ No, if so, explain, with an estimated timeframe for obtaining permission: Upon approval of NPDES 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): 02/2019 - 01/20 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	121,4500	75	1890	1890	Report mg/L	---
Chloride		✔	1	44,300.0	500	96400	96400	Report µg/l	---
Total Residual Chlorine	✔		1	121,4500	20	<DL	<DL	0.2 mg/L	
Total Suspended Solids		✔	1	121,2540	500	12000	12000	30 mg/L	
Antimony	✔		1	EPA	4	<DL	<DL	206 µg/L	
Arsenic		✔	1	EPA	1	1.03	1.03	104 µg/L	
Cadmium	✔		1	EPA	.2	<DL	<DL	10.2 µg/L	
Chromium III	✔		1	1,7196A	10	<DL	<DL	323 µg/L	
Chromium VI	✔		1	1,7196A	10	<DL	<DL	323 µg/L	
Copper	✔		1	EPA	1	<DL	<DL	242 µg/L	
Iron		✔	1	19,200.7	50	4700	4700	5,000 µg/L	
Lead	✔		1	3,200.8	1	<DL	<DL	160 µg/L	
Mercury	✔		1	3,245.1	.2	<DL	<DL	0.739 µg/L	
Nickel		✔	1	3,200.8	2	19.4	19.4	1,450 µg/L	
Selenium	✔		1	3,200.8	5	<DL	<DL	235.8 µg/L	
Silver	✔		1	3,200.8	0.4	<DL	<DL	35.1 µg/L	
Zinc	✔		1	3,200.8	10	<DL	<DL	420 µg/L	
Cyanide	✔		1	121,4500	5	<DL	<DL	178 mg/L	
B. Non-Halogenated VOCs									
Total BTEX	✔		1	128624.1	1	<DL	<DL	100 µg/L	---
Benzene	✔		1	128624.1	1	<DL	<DL	5.0 µg/L	---
1,4 Dioxane	✔		1	128624.1	50	<DL	<DL	200 µg/L	---
Acetone	✔		1	128624.1	10	<DL	<DL	7.97 mg/L	---
Phenol	✔		1	128624.1	30	<DL	<DL	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	✓							4.4 µg/L	
1,2 Dichlorobenzene	✓							600 µg/L	---
1,3 Dichlorobenzene	✓							320 µg/L	---
1,4 Dichlorobenzene	✓							5.0 µg/L	---
Total dichlorobenzene	✓							763 µg/L in NH	---
1,1 Dichloroethane	✓							70 µg/L	---
1,2 Dichloroethane	✓							5.0 µg/L	---
1,1 Dichloroethylene	✓							3.2 µg/L	---
Ethylene Dibromide	✓							0.05 µg/L	---
Methylene Chloride	✓							4.6 µg/L	---
1,1,1 Trichloroethane	✓							200 µg/L	---
1,1,2 Trichloroethane	✓							5.0 µg/L	---
Trichloroethylene	✓							5.0 µg/L	---
Tetrachloroethylene	✓							5.0 µg/L	
cis-1,2 Dichloroethylene	✓							70 µg/L	---
Vinyl Chloride	✓							2.0 µg/L	---
D. Non-Halogenated SVOCs									
Total Phthalates	✓		1	129,625.1	0.1	<DL	<DL	190 µg/L	
Diethylhexyl phthalate	✓		1	129,625.1	0.1	<DL	<DL	101 µg/L	
Total Group I PAHs		✓	1	129,625.1	0.1	0.82	0.82	1.0 µg/L	---
Benzo(a)anthracene	✓		1	129,625.1	0.1	0.2	0.2	As Total PAHs	0.0645 - 0.1
Benzo(a)pyrene			1	129,625.1	0.1	0.15	0.15		0.0645 - 0.1
Benzo(b)fluoranthene		✓	1	129,625.1	0.1	0.24	0.24		0.0645 - 0.1
Benzo(k)fluoranthene	✓		1	129,625.1	0.1	<DL	<DL		
Chrysene		✓	1	129,625.1	0.1	0.23	0.23		0.0645 - 0.1
Dibenzo(a,h)anthracene	✓		1	129,625.1	0.1	<DL	<DL		
Indeno(1,2,3-cd)pyrene	✓		1	129,625.1	0.1	<DL	<DL		

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		✓	1	1,8270D	0.1	39.76	39.76	100 µg/L	---
Naphthalene		✓	1	1,8270D	0.1	0.82	0.82	20 µg/L	---
E. Halogenated SVOCs									
Total PCBs	✓							0.000064 µg/L	---
Pentachlorophenol	✓							1.0 µg/L	---
F. Fuels Parameters									
Total Petroleum Hydrocarbons	✓		1	74,1664A	400	<DL	<DL	5.0 mg/L	---
Ethanol	✓							Report mg/L	---
Methyl-tert-Butyl Ether	✓		1	1,8260C	10	<DL	<DL	70 µg/L	
tert-Butyl Alcohol	✓		1	1,8260C	100	<DL	<DL	120 µg/L in MA 40 µg/L in NH	---
tert-Amyl Methyl Ether	✓		1	1,8260C	20	<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			1	1214500I		7.1			
Temperature			1	YSI		25 C			
Salinity			1	1212520I	2.0	<DL			
pH- Surface Water			1	1214500I		7.8			

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.
Frac Tank, Bag Filters, and GAC

Ion Resin Exchange if Necessary

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(s) 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:	n/a

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

F. Chemical and additive information

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

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

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

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

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

G. Endangered Species Act eligibility determination

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

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

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

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

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

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

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

H. National Historic Preservation Act eligibility determination

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

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

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

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

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

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

I. Supplemental information

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

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

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

J. Certification requirement

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

BMPP certification statement:	A BMPP Statement has been prepared in accordance with good engineering practices following Part 2.5 of the RGP and shall be implemented upon 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. 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 ☐ Submission of documentation to and approval from BWSC in tandem with this NOI 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: Daniel Lebiedz	Date: 2/2/2019
Print Name and Title: Daniel Lebiedz, Project Executive, Lee Kennedy Co.	

Boston Water and Sewer Commission
980 Harrison Avenue
Boston, MA 02119-2540

DEWATERING DISCHARGE PERMIT APPLICATION

OWNER / AUTHORIZED APPLICANT PROVIDE INFORMATION HERE:

Company Name: Lee Kennedy Address: 122 Quincy Shore Drive

Phone Number: 617-825-6930 Fax number: 617-265-0815

Contact person name: Dan Lebiedz Title: Project Executive

Cell number: 617-212-2146 Email address: dlebiedz@leekennedy.com

Permit Request (check one): ☒ New Application ☐ Permit Extension ☐ Other (Specify): _____

Owner's Information (if different from above):

Owner of property being dewatered: SB Partners Three, LLC c/o Jiten Hotel Management

Owner's mailing address: 495 Westgate Drive Brockton, MA 02301 Phone number: 508-427-1667

Location of Discharge & Proposed Treatment System(s):

Street number and name: 30 W Howell Street Neighborhood Dorchester

Discharge is to a: ☐ Sanitary Sewer ☐ Combined Sewer ☒ Storm Drain ☐ Other (specify): _____

Describe Proposed Pre-Treatment System(s): Frac Tank, Bag Filters, GAC filter and ION Resin (if necessary)

BWSC Outfall No. CSO 070 Receiving Waters Fort Point Channel via The Bass River

---

Temporary Discharges (Provide Anticipated Dates of Discharge): From 2/2019 To 9/2019

☐ Groundwater Remediation	☒ Tank Removal/Installation	☒ Foundation Excavation
☐ Utility/Manhole Pumping	☐ Test Pipe	☐ Trench Excavation
☒ Accumulated Surface Water	☐ Hydrogeologic Testing	☐ Other _____

Permanent Discharges

☐ Foundation Drainage	☐ Crawl Space/Footing Drain
☐ Accumulated Surface Water	☐ Non-contact/Uncontaminated Cooling
☐ Non-contact/Uncontaminated Process	☐ Other; _____

---

1. Attach a Site Plan showing the source of the discharge and the location of the point of discharge (i.e. the sewer pipe or catch basin). Include meter type, meter number, size, make and start reading. Note. All discharges to the Commission's sewer system will be assessed current sewer charges.
2. If discharging to a sanitary or combined sewer, attach a copy of MWRA's Sewer Use Discharge permit or application.
3. If discharging to a separate storm drain, attach a copy of EPA's NPDES Permit or NOI application, or NPDES Permit exclusion letter for the discharge, as well as other relevant information.
4. Dewatering Drainage Permit will be denied or revoked if applicant fails to obtain the necessary permits from MWRA or EPA.

Submit Completed Application to: Boston Water and Sewer Commission
Engineering Customer Services
980 Harrison Avenue, Boston, MA 02119
Attn: Matthew Tuttle, Engineering Customer Service
E-mail: tuttlemp@bwsc.org
Phone: 617-989-7204 Fax: 617-989-7716

Signature of Authorized Representative for Property Owner: _____ Date: 2/2/19

APPENDIX C:

DEP PRIORITY RESOURCES MAP

ADDITIONAL NOI SUPPORT INFORMATION

MassDEP - Bureau of Waste Site Cleanup

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

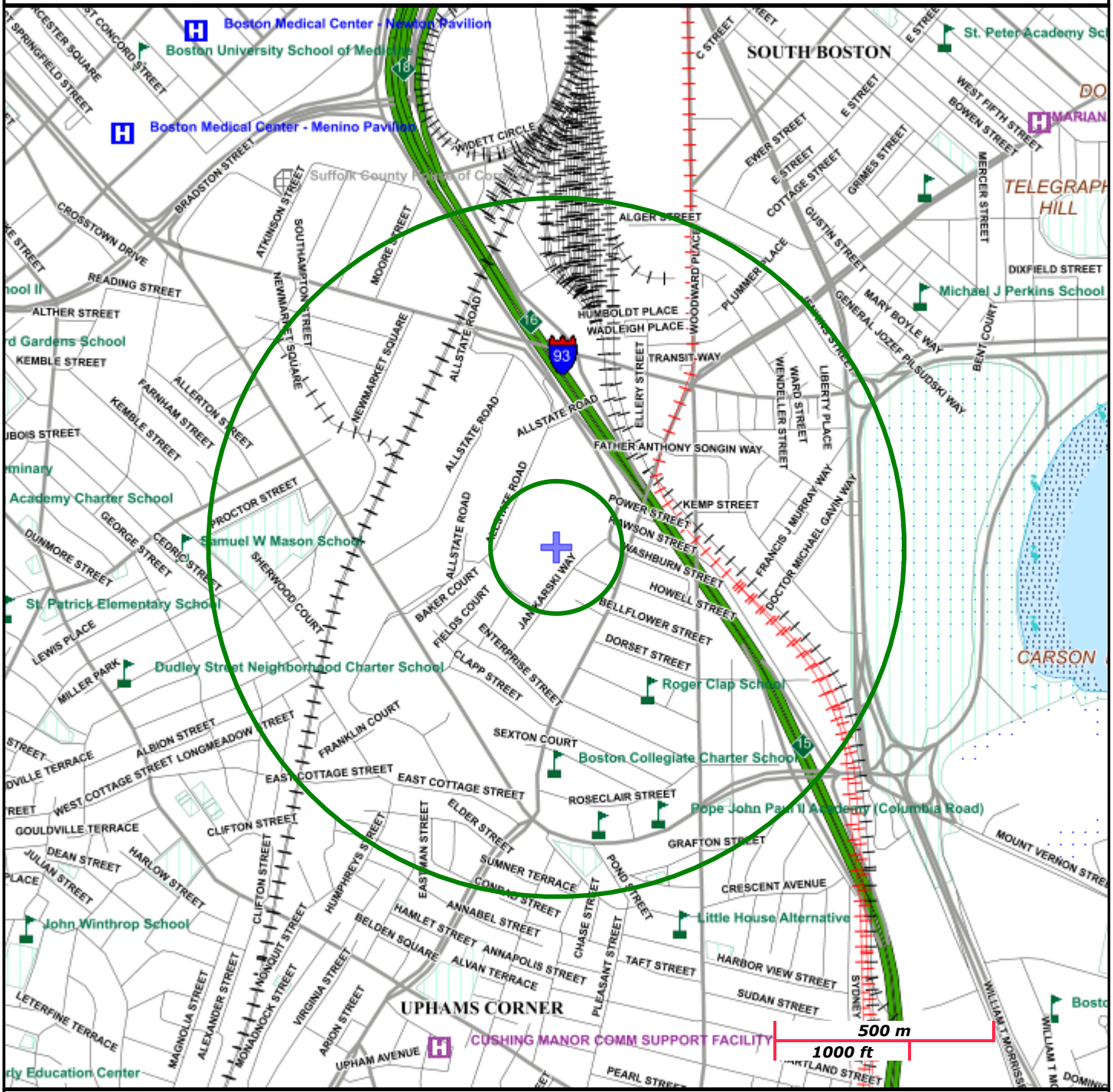
Site Information:

30 W HOWELL STREET BOSTON, MA

NAD83 UTM Meters:
4688044mN , 330200mE (Zone: 19)
February 5, 2019

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

MassDEP
Commonwealth of Massachusetts
Department of Environmental Protection



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

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

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

Aquifers: Medium Yield, High Yield, EPA Sole Source

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

PWS Protection Areas: Zone II, IWPA, Zone A

Hydrography: Open Water, PWS Reservoir, Tidal Flat

Wetlands: Freshwater, Saltwater, Cranberry Bog

FEMA 100yr Floodplain; Protected Open Space; ACEC

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

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

United States Department of the Interior

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

In Reply Refer To:
Consultation Code: 05E1NE00-2019-SLI-0625
Event Code: 05E1NE00-2019-E-01452
Project Name: 30 W Howell Street

January 29, 2019

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: 05E1NE00-2019-SLI-0625

Event Code: 05E1NE00-2019-E-01452

Project Name: 30 W Howell Street

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/42.32576102407672N71.05997174539365W

Counties: Suffolk, MA

Endangered Species Act Species

There is a total of 0 threatened, endangered, or candidate species on this species list.

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

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

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

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1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Critical habitats

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

Massachusetts Cultural Resource Information System

MACRIS

MACRIS Search Results

Search Criteria: Town(s): Boston; Street No: 30; Street Name: W Howell St; Resource Type(s): Area, Building, Burial Ground, Object, Structure;

Inv. No.	Property Name	Street	Town	Year

APPENDIX D:

LABORATORY ANALYTICAL DATA – GROUNDWATER

ANALYTICAL REPORT

Lab Number:	L1851775
Client:	McPhail Associates 2269 Massachusetts Avenue Cambridge, MA 02140
ATTN:	Ambrose Donovan
Phone:	(617) 868-1420
Project Name:	SOUTH BAY BLDG E
Project Number:	5737.9.E3
Report Date:	12/26/18

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-17-00196).

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

Project Name: SOUTH BAY BLDG E
Project Number: 5737.9.E3

Lab Number: L1851775
Report Date: 12/26/18

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1851775-01	E-102 (OW)	WATER	BOSTON, MA	12/14/18 11:00	12/14/18
L1851775-02	TRIP BLANK	WATER	BOSTON, MA	12/14/18 11:00	12/14/18

Project Name:	SOUTH BAY BLDG E	**Lab Number:**	L1851775
Project Number:	5737.9.E3	**Report Date:**	12/26/18

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:	SOUTH BAY BLDG E	**Lab Number:**	L1851775
Project Number:	5737.9.E3	**Report Date:**	12/26/18

Case Narrative (continued)

Report Submission

The analysis of Ethanol was subcontracted. A copy of the laboratory report is included as an addendum.

Please note: This data is only available in PDF format and is not available on Data Merger.

Sample Receipt

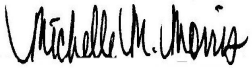
The analyses performed were specified by the client.

L1851775-02: A sample identified as "TRIP BLANK" was received but not listed on the Chain of Custody. This sample was not analyzed.

Semivolatile Organics by Method 625

L1851775-01: The sample has elevated detection limits due to the dilution required by the sample matrix.

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:  Michelle M. Morris

Title: Technical Director/Representative Date: 12/26/18

ORGANICS

VOLATILES

Project Name: SOUTH BAY BLDG E
Project Number: 5737.9.E3
Lab Number: L1851775
Report Date: 12/26/18

SAMPLE RESULTS

Lab ID: L1851775-01
Client ID: E-102 (OW)
Sample Location: BOSTON, MA

Date Collected: 12/14/18 11:00
Date Received: 12/14/18
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 128,624.1
Analytical Date: 12/17/18 22:20
Analyst: NLK

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	ND		ug/l	1.0	--	1
Toluene	ND		ug/l	1.0	--	1
Ethylbenzene	ND		ug/l	1.0	--	1
p/m-Xylene	ND		ug/l	2.0	--	1
o-xylene	ND		ug/l	1.0	--	1
Xylenes, Total	ND		ug/l	1.0	--	1
Acetone	ND		ug/l	10	--	1
Methyl tert butyl Ether	ND		ug/l	10	--	1
Tert-Butyl Alcohol	ND		ug/l	100	--	1
Tertiary-Amyl Methyl Ether	ND		ug/l	20	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Pentafluorobenzene	96		60-140
Fluorobenzene	105		60-140
4-Bromofluorobenzene	98		60-140

Project Name: SOUTH BAY BLDG E
Lab Number: L1851775
Project Number: 5737.9.E3
Report Date: 12/26/18

SAMPLE RESULTS

Lab ID: L1851775-01
Client ID: E-102 (OW)
Sample Location: BOSTON, MA

Date Collected: 12/14/18 11:00
Date Received: 12/14/18
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 128,624.1-SIM
Analytical Date: 12/17/18 22:20
Analyst: GT

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS-SIM - Westborough Lab						
1,4-Dioxane	ND		ug/l	50	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Fluorobenzene	111		60-140
4-Bromofluorobenzene	118		60-140

Project Name: SOUTH BAY BLDG E
Project Number: 5737.9.E3

Lab Number: L1851775
Report Date: 12/26/18

Method Blank Analysis
Batch Quality Control

Analytical Method: 128,624.1
Analytical Date: 12/17/18 17:39
Analyst: GT

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1191157-4					
Benzene	ND		ug/l	1.0	--
Toluene	ND		ug/l	1.0	--
Ethylbenzene	ND		ug/l	1.0	--
p/m-Xylene	ND		ug/l	2.0	--
o-xylene	ND		ug/l	1.0	--
Xylenes, Total	ND		ug/l	1.0	--
Acetone	ND		ug/l	10	--
Methyl tert butyl Ether	ND		ug/l	10	--
Tert-Butyl Alcohol	ND		ug/l	100	--
Tertiary-Amyl Methyl Ether	ND		ug/l	20	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
Pentafluorobenzene	98		60-140
Fluorobenzene	96		60-140
4-Bromofluorobenzene	97		60-140

Project Name: SOUTH BAY BLDG E
Project Number: 5737.9.E3

Lab Number: L1851775
Report Date: 12/26/18

Method Blank Analysis
Batch Quality Control

Analytical Method: 128,624.1-SIM
Analytical Date: 12/17/18 17:39
Analyst: GT

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01 Batch: WG1191160-4					
1,4-Dioxane	ND		ug/l	50	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
Fluorobenzene	102		60-140
4-Bromofluorobenzene	119		60-140

Lab Control Sample Analysis
Batch Quality Control

Project Name: SOUTH BAY BLDG E
Project Number: 5737.9.E3

Lab Number: L1851775
Report Date: 12/26/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1191157-3								
Benzene	100		-		65-135	-		61
Toluene	100		-		70-130	-		41
Ethylbenzene	95		-		60-140	-		63
p/m-Xylene	85		-		60-140	-		30
o-xylene	85		-		60-140	-		30
Acetone	100		-		40-160	-		30
Methyl tert butyl Ether	80		-		60-140	-		30
Tert-Butyl Alcohol	84		-		60-140	-		30
Tertiary-Amyl Methyl Ether	70		-		60-140	-		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
Pentafluorobenzene	102				60-140
Fluorobenzene	106				60-140
4-Bromofluorobenzene	99				60-140

Lab Control Sample Analysis
Batch Quality Control

Project Name: SOUTH BAY BLDG E
Project Number: 5737.9.E3

Lab Number: L1851775
Report Date: 12/26/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01 Batch: WG1191160-3								
1,4-Dioxane	120		-		60-140	-		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
Fluorobenzene	111				60-140
4-Bromofluorobenzene	111				60-140

SEMIVOLATILES

Project Name: SOUTH BAY BLDG E
Project Number: 5737.9.E3

Lab Number: L1851775
Report Date: 12/26/18

SAMPLE RESULTS

Lab ID: L1851775-01
Client ID: E-102 (OW)
Sample Location: BOSTON, MA

Date Collected: 12/14/18 11:00
Date Received: 12/14/18
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 129,625.1-SIM
Analytical Date: 12/19/18 14:11
Analyst: DV

Extraction Method: EPA 625.1
Extraction Date: 12/18/18 08:00

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	8.8		ug/l	0.10	--	1
Fluoranthene	0.96		ug/l	0.10	--	1
Naphthalene	0.82		ug/l	0.10	--	1
Benzo(a)anthracene	0.20		ug/l	0.10	--	1
Benzo(a)pyrene	0.15		ug/l	0.10	--	1
Benzo(b)fluoranthene	0.24		ug/l	0.10	--	1
Benzo(k)fluoranthene	ND		ug/l	0.10	--	1
Chrysene	0.23		ug/l	0.10	--	1
Acenaphthylene	ND		ug/l	0.10	--	1
Anthracene	0.96		ug/l	0.10	--	1
Benzo(ghi)perylene	ND		ug/l	0.10	--	1
Fluorene	11		ug/l	0.10	--	1
Phenanthrene	18		ug/l	0.10	--	1
Dibenzo(a,h)anthracene	ND		ug/l	0.10	--	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	--	1
Pyrene	1.0		ug/l	0.10	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	77		42-122
2-Fluorobiphenyl	74		46-121
4-Terphenyl-d14	80		47-138

Project Name: SOUTH BAY BLDG E
Project Number: 5737.9.E3

Lab Number: L1851775
Report Date: 12/26/18

SAMPLE RESULTS

Lab ID: L1851775-01 D
Client ID: E-102 (OW)
Sample Location: BOSTON, MA

Date Collected: 12/14/18 11:00
Date Received: 12/14/18
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 129,625.1
Analytical Date: 12/20/18 13:50
Analyst: SZ

Extraction Method: EPA 625.1
Extraction Date: 12/19/18 21:35

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Bis(2-ethylhexyl)phthalate	ND		ug/l	11	--	5
Butyl benzyl phthalate	ND		ug/l	25	--	5
Di-n-butylphthalate	ND		ug/l	25	--	5
Di-n-octylphthalate	ND		ug/l	25	--	5
Diethyl phthalate	ND		ug/l	25	--	5
Dimethyl phthalate	ND		ug/l	25	--	5

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	46		25-87
Phenol-d6	29		16-65
Nitrobenzene-d5	73		42-122
2-Fluorobiphenyl	85		46-121
2,4,6-Tribromophenol	87		45-128
4-Terphenyl-d14	80		47-138

Project Name: SOUTH BAY BLDG E
Project Number: 5737.9.E3

Lab Number: L1851775
Report Date: 12/26/18

Method Blank Analysis
Batch Quality Control

Analytical Method: 129,625.1-SIM
Analytical Date: 12/19/18 11:07
Analyst: DV

Extraction Method: EPA 625.1
Extraction Date: 12/17/18 20:05

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01 Batch: WG1190521-1					
Acenaphthene	ND		ug/l	0.10	--
Fluoranthene	ND		ug/l	0.10	--
Naphthalene	ND		ug/l	0.10	--
Benzo(a)anthracene	ND		ug/l	0.10	--
Benzo(a)pyrene	ND		ug/l	0.10	--
Benzo(b)fluoranthene	ND		ug/l	0.10	--
Benzo(k)fluoranthene	ND		ug/l	0.10	--
Chrysene	ND		ug/l	0.10	--
Acenaphthylene	ND		ug/l	0.10	--
Anthracene	ND		ug/l	0.10	--
Benzo(ghi)perylene	ND		ug/l	0.10	--
Fluorene	ND		ug/l	0.10	--
Phenanthrene	ND		ug/l	0.10	--
Dibenzo(a,h)anthracene	ND		ug/l	0.10	--
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	--
Pyrene	ND		ug/l	0.10	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	48		25-87
Phenol-d6	36		16-65
Nitrobenzene-d5	72		42-122
2-Fluorobiphenyl	66		46-121
2,4,6-Tribromophenol	82		45-128
4-Terphenyl-d14	74		47-138

Project Name: SOUTH BAY BLDG E
Project Number: 5737.9.E3

Lab Number: L1851775
Report Date: 12/26/18

Method Blank Analysis
Batch Quality Control

Analytical Method: 129,625.1
Analytical Date: 12/20/18 16:09
Analyst: SZ

Extraction Method: EPA 625.1
Extraction Date: 12/19/18 19:30

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1191331-1					
Bis(2-ethylhexyl)phthalate	ND		ug/l	2.2	--
Butyl benzyl phthalate	ND		ug/l	5.0	--
Di-n-butylphthalate	ND		ug/l	5.0	--
Di-n-octylphthalate	ND		ug/l	5.0	--
Diethyl phthalate	ND		ug/l	5.0	--
Dimethyl phthalate	ND		ug/l	5.0	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	27		25-87
Phenol-d6	20		16-65
Nitrobenzene-d5	48		42-122
2-Fluorobiphenyl	63		46-121
2,4,6-Tribromophenol	71		45-128
4-Terphenyl-d14	81		47-138

Lab Control Sample Analysis
Batch Quality Control

Project Name: SOUTH BAY BLDG E
Project Number: 5737.9.E3

Lab Number: L1851775
Report Date: 12/26/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01 Batch: WG1190521-2								
Acenaphthene	88		-		60-132	-		30
Fluoranthene	95		-		43-121	-		30
Naphthalene	88		-		36-120	-		30
Benzo(a)anthracene	88		-		42-133	-		30
Benzo(a)pyrene	99		-		32-148	-		30
Benzo(b)fluoranthene	94		-		42-140	-		30
Benzo(k)fluoranthene	102		-		25-146	-		30
Chrysene	99		-		44-140	-		30
Acenaphthylene	93		-		54-126	-		30
Anthracene	100		-		43-120	-		30
Benzo(ghi)perylene	92		-		1-195	-		30
Fluorene	87		-		70-120	-		30
Phenanthrene	91		-		65-120	-		30
Dibenzo(a,h)anthracene	93		-		1-200	-		30
Indeno(1,2,3-cd)pyrene	94		-		1-151	-		30
Pyrene	95		-		70-120	-		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: SOUTH BAY BLDG E
Project Number: 5737.9.E3

Lab Number: L1851775
Report Date: 12/26/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01 Batch: WG1190521-2								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	55				25-87
Phenol-d6	40				16-65
Nitrobenzene-d5	82				42-122
2-Fluorobiphenyl	77				46-121
2,4,6-Tribromophenol	89				45-128
4-Terphenyl-d14	78				47-138

Lab Control Sample Analysis
Batch Quality Control

Project Name: SOUTH BAY BLDG E
Project Number: 5737.9.E3

Lab Number: L1851775
Report Date: 12/26/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1191331-2								
Bis(2-ethylhexyl)phthalate	96		-		29-137	-		30
Butyl benzyl phthalate	108		-		1-140	-		30
Di-n-butylphthalate	105		-		8-120	-		30
Di-n-octylphthalate	96		-		19-132	-		30
Diethyl phthalate	86		-		1-120	-		30
Dimethyl phthalate	87		-		1-120	-		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	53				25-87
Phenol-d6	38				16-65
Nitrobenzene-d5	85				42-122
2-Fluorobiphenyl	80				46-121
2,4,6-Tribromophenol	84				45-128
4-Terphenyl-d14	77				47-138

METALS

Project Name: SOUTH BAY BLDG E
Lab Number: L1851775
Project Number: 5737.9.E3
Report Date: 12/26/18

SAMPLE RESULTS

Lab ID: L1851775-01
Client ID: E-102 (OW)
Sample Location: BOSTON, MA
Date Collected: 12/14/18 11:00
Date Received: 12/14/18
Field Prep: Not Specified

Sample Depth:
Matrix: Water

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	12/19/18 14:10	12/20/18 10:41	EPA 3005A	3,200.8	AM
Arsenic, Total	0.00103		mg/l	0.00100	--	1	12/19/18 14:10	12/20/18 10:41	EPA 3005A	3,200.8	AM
Cadmium, Total	ND		mg/l	0.00020	--	1	12/19/18 14:10	12/20/18 10:41	EPA 3005A	3,200.8	AM
Chromium, Total	ND		mg/l	0.00100	--	1	12/19/18 14:10	12/20/18 10:41	EPA 3005A	3,200.8	AM
Copper, Total	ND		mg/l	0.00100	--	1	12/19/18 14:10	12/20/18 10:41	EPA 3005A	3,200.8	AM
Iron, Total	4.70		mg/l	0.050	--	1	12/19/18 14:10	12/20/18 05:07	EPA 3005A	19,200.7	AB
Lead, Total	ND		mg/l	0.00100	--	1	12/19/18 14:10	12/20/18 10:41	EPA 3005A	3,200.8	AM
Mercury, Total	ND		mg/l	0.00020	--	1	12/19/18 13:02	12/19/18 21:35	EPA 245.1	3,245.1	MG
Nickel, Total	0.01940		mg/l	0.00200	--	1	12/19/18 14:10	12/20/18 10:41	EPA 3005A	3,200.8	AM
Selenium, Total	ND		mg/l	0.00500	--	1	12/19/18 14:10	12/20/18 10:41	EPA 3005A	3,200.8	AM
Silver, Total	ND		mg/l	0.00040	--	1	12/19/18 14:10	12/20/18 10:41	EPA 3005A	3,200.8	AM
Zinc, Total	ND		mg/l	0.01000	--	1	12/19/18 14:10	12/20/18 10:41	EPA 3005A	3,200.8	AM
Total Hardness by SM 2340B - Mansfield Lab											
Hardness	773		mg/l	0.660	NA	1	12/19/18 14:10	12/20/18 14:01	EPA 3005A	19,200.7	MC
General Chemistry - Mansfield Lab											
Chromium, Trivalent	ND		mg/l	0.010	--	1		12/20/18 10:41	NA	107,-	

Project Name: SOUTH BAY BLDG E
Project Number: 5737.9.E3
Lab Number: L1851775
Report Date: 12/26/18

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: WG1191126-1										
Iron, Total	ND		mg/l	0.050	--	1	12/19/18 14:10	12/20/18 02:28	19,200.7	AB

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: WG1191126-1										
Hardness	ND		mg/l	0.660	NA	1	12/19/18 14:10	12/20/18 02:28	19,200.7	AB

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: WG1191131-1										
Antimony, Total	ND		mg/l	0.00400	--	1	12/19/18 14:10	12/20/18 09:28	3,200.8	AM
Arsenic, Total	ND		mg/l	0.00100	--	1	12/19/18 14:10	12/20/18 09:28	3,200.8	AM
Cadmium, Total	ND		mg/l	0.00020	--	1	12/19/18 14:10	12/20/18 09:28	3,200.8	AM
Chromium, Total	ND		mg/l	0.00100	--	1	12/19/18 14:10	12/20/18 09:28	3,200.8	AM
Copper, Total	ND		mg/l	0.00100	--	1	12/19/18 14:10	12/20/18 09:28	3,200.8	AM
Lead, Total	ND		mg/l	0.00100	--	1	12/19/18 14:10	12/20/18 09:28	3,200.8	AM
Nickel, Total	ND		mg/l	0.00200	--	1	12/19/18 14:10	12/20/18 09:28	3,200.8	AM
Selenium, Total	ND		mg/l	0.00500	--	1	12/19/18 14:10	12/20/18 09:28	3,200.8	AM
Silver, Total	ND		mg/l	0.00040	--	1	12/19/18 14:10	12/20/18 09:28	3,200.8	AM
Zinc, Total	ND		mg/l	0.01000	--	1	12/19/18 14:10	12/20/18 09:28	3,200.8	AM

Prep Information

Digestion Method: EPA 3005A

Project Name: SOUTH BAY BLDG E
Project Number: 5737.9.E3
Lab Number: L1851775
Report Date: 12/26/18

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: WG1191173-1										
Mercury, Total	ND		mg/l	0.00020	--	1	12/19/18 13:02	12/19/18 21:00	3,245.1	MG

Prep Information

Digestion Method: EPA 245.1

Lab Control Sample Analysis

Batch Quality Control

Project Name: SOUTH BAY BLDG E

Project Number: 5737.9.E3

Lab Number: L1851775

Report Date: 12/26/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01 Batch: WG1191126-2								
Iron, Total	101		-		85-115	-		
Total Hardness by SM 2340B - Mansfield Lab Associated sample(s): 01 Batch: WG1191126-2								
Hardness	108		-		85-115	-		
Total Metals - Mansfield Lab Associated sample(s): 01 Batch: WG1191131-2								
Antimony, Total	99		-		85-115	-		
Arsenic, Total	103		-		85-115	-		
Cadmium, Total	110		-		85-115	-		
Chromium, Total	100		-		85-115	-		
Copper, Total	96		-		85-115	-		
Lead, Total	107		-		85-115	-		
Nickel, Total	100		-		85-115	-		
Selenium, Total	105		-		85-115	-		
Silver, Total	103		-		85-115	-		
Zinc, Total	107		-		85-115	-		
Total Metals - Mansfield Lab Associated sample(s): 01 Batch: WG1191173-2								
Mercury, Total	107		-		85-115	-		

Matrix Spike Analysis
Batch Quality Control

Project Name: SOUTH BAY BLDG E
Project Number: 5737.9.E3

Lab Number: L1851775
Report Date: 12/26/18

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: WG1191126-3 QC Sample: L1851149-01 Client ID: MS Sample												
Iron, Total	ND	1	1.05	105		-	-		75-125	-		20
Total Hardness by SM 2340B - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1191126-3 QC Sample: L1851149-01 Client ID: MS Sample												
Hardness	223	66.2	294	107		-	-		75-125	-		20
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1191126-7 QC Sample: L1851150-01 Client ID: MS Sample												
Iron, Total	0.061	1	1.08	102		-	-		75-125	-		20
Total Hardness by SM 2340B - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1191126-7 QC Sample: L1851150-01 Client ID: MS Sample												
Hardness	10.8	66.2	76.2	99		-	-		75-125	-		20
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1191131-3 QC Sample: L1851574-01 Client ID: MS Sample												
Antimony, Total	ND	0.5	0.5626	112		-	-		70-130	-		20
Arsenic, Total	0.00226	0.12	0.1330	109		-	-		70-130	-		20
Cadmium, Total	ND	0.051	0.05436	106		-	-		70-130	-		20
Chromium, Total	0.00137	0.2	0.2021	100		-	-		70-130	-		20
Copper, Total	0.00165	0.25	0.2561	102		-	-		70-130	-		20
Lead, Total	ND	0.51	0.5509	108		-	-		70-130	-		20
Nickel, Total	ND	0.5	0.5088	102		-	-		70-130	-		20
Selenium, Total	ND	0.12	0.1296	108		-	-		70-130	-		20
Silver, Total	ND	0.05	0.05076	102		-	-		70-130	-		20
Zinc, Total	ND	0.5	0.5296	106		-	-		70-130	-		20
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1191173-3 QC Sample: L1851574-01 Client ID: MS Sample												
Mercury, Total	ND	0.005	0.00400	80		-	-		70-130	-		20

Matrix Spike Analysis
Batch Quality Control

Project Name: SOUTH BAY BLDG E
Project Number: 5737.9.E3

Lab Number: L1851775
Report Date: 12/26/18

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 QC Batch ID: WG1191173-5 QC Sample: L1851574-02 Client ID: MS Sample									
Mercury, Total	ND	0.005	0.00432	86	-	-	70-130	-	20

Lab Duplicate Analysis

Batch Quality Control

Project Name: SOUTH BAY BLDG E
Project Number: 5737.9.E3

Lab Number: L1851775
Report Date: 12/26/18

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1191126-4 QC Sample: L1851149-01 Client ID: DUP Sample						
Iron, Total	ND	ND	mg/l	NC		20
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1191126-8 QC Sample: L1851150-01 Client ID: DUP Sample						
Iron, Total	0.061	0.052	mg/l	17		20
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1191131-4 QC Sample: L1851574-01 Client ID: DUP Sample						
Antimony, Total	ND	ND	mg/l	NC		20
Arsenic, Total	0.00226	0.00212	mg/l	6		20
Cadmium, Total	ND	ND	mg/l	NC		20
Chromium, Total	0.00137	0.00138	mg/l	1		20
Copper, Total	0.00165	0.00173	mg/l	5		20
Lead, Total	ND	ND	mg/l	NC		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 QC Batch ID: WG1191173-4 QC Sample: L1851574-01 Client ID: DUP Sample						
Mercury, Total	ND	ND	mg/l	NC		20
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1191173-6 QC Sample: L1851574-02 Client ID: DUP Sample						
Mercury, Total	ND	ND	mg/l	NC		20

INORGANICS
&
MISCELLANEOUS

Project Name: SOUTH BAY BLDG E
Project Number: 5737.9.E3

Lab Number: L1851775
Report Date: 12/26/18

SAMPLE RESULTS

Lab ID: L1851775-01
Client ID: E-102 (OW)
Sample Location: BOSTON, MA

Date Collected: 12/14/18 11:00
Date Received: 12/14/18
Field Prep: Not Specified

Sample Depth:
Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
SALINITY	ND		SU	2.0	--	1	-	12/15/18 05:50	121,2520B	MA
Solids, Total Suspended	12.		mg/l	5.0	NA	1	-	12/17/18 15:15	121,2540D	DR
Cyanide, Total	ND		mg/l	0.005	--	1	12/18/18 03:09	12/18/18 13:22	121,4500CN-CE	LH
Chlorine, Total Residual	ND		mg/l	0.02	--	1	-	12/15/18 03:46	121,4500CL-D	JW
pH (H)	7.1		SU	-	NA	1	-	12/15/18 06:12	121,4500H+-B	JW
Nitrogen, Ammonia	1.89		mg/l	0.075	--	1	12/18/18 18:18	12/19/18 22:13	121,4500NH3-BH	AT
TPH, SGT-HEM	ND		mg/l	4.00	--	1	12/17/18 11:30	12/17/18 16:50	74,1664A	ML
Phenolics, Total	ND		mg/l	0.030	--	1	12/17/18 06:15	12/18/18 05:21	4,420.1	GD
Chromium, Hexavalent	ND		mg/l	0.010	--	1	12/15/18 05:00	12/15/18 05:46	1,7196A	JW
Anions by Ion Chromatography - Westborough Lab										
Chloride	96.4		mg/l	5.00	--	10	-	12/17/18 00:11	44,300.0	JR

Project Name: SOUTH BAY BLDG E
Project Number: 5737.9.E3
Lab Number: L1851775
Report Date: 12/26/18

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: WG1189735-1										
Chlorine, Total Residual	ND		mg/l	0.02	--	1	-	12/15/18 03:46	121,4500CL-D	JW
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG1189746-1										
Chromium, Hexavalent	ND		mg/l	0.010	--	1	12/15/18 05:00	12/15/18 05:44	1,7196A	JW
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG1190151-1										
Solids, Total Suspended	ND		mg/l	5.0	NA	1	-	12/17/18 15:15	121,2540D	DR
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG1190182-1										
Phenolics, Total	ND		mg/l	0.030	--	1	12/17/18 06:15	12/18/18 05:11	4,420.1	GD
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG1190250-1										
TPH, SGT-HEM	ND		mg/l	4.00	--	1	12/17/18 11:30	12/17/18 16:50	74,1664A	ML
Anions by Ion Chromatography - Westborough Lab for sample(s): 01 Batch: WG1190360-1										
Chloride	ND		mg/l	0.500	--	1	-	12/17/18 00:47	44,300.0	JR
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG1190438-1										
Cyanide, Total	ND		mg/l	0.005	--	1	12/18/18 03:09	12/18/18 13:03	121,4500CN-CE	LH
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG1190578-1										
Nitrogen, Ammonia	ND		mg/l	0.075	--	1	12/18/18 18:18	12/19/18 21:58	121,4500NH3-BH	AT

Lab Control Sample Analysis

Batch Quality Control

Project Name: SOUTH BAY BLDG E

Project Number: 5737.9.E3

Lab Number: L1851775

Report Date: 12/26/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG1189735-2								
Chlorine, Total Residual	96		-		90-110	-		
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG1189746-2								
Chromium, Hexavalent	93		-		85-115	-		20
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG1189754-1								
pH	100		-		99-101	-		5
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG1189761-1								
SALINITY	99		-			-		
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG1190182-2								
Phenolics, Total	88		-		70-130	-		
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG1190250-2								
TPH	86		-		64-132	-		34
Anions by Ion Chromatography - Westborough Lab Associated sample(s): 01 Batch: WG1190360-2								
Chloride	96		-		90-110	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: SOUTH BAY BLDG E

Project Number: 5737.9.E3

Lab Number: L1851775

Report Date: 12/26/18

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG1190438-2					
Cyanide, Total	103	-	90-110	-	
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG1190578-2					
Nitrogen, Ammonia	99	-	80-120	-	20

Matrix Spike Analysis
Batch Quality Control

Project Name: SOUTH BAY BLDG E
Project Number: 5737.9.E3

Lab Number: L1851775
Report Date: 12/26/18

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: WG1189735-4 QC Sample: L1851633-01 Client ID: MS Sample												
Chlorine, Total Residual	ND	0.25	0.24	96		-	-		80-120	-		20
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1189746-4 QC Sample: L1851775-01 Client ID: E-102 (OW)												
Chromium, Hexavalent	ND	0.1	0.095	95		-	-		85-115	-		20
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1190182-4 QC Sample: L1851048-01 Client ID: MS Sample												
Phenolics, Total	ND	0.4	0.35	88		-	-		70-130	-		20
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1190250-4 QC Sample: L1851419-01 Client ID: MS Sample												
TPH	ND	20	17.2	86		-	-		64-132	-		34
Anions by Ion Chromatography - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1190360-3 QC Sample: L1851316-03 Client ID: MS Sample												
Chloride	9120	2000	19300	**511**	Q	-	-		90-110	-		18
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1190438-4 QC Sample: L1851567-02 Client ID: MS Sample												
Cyanide, Total	0.008	0.2	0.176	**84**	Q	-	-		90-110	-		30
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1190578-4 QC Sample: L1851575-02 Client ID: MS Sample												
Nitrogen, Ammonia	0.655	4	4.45	95		-	-		80-120	-		20

Lab Duplicate Analysis
Batch Quality Control

Project Name: SOUTH BAY BLDG E
Project Number: 5737.9.E3

Lab Number: L1851775
Report Date: 12/26/18

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1189735-3 QC Sample: L1851633-01 Client ID: DUP Sample						
Chlorine, Total Residual	ND	ND	mg/l	NC		20
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1189746-3 QC Sample: L1851775-01 Client ID: E-102 (OW)						
Chromium, Hexavalent	ND	ND	mg/l	NC		20
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1189754-2 QC Sample: L1851588-01 Client ID: DUP Sample						
pH	7.3	7.3	SU	0		5
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1189761-2 QC Sample: L1851775-01 Client ID: E-102 (OW)						
SALINITY	ND	ND	SU	NC		
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1190151-2 QC Sample: L1800012-137 Client ID: DUP Sample						
Solids, Total Suspended	2200	2300	mg/l	4		29
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1190182-3 QC Sample: L1851048-01 Client ID: DUP Sample						
Phenolics, Total	ND	ND	mg/l	NC		20
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1190250-3 QC Sample: L1851285-01 Client ID: DUP Sample						
TPH	ND	ND	mg/l	NC		34
Anions by Ion Chromatography - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1190360-4 QC Sample: L1851316-03 Client ID: DUP Sample						
Chloride	9120	9160	mg/l	0		18
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1190438-3 QC Sample: L1851567-01 Client ID: DUP Sample						
Cyanide, Total	0.017	0.023	mg/l	**31**	Q	30

Lab Duplicate Analysis

Batch Quality Control

Project Name: SOUTH BAY BLDG E

Project Number: 5737.9.E3

Lab Number: L1851775

Report Date: 12/26/18

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1190578-3 QC Sample: L1851575-02 Client ID: DUP Sample					
Nitrogen, Ammonia	0.655	0.703	mg/l	7	20

Project Name: SOUTH BAY BLDG E
Project Number: 5737.9.E3

Lab Number: L1851775
Report Date: 12/26/18

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(*)
L1851775-01A	Vial Na2S2O3 preserved	A	NA		1.9	Y	Absent		624.1-RGP(7),624.1-SIM-RGP(7)
L1851775-01B	Vial Na2S2O3 preserved	A	NA		1.9	Y	Absent		624.1-RGP(7),624.1-SIM-RGP(7)
L1851775-01C	Vial Na2S2O3 preserved	A	NA		1.9	Y	Absent		624.1-RGP(7),624.1-SIM-RGP(7)
L1851775-01C1	Vial Na2S2O3 preserved	A	NA		1.9	Y	Absent		624.1-RGP(7),624.1-SIM-RGP(7)
L1851775-01D	Vial Na2S2O3 preserved	A	NA		1.9	Y	Absent		HOLD-504/8011(14)
L1851775-01E	Vial Na2S2O3 preserved	A	NA		1.9	Y	Absent		HOLD-504/8011(14)
L1851775-01F	Vial Na2S2O3 preserved	A	NA		1.9	Y	Absent		HOLD-504/8011(14)
L1851775-01G	Vial HCl preserved	A	NA		1.9	Y	Absent		SUB-ETHANOL(14)
L1851775-01H	Vial HCl preserved	A	NA		1.9	Y	Absent		SUB-ETHANOL(14)
L1851775-01H1	Vial HCl preserved	A	NA		1.9	Y	Absent		SUB-ETHANOL(14)
L1851775-01I	Amber 1000ml Na2S2O3	A	7	7	1.9	Y	Absent		HOLD-8082()
L1851775-01J	Amber 1000ml Na2S2O3	A	7	7	1.9	Y	Absent		HOLD-8082()
L1851775-01K	Amber 1000ml Na2S2O3	A	7	7	1.9	Y	Absent		HOLD-8082()
L1851775-01L	Amber 1000ml Na2S2O3	A	7	7	1.9	Y	Absent		HOLD-8082()
L1851775-01M	Amber 1000ml Na2S2O3	A	7	7	1.9	Y	Absent		625.1-RGP(7),625.1-SIM-RGP(7)
L1851775-01N	Amber 1000ml Na2S2O3	A	7	7	1.9	Y	Absent		625.1-RGP(7),625.1-SIM-RGP(7)
L1851775-01O	Amber 1000ml HCl preserved	A	NA		1.9	Y	Absent		TPH-1664(28)
L1851775-01P	Amber 1000ml HCl preserved	A	NA		1.9	Y	Absent		TPH-1664(28)
L1851775-01Q	Amber 950ml H2SO4 preserved	A	<2	<2	1.9	Y	Absent		TPHENOL-420(28)
L1851775-01R	Plastic 250ml NaOH preserved	A	>12	>12	1.9	Y	Absent		TCN-4500(14)
L1851775-01S	Plastic 500ml H2SO4 preserved	A	<2	<2	1.9	Y	Absent		NH3-4500(28)

*Values in parentheses indicate holding time in days

Project Name: SOUTH BAY BLDG E
Project Number: 5737.9.E3

Lab Number: L1851775
Report Date: 12/26/18

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1851775-01T	Plastic 250ml HNO3 preserved	A	<2	<2	1.9	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)
L1851775-01U	Plastic 950ml unpreserved	A	7	7	1.9	Y	Absent		TSS-2540(7)
L1851775-01V	Plastic 950ml unpreserved	A	7	7	1.9	Y	Absent		CL-300(28),HEXCR-7196(1),SALINITY(28),TRC-4500(1),PH-4500(.01)
L1851775-02A	Vial Na2S2O3 preserved	A	NA		1.9	Y	Absent		ARCHIVE()
L1851775-02B	Vial Na2S2O3 preserved	A	NA		1.9	Y	Absent		ARCHIVE()
L1851775-02C	Vial Na2S2O3 preserved	A	NA		1.9	Y	Absent		ARCHIVE()
L1851775-02D	Vial Na2S2O3 preserved	A	NA		1.9	Y	Absent		ARCHIVE()

*Values in parentheses indicate holding time in days

Project Name:	SOUTH BAY BLDG E	**Lab Number:**	L1851775
Project Number:	5737.9.E3	**Report Date:**	12/26/18

GLOSSARY

Acronyms

EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample¿s toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Footnotes

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

Terms

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

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

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

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

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

Report Format: Data Usability Report

Project Name:	SOUTH BAY BLDG E	**Lab Number:**	L1851775
Project Number:	5737.9.E3	**Report Date:**	12/26/18

Data Qualifiers

A - Spectra identified as "Aldol Condensation Product".

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

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

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

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

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

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

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

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

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

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

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

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

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

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

Report Format: Data Usability Report

Project Name:	SOUTH BAY BLDG E	**Lab Number:**	L1851775
Project Number:	5737.9.E3	**Report Date:**	12/26/18

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.

4 Methods for Chemical Analysis of Water and Wastes. EPA 600/4-79-020. Revised March 1983.

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.

74 Method 1664,Revision A: N-Hexane Extractable Material (HEM; Oil & Grease) and Silica Gel Treated N-Hexane Extractable Material (SGT-HEM; Non-polar Material) by Extraction and Gravimetry, EPA-821-R-98-002, February 1999.

107 Alpha Analytical - In-house calculation method.

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

128 Method 624.1: Purgeables by GC/MS, EPA 821-R-16-008, December 2016.

129 Method 625.1: Base/Neutrals and Acids by GC/MS, EPA 821-R-16-007, December 2016.

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 624/624.1: m/p-xylene, o-xylene
EPA 8260C: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), Methyl methacrylate, 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270D: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.

EPA 6860: SCM: Perchlorate

SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO2, NO3.

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

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

Westborough Facility:

Drinking Water
EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, 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: Ammonia-N and Kjeldahl-N, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2**: Nitrate-N**, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate.**
EPA 624.1: Volatile Halocarbons & Aromatics,
EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625.1: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603.**

Mansfield Facility:

Drinking Water
EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.
EPA 522.

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

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

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: 12/14/18

ALPHA Job #: L1851775

Project Information

Project Name: South Bay Bldg E

Project Location: Boston, MA

Project #: 5737.9.E3

Project Manager: BED

ALPHA Quote #:

Client Information

Client: McPhail Associates, LLC

Address: 2269 Massachusetts Avenue

Cambridge, MA 02140

Phone: (617) 868-1420

Fax:

Email: bdowning@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
NPDES RGP	

Other Project Specific Requirements/Comments/Detection Limits:

Circle the following if required:

SALINITY HARDNESS PH

Sect. A Inorganics: Ammonia, Chloride, TRC,TSS,CrVI,CrIII, Tot-CN, RGP Metals

B- Non-Hal- VOC- 8260, 8260-SIM, Tot. Phenol Sect C- VOC- 8260 & 504

D: 8270/8270-SIM: E- PCB's, PCP(8270/8270-SIM): F-TPH, 8260, Sub-Ethanol

ANALYSIS

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	RGP Metals (200.8) (A)	TSS- (A)	Ammonia (4500 (A))	TCN (A)	HexCr (7196), TRC, Cl- (A)	8260 (B, ~~C~~, F)/8260SIM (B)	Tphenol-420 (B)	504-EDB (C)	8270/8270SIM- (D, ~~E~~)	PCB-608- (E)	TPH-1664-(F)	SUB-ETHANOL (F)	Sample Specific Comments	TOTAL # BOTTLES
51775-01	E-102 (OW)	12/14/18	1100	GW	TMC	☒	☒	☒	☒	☒	☒	☒	☐	☒	☐	☒	☒		25
						☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐		
						☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐		
						☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐		
						☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐		
						☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐		
						☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐		
						☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐		
						☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐		
						☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐		
					Container Type	P	P	P	P	P	V	A	V	A	A	A	V		
					Preservative	C	A	D	E	A	B	D	H	A	H	B	B		

SAMPLE HANDLING

Filtration

☐ Done

☐ Not Needed

☐ Lab to do

Preservation

☐ Lab to do

(Please specify below)

Relinquished By:	Date/Time	Received By:	Date/Time
[signature]	12/14/18 1330	[signature] AAL	12/14/18 1645
[signature] AAL	12/14/18 1815	[signature] AAL	12/14/18 1815

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.

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

ALPHA ANALYTICAL
World Class Chemistry

Subcontract Chain of Custody

Test America (Nashville)
2960 Foster Creighton Drive
Nashville, TN 37204

Alpha Job Number
L1851775

Client Information

Client: Alpha Analytical Labs
Address: Eight Walkup Drive
Westborough, MA 01581-1019

Phone: 603.319.5010
Email: mgulli@alphalab.com

Project Information

Project Location: MA
Project Manager: Melissa Gulli

Turnaround & Deliverables Information

Due Date:
Deliverables:

Regulatory Requirements/Report Limits

State/Federal Program:
Regulatory Criteria:

Project Specific Requirements and/or Report Requirements

Reference following Alpha Job Number on final report/deliverables: L1851775

Report to include Method Blank, LCS/LCSD:

Additional Comments: Send all results/reports to subreports@alphalab.com

Lab ID	Client ID	Collection Date/Time	Sample Matrix	Analysis	Batch QC
	E-102 (OW)	12-14-18 11:00	WATER	Ethanol by EPA 1671 Revision A	

	Relinquished By:	Date/Time:	Received By:	Date/Time:
	AAR	12/17/18		
Form No: AL_subcoc				

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Tel: (615)726-0177

TestAmerica Job ID: 490-165188-1
Client Project/Site: L1851775

For:
Alpha Analytical Inc
145 Flanders Road
Westborough, Massachusetts 01581-1019

Attn: Melissa Gulli

Authorized for release by:
12/26/2018 1:05:36 PM

Ken Hayes, Project Manager II
(615)301-5035
ken.hayes@testamericainc.com

Table of Contents

Sample Summary

Client: Alpha Analytical Inc
Project/Site: L1851775

TestAmerica Job ID: 490-165188-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
490-165188-1	E-102 (OW)	Water	12/14/18 11:00	12/18/18 12:05

Case Narrative

Client: Alpha Analytical Inc
Project/Site: L1851775

TestAmerica Job ID: 490-165188-1

Job ID: 490-165188-1

Laboratory: TestAmerica Nashville

Narrative

Job Narrative
490-165188-1

Comments
No additional comments.

Receipt
The sample was received on 12/18/2018 12:05 PM; the sample arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 1.7º C.

GC Semi VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Definitions/Glossary

Client: Alpha Analytical Inc
Project/Site: L1851775

TestAmerica Job ID: 490-165188-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Client Sample Results

Client: Alpha Analytical Inc
Project/Site: L1851775

TestAmerica Job ID: 490-165188-1

Client Sample ID: E-102 (OW)

Lab Sample ID: 490-165188-1

Date Collected: 12/14/18 11:00

Matrix: Water

Date Received: 12/18/18 12:05

Method: 1671A - Ethanol (GC/FID)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethanol	ND		2000	500	ug/L			12/21/18 12:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Isopropyl acetate (Surr)	*88*		*70 - 130*		*12/21/18 12:33*	*1*

QC Sample Results

Client: Alpha Analytical Inc
Project/Site: L1851775

TestAmerica Job ID: 490-165188-1

Method: 1671A - Ethanol (GC/FID)

Lab Sample ID: MB 490-565542/7
Matrix: Water
Analysis Batch: 565542

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethanol	ND		2000	500	ug/L			12/21/18 12:21	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Isopropyl acetate (Surr)	*90*		*70 - 130*		*12/21/18 12:21*	*1*

Lab Sample ID: LCS 490-565542/8
Matrix: Water
Analysis Batch: 565542

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Ethanol			50200	55550		ug/L		111	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Isopropyl acetate (Surr)	*90*		*70 - 130*

Lab Sample ID: 490-165188-1 MS
Matrix: Water
Analysis Batch: 565542

Client Sample ID: E-102 (OW)
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Ethanol	ND		50200	50350		ug/L		100	70 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Isopropyl acetate (Surr)	*87*		*70 - 130*

Lab Sample ID: 490-165188-1 MSD
Matrix: Water
Analysis Batch: 565542

Client Sample ID: E-102 (OW)
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ethanol	ND		50200	56510		ug/L		112	70 - 130	12	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Isopropyl acetate (Surr)	*85*		*70 - 130*

QC Association Summary

Client: Alpha Analytical Inc
Project/Site: L1851775

TestAmerica Job ID: 490-165188-1

GC VOA

Analysis Batch: 565542

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-165188-1	E-102 (OW)	Total/NA	Water	1671A	
MB 490-565542/7	Method Blank	Total/NA	Water	1671A	
LCS 490-565542/8	Lab Control Sample	Total/NA	Water	1671A	
490-165188-1 MS	E-102 (OW)	Total/NA	Water	1671A	
490-165188-1 MSD	E-102 (OW)	Total/NA	Water	1671A	

Lab Chronicle

Client: Alpha Analytical Inc
Project/Site: L1851775

TestAmerica Job ID: 490-165188-1

Client Sample ID: E-102 (OW)
Date Collected: 12/14/18 11:00
Date Received: 12/18/18 12:05

Lab Sample ID: 490-165188-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	1671A		1			565542	12/21/18 12:33	ZXS	TAL NSH

Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Method Summary

Client: Alpha Analytical Inc
Project/Site: L1851775

TestAmerica Job ID: 490-165188-1

Method	Method Description	Protocol	Laboratory
1671A	Ethanol (GC/FID)	EPA	TAL NSH

Protocol References:

EPA = US Environmental Protection Agency

Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Accreditation/Certification Summary

Client: Alpha Analytical Inc
Project/Site: L1851775

TestAmerica Job ID: 490-165188-1

Laboratory: TestAmerica Nashville

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
California	State Program	9	2938	10-31-18 *

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
1671A		Water	Ethanol

Maine	State Program	1	TN00032	11-03-19

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
1671A		Water	Ethanol

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

COOLER RECEIPT FORM

490-165188 Chain of Custody

Cooler Received/Opened On 12-18-2018 @ 1205

Time Samples Removed From Cooler 1315 Time Samples Placed In Storage 1324 (2 Hour Window)

1. Tracking # 1ZE306540196875307 (last 4 digits, FedEx) Courier: UPS NDA

IR Gun ID 31470368 pH Strip Lot N/A Chlorine Strip Lot N/A

2. Temperature of rep. sample or temp blank when opened: 1-7 *Degrees Celsius*

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO...NA

4. Were custody seals on outside of cooler? YES...NO...NA

If yes, how many and where: _____

5. Were the seals intact, signed, and dated correctly? YES...NO...NA

6. Were custody papers inside cooler? YES...NO...NA

I certify that I opened the cooler and answered questions 1-6 (intial) ASH

7. Were custody seals on containers: YES NO and Intact YES...NO...NA

Were these signed and dated correctly? YES...NO...NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA

12. Did all container labels and tags agree with custody papers? YES...NO...NA

13a. Were VOA vials received? YES...NO...NA

b. Was there any observable headspace present in any VOA vial? YES...NO...NA

Larger than this.

14. Was there a Trip Blank in this cooler? YES...NO...NA If multiple coolers, sequence # _____

I certify that I unloaded the cooler and answered questions 7-14 (intial) _____

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES...NO...NA

b. Did the bottle labels indicate that the correct preservatives were used YES...NO...NA

16. Was residual chlorine present? YES...NO...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial) _____

17. Were custody papers properly filled out (ink, signed, etc)? YES...NO...NA

18. Did you sign the custody papers in the appropriate place? YES...NO...NA

19. Were correct containers used for the analysis requested? YES...NO...NA

20. Was sufficient amount of sample sent in each container? YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (intial) _____

I certify that I attached a label with the unique LIMS number to each container (intial) _____

21. Were there Non-Conformance issues at login? YES...NO Was a NCM generated? YES...NO...# _____

BIS = Broken in shipment
Cooler Receipt Form.doc

LF-1
End of Form

Revised 8/23/17

ALPHA ANALYTICAL
World Class Chemistry

Subcontract Chain of Custody

Test America (Nashville)
2960 Foster Creighton Drive
Nashville, TN 37204

Loc: 490
165188

Alpha Job Number
L1851775

Client Information

Client: Alpha Analytical Labs
Address: Eight Walkup Drive
Westborough, MA 01581-1019

Phone: 603.319.5010
Email: mgulli@alphalab.com

Project Information

Project Location: MA
Project Manager: Melissa Gulli

Turnaround & Deliverables Information

Due Date:
Deliverables:

Regulatory Requirements/Report Limits

State/Federal Program:
Regulatory Criteria:

Project Specific Requirements and/or Report Requirements

Reference following Alpha Job Number on final report/deliverables: L1851775

Report to include Method Blank, LCS/LCSD:

Additional Comments: Send all results/reports to subreports@alphalab.com

Lab ID	Client ID	Collection Date/Time	Sample Matrix	Analysis	Batch QC
	E-102 (OW)	12-14-18 11:00	WATER	Ethanol by EPA 1671 Revision A	

	Relinquished By:	Date/Time:	Received By:	Date/Time:
	AAR	12/17/18		12/18/18 12:05
Form No: AL_subcoc				

APPENDIX E:

LABORATORY ANALYTICAL DATA – SURFACE WATER

ANALYTICAL REPORT

Lab Number:	L1852943
Client:	McPhail Associates 2269 Massachusetts Avenue Cambridge, MA 02140
ATTN:	Ambrose Donovan
Phone:	(617) 868-1420
Project Name:	SOUTH BAY BUILDING E
Project Number:	5737.9.E3
Report Date:	01/02/19

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-17-00196).

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

Project Name: SOUTH BAY BUILDING E
Project Number: 5737.9.E3

Lab Number: L1852943
Report Date: 01/02/19

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1852943-01	BASS RIVER	WATER	BOSTON, MA	12/21/18 11:45	12/21/18

Project Name:	SOUTH BAY BUILDING E	**Lab Number:**	L1852943
Project Number:	5737.9.E3	**Report Date:**	01/02/19

Case Narrative

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

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

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

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

HOLD POLICY

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

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

Project Name:	SOUTH BAY BUILDING E	**Lab Number:**	L1852943
Project Number:	5737.9.E3	**Report Date:**	01/02/19

Case Narrative (continued)

Total Metals

L1852943-01: The sample has elevated detection limits for all elements, with the exception of mercury, due to the dilution required by the high concentrations of target and non-target elements.

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: 01/02/19

METALS

Project Name: SOUTH BAY BUILDING E
Project Number: 5737.9.E3
Lab Number: L1852943
Report Date: 01/02/19

SAMPLE RESULTS

Lab ID: L1852943-01
Client ID: BASS RIVER
Sample Location: BOSTON, MA
Sample Depth:
Matrix: Water

Date Collected: 12/21/18 11:45
Date Received: 12/21/18
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	0.04000	--	10	12/28/18 15:05	01/02/19 10:39	EPA 3005A	3,200.8	AM
Arsenic, Total	ND		mg/l	0.01000	--	10	12/28/18 15:05	01/02/19 10:39	EPA 3005A	3,200.8	AM
Cadmium, Total	ND		mg/l	0.00200	--	10	12/28/18 15:05	01/02/19 10:39	EPA 3005A	3,200.8	AM
Chromium, Total	ND		mg/l	0.01000	--	10	12/28/18 15:05	01/02/19 10:39	EPA 3005A	3,200.8	AM
Copper, Total	ND		mg/l	0.01000	--	10	12/28/18 15:05	01/02/19 10:39	EPA 3005A	3,200.8	AM
Iron, Total	0.160		mg/l	0.050	--	1	12/28/18 15:05	12/29/18 01:11	EPA 3005A	19,200.7	MC
Lead, Total	ND		mg/l	0.01000	--	10	12/28/18 15:05	01/02/19 10:39	EPA 3005A	3,200.8	AM
Mercury, Total	ND		mg/l	0.00020	--	1	12/28/18 12:29	01/01/19 10:50	EPA 245.1	3,245.1	MG
Nickel, Total	ND		mg/l	0.02000	--	10	12/28/18 15:05	01/02/19 10:39	EPA 3005A	3,200.8	AM
Selenium, Total	ND		mg/l	0.05000	--	10	12/28/18 15:05	01/02/19 10:39	EPA 3005A	3,200.8	AM
Silver, Total	ND		mg/l	0.00400	--	10	12/28/18 15:05	01/02/19 10:39	EPA 3005A	3,200.8	AM
Zinc, Total	ND		mg/l	0.1000	--	10	12/28/18 15:05	01/02/19 10:39	EPA 3005A	3,200.8	AM
Total Hardness by SM 2340B - Mansfield Lab											
Hardness	3500		mg/l	0.660	NA	1	12/28/18 15:05	12/29/18 01:11	EPA 3005A	19,200.7	MC

Project Name: SOUTH BAY BUILDING E
Project Number: 5737.9.E3
Lab Number: L1852943
Report Date: 01/02/19

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: WG1193539-1										
Mercury, Total	ND		mg/l	0.0002	--	1	12/28/18 12:29	01/01/19 10:07	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 Batch: WG1193544-1										
Antimony, Total	ND		mg/l	0.00400	--	1	12/28/18 15:05	01/02/19 10:22	3,200.8	AM
Arsenic, Total	ND		mg/l	0.00100	--	1	12/28/18 15:05	01/02/19 10:22	3,200.8	AM
Cadmium, Total	ND		mg/l	0.00020	--	1	12/28/18 15:05	01/02/19 10:22	3,200.8	AM
Chromium, Total	ND		mg/l	0.00100	--	1	12/28/18 15:05	01/02/19 10:22	3,200.8	AM
Copper, Total	ND		mg/l	0.00100	--	1	12/28/18 15:05	01/02/19 10:22	3,200.8	AM
Lead, Total	ND		mg/l	0.00100	--	1	12/28/18 15:05	01/02/19 10:22	3,200.8	AM
Nickel, Total	ND		mg/l	0.00200	--	1	12/28/18 15:05	01/02/19 10:22	3,200.8	AM
Selenium, Total	ND		mg/l	0.00500	--	1	12/28/18 15:05	01/02/19 10:22	3,200.8	AM
Silver, Total	ND		mg/l	0.00040	--	1	12/28/18 15:05	01/02/19 10:22	3,200.8	AM
Zinc, Total	ND		mg/l	0.01000	--	1	12/28/18 15:05	01/02/19 10:22	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 Batch: WG1193549-1										
Iron, Total	ND		mg/l	0.050	--	1	12/28/18 15:05	12/28/18 21:20	19,200.7	MC

Prep Information

Digestion Method: EPA 3005A

Project Name: SOUTH BAY BUILDING E
Project Number: 5737.9.E3
Lab Number: L1852943
Report Date: 01/02/19

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 Batch: WG1193549-1										
Hardness	ND		mg/l	0.660	NA	1	12/28/18 15:05	12/28/18 21:20	19,200.7	MC

Prep Information

Digestion Method: EPA 3005A

Lab Control Sample Analysis

Batch Quality Control

Project Name: SOUTH BAY BUILDING E

Project Number: 5737.9.E3

Lab Number: L1852943

Report Date: 01/02/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01 Batch: WG1193539-2								
Mercury, Total	105		-		85-115	-		
Total Metals - Mansfield Lab Associated sample(s): 01 Batch: WG1193544-2								
Antimony, Total	95		-		85-115	-		
Arsenic, Total	105		-		85-115	-		
Cadmium, Total	109		-		85-115	-		
Chromium, Total	98		-		85-115	-		
Copper, Total	98		-		85-115	-		
Lead, Total	113		-		85-115	-		
Nickel, Total	100		-		85-115	-		
Selenium, Total	109		-		85-115	-		
Silver, Total	104		-		85-115	-		
Zinc, Total	111		-		85-115	-		
Total Metals - Mansfield Lab Associated sample(s): 01 Batch: WG1193549-2								
Iron, Total	106		-		85-115	-		
Total Hardness by SM 2340B - Mansfield Lab Associated sample(s): 01 Batch: WG1193549-2								
Hardness	104		-		85-115	-		

Matrix Spike Analysis
Batch Quality Control

Project Name: SOUTH BAY BUILDING E
Project Number: 5737.9.E3

Lab Number: L1852943
Report Date: 01/02/19

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: WG1193539-3 QC Sample: L1852678-01 Client ID: MS Sample												
Mercury, Total	ND	0.005	0.0049	98		-	-		70-130	-		20
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1193539-5 QC Sample: L1852687-01 Client ID: MS Sample												
Mercury, Total	0.00058	0.005	0.0053	95		-	-		70-130	-		20
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1193544-3 QC Sample: L1852634-01 Client ID: MS Sample												
Antimony, Total	ND	0.5	0.5326	106		-	-		70-130	-		20
Arsenic, Total	ND	0.12	0.1292	108		-	-		70-130	-		20
Cadmium, Total	ND	0.051	0.05445	107		-	-		70-130	-		20
Chromium, Total	0.0064	0.2	0.2018	98		-	-		70-130	-		20
Copper, Total	0.00132	0.25	0.2441	97		-	-		70-130	-		20
Lead, Total	ND	0.51	0.5517	108		-	-		70-130	-		20
Nickel, Total	ND	0.5	0.4927	98		-	-		70-130	-		20
Selenium, Total	ND	0.12	0.1326	110		-	-		70-130	-		20
Silver, Total	ND	0.05	0.05266	105		-	-		70-130	-		20
Zinc, Total	ND	0.5	0.5285	106		-	-		70-130	-		20
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1193549-3 QC Sample: L1852634-01 Client ID: MS Sample												
Iron, Total	ND	1	1.04	104		-	-		75-125	-		20
Total Hardness by SM 2340B - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1193549-3 QC Sample: L1852634-01 Client ID: MS Sample												
Hardness	210	66.2	270	91		-	-		75-125	-		20
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1193549-7 QC Sample: L1852687-01 Client ID: MS Sample												
Iron, Total	0.081	1	1.14	106		-	-		75-125	-		20

Matrix Spike Analysis
Batch Quality Control

Project Name: SOUTH BAY BUILDING E
Project Number: 5737.9.E3

Lab Number: L1852943
Report Date: 01/02/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Hardness by SM 2340B - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1193549-7 QC Sample: L1852687-01 Client ID: MS Sample									
Hardness	17.1	66.2	85.0	103	-	-	75-125	-	20

Lab Duplicate Analysis

Batch Quality Control

Project Name: SOUTH BAY BUILDING E
Project Number: 5737.9.E3

Lab Number: L1852943
Report Date: 01/02/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1193539-4 QC Sample: L1852678-01 Client ID: DUP Sample						
Mercury, Total	ND	0.0003	mg/l	NC		20
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1193539-6 QC Sample: L1852687-01 Client ID: DUP Sample						
Mercury, Total	0.00058	0.0009	mg/l	**38**	Q	20
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1193544-4 QC Sample: L1852634-01 Client ID: DUP Sample						
Copper, Total	0.00132	0.00125	mg/l	5		20
Lead, Total	ND	ND	mg/l	NC		20
Nickel, 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 QC Batch ID: WG1193549-4 QC Sample: L1852634-01 Client ID: DUP Sample						
Iron, Total	ND	ND	mg/l	NC		20

INORGANICS
&
MISCELLANEOUS

Project Name: SOUTH BAY BUILDING E
Project Number: 5737.9.E3

Lab Number: L1852943
Report Date: 01/02/19

SAMPLE RESULTS

Lab ID: L1852943-01
Client ID: BASS RIVER
Sample Location: BOSTON, MA

Date Collected: 12/21/18 11:45
Date Received: 12/21/18
Field Prep: Not Specified

Sample Depth:
Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
pH (H)	7.8		SU	-	NA	1	-	12/21/18 23:46	121,4500H+-B	AS

Lab Control Sample Analysis

Batch Quality Control

Project Name: SOUTH BAY BUILDING E

Project Number: 5737.9.E3

Lab Number: L1852943

Report Date: 01/02/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG1192291-1								
pH	100		-		99-101	-		5

Lab Duplicate Analysis

Batch Quality Control

Project Name: SOUTH BAY BUILDING E

Project Number: 5737.9.E3

Lab Number: L1852943

Report Date: 01/02/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1192291-2 QC Sample: L1852521-01 Client ID: DUP Sample						
pH	7.4	7.3	SU	1		5

Project Name: SOUTH BAY BUILDING E
Project Number: 5737.9.E3

Lab Number: L1852943
Report Date: 01/02/19

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(*)
L1852943-01A	Plastic 250ml HNO3 preserved	A	<2	<2	2.7	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)
L1852943-01B	Plastic 500ml unpreserved	A	7	7	2.7	Y	Absent		PH-4500(.01)

*Values in parentheses indicate holding time in days

Project Name:	SOUTH BAY BUILDING E	**Lab Number:**	L1852943
Project Number:	5737.9.E3	**Report Date:**	01/02/19

GLOSSARY

Acronyms

EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample¿s toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Footnotes

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

Terms

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

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

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

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

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

Report Format: Data Usability Report

Project Name:	SOUTH BAY BUILDING E	**Lab Number:**	L1852943
Project Number:	5737.9.E3	**Report Date:**	01/02/19

Data Qualifiers

A - Spectra identified as "Aldol Condensation Product".

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

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

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

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

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

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

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

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

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

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

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

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

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

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

Report Format: Data Usability Report

Project Name:	SOUTH BAY BUILDING E	**Lab Number:**	L1852943
Project Number:	5737.9.E3	**Report Date:**	01/02/19

REFERENCES

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 624/624.1: m/p-xylene, o-xylene
EPA 8260C: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), Methyl methacrylate, 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270D: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.

EPA 6860: SCM: Perchlorate

SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO2, NO3.

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

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

Westborough Facility:

Drinking Water
EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, 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: Ammonia-N and Kjeldahl-N, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2**: Nitrate-N**, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate.**
EPA 624.1: Volatile Halocarbons & Aromatics,
EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625.1: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603.**

Mansfield Facility:

Drinking Water
EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.
EPA 522.

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

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

CHAIN OF COUSTODY

ALPHA ANALYTICAL — World Class Chemistry

PAGE OF

Date Rec'd in Lab: 12/21/18

ALPHA Job #: L1852943

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

Project Information

Project Name: South Bay Building E

Project Location: Boston, MA

Project #: 5737.9.E3

Project Manager: BED

ALPHA Quote #:

Client Information

Client: McPhail Associates, LLC

Address: 2269 Massachusetts Avenue

Cambridge, MA 02140

Phone: (617) 868-1420

Fax:

Email: bdowning@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
NPDES RGP	

Other Project Specific Requirements/Comments/Detection Limits:

Circle the following if required:

SALINITY HARDNESS PH

Sect. A inorganics: Ammonia, Chloride, TRC,TSS,CrVI,CrIII, Tot-CN, RGP Metals

B- Non-Hal- VOC- 8260, 8260-SIM, Tot. Phenol Sect C- VOC- 8260 & 504

D: 8270/8270-SIM: E- PCB's, PCP(8270/8270-SIM): F-TPH, 8260, Sub-Ethanol

ANALYSIS

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

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	RGP Metals (200.8) (A)	TSS- (A)	Ammonia (4500 (A))	TCN (A)	HexCr (7196), TRC, Cl- (A)	8260 (B, C, F)/8260SIM (B)	Tphenol-420 (B)	504-EDB (C)	8270/8270SIM- (D, E)	PCB-608- (E)	TPH-1664-(F)	SUB-ETHANOL (F)	Sample Specific Comments	TOTAL # BOTTLES
52943-01	Bass River	12/21/18	11:45	GW	IMB	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐		2
						☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐		
						☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐		
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						☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐		
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						☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐		
						☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐		
						☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐		
					Container Type	P	P	P	P	P	V	A	V	A	A	A	V		
					Preservative	C	A	D	E	A	B	D	H	A	H	B	B		

Relinquished By:	Date/Time	Received By:	Date/Time
Ian Bachman	12/21/18 12:00	Hold Fridge	12/21/18 12:00
John Sergio AAL	12/21/18 16:19	John Sergio AAL	12/21/18 16:19
John Sergio AAL	12/21/18 18:00		

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.

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

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 30 W Howell Street in Dorchester, 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. A review of available subgrade sanitary and storm sewer system plans accessed from the BWSC indicates the presence of a dedicated stormwater drain system located beneath Enterprise Street. The discharge flow, indicated by BWSC plans, goes west and north beneath the South Bay Shopping Center and then follows the MBTA railway line north where the storm drain discharges into the Bass River of the Fort Point Channel. Dewatering effluent treatment will consist of a settling tank, bag filters to remove suspended soil particulates, and granular activated carbon filters or ion resin media vessels prior to off-site discharge.

Discharge Monitoring and Compliance

Regular 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 must 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 samples dictated 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

A number of methods will be used to minimize the potential for violations during the term of this permit discharge. Scheduled 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 closest body of water is the Dorchester Old Harbor located approximately 3,500 feet to the east of the subject site. Dewatering effluent will be pumped into a settling tank. Water within the settling tank will pumped through bag filters and, as necessary, GAC filters and or 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 and GAC filters will be replaced/disposed of as necessary.