



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 1

5 Post Office Square, Suite 100

BOSTON, MA 02109-3912

CERTIFIED MAIL RETURN RECEIPT REQUESTED

FEB 24 2015

Bill Sturgis
Project Manager
Tishman Construction Corporation of MA
66 Long Wharf, 2nd Floor
Boston, MA 02110

Re: Authorization to discharge under the Remediation General Permit (RGP) –
MAG910000. Seaport Square- Parcel J located at 65 Seaport Boulevard, Boston, MA
02210, Suffolk County; Authorization # MAG910662

Dear Mr. Sturgis:

Based on the review of a Notice of Intent (NOI) submitted by Owen W. Miles from
Haley & Aldrich, Inc., on behalf of MS Seaport Block J, LLC, for the site referenced
above, the Environmental Protection Agency (EPA) hereby authorizes you, as the named
Operator, to discharge in accordance with the provisions of the RGP at that site. Your
authorization number is listed above.

The checklist enclosed with this RGP authorization indicates the pollutants which you are
required to monitor. Also indicated on the checklist are the effluent limits, test methods
and minimum levels (MLs) for each pollutant. Please note that the checklist does not
represent the complete requirements of the RGP. Operators must comply with all of the
applicable requirements of this permit, including influent and effluent monitoring,
narrative water quality standards, record keeping, and reporting requirements, found in
Parts I and II, and Appendices I – VIII of the RGP. See EPA's website for the complete
RGP and other information at: <http://www.epa.gov/region1/npdes/mass.html#dgp>.

Please note the enclosed checklist includes parameters that your consultant has market
"Believed Present".

Also, please note that the metals included on the checklist are dilution dependent
pollutants and subject to limitations based on selected dilution ranges and technology-
based ceiling limitations. With the absence of dilution of freshwater into tidal water,
EPA determined that the Dilution Factor Range (DFR) for each parameter for this site is
in the one and five (1-5) range. (See the RGP Appendix IV for Massachusetts facilities).
Therefore, the limits for arsenic of 36 ug/L, cadmium of 8.9 ug/L, trivalent chromium of

100 ug/L, copper of 3.7 ug/L, nickel of 8.2 ug/L, zinc of 85.6 ug/L and iron of 1,000 ug/L, are required to achieve permit compliance at your site.

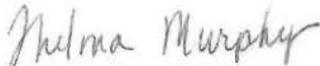
Also, please note that based on Part I. Section C.7., of the RGP reissuance issued on September 9, 2010, dilution factors may be available for discharges to saline waters but only with approval of the flow modeling information from the State prior to the submission of the NOI. Any other dilution factor based on estimated values such as the dilution factor of 3 proposed in your NOI is no longer accepted by EPA.

Finally, please note the checklist of pollutants attached to this authorization is subject to a recertification if the operations at the site result in a discharge lasting longer than six months. A recertification can be submitted to EPA within six (6) to twelve (12) months of operations in accordance with the 2010 RGP regulations.

This general permit and authorization to discharge will expire on September 9, 2015. You have reported that this project will terminate on April 1, 2017. Please be advised that this permit authorization has to be reissued after the EPA permit expiration date. EPA will announce on its web site an specific date for applicants to start the reapplication procedures after the EPA RGP permit is reissued. Also, you are required to submit a Notice of Termination (NOT) to the attention of the contact person indicated below within 30 days of project completion.

Thank you in advance for your cooperation in this matter. Please contact Victor Alvarez at 617-918-1572 or Alvarez.Victor@epa.gov, if you have any questions.

Sincerely,



Thelma Murphy, Chief
Storm Water and Construction
Permits Section

Enclosure

cc: Robert Kubit, MassDEP
Stephen Shea, Boston WSC

**2010 Remediation General Permit
Summary of Monitoring Parameters^[1]**

NPDES Authorization Number:	MAG910662
Authorization Issued:	February, 2015
Facility/Site Name:	Seaport Square- Parcel J
Facility/Site Address:	65 Seaport Boulevard, Boston, MA 02210, Suffolk County Email address of owner: aalbers@bginvestors.com
Legal Name of Operator:	Tishman Construction Corporation of MA
Operator contact name, title, and Address:	Bill Sturgis -Project Manager 66 Long Wharf, 2dn floor, Boston, MA 02110, Suffolk County Email: bill.sturgis@aecom.com
Estimated date of the site's Completion:	April 1, 2017
Category and Sub-Category:	Category III- Contaminated Construction Dewatering. Sub-category A. General Urban Fill Sites
RGP Termination Date:	September 10, 2015
Receiving Water:	Fort Point Channel - Boston Inner Harbor

Monitoring & Limits are applicable if checked. All samples are to be collected as grab samples

	Parameter	Effluent Limit/Method#/ML (All Effluent Limits are shown as Daily Maximum Limit, unless denoted by a **, in that case it will be a Monthly Average Limit)
✓	1. Total Suspended Solids (TSS)	30 milligrams/liter (mg/L) **, 50 mg/L for hydrostatic testing ** Me#160.2/ML5ug/L
	2. Total Residual Chlorine (TRC) ¹	Freshwater = 11 ug/L ** Saltwater = 7.5 ug/L **/ Me#330.5/ML 20ug/L
	3. Total Petroleum Hydrocarbons (TPH)	5.0 mg/L/ Me# 1664A/ML 5.0mg/L
	4. Cyanide (CN) ^{2,3}	Freshwater = 5.2 ug/l ** Saltwater = 1.0 ug/L **/ Me#335.4/ML 10ug/L
	5. Benzene (B)	5ug/L /50.0 ug/L for hydrostatic testing only/ Me#8260C/ML 2 ug/L
	6. Toluene (T)	(limited as ug/L total BTEX)/ Me#8260C/ML 2ug/L
	7. Ethylbenzene (E)	(limited as ug/L total BTEX) Me#8260C/ML 2ug/L
	8. (m,p,o) Xylenes (X)	(limited as ug/L total BTEX) Me#8260C/ML 2ug/L

	<u>Parameter</u>	<u>Effluent Limit/Method#/ML</u> (All Effluent Limits are shown as Daily Maximum Limit, unless denoted by a **, in that case it will be a Monthly Average Limit)
	9. Total Benzene, Toluene, Ethyl Benzene, and Xylenes (BTEX) ⁴	100 ug/L/ Me#8260C/ ML 2ug/L
	10. Ethylene Dibromide (EDB) (1,2- Dibromoethane)	0.05 ug/l/ Me#8260C/ ML 10ug/L
	11. Methyl-tert-Butyl Ether (MtBE)	70.0 ug/l/Me#8260C/ML 10ug/L
	12.tert-Butyl Alcohol (TBA) (TertiaryButanol)	Monitor Only(ug/L)/Me#8260C/ML 10ug/L
	13. tert-Amyl Methyl Ether (TAME)	Monitor Only(ug/L)/Me#8260C/ML 10ug/L
	14. Naphthalene ⁵	20 ug/L /Me#8260C/ML 2ug/L
	15. Carbon Tetrachloride	4.4 ug/L /Me#8260C/ ML 5ug/L
	16. 1,2 Dichlorobenzene (o-DCB)	600 ug/L /Me#8260C/ ML 5ug/L
	17. 1,3 Dichlorobenzene (m-DCB)	320 ug/L /Me#8260C/ ML 5ug/L
	18. 1,4 Dichlorobenzene (p-DCB)	5.0 ug/L /Me#8260C/ ML 5ug/L
	18a. Total dichlorobenzene	763 ug/L - NH only /Me#8260C/ ML 5ug/L
	19. 1,1 Dichloroethane (DCA)	70 ug/L /Me#8260C/ ML 5ug/L
	20. 1,2 Dichloroethane (DCA)	5.0 ug/L /Me#8260C/ ML 5ug/L
	21. 1,1 Dichloroethene (DCE)	3.2 ug/L/Me#8260C/ ML 5ug/L
	22. cis-1,2 Dichloroethene (DCE)	70 ug/L/Me#8260C/ ML 5ug/L
	23. Methylene Chloride	4.6 ug/L/Me#8260C/ ML 5ug/L
	24. Tetrachloroethene (PCE)	5.0 ug/L/Me#8260C/ ML 5ug/L
	25. 1,1,1 Trichloro-ethane (TCA)	200 ug/L/Me#8260C/ ML 5ug/L
	26. 1,1,2 Trichloro-ethane (TCA)	5.0 ug/L /Me#8260C/ ML 5ug/L
	27. Trichloroethene (TCE)	5.0 ug/L /Me#8260C/ ML 5ug/L
	28. Vinyl Chloride (Chloroethene)	2.0 ug/L /Me#8260C/ ML 5ug/L
√	29. Acetone	Monitor Only(ug/L)/Me#8260C/ML 50ug/L
	30. 1,4 Dioxane	Monitor Only /Me#1624C/ML 50ug/L
	31. Total Phenols	300 ug/L Me#420.1&420.2/ML 2 ug/L/ Me# 420.4 /ML 50ug/L
	32. Pentachlorophenol (PCP)	1.0 ug/L /Me#8270D/ML 5ug/L,Me#604 &625/ML 10ug/L
	33. Total Phthalates (Phthalate esters) ⁶	3.0 ug/L ** /Me#8270D/ML 5ug/L, Me#606/ML 10ug/L& Me#625/ML 5ug/L
	34. Bis (2-Ethylhexyl) Phthalate [Di- (ethylhexyl) Phthalate]	6.0 ug/L /Me#8270D/ML 5ug/L,Me#606/ML 10ug/L & Me#625/ML 5ug/L

	<u>Parameter</u>	<u>Effluent Limit/Method#/ML</u> (All Effluent Limits are shown as Daily Maximum Limit, unless denoted by a **, in that case it will be a Monthly Average Limit)
	35. Total Group I Polycyclic Aromatic Hydrocarbons (PAH)	10.0 ug/L
	a. Benzo(a) Anthracene ⁷	0.0038 ug/L /Me#8270D/ ML 5ug/L, Me#610/ML 5ug/L& Me#625/ML 5ug/L
	b. Benzo(a) Pyrene ⁷	0.0038 ug/L /Me#8270D/ ML 5ug/L, Me#610/ML 5ug/L& Me#625/ML 5ug/L
	c. Benzo(b)Fluoranthene ⁷	0.0038 ug/L /Me#8270D/ ML 5ug/L, Me#610/ML 5ug/L& Me#625/ML 5ug/L
	d. Benzo(k)Fluoranthene ⁷	0.0038 ug/L /Me#8270D/ ML 5ug/L, Me#610/ML 5ug/L& Me#625/ML 5ug/L
	e. Chrysene ⁷	0.0038 ug/L /Me#8270D/ML 5ug/L, Me#610/ML 5ug/L& Me#625/ML 5ug/L
	f. Dibenzo(a,h)anthracene ⁷	0.0038 ug/L /Me#8270D/ML 5ug/L, Me#610/ML 5ug/L& Me#625/ML 5ug/L
	g. Indeno(1,2,3-cd) Pyrene ⁷	0.0038 ug/L /Me#8270D/ML 5ug/L, Me#610/ML 5ug/L& Me#625/ML 5ug/L
	36. Total Group II Polycyclic Aromatic Hydrocarbons (PAH)	100 ug/L
	h. Acenaphthene	X/Me#8270D/ML 5ug/L, Me#610/ML 5ug/L & Me#625/ML 5ug/L
	i. Acenaphthylene	X/Me#8270D/ML 5ug/L, Me#610/ML 5ug/L & Me#625/ML 5ug/L
	j. Anthracene	X/Me#8270D/ML 5ug/L, Me#610/ML 5ug/L & Me#625/ML 5ug/L
	k. Benzo(ghi) Perylene	X/Me#8270D/ML 5ug/L, Me#610/ML 5ug/L & Me#625/ML 5ug/L
	l. Fluoranthene	X/Me#8270D/ML 5ug/L, Me#610/ML 5ug/L & Me#625/ML 5ug/L
	m. Fluorene	X/Me#8270D/ML 5ug/L, Me#610/ML 5ug/L & Me#625/ML 5ug/L
	n. Naphthalene ⁵	20 ug/l / Me#8270/ML 5ug/L, Me#610/ML 5ug/L & Me#625/ML 5ug/L
	o. Phenanthrene	X/Me#8270D/ML 5ug/L, Me#610/ML 5ug/L & Me#625/ML 5ug/L
	p. Pyrene	X/Me#8270D/ML 5ug/L, Me#610/ML 5ug/L & Me#625/ML 5ug/L
	37. Total Polychlorinated Biphenyls (PCBs) ^{8,9}	0.000064 ug/L/Me# 608/ ML 0.5 ug/L
✓	38. Chloride	Monitor only/Me# 300.0/ ML 100 ug/L

	<u>Metal parameter</u>	<u>Total Recoverable Metal Limit @ H¹⁰ = 50 mg/l CaCO₃ for discharges in Massachusetts (ug/l)^{11/12}</u>		<u>Minimum level=ML</u>	
			<u>Saltwater</u>		
	39. Antimony	5.6/ML 10			
✓	40. Arsenic **		36	ML	20
✓	41. Cadmium **		8.9	ML	10
✓	42. Chromium III (trivalent) **		100	ML	15
	43. Chromium VI (hexavalent) **		50.3	ML	10
✓	44. Copper **		3.7	ML	15
	45. Lead **		8.5	ML	20
	46. Mercury **		1.1	ML	0.2
✓	47. Nickel **		8.2	ML	20
	48. Selenium **		71	ML	20
	49. Silver		2.2	ML	10
✓	50. Zinc **		85.6	ML	15
✓	51. Iron	1,000		ML	20

	<u>Other Parameters</u>	<u>Limit</u>
✓	52. Instantaneous Flow	Site specific in CFS
✓	53. Total Flow	Site specific in CFS
✓	54. pH Range for Class A & Class B Waters in MA	6.5-8.3; 1/Month/Grab ¹³
	55. pH Range for Class SA & Class SB Waters in MA	6.5-8.3; 1/Month/Grab ¹³
	56. pH Range for Class B Waters in NH	6.5-8; 1/Month/Grab ¹³
	57. Daily maximum temperature - Warm water fisheries	83°F; 1/Month/Grab ¹⁴
	58. Daily maximum temperature - Cold water fisheries	68°F; 1/Month/Grab ¹⁴
	59. Maximum Change in Temperature in MA - Any Class A water body	1.5°F; 1/Month/Grab ¹⁴
	60. Maximum Change in Temperature in MA - Any Class B water body- Warm Water	5°F; 1/Month/Grab ¹⁴
	61. Maximum Change in Temperature in MA - Any Class B water body - Cold water and Lakes/Ponds	3°F; 1/Month/Grab ¹⁴
	62. Maximum Change in Temperature in MA - Any Class SA water body - Coastal	1.5°F; 1/Month/Grab ¹⁴
	63. Maximum Change in Temperature in MA - Any Class SB water body - July to September	1.5°F; 1/Month/Grab ¹⁴
	64. Maximum Change in Temperature in MA -Any Class SB water body - October to June	4°F; 1/Month/Grab ¹⁴

Footnotes:

¹ Although the maximum values for TRC are 11ug/l and 7.5 ug/l for freshwater, and saltwater respectively, the compliance limits are equal to the minimum level (ML) of the test method used as listed in Appendix VI (i.e., Method 330.5, 20 ug/l).

² Limits for cyanide are based on EPA's water quality criteria expressed as micrograms per liter. There is currently no EPA approved test method for free cyanide. Therefore, total cyanide must be reported.

³ Although the maximum values for cyanide are 5.2 ug/l and 1.0 ug/l for freshwater and saltwater, respectively, the compliance limits are equal to the minimum level (ML) of the Method 335.4 as listed in Appendix VI (i.e., 10 ug/l).

⁴ BTEX = sum of Benzene, Toluene, Ethylbenzene, and total Xylenes.

⁵ Naphthalene can be reported as both a purgeable (VOC) and extractable (SVOC) organic compound. If both VOC and SVOC are analyzed, the highest value must be used unless the QC criteria for one of the analyses is not met. In such cases, the value from the analysis meeting the QC criteria must be used.

⁶ The sum of individual phthalate compounds(not including the #34, Bis (2-Ethylhexyl) Phthalate . The compliance limits are equal to the minimum level (ML) of the test method used as listed in Appendix VI.

Total values calculated for reporting on NOIs and discharge monitoring reports shall be calculated by adding the measured concentration of each constituent. If the measurement of a constituent is less than the ML, the permittee shall use a value of zero for that constituent. For each test, the permittee shall also attach the raw data for each constituent to the discharge monitoring report, including the minimum level and minimum detection level for the analysis.

⁷ Although the maximum value for the individual PAH compounds is 0.0038 ug/l, the compliance limits are equal to the minimum level (ML) of the test method used as listed in Appendix VI.

⁸ In the November 2002 WQC, EPA has revised the definition of Total PCBs for aquatic life as total PCBs is the sum of all homologue, all isomer, all congener, or all "Oroclor analyses."Total values calculated for reporting on NOIs and discharge monitoring reports shall be calculated by adding the measured concentration of each constituent. If the measure of a constituent is less than the ML, the permittee shall use a value of zero for that constituent. For each test, the permittee shall also attach the raw data for each constituent to the discharge monitoring report, including the minimum level and minimum detection level for the analysis.

⁹Although the maximum value for total PCBs is 0.000064 ug/l, the compliance limit is equal to the minimum level (ML) of the test method used as listed in Appendix VI (i.e., 0.5 ug/l for Method 608 or 0.00005 ug/l when Method 1668a is approved).

¹⁰ Hardness. Cadmium, Chromium III, Copper, Lead, Nickel, Silver, and Zinc are Hardness Dependent.

¹¹ For a Dilution Factor (DF) from 1 to 5, metals limits are calculated using DF times the base limit for the metal. See Appendix IV. For example, iron limits are calculated using $DF \times 1,000\text{ug/L}$ (the iron base limit). Therefore DF is 1.5, the iron limit will be 1,500 ug/L; DF 2, then iron limit = $1,000 \times 2 = 2,000 \text{ ug/L}$., etc. not to exceed the DF=5.

¹² Minimum Level (ML) is the lowest level at which the analytical system gives a recognizable signal and acceptable calibration point for the analyte. The ML represents the lowest concentration at which an analyte can be measured with a known level of confidence. The ML is calculated by multiplying the laboratory-determined method detection limit by 3.18 (see 40 CFR Part 136, Appendix B).

¹³ pH sampling for compliance with permit limits may be performed using field methods as provided for in EPA test Method 150.1.

¹⁴ Temperature sampling per Method 170.1



Haley & Aldrich, Inc.
465 Medford St.
Suite 2200
Boston, MA 02129
617.886.7400

6 February 2015
File No. 34099-402

US Environmental Protection Agency – Region 1
Industrial NPDES Permits (CIP)
5 Post Office Square
Mail Code OEP06-4
Boston, Massachusetts, 02109-3912

Attention: Remediation General Permit NOI Processing

Subject: Notice of Intent (NOI) for NPDES Dewatering General Permit
Temporary Construction Dewatering
Seaport Square Parcel J
65 Seaport Boulevard
Boston, Massachusetts
RTN 3-28572

Ladies and Gentlemen:

On behalf of our client, MS Seaport Block J, LLC, and in accordance with the National Pollutant Discharge Elimination System (NPDES) Remediation General Permit (RGP) in Massachusetts, MAG910000, this letter submits a Notice of Intent (NOI) and the applicable documentation as required by the US Environmental Protection Agency (EPA) for temporary construction site dewatering under the RGP.

SITE HISTORY

The site is located in the former South Boston tidal flats which were filled in 1870s in conjunction with the construction of Fan Pier to provide waterfront railroad access. The site was historically occupied by railroad tracks (1880s through 1960s) and has been a parking lot since at least 2006; no known structures historically existed at the subject site.

CURRENT SITE CONDITIONS

The site is located at 65 Seaport Boulevard in South Boston, Massachusetts and currently consists of an asphalt-paved parking lot, approximately 12,000 square feet in size. Figure 1 depicts project locus. As shown on Figure 2, the site is bordered by Seaport Boulevard to the north, Farnsworth Street to the west, Thomson Place to the east, and by the buildings at 42-56 Thompson Place and 44-46 Farnsworth Street to the south. The MBTA Courthouse Station headhouse is located directly at the southern corner of the site and an MBTA easement to the headhouse entry occupies the southeast end of the subject

site. The headhouse consists of a one story glass and metal kiosk which serves as an entryway to the MBTA Silver Line Courthouse Station which is present on the north side of the site below Seaport Boulevard. An air duct and vent shaft is located below grade within the easement. Site grades are relatively flat ranging from about El. 15.7 to 16.4 across the site.

PROPOSED CONSTRUCTION

The proposed building will be an 11-story hotel with ground level at El. 19.7 ft. A one level below grade basement is planned west of the MBTA Courthouse Station entry/headhouse with top of basement slab at El. 7.7 ft. The building is planned to span over the MBTA headhouse above the third floor level. Finished site grades will vary from approximately El. 19 on the north side of the building to approximately El. 16 on the south side of the building

1. Regulatory Background

The results of test boring performed in March 2014, soil precharacterization and groundwater sampling programs conducted at Parcel J did not indicate the presence of contaminants in soils above the applicable Massachusetts Contingency Plan RCS-1 Reportable Concentrations for Soil or RCGW-2 Reportable Concentrations for Groundwater. Therefore, the Parcel J project does not currently need to be reported to MassDEP, and further MCP regulatory compliance should not be required for development of the parcel (beyond closure of the umbrella RTN discussed below) and soil management activities.

2. Groundwater Sampling and Analysis

In support of the NOI, Haley & Aldrich collected unfiltered groundwater samples and one field filtered groundwater sample from observation well HA-J5(OW) on 19 March 2014. The collected groundwater samples were submitted to Alpha Analytical, Inc. of Westborough, Massachusetts (Alpha Analytical), a DEP certified laboratory for analysis for NPDES permit parameters including volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), total and dissolved metals, polychlorinated biphenyls (PCBs), total petroleum hydrocarbons (TPH), Total Suspended Solids (TSS), chloride, total cyanide, total phenolics, and total residual chlorine. The analytical results for the groundwater samples were either not detected above the laboratory detection limit or were below the applicable MCP RCGW-2 Reportable Concentration. The results of water quality testing conducted for this NOI are summarized in Table I. The location of the observation well is shown on Figure 2.

Total copper and iron were detected above the effluent criteria. However after applying a dilution factor for the outfall, the concentration was reduced to comply with the criteria. Further discussion on the dilution factor is included below. Total suspended solids (TSS) were also recorded above the NPDES RGP limit, however the proposed treatment system is anticipated to remove TSS to below the discharge limit. Other tested compounds were below the RGP effluent discharge criteria, and each of the tested compounds was below the applicable MCP RCGW-2 Reportable Concentration.

3. Management of Dewatering Effluent

Prior to discharge, collected water will be routed through a sedimentation tank with bag filters, to remove suspended solids and un-dissolved chemical constituents. Supplemental pretreatment may be required to meet discharge criteria as shown in the Proposed Treatment System Schematic included in Figure 3. Supplemental pretreatment will remove iron and copper from the water if required. Construction dewatering under this RGP NOI will include piping and discharging to Boston Water and Sewer Commission storm drains near the site. The storm drains travel to the west of the site, ultimately discharging into Fort Point Channel. The proposed discharge route is shown on Figure 4.

During construction, it will be necessary to perform temporary dewatering to control surface water runoff from precipitation, groundwater seepage and construction-generated water to enable

construction in-the-dry. Construction and construction dewatering activities are currently anticipated to begin as early as April 2015. On average, we estimate effluent discharge rates of 50 gallons per minute (gpm) or less, with occasional peak flows of approximately 100 gpm during significant precipitation events. Temporary dewatering will be conducted from sumps located in excavations.

4. Discharge Start Date and Length of Discharge

Site work and associated construction dewatering is currently anticipated to begin in April 2015 and is estimated to take up to 24 months to complete. Dewatering activities during below-grade construction are anticipated to be periodic and intermittent.

5. Dilution Factor Application for Metals

A Dilution Factor (DF) was calculated for the detected levels of total metals greater than the applicable effluent limits. The DF is applicable to copper and iron, and the calculated DF was used to find the appropriate Dilution Range concentrations for these metals. The DF was calculated using the following equation:

$$DF = (Q_d + Q_s) / Q_d$$

where Q_d is the maximum discharge flow rate, assumed to be 100 gpm or approximately 0.223 cubic feet per second (cfs), and Q_s is the receiving water flow rate, minimum for 7 consecutive days with a recurrence interval of 10 years. Testing of groundwater at the site indicated that metals were either not detected above the laboratory detection limit and/or were below NPDES RGP effluent discharge criteria with the exception of copper and iron. The Fort Point Channel is the receiving water body, and is a tidally influenced channel without regular inflow data. Therefore, estimating a flow and dilution factor would be difficult. Based on correspondence with Mr. Victor Alvarez of EPA on 25 August 2014, the Dilution Factor for discharge of metals to Fort Point Channel can be conservatively assumed to be in the 1 to 5 range. Applying a dilution factor of 3 is sufficient to reduce copper and iron concentrations to the RGP effluent discharge criteria.

6. Appendices

The completed "Suggested Notice of Intent" (NOI) form as provided in the RGP is enclosed in Appendix A. The site owner is MS Seaport Block J, LLC c/o Boston Global Investors, LLC. The site operator is Tishman Construction Corporation. Haley & Aldrich will monitor the Contractor's dewatering activities on behalf of Boston Global Investors LLC. In accordance with the requirements for this NOI submission, Tishman Construction Corporation as the operator is listed as permittee for this NPDES RGP, and therefore has signed the NOI form.

A Best Management Practices Plan (BMPP), which outlines the proposed discharge operations covered under the RGP, is included in Appendix B. Appendices C and D include Endangered Species Act and National Register of Historic Places Documentation, respectively. Appendix E provides the BWSC Permit Application to be submitted separately to the Boston Water and Sewer Commission. A copy of the groundwater testing laboratory data report for samples obtained by Haley & Aldrich is provided in Appendix F.

7. Closing

Thank you very much for your consideration of this NOI. Please feel free to contact us should you wish to discuss the information contained herein or if you need additional information.

Sincerely yours,
HALEY & ALDRICH, INC.



Owen W. Miles
Staff Hydrogeologist



Heather B. Scranton, P.E.
Senior Project Manager

Attachments:

- Table I – Summary of Groundwater Quality Data
- Figure 1 – Site Locus
- Figure 2 – Site and Subsurface Exploration Location Plan
- Figure 3 – Proposed Treatment System Schematic
- Figure 4 – Proposed Dewatering Effluent Discharge Route
- Appendix A – Notice of Intent (NOI) for Remediation General Permit (RGP)
- Appendix B – Best Management Practices Plan (BMPP)
- Appendix C – Endangered Species Act Documentation
- Appendix D – National Register of Historic Places and Massachusetts Historical Commission Documentation
- Appendix E – Copy of BWSC Permit Application
- Appendix F – Laboratory Data Reports

c: Boston Global Investors; Attn: Andrew Albers
Tishman Construction Corporation; Attn: William Sturgis

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TABLE I
GROUNDWATER QUALITY DATA
PARCEL J, SEAPORT SQUARE
BOSTON, MASSACHUSETTS
FILE NO. 34099-450

SAMPLE ID SAMPLING DATE LAB SAMPLE ID	2014 MCP Reportable Concentrations RCGW-2	NPDES RGP Effluent Discharge Criteria	HA-J5(OW) 3/19/2014 L1405735-01 L1405736-03
VOCs by GC/MS (mg/l)			
VOCs total	NA	NA	ND
SVOCs			
Total Metals (mg/l)			
Antimony	8	0.0056	ND(0.002)
Arsenic	0.9	0.036	0.01748
Cadmium,	0.004	0.0089	ND(0.0004)
Chromium	0.3	0.1	0.00614
Copper	100	0.0037	0.00436
Iron	NA	1	2.9
Lead	0.01	0.0085	ND(0.002)
Mercury	0.02	0.0011	ND(0.0001)
Nickel	0.2	0.0082	0.00603
Selenium	0.1	0.071	ND(0.01)
Silver	0.007	0.0022	ND(0.0008)
Zinc	0.9	0.0856	ND(0.02)
Dissolved Metals (mg/l)			
Antimony	8		ND(0.002)
Arsenic	0.9		0.01534
Cadmium,	0.004		ND(0.0004)
Chromium	0.3		ND(0.002)
Copper	100		ND(0.002)
Iron	NA		0.07
Lead	0.01		ND(0.002)
Mercury	0.02		ND(0.0001)
Nickel	0.2		0.00265
Selenium	0.1		ND(0.01)
Silver	0.007		ND(0.0008)
Zinc	0.9		ND(0.02)
PCBs (ug/l)			
Total PCBs	5	0.000064	ND
General Chemistry			
Cyanide, Total	0.03	0.001	ND(0.0025)
Chlorine, Total Residual	NA	0.0075	ND(0.01)
pH	NA	NA	6.4
TPH	5	5	ND(2)
Chromium, Hexavalent	0.3	0.053	ND(0.005)
Chloride	NA	Monitor Only	1310000
Solids, Total Suspended	NA	30	61
Pesticides (ug/l)			
1,2-Dibromoethane	2	0.05	ND(0.005)

ABBREVIATIONS:

NA : Not applicable

ND(2.5): Not detected; number in parentheses is one-half the laboratory

NOTES:

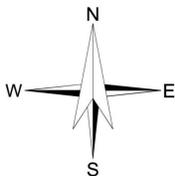
1. This table includes only those compounds detected on the dates indicated.
2. Bold values indicate value exceeds the NPDES RGP criteria.



SITE COORDINATES: 42°21'8"N, 71°2'50"W

**HALEY
ALDRICH**

SEAPORT SQUARE PARCEL J
BOSTON, MASSACHUSETTS

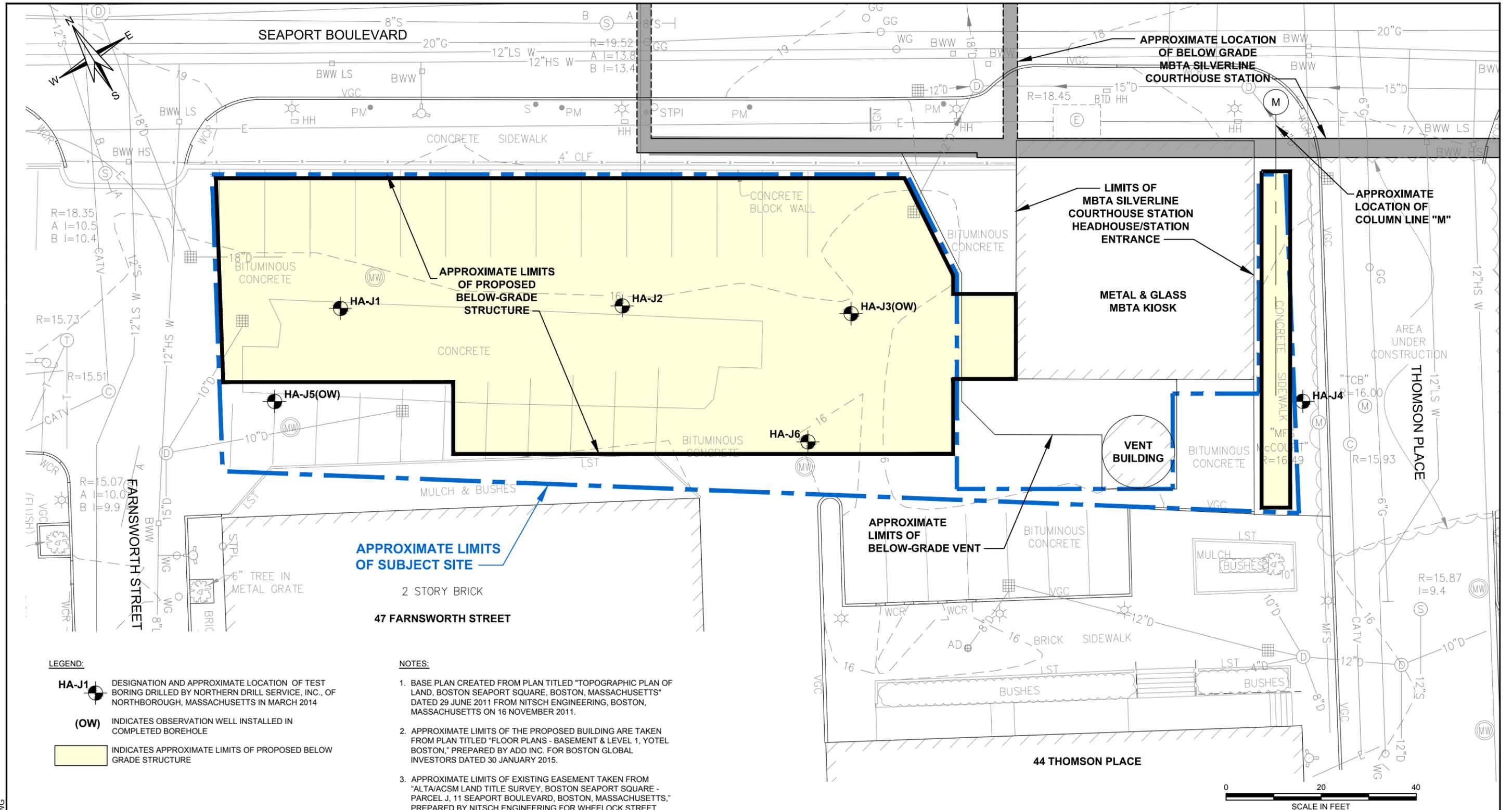


U.S.G.S. QUADRANGLE: BOSTON SOUTH, MA

PROJECT LOCUS

SCALE: 1:24,000
MARCH 2014

FIGURE 1



LEGEND:

- HA-J1** DESIGNATION AND APPROXIMATE LOCATION OF TEST BORING DRILLED BY NORTHERN DRILL SERVICE, INC., OF NORTHBOROUGH, MASSACHUSETTS IN MARCH 2014
- (OW)** INDICATES OBSERVATION WELL INSTALLED IN COMPLETED BOREHOLE
- INDICATES APPROXIMATE LIMITS OF PROPOSED BELOW GRADE STRUCTURE

NOTES:

1. BASE PLAN CREATED FROM PLAN TITLED "TOPOGRAPHIC PLAN OF LAND, BOSTON SEAPORT SQUARE, BOSTON, MASSACHUSETTS" DATED 29 JUNE 2011 FROM NITSCH ENGINEERING, BOSTON, MASSACHUSETTS ON 16 NOVEMBER 2011.
2. APPROXIMATE LIMITS OF THE PROPOSED BUILDING ARE TAKEN FROM PLAN TITLED "FLOOR PLANS - BASEMENT & LEVEL 1, YOTEL BOSTON," PREPARED BY ADD INC. FOR BOSTON GLOBAL INVESTORS DATED 30 JANUARY 2015.
3. APPROXIMATE LIMITS OF EXISTING EASEMENT TAKEN FROM "ALTA/ACSM LAND TITLE SURVEY, BOSTON SEAPORT SQUARE - PARCEL J, 11 SEAPORT BOULEVARD, BOSTON, MASSACHUSETTS," PREPARED BY NITSCH ENGINEERING FOR WHELOCK STREET CAPITAL DATED 4 MARCH 2014.
4. TEST BORING LOCATIONS ARE APPROXIMATED FROM TAPE MEASUREMENTS OFF OF AVAILABLE SITE FEATURES AND LINE OF SITE IN THE FIELD.

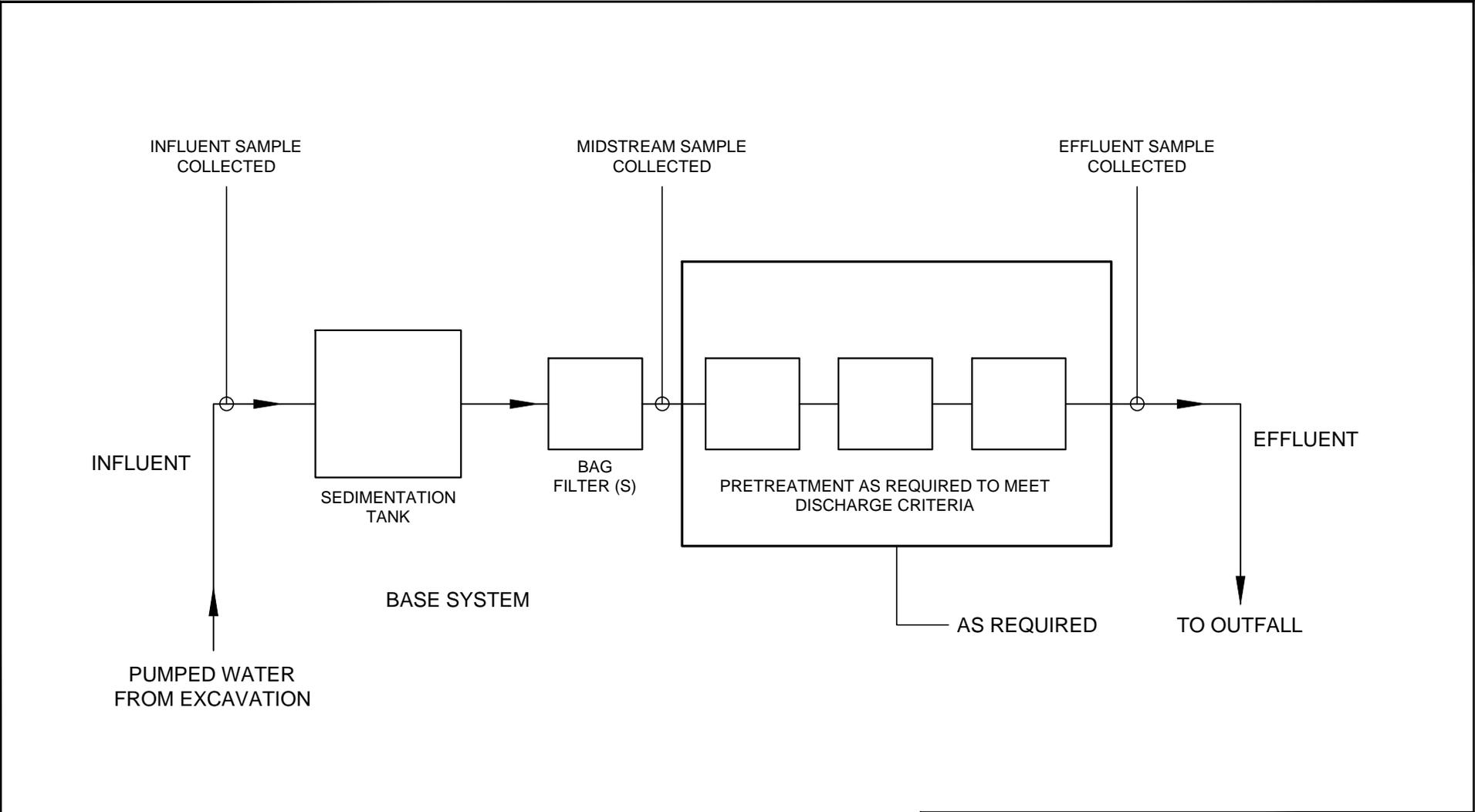


SEAPORT SQUARE BLOCK J - YOTEL
 BOSTON, MASSACHUSETTS

**SITE AND SUBSURFACE
 EXPLORATION LOCATION PLAN**

SCALE: AS SHOWN
 JANUARY 2015

FIGURE 2



LEGEND:

—▶ DIRECTION OF FLOW

NOTE:

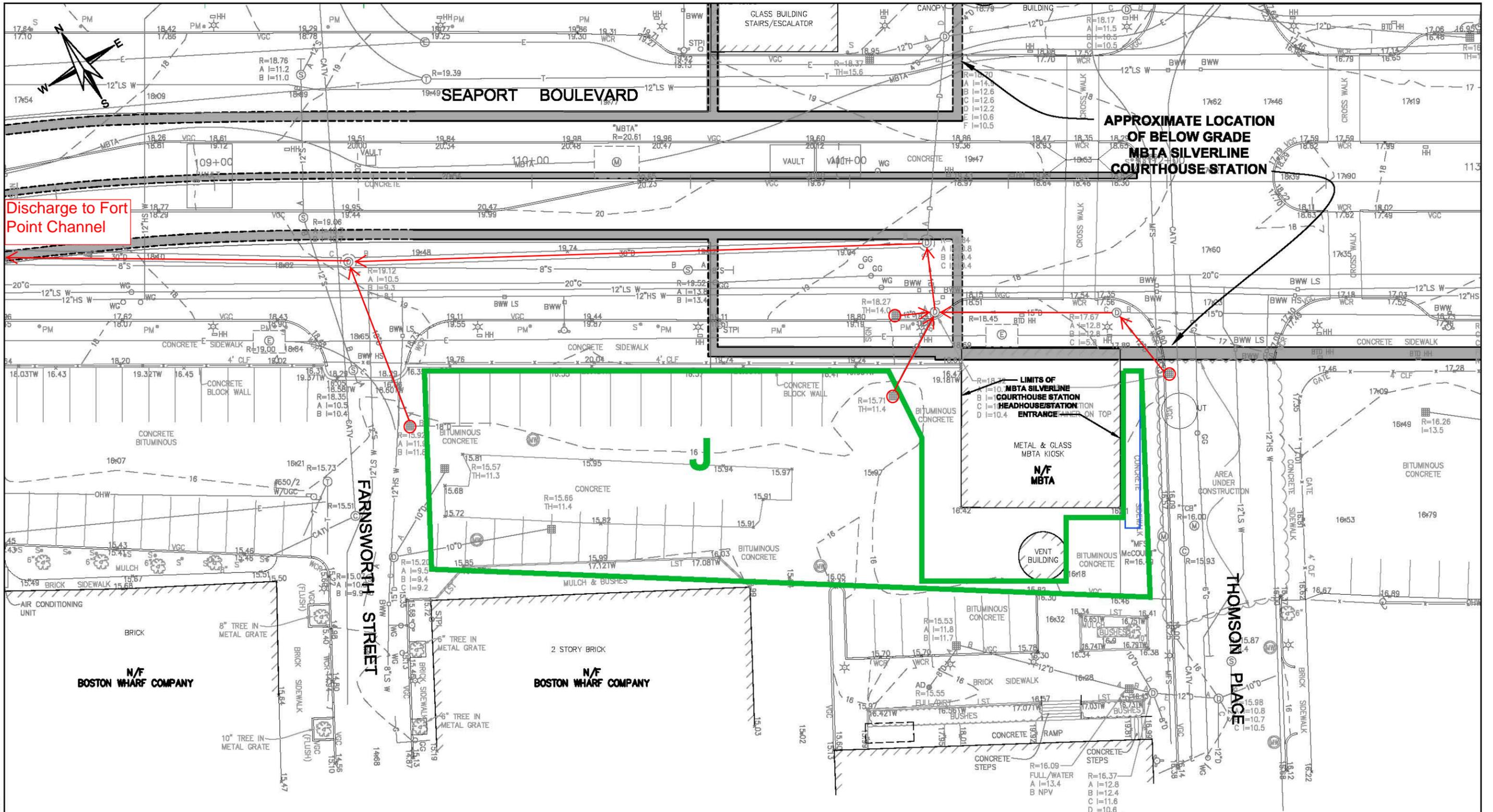
1. DETAILS OF TREATMENT SYSTEM MAY VARY FROM SYSTEM INDICATED ABOVE. SPECIFIC MEANS AND METHODS OF TREATMENT TO BE SELECTED BY CONTRACTOR. WATER WILL BE TREATED TO MEET REQUIRED EFFLUENT STANDARDS.

HALEY ALDRICH WATERMARK SEAPORT
SEAPORT SQUARE PARCEL H
BOSTON, MASSACHUSETTS

**PROPOSED
TREATMENT SYSTEM
SCHEMATIC**

SCALE: NONE
MAY 2013

FIGURE 3



Discharge to Fort Point Channel

APPROXIMATE LOCATION OF BELOW GRADE MBTA SILVERLINE COURTHOUSE STATION

LIMITS OF MBTA SILVERLINE COURTHOUSE STATION HEADHOUSE/STATION ENTRANCE

METAL & GLASS MBTA KIOSK

N/F MBTA

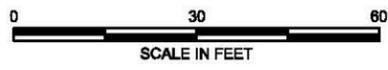
N/F BOSTON WHARF COMPANY

N/F BOSTON WHARF COMPANY

THOMSON PLACE

NOTE:

- LIMITS OF PROPOSED PARCELS AND ROADWAYS TAKEN FROM SERIES OF DRAWINGS TITLED "ALTA/ACSM LAND TITLE SURVEY, BOSTON SEAPORT SQUARE - PARCEL B/C, D, F, G, H, J, L2, L3, L4, L5, L6, M1, M2, N, P AND Q, BOSTON, MASSACHUSETTS", DATED AUGUST 2013, BY NITSCH ENGINEERING OF BOSTON, MASSACHUSETTS.
- BASE PLAN CREATED FROM PLAN TITLED "TOPOGRAPHIC PLAN OF LAND, BOSTON SEAPORT SQUARE, BOSTON, MASSACHUSETTS" DATED 29 JUNE 2011 FROM NITSCH ENGINEERING, BOSTON, MASSACHUSETTS ON 16 NOVEMBER 2011.



HALEY ALDRICH SEAPORT SQUARE PARCEL J BOSTON, MASSACHUSETTS

PROPOSED DEWATERING DISCHARGE LOCATIONS

SCALE: AS SHOWN AUGUST 2014

FIGURE 4

J:\GRAPHICS\34089\34089-451-B158.DWG

Appendix A
Notice of Intent (NOI) for Remediation General Permit (RGP)

B. Suggested Form for Notice of Intent (NOI) for the Remediation General Permit

1. General facility/site information. Please provide the following information about the site:

a) Name of facility/site :		Facility/site mailing address:		
Location of facility/site : longitude: _____ latitude: _____	Facility SIC code(s):	Street:		
b) Name of facility/site owner : FPC Hotel LLC		Town:		
Email address of facility/site owner:		State: <small>Connecticut, New Hampshire, United States</small>	Zip:	County:
Telephone no. of facility/site owner :				
Fax no. of facility/site owner :		Owner is (check one): 1. Federal____ 2. State/Tribal____ 3. Private____ 4. Other ____ if so, describe:		
Address of owner (if different from site):				
Street:				
Town:	State:	Zip:	County:	
c) Legal name of operator :		Operator telephone no:		
		Operator fax no.:		Operator email:
Operator contact name and title:				
Address of operator (if different from owner):		Street:		
Town:	State:	Zip:	County:	

<p>d) Check Y for “yes” or N for “no” for the following:</p> <p>1. Has a prior NPDES permit exclusion been granted for the discharge? Y___ N___, if Y, number: _____</p> <p>2. Has a prior NPDES application (Form 1 & 2C) ever been filed for the discharge? Y___ N___, if Y, date and tracking #: _____</p> <p>3. Is the discharge a “new discharge” as defined by 40 CFR 122.2? Y___ N___</p> <p>4. For sites in Massachusetts, is the discharge covered under the Massachusetts Contingency Plan (MCP) and exempt from state permitting? Y___ N___</p>	
<p>e) Is site/facility subject to any State permitting, license, or other action which is causing the generation of discharge? Y___ N___</p> <p>If Y, please list:</p> <p>1. site identification # assigned by the state of NH or MA: _____</p> <p>2. permit or license # assigned: _____</p> <p>3. state agency contact information: name, location, and telephone number: _____</p>	<p>f) Is the site/facility covered by any other EPA permit, including:</p> <p>1. Multi-Sector General Permit? Y___ N___, if Y, number: _____</p> <p>2. Final Dewatering General Permit? Y___ N___, if Y, number: _____</p> <p>3. EPA Construction General Permit? Y___ N___, if Y, number: _____</p> <p>4. Individual NPDES permit? Y___ N___, if Y, number: _____</p> <p>5. any other water quality related individual or general permit? Y___ N___, if Y, number: _____</p>
<p>g) Is the site/facility located within or does it discharge to an Area of Critical Environmental Concern (ACEC)? Y___ N___</p>	
<p>h) Based on the facility/site information and any historical sampling data, identify the sub-category into which the potential discharge falls.</p>	
<u>Activity Category</u>	<u>Activity Sub-Category</u>
I - Petroleum Related Site Remediation	<p>A. Gasoline Only Sites _____</p> <p>B. Fuel Oils and Other Oil Sites (including Residential Non-Business Remediation Discharges) _____</p> <p>C. Petroleum Sites with Additional Contamination _____</p>
II - Non Petroleum Site Remediation	<p>A. Volatile Organic Compound (VOC) Only Sites _____</p> <p>B. VOC Sites with Additional Contamination _____</p> <p>C. Primarily Heavy Metal Sites _____</p>
III - Contaminated Construction Dewatering	<p>A. General Urban Fill Sites _____</p> <p>B. Known Contaminated Sites _____</p>

IV - Miscellaneous Related Discharges	A. Aquifer Pump Testing to Evaluate Formerly Contaminated Sites ____ B. Well Development/Rehabilitation at Contaminated/Formerly Contaminated Sites ____ C. Hydrostatic Testing of Pipelines and Tanks ____ D. Long-Term Remediation of Contaminated Sumps and Dikes ____ E. Short-term Contaminated Dredging Drain Back Waters (if not covered by 401/404 permit) ____
---------------------------------------	---

2. Discharge information. Please provide information about the discharge, (attaching additional sheets as necessary) including:

a) Describe the discharge activities for which the owner/applicant is seeking coverage:	
b) Provide the following information about each discharge:	
1) Number of discharge points:	2) What is the maximum and average flow rate of discharge (in cubic feet per second, ft ³ /s)? Max. flow _____ Is maximum flow a design value ? Y__ N____ Average flow (include units) _____ Is average flow a design value or estimate? _____
3) Latitude and longitude of each discharge within 100 feet: pt.1: lat. _____ long. _____; pt.2: lat. _____ long. _____; pt.3: lat. _____ long. _____; pt.4: lat. _____ long. _____; pt.5: lat. _____ long. _____; pt.6: lat. _____ long. _____; pt.7: lat. _____ long. _____; pt.8: lat. _____ long. _____; etc.	
4) If hydrostatic testing, total volume of the discharge (gals): _____	5) Is the discharge intermittent ____ or seasonal ____? Is discharge ongoing? Y ____ N _____
c) Expected dates of discharge (mm/dd/yy): start _____ end _____	
d) Please attach a line drawing or flow schematic showing water flow through the facility including: 1. sources of intake water, 2. contributing flow from the operation, 3. treatment units, and 4. discharge points and receiving waters(s).	

3. Contaminant information.

a) Based on the sub-category selected (see Appendix III), indicate whether each listed chemical is **believed present** or **believed absent** in the potential discharge. Attach additional sheets as needed.

<u>Parameter *</u>	<u>CAS Number</u>	<u>Believed Absent</u>	<u>Believed Present</u>	<u># of Samples</u>	<u>Sample Type (e.g., grab)</u>	<u>Analytical Method Used (method #)</u>	<u>Minimum Level (ML) of Test Method</u>	<u>Maximum daily value</u>		<u>Average daily value</u>	
								<u>concentration (ug/l)</u>	<u>mass (kg)</u>	<u>concentration (ug/l)</u>	<u>mass (kg)</u>
1. Total Suspended Solids (TSS)											
2. Total Residual Chlorine (TRC)											
3. Total Petroleum Hydrocarbons (TPH)											
4. Cyanide (CN)	57125										
5. Benzene (B)	71432										
6. Toluene (T)	108883										
7. Ethylbenzene (E)	100414										
8. (m,p,o) Xylenes (X)	108883; 106423; 95476; 1330207										
9. Total BTEX ²	n/a										
10. Ethylene Dibromide (EDB) (1,2-Dibromoethane) ³	106934										
11. Methyl-tert-Butyl Ether (MtBE)	1634044										
12. tert-Butyl Alcohol (TBA) (Tertiary-Butanol)	75650										

* Numbering system is provided to allow cross-referencing to Effluent Limits and Monitoring Requirements by Sub-Category included in Appendix III, as well as the Test Methods and Minimum Levels associated with each parameter provided in Appendix VI.

² BTEX = Sum of Benzene, Toluene, Ethylbenzene, total Xylenes.

³ EDB is a groundwater contaminant at fuel spill and pesticide application sites in New England.

<u>Parameter *</u>	<u>CAS Number</u>	<u>Believed Absent</u>	<u>Believed Present</u>	<u># of Samples</u>	<u>Sample Type (e.g., grab)</u>	<u>Analytical Method Used (method #)</u>	<u>Minimum Level (ML) of Test Method</u>	<u>Maximum daily value</u>		<u>Average daily value</u>	
								<u>concentration (ug/l)</u>	<u>mass (kg)</u>	<u>concentration (ug/l)</u>	<u>mass (kg)</u>
13. tert-Amyl Methyl Ether (TAME)	9940508										
14. Naphthalene	91203										
15. Carbon Tetrachloride	56235										
16. 1,2 Dichlorobenzene (o-DCB)	95501										
17. 1,3 Dichlorobenzene (m-DCB)	541731										
18. 1,4 Dichlorobenzene (p-DCB)	106467										
18a. Total dichlorobenzene											
19. 1,1 Dichloroethane (DCA)	75343										
20. 1,2 Dichloroethane (DCA)	107062										
21. 1,1 Dichloroethene (DCE)	75354										
22. cis-1,2 Dichloroethene (DCE)	156592										
23. Methylene Chloride	75092										
24. Tetrachloroethene (PCE)	127184										
25. 1,1,1 Trichloro-ethane (TCA)	71556										
26. 1,1,2 Trichloro-ethane (TCA)	79005										
27. Trichloroethene (TCE)	79016										

<u>Parameter *</u>	<u>CAS Number</u>	<u>Believed Absent</u>	<u>Believed Present</u>	<u># of Samples</u>	<u>Sample Type (e.g., grab)</u>	<u>Analytical Method Used (method #)</u>	<u>Minimum Level (ML) of Test Method</u>	<u>Maximum daily value</u>		<u>Average daily value</u>	
								<u>concentration (ug/l)</u>	<u>mass (kg)</u>	<u>concentration (ug/l)</u>	<u>mass (kg)</u>
28. Vinyl Chloride (Chloroethene)	75014										
29. Acetone	67641										
30. 1,4 Dioxane	123911										
31. Total Phenols	108952										
32. Pentachlorophenol (PCP)	87865										
33. Total Phthalates (Phthalate esters) ⁴											
34. Bis (2-Ethylhexyl) Phthalate [Di-(ethylhexyl) Phthalate]	117817										
35. Total Group I Polycyclic Aromatic Hydrocarbons (PAH)											
a. Benzo(a) Anthracene	56553										
b. Benzo(a) Pyrene	50328										
c. Benzo(b)Fluoranthene	205992										
d. Benzo(k)Fluoranthene	207089										
e. Chrysene	21801										
f. Dibenzo(a,h)anthracene	53703										
g. Indeno(1,2,3-cd) Pyrene	193395										
36. Total Group II Polycyclic Aromatic Hydrocarbons (PAH)											

⁴The sum of individual phthalate compounds.

<u>Parameter *</u>	<u>CAS Number</u>	<u>Believed Absent</u>	<u>Believed Present</u>	<u># of Samples</u>	<u>Sample Type (e.g., grab)</u>	<u>Analytical Method Used (method #)</u>	<u>Minimum Level (ML) of Test Method</u>	<u>Maximum daily value</u>		<u>Average daily value</u>	
								<u>concentration (ug/l)</u>	<u>mass (kg)</u>	<u>concentration (ug/l)</u>	<u>mass (kg)</u>
h. Acenaphthene	83329										
i. Acenaphthylene	208968										
j. Anthracene	120127										
k. Benzo(ghi) Perylene	191242										
l. Fluoranthene	206440										
m. Fluorene	86737										
n. Naphthalene	91203										
o. Phenanthrene	85018										
p. Pyrene	129000										
37. Total Polychlorinated Biphenyls (PCBs)	85687; 84742; 117840; 84662; 131113; 117817.										
38. Chloride	16887006										
39. Antimony	7440360										
40. Arsenic	7440382										
41. Cadmium	7440439										
42. Chromium III (trivalent)	16065831										
43. Chromium VI (hexavalent)	18540299										
44. Copper	7440508										
45. Lead	7439921										
46. Mercury	7439976										
47. Nickel	7440020										
48. Selenium	7782492										
49. Silver	7440224										
50. Zinc	7440666										
51. Iron	7439896										
Other (describe):											

<u>Parameter *</u>	<u>CAS Number</u>	<u>Believed Absent</u>	<u>Believed Present</u>	<u># of Samples</u>	<u>Sample Type (e.g., grab)</u>	<u>Analytical Method Used (method #)</u>	<u>Minimum Level (ML) of Test Method</u>	<u>Maximum daily value</u>		<u>Average daily value</u>	
								<u>concentration (ug/l)</u>	<u>mass (kg)</u>	<u>concentration (ug/l)</u>	<u>mass (kg)</u>

b) For discharges where **metals** are believed present, please fill out the following (attach results of any calculations):

<i>Step 1:</i> Do any of the metals in the influent exceed the effluent limits in Appendix III (i.e., the limits set at zero dilution)? Y____ N____	If yes, which metals?
<i>Step 2:</i> For any metals which exceed the Appendix III limits, calculate the dilution factor (DF) using the formula in Part I.A.3.c (step 2) of the NOI instructions or as determined by the State prior to the submission of this NOI. What is the dilution factor for applicable metals? Metal: _____ DF: _____ Metal: _____ DF: _____ Metal: _____ DF: _____ Metal: _____ DF: _____ Etc.	Look up the limit calculated at the corresponding dilution factor in Appendix IV . Do any of the metals in the influent have the potential to exceed the corresponding effluent limits in Appendix IV (i.e., is the influent concentration above the limit set at the calculated dilution factor)? Y____ N____ If Y, list which metals:

4. Treatment system information. Please describe the treatment system using separate sheets as necessary, including:

a) A description of the treatment system, including a schematic of the proposed or existing treatment system:						
b) Identify each applicable treatment unit (check all that apply):	Frac. tank	Air stripper	Oil/water separator	Equalization tanks	Bag filter	GAC filter
	Chlorination	De-chlorination	Other (please describe):			

6. ESA and NHPA Eligibility.

Please provide the following information according to requirements of Permit Parts I.A.4 and I.A.5 Appendices II and VII.

<p>a) Using the instructions in Appendix VII and information on Appendix II, under which criterion listed in Part I.C are you eligible for coverage under this general permit? A ____ B ____ C ____ D ____ E ____ F ____</p> <p>b) If you selected Criterion D or F, has consultation with the federal services been completed? Y ____ N ____ Underway ____</p> <p>c) If consultation with U.S. Fish and Wildlife Service and/or NOAA Fisheries Service was completed, was a written concurrence finding that the discharge is “not likely to adversely affect” listed species or critical habitat received? Y ____ N ____</p> <p>d) Attach documentation of ESA eligibility as described in the NOI instructions and required by Appendix VII, Part I.C, Step 4.</p>
<p>e) Using the instructions in Appendix VII, under which criterion listed in Part II.C are you eligible for coverage under this general permit? 1 ____ 2 ____ 3 ____</p> <p>f) If Criterion 3 was selected, attach all written correspondence with the State or Tribal historic preservation officers, including any terms and conditions that outline measures the applicant must follow to mitigate or prevent adverse effects due to activities regulated by the RGP.</p>

7. Supplemental information.

<p>Please provide any supplemental information. Attach any analytical data used to support the application. Attach any certification(s) required by the general permit.</p>

8. Signature Requirements: The Notice of Intent must be signed by the operator in accordance with the signatory requirements of 40 CFR Section 122.22, including the following certification:

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 gather and evaluate 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, I certify that the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I certify that I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Facility/Site Name:	Seaport Square Parcel J
Operator signature:	Bill Sturgis
Printed Name & Title:	Bill Sturgis ; Project Director
Date:	2/5/15

Appendix B
Best Management Practices Plan (BMPP)

**NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
REMEDATION GENERAL PERMIT
SEAPORT SQUARE – PARCEL J
65 Seaport Boulevard
BOSTON, MASSACHUSETTS**

Best Management Practices 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 planned to occur at the 65 Seaport Boulevard project site located in South Boston, Massachusetts. This Best Management Practices Plan (BMPP) has been prepared as an Appendix to the RGP and will be posted at the site during the time period that temporary construction dewatering is occurring at the site.

Water Treatment and Management

Prior to discharge, collected water will be routed through sedimentation tank and bag filters (if needed), to remove suspended solids and un-dissolved chemical constituents. Construction dewatering under this RGP NOI will include piping and discharging to storm drains located within and near the site. The storm drains travel to the west of the site, ultimately discharging into Fort Point Channel. Dewatering effluent treatment may consist of bag filters, granular activated carbon (GAC), ion exchange, or precipitation, as required.

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. This includes chemical testing required within the first week of discharging, and the monthly testing to be conducted through the end of the scheduled discharge.

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 for the term of this permit. Scheduled regular maintenance of the treatment system will be conducted to verify proper operation. Regular maintenance will include checking the condition of the treatment system equipment such as the sedimentation tanks, filters, hoses, pumps, and flow meters. Equipment will be monitored daily for potential issues or unscheduled maintenance requirements.

**NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
REMEDATION GENERAL PERMIT
SEAPORT SQUARE – PARCEL J
65 Seaport Boulevard
BOSTON, MASSACHUSETTS**

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

Miscellaneous Items

The project specifications also include requirements for erosion control. Site security for the treatment system will be covered within the overall site security plan.

No adverse effects on designated uses of surrounding surface water bodies is anticipated. The nearest surface water body is the Fort Point Channel. Dewatering effluent will be pumped to a sedimentation tank, at a minimum, prior to discharge to the storm drains.

Management of Treatment System Materials

Dewatering effluent will be pumped directly to the treatment system from the excavation with use of hoses and 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 sedimentation 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. If used, granular activated carbon and/or ion exchange resin may be recycled and/or removed from the site to an appropriate receiving facility. Bag filters, if used, will be disposed of as necessary.

Appendix C
Endangered Species Act Documentation



United States Department of the Interior



FISH AND WILDLIFE SERVICE

New England Field Office
70 Commercial Street, Suite 300
Concord, NH 03301-5087
<http://www.fws.gov/newengland>

January 7, 2014

To Whom It May Concern:

This project was reviewed for the presence of federally listed or proposed, threatened or endangered species or critical habitat per instructions provided on the U.S. Fish and Wildlife Service's New England Field Office website:

<http://www.fws.gov/newengland/EndangeredSpec-Consultation.htm>

Based on information currently available to us, no federally listed or proposed, threatened or endangered species or critical habitat under the jurisdiction of the U.S. Fish and Wildlife Service are known to occur in the project area(s). Preparation of a Biological Assessment or further consultation with us under section 7 of the Endangered Species Act is not required. No further Endangered Species Act coordination is necessary for a period of one year from the date of this letter, unless additional information on listed or proposed species becomes available.

Thank you for your cooperation. Please contact Maria Tur of this office at 603-223-2541 if we can be of further assistance.

Sincerely yours,

Thomas R. Chapman
Supervisor
New England Field Office

Endangered Species by Town: Boston

<u>Town</u>	<u>Taxonomic Group</u>	<u>ScientificName</u>	<u>CommonName</u>	<u>MESA Status</u>	<u>Federal Status</u>	<u>Most Recent Observation</u>
BOSTON	Butterfly/Moth	Abagrotis nefascia	Coastal Heathland Cutworm	SC		2001
BOSTON	Bird	Accipiter striatus	Sharp-shinned Hawk	SC		1898
BOSTON	Vascular Plant	Ageratina aromatica	Lesser Snakeroot	E		1896
BOSTON	Amphibian	Ambystoma laterale	Blue-spotted Salamander	SC		2013
BOSTON	Bird	Ammodramus savannarum	Grasshopper Sparrow	T		1993
BOSTON	Butterfly/Moth	Apodrepanulatrix liberaria	New Jersey Tea Inchworm	E		Historic
BOSTON	Vascular Plant	Aristida purpurascens	Purple Needlegrass	T		1800s
BOSTON	Vascular Plant	Aristida tuberculosa	Seabeach Needlegrass	T		1877
BOSTON	Vascular Plant	Asclepias verticillata	Linear-leaved Milkweed	T		1878
BOSTON	Bird	Bartramia longicauda	Upland Sandpiper	E		1993
BOSTON	Vascular Plant	Boechera missouriensis	Green Rock-cress	T		1930
BOSTON	Vascular Plant	Carex striata	Walter's Sedge	E		Historic
BOSTON	Bird	Charadrius melodus	Piping Plover	T	T	2011
BOSTON	Beetle	Cicindela duodecimguttata	Twelve-spotted Tiger Beetle	SC		1910
BOSTON	Beetle	Cicindela purpurea	Cow Path Tiger Beetle	SC		1928
BOSTON	Beetle	Cicindela rufiventris hentzii	Eastern Red-bellied Tiger Beetle	T		1927
BOSTON	Vascular Plant	Desmodium cuspidatum	Large-bracted Tick-trefoil	T		1896
BOSTON	Vascular Plant	Eriophorum gracile	Slender Cottongrass	T		1885
BOSTON	Bird	Falco peregrinus	Peregrine Falcon	E		2013
BOSTON	Fish	Gasterosteus aculeatus	Threespine Stickleback	T		2000
BOSTON	Bird	Gavia immer	Common Loon	SC		1824
BOSTON	Vascular Plant	Houstonia longifolia	Long-leaved Bluet	E		1918
BOSTON	Vascular Plant	Liatrix scariosa var. novae-angliae	New England Blazing Star	SC		1933
BOSTON	Mussel	Ligumia nasuta	Eastern Pondmussel	SC		1841
BOSTON	Vascular Plant	Linum medium var. texanum	Rigid Flax	T		1909
BOSTON	Vascular Plant	Lycopus rubellus	Gypsywort	E		1896
BOSTON	Butterfly/Moth	Metarranthis apiciaria	Barrens Metarranthis	E		1934
BOSTON	Vascular Plant	Myriophyllum alterniflorum	Alternate-flowered Water-milfoil	E		Historic
BOSTON	Vascular Plant	Ophioglossum pusillum	Adder's-tongue Fern	T		1884
BOSTON	Vascular Plant	Platanthera flava var. herbiola	Pale Green Orchis	T		1908
BOSTON	Bird	Poocetes gramineus	Vesper Sparrow	T		1985
BOSTON	Butterfly/Moth	Pyrrhia aurantiago	Orange Sallow Moth	SC		1988
BOSTON	Vascular Plant	Ranunculus micranthus	Tiny-flowered Buttercup	E		1891
BOSTON	Vascular Plant	Rumex pallidus	Seabeach Dock	T		1984
BOSTON	Vascular Plant	Sanicula odorata	Long-styled Sanicle	T		Historic
BOSTON	Amphibian	Scaphiopus holbrookii	Eastern Spadefoot	T		1932
BOSTON	Vascular Plant	Scirpus longii	Long's Bulrush	T		1907
BOSTON	Vascular Plant	Setaria parviflora	Bristly Foxtail	SC		2001
BOSTON	Dragonfly/Damselfly	Somatochlora linearis	Mocha Emerald	SC		2009
BOSTON	Bird	Sterna hirundo	Common Tern	SC		2012
BOSTON	Bird	Sternula antillarum	Least Tern	SC		2012
BOSTON	Vascular Plant	Suaeda calceoliformis	American Sea-blite	SC		1909
BOSTON	Reptile	Terrapene carolina	Eastern Box Turtle	SC		1939
BOSTON	Bird	Tyto alba	Barn Owl	SC		1989
BOSTON	Bird	Vermivora chrysoptera	Golden-winged Warbler	E		Historic
BOSTON	Vascular Plant	Viola brittoniana	Britton's Violet	T		1909



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Energy and Environmental Affairs

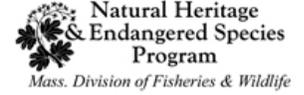
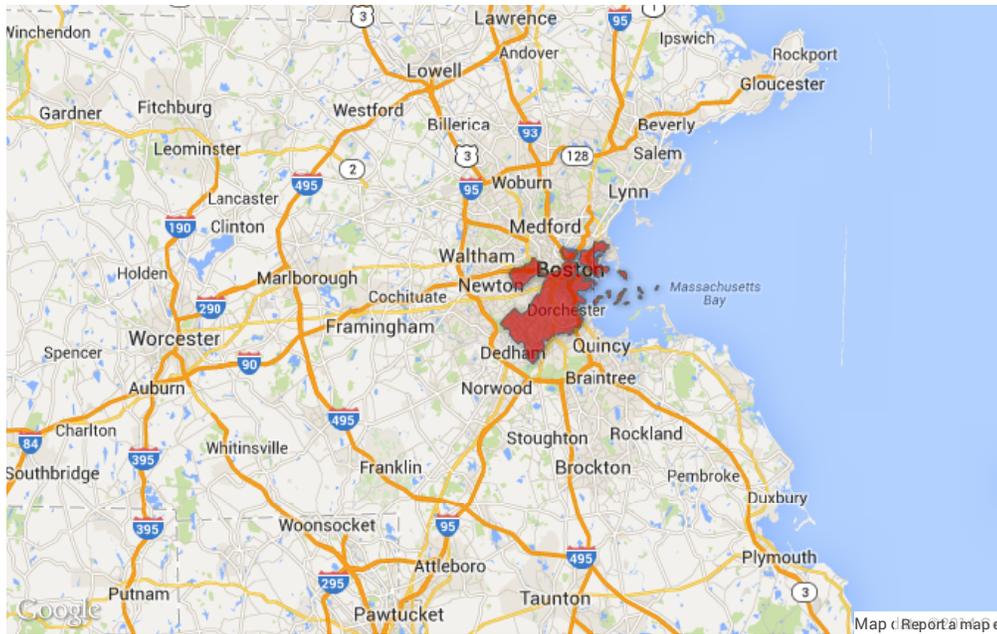
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 [Fisheries & Wildlife](#) >
 [Natural Heritage & Endangered Species](#) >
 [Species Information & Conservation](#) >
 [Town Species Viewer](#)

Town Species Viewer

The Natural Heritage & Endangered Species Program maintains a list of all documented MESA-listed species observations in the Commonwealth. Please select a town if you would like to see a table showing which listed species have been observed in that town. The selected town will also be highlighted on the map. Alternatively you can specify either the Common Name or Scientific Name of a species to see it's distribution on the map and table showing the towns it has been observed in. Clicking on a column header in the table will sort the column. Clicking again on the same column heading will reverse the sort order.

The Town List and Species Viewer will be updated at regular intervals as new data is accepted and entered into the NHESP database.

Town:
 Species (Common Name):
 Species (Scientific Name):



Questions/Comments to
natural.heritage@state.ma.us
 Phone: (508) 389-6360

Species and Conservation Resources

- [Species Information and Conservation](#)
- [NHESP Research and Inventory](#)
- [List of Rare Species in Massachusetts](#)
- [Report Rare Species](#)
- [Request Species Information](#)
- [Biodiversity in the Housatonic River Watershed](#)
- [Scientific Collection Permit \(Education/Research\)](#)
- [Rare Bird Conservation](#)
- [See All](#)



Division of Fisheries and Wildlife
 100 Hartwell Street, Suite 230
 West Boylston MA 01583
 Tel: 508-389-6300
mass.wildlife@state.ma.us

[Contact ALL DFW Offices](#)

Showing 1 to 10 of 46 entries

Search:

Town	Taxonomic Group	Scientific Name	Common Name	MESA Status	Most Recent Obs
BOSTON	Butterfly/Moth	Abagrotis nefascia	Coastal Heathland Cutworm	SC	2001
BOSTON	Bird	Accipiter striatus	Sharp-shinned Hawk	SC	1898

Download data as [xls](#) or [csv](#) file.

**FEDERALLY LISTED ENDANGERED AND THREATENED SPECIES
IN MASSACHUSETTS**

COUNTY	SPECIES	FEDERAL STATUS	GENERAL LOCATION/HABITAT	TOWNS
Barnstable	Piping Plover	Threatened	Coastal Beaches	All Towns
	Roseate Tern	Endangered	Coastal beaches and the Atlantic Ocean	All Towns
	Northeastern beach tiger beetle	Threatened	Coastal Beaches	Chatham
	Sandplain gerardia	Endangered	Open areas with sandy soils.	Sandwich and Falmouth.
	Northern Red-bellied Cooter	Endangered	Inland Ponds and Rivers	Bourne (north of the Cape Cod Canal)
Berkshire	Bog Turtle	Threatened	Wetlands	Egremont and Sheffield
Bristol	Piping Plover	Threatened	Coastal Beaches	Fairhaven, Dartmouth, Westport
	Roseate Tern	Endangered	Coastal beaches and the Atlantic Ocean	Fairhaven, New Bedford, Dartmouth, Westport
	Northern Red-bellied Cooter	Endangered	Inland Ponds and Rivers	Taunton
Dukes	Roseate Tern	Endangered	Coastal beaches and the Atlantic Ocean	All Towns
	Piping Plover	Threatened	Coastal Beaches	All Towns
	Northeastern beach tiger beetle	Threatened	Coastal Beaches	Aquinnah and Chilmark
	Sandplain gerardia	Endangered	Open areas with sandy soils.	West Tisbury
Essex	Small whorled Pogonia	Threatened	Forests with somewhat poorly drained soils and/or a seasonally high water table	Gloucester, Essex and Manchester
	Piping Plover	Threatened	Coastal Beaches	Gloucester, Essex, Ipswich, Rowley, Revere, Newbury, Newburyport and Salisbury
Franklin	Northeastern bulrush	Endangered	Wetlands	Montague, Warwick
	Dwarf wedgemussel	Endangered	Mill River	Whately
Hampshire	Small whorled Pogonia	Threatened	Forests with somewhat poorly drained soils and/or a seasonally high water table	Hadley
	Puritan tiger beetle	Threatened	Sandy beaches along the Connecticut River	Northampton and Hadley
	Dwarf wedgemussel	Endangered	Rivers and Streams.	Hatfield, Amherst and Northampton
Hampden	Small whorled Pogonia	Threatened	Forests with somewhat poorly drained soils and/or a seasonally high water table	Southwick
Middlesex	Small whorled Pogonia	Threatened	Forests with somewhat poorly drained soils and/or a seasonally high water table	Groton
Nantucket	Piping Plover	Threatened	Coastal Beaches	Nantucket
	Roseate Tern	Endangered	Coastal beaches and the Atlantic Ocean	Nantucket
	American burying beetle	Endangered	Upland grassy meadows	Nantucket
Plymouth	Piping Plover	Threatened	Coastal Beaches	Scituate, Marshfield, Duxbury, Plymouth, Wareham and Mattapoisett
	Northern Red-bellied Cooter	Endangered	Inland Ponds and Rivers	Kingston, Middleborough, Carver, Plymouth, Bourne, Wareham, Halifax, and Pembroke
	Roseate Tern	Endangered	Coastal beaches and the Atlantic Ocean	Plymouth, Marion, Wareham, and Mattapoisett.
Suffolk	Piping Plover	Threatened	Coastal Beaches	Winthrop
Worcester	Small whorled Pogonia	Threatened	Forests with somewhat poorly drained soils and/or a seasonally high water table	Leominster

- Eastern cougar and gray wolf are considered extirpated in Massachusetts.
- Endangered gray wolves are not known to be present in Massachusetts, but dispersing individuals from source populations in Canada may occur statewide.
- Critical habitat for the Northern Red-bellied Cooter is present in Plymouth County.

MASSACHUSETTS AREAS OF CRITICAL ENVIRONMENTAL CONCERN

November 2010

Total Approximate Acreage: 268,000 acres

Approximate acreage and designation date follow ACEC names below.

Bourne Back River

(1,850 acres, 1989) Bourne

Canoe River Aquifer and Associated Areas (17,200 acres, 1991) Easton, Foxborough, Mansfield, Norton, Sharon, and Taunton

Cedar Swamp

(1,650 acres, 1975) Hopkinton and Westborough

Central Nashua River Valley

(12,900 acres, 1996) Bolton, Harvard, Lancaster, and Leominster

Cranberry Brook Watershed

(1,050 acres, 1983) Braintree and Holbrook

Ellisville Harbor

(600 acres, 1980) Plymouth

Fowl Meadow and Ponkapoag Bog

(8,350 acres, 1992) Boston, Canton, Dedham, Milton, Norwood, Randolph, Sharon, and Westwood

Golden Hills

(500 acres, 1987) Melrose, Saugus, and Wakefield

Great Marsh (originally designated as Parker River/Essex Bay)

(25,500 acres, 1979) Essex, Gloucester, Ipswich, Newbury, and Rowley

Herring River Watershed

(4,450 acres, 1991) Bourne and Plymouth

Hinsdale Flats Watershed

(14,500 acres, 1992) Dalton, Hinsdale, Peru, and Washington

Hockomock Swamp

(16,950 acres, 1990) Bridgewater, Easton, Norton, Raynham, Taunton, and West Bridgewater

Inner Cape Cod Bay

(2,600 acres, 1985) Brewster, Eastham, and Orleans

Kampoosa Bog Drainage Basin

(1,350 acres, 1995) Lee and Stockbridge

Karner Brook Watershed

(7,000 acres, 1992) Egremont and Mount Washington

Miscoe, Warren, and Whitehall Watersheds

(8,700 acres, 2000) Grafton, Hopkinton, and Upton

Neponset River Estuary

(1,300 acres, 1995) Boston, Milton, and Quincy

Petapawag

(25,680 acres, 2002) Ayer, Dunstable, Groton, Pepperell, and Tyngsborough

Pleasant Bay

(9,240 acres, 1987) Brewster, Chatham, Harwich, and Orleans

Pocasset River

(160 acres, 1980) Bourne

Rumney Marshes

(2,800 acres, 1988) Boston, Lynn, Revere, Saugus, and Winthrop

Sandy Neck Barrier Beach System

(9,130 acres, 1978) Barnstable and Sandwich

Schenob Brook Drainage Basin

(13,750 acres, 1990) Mount Washington and Sheffield

Squannassit

(37,420 acres, 2002) Ashby, Ayer, Groton, Harvard, Lancaster, Lunenburg, Pepperell, Shirley, and Townsend

Three Mile River Watershed

(14,280 acres, 2008) Dighton, Norton, Taunton

Upper Housatonic River

(12,280 acres, 2009) Lee, Lenox, Pittsfield, Washington

Waquoit Bay

(2,580 acres, 1979) Falmouth and Mashpee

Weir River

(950 acres, 1986) Cohasset, Hingham, and Hull

Wellfleet Harbor

(12,480 acres, 1989) Eastham, Truro, and Wellfleet

Weymouth Back River

(800 acres, 1982) Hingham and Weymouth

Towns with ACECs within their Boundaries**November 2010**

TOWN	ACEC	TOWN	ACEC
Ashby	Squannassit	Mt. Washington	Karner Brook Watershed
Ayer	Petapawag		Schenob Brook
	Squannassit	Newbury	Great Marsh
Barnstable	Sandy Neck Barrier Beach System	Norton	Hockomock Swamp
Bolton	Central Nashua River Valley		Canoe River Aquifer
Boston	Rumney Marshes		Three Mile River Watershed
	Fowl Meadow and Ponkapoag Bog	Norwood	Fowl Meadow and Ponkapoag Bog
	Neponset River Estuary	Orleans	Inner Cape Cod Bay
Bourne	Pocasset River		Pleasant Bay
	Bourne Back River	Pepperell	Petapawag
	Herring River Watershed		Squannassit
Braintree	Cranberry Brook Watershed	Peru	Hinsdale Flats Watershed
Brewster	Pleasant Bay	Pittsfield	Upper Housatonic River
	Inner Cape Cod Bay	Plymouth	Herring River Watershed
Bridgewater	Hockomock Swamp		Ellisville Harbor
Canton	Fowl Meadow and Ponkapoag Bog	Quincy	Neponset River Estuary
Chatham	Pleasant Bay	Randolph	Fowl Meadow and Ponkapoag Bog
Cohasset	Weir River	Raynham	Hockomock Swamp
Dalton	Hinsdale Flats Watershed	Revere	Rumney Marshes
Dedham	Fowl Meadow and Ponkapoag Bog	Rowley	Great Marsh
Dighton	Three Mile River Watershed	Sandwich	Sandy Neck Barrier Beach System
Dunstable	Petapawag	Saugus	Rumney Marshes
Eastham	Inner Cape Cod Bay		Golden Hills
	Wellfleet Harbor	Sharon	Canoe River Aquifer
Easton	Canoe River Aquifer		Fowl Meadow and Ponkapoag Bog
	Hockomock Swamp	Sheffield	Schenob Brook
Egremont	Karner Brook Watershed	Shirley	Squannassit
Essex	Great Marsh	Stockbridge	Kampoosa Bog Drainage Basin
Falmouth	Waquoit Bay	Taunton	Hockomock Swamp
Foxborough	Canoe River Aquifer		Canoe River Aquifer
Gloucester	Great Marsh		Three Mile River Watershed
Grafton	Miscoe-Warren-Whitehall Watersheds	Truro	Wellfleet Harbor
		Townsend	Squannassit
Groton	Petapawag	Tyngsborough	Petapawag
	Squannassit	Upton	Miscoe-Warren-Whitehall Watersheds
Harvard	Central Nashua River Valley		
	Squannassit	Wakefield	Golden Hills
Harwich	Pleasant Bay	Washington	Hinsdale Flats Watershed
Hingham	Weir River		Upper Housatonic River
	Weymouth Back River	Wellfleet	Wellfleet Harbor
Hinsdale	Hinsdale Flats Watershed	W Bridgewater	Hockomock Swamp
Holbrook	Cranberry Brook Watershed	Westborough	Cedar Swamp
Hopkinton	Miscoe-Warren-Whitehall Watersheds	Westwood	Fowl Meadow and Ponkapoag Bog
		Weymouth	Weymouth Back River
	Cedar Swamp	Winthrop	Rumney Marshes
Hull	Weir River		
Ipswich	Great Marsh		
Lancaster	Central Nashua River Valley		
	Squannassit		
Lee	Kampoosa Bog Drainage Basin		
	Upper Housatonic River		
Lenox	Upper Housatonic River		
Leominster	Central Nashua River Valley		
Lunenburg	Squannassit		
Lynn	Rumney Marshes		
Mansfield	Canoe River Aquifer		
Mashpee	Waquoit Bay		
Melrose	Golden Hills		
Milton	Fowl Meadow and Ponkapoag Bog		
	Neponset River Estuary		

MassDEP - Bureau of Waste Site Cleanup

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

Site Information:

SEAPORT SQUARE PARCEL J
11 SEAPORT BOULEVARD BOSTON, MA

NAD83 UTM Meters:
4690923mN , 331394mE (Zone: 19)
August 14, 2014

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	PWS Protection Areas: Zone II, IWPA, Zone A			
Boundaries: Town, County, DEP Region; Train; Powerline; Pipeline; Aqueduct	Hydrography: Open Water, PWS Reservoir, Tidal Flat			
Basins: Major, PWS; Streams: Perennial, Intermittent, Man Made Shore, Dam	Wetlands: Freshwater, Saltwater, Cranberry Bog			
Aquifers: Medium Yield, High Yield, EPA Sole Source	FEMA 100yr Floodplain; Protected Open Space; ACEC			
Non Potential Drinking Water Source Area: Medium, High (Yield)	Est. Rare Wetland Wildlife Hab; Vernal Pool: Cert., Potential			
	Solid Waste Landfill; PWS: Com. GW, SW, Emerg., Non-Com.			

Appendix D
National Register of Historic Places and
Massachusetts Historical Commission Documentation

Massachusetts Historical Commission

William Francis Galvin, Secretary of the Commonwealth

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[MHC Home](#)

Massachusetts Cultural Resource Information System **MACRIS**

[Scanned forms and photos now available for selected towns!](#)

The Massachusetts Cultural Resource Information System (MACRIS) allows you to search the Massachusetts Historical Commission database for information on historic properties and areas in the Commonwealth.

Users of the database should keep in mind that it does not include information on all historic properties and areas in Massachusetts, nor does it reflect all the information on file on historic properties and areas at the Massachusetts Historical Commission.

[Click here to begin your search of the MACRIS database.](#)



[Home](#) | [Search](#) | [Index](#) | [Feedback](#) | [Contact](#)

Massachusetts Cultural Resource Information System

MACRIS

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For more information about this page and how to use it, [click here](#).

Inventory No: BOS.5560 

Historic Name: Boston Wharf Company Warehouse

Common Name:

Address: 47-55 Thomson Pl
Congress St

City/Town: Boston

Village/Neighborhood: Fort Point Channel; South Boston

Local No: 602654001

Year Constructed: 1924

Architect(s): Prescott, Howard S. B.

Architectural Style(s): Classical Revival

Use(s): Undetermined; Warehouse

Significance: Architecture; Industry

Area(s):  [BOS.CX: Fort Point Channel District](#)
 [BOS.WZ: Fort Point Channel Historic District](#)
[BOS.ZG: Fort Point Channel Landmark District](#)

Designation(s): Local Historic District (12/9/2008); Nat'l Register District (9/10/2004)

Building Material(s): Wall: Brick

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Massachusetts Cultural Resource Information System

MACRIS

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For more information about this page and how to use it, [click here](#).

Inventory No: BOS.5537 

Historic Name: Boston Wharf Company Warehouse

Common Name:

Address: 47-53 Farnsworth St

City/Town: Boston

Village/Neighborhood: Fort Point Channel; South Boston

Local No: 602661000

Year Constructed: 1895

Architect(s): Safford, Morton D.

Architectural Style(s): Romanesque Revival

Use(s): Undetermined; Warehouse

Significance: Architecture; Industry

Area(s):  [BOS.CX: Fort Point Channel District](#)
 [BOS.WZ: Fort Point Channel Historic District](#)
[BOS.ZG: Fort Point Channel Landmark District](#)

Designation(s): Local Historic District (12/9/2008); Nat'l Register District (9/10/2004)

Building Material(s): Wall: Brick; Granite; Stone, Cut

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Appendix E
Copy of BWSC Permit Application



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

DEWATERING DISCHARGE PERMIT APPLICATION

OWNER / AUTHORIZED APPLICANT PROVIDE INFORMATION HERE: c/o Boston Global Investors, LLC

Company Name: MS Seaport Block J, LLC Address: One Post Office Square, Suite 1900, Boston, MA 02109

Phone number: 617-350-7577 Fax number: 617-350-7571

Contact person name: Andrew Albers Title: Assistant Vice President

Cell number: 617-710-3335 Email address: aalbers@bginvestors.com

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

Owner's Information (if different from above):

Owner of property being dewatered: MS SEAPORT BLOCK J, LLC

Owner's mailing address: c/o Boston Global Investors, LLC
One Post Office Square, Suite 1900, Boston, MA 02109 Phone number: 617-350-7577

Location of Discharge & Proposed Treatment System(s):

Street number and name: 65 Seaport Blvd. Neighborhood South Boston

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

Describe Proposed Pre-Treatment System(s): Sedimentation Tank and bag filters (if required)

BWSC Outfall No. SDO196 Receiving Waters Fort Point Channel

Temporary Discharges (Provide Anticipated Dates of Discharge): From _____ To _____

- | | | |
|---|--|---|
| <input type="checkbox"/> Groundwater Remediation | <input type="checkbox"/> Tank Removal/Installation | <input checked="" type="checkbox"/> Foundation Excavation |
| <input type="checkbox"/> Utility/Manhole Pumping | <input type="checkbox"/> Test Pipe | <input type="checkbox"/> Trench Excavation |
| <input checked="" type="checkbox"/> Accumulated Surface Water | <input type="checkbox"/> Hydrogeologic Testing | <input type="checkbox"/> Other _____ |

Permanent Discharges

- | | |
|---|---|
| <input type="checkbox"/> Foundation Drainage | <input type="checkbox"/> Crawl Space/Footing Drain |
| <input type="checkbox"/> Accumulated Surface Water | <input type="checkbox"/> Non-contact/Uncontaminated Cooling |
| <input type="checkbox"/> Non-contact/Uncontaminated Process | <input type="checkbox"/> 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. **Refer to Figure 3 of the attached NPDES RGP Permit Application.**
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. **Refer to copy of NPDES RGP Permit Application.**
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: Francis M. McLaughlin, Manager Engineering Customer Services
E-mail: MclaughlinF@bwsc.org
Phone: 617-989-7208 Fax: 617-989-7716

BWSC Use Only: Date Received _____ Comments: _____

Appendix F
Laboratory Data Reports



ANALYTICAL REPORT

Lab Number:	L1405736
Client:	Haley & Aldrich, Inc. 465 Medford Street, Suite 2200 Charlestown, MA 02129-1400
ATTN:	Katelyn Tripp
Phone:	(617) 886-7482
Project Name:	SEAPORT SQUARE PARCEL J
Project Number:	34099-400
Report Date:	03/24/14

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

Certifications & Approvals: MA (M-MA086), NY (11148), CT (PH-0574), NH (2003), NJ NELAP (MA935), RI (LAO00065), ME (MA00086), PA (68-03671), USDA (Permit #P-330-11-00240), NC (666), TX (T104704476), DOD (L2217), US Army Corps of Engineers.

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



Project Name: SEAPORT SQUARE PARCEL J
Project Number: 34099-400

Lab Number: L1405736
Report Date: 03/24/14

Alpha Sample ID	Client ID	Sample Location	Collection Date/Time
L1405736-01	HA-J3(OW)	Not Specified	03/19/14 15:00
L1405736-02	HA-J3(OW)-TRIP	Not Specified	03/19/14 00:00
L1405736-03	HA-J5(OW)	Not Specified	03/19/14 12:00

Project Name: SEAPORT SQUARE PARCEL J

Lab Number: L1405736

Project Number: 34099-400

Report Date: 03/24/14

MADEP MCP Response Action Analytical Report Certification

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

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

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



Project Name: SEAPORT SQUARE PARCEL J
Project Number: 34099-400

Lab Number: L1405736
Report Date: 03/24/14

Case Narrative

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

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet all of the requirements of NELAC, for all NELAC accredited parameters. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. 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. Performance criteria for CAM and RCP methods allow for some LCS compound failures to occur and still be within method compliance. In these instances, the specific failures are not narrated but are noted in the associated QC table. This information is also incorporated in the Data Usability format for 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: SEAPORT SQUARE PARCEL J
Project Number: 34099-400

Lab Number: L1405736
Report Date: 03/24/14

Case Narrative (continued)

MCP Related Narratives

Volatile Organics

In reference to question H:

The initial calibration, associated with L1405736-01 and -02 (HA-J3(OW) and HA-J3(OW)-TRIP), did not meet the method required minimum response factor on the lowest calibration standard for 1,4-dioxane (0.00318), as well as the average response factor for 1,4-dioxane.

The continuing calibration standard, associated with L1405736-01 and -02 (HA-J3(OW) and HA-J3(OW)-TRIP), is outside the acceptance criteria for several compounds; however, it is within overall method allowances. A copy of the continuing calibration standard is included as an addendum to this report.

VPH

In reference to question I:

L1405736-03 (HA-J5(OW)) was analyzed for a subset of MCP compounds per the Chain of Custody.

EPH

In reference to question I:

L1405736-03 (HA-J5(OW)) was analyzed for a subset of MCP compounds per the Chain of Custody.

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

Authorized Signature:

 Michelle M. Morris

Title: Technical Director/Representative

Date: 03/24/14

ORGANICS

VOLATILES

Project Name: SEAPORT SQUARE PARCEL J**Lab Number:** L1405736**Project Number:** 34099-400**Report Date:** 03/24/14**SAMPLE RESULTS**

Lab ID: L1405736-01
Client ID: HA-J3(OW)
Sample Location: Not Specified
Matrix: Water
Analytical Method: 97,8260C
Analytical Date: 03/21/14 10:13
Analyst: MM

Date Collected: 03/19/14 15:00
Date Received: 03/19/14
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Methylene chloride	ND		ug/l	2.0	--	1
1,1-Dichloroethane	ND		ug/l	1.0	--	1
Chloroform	ND		ug/l	1.0	--	1
Carbon tetrachloride	ND		ug/l	1.0	--	1
1,2-Dichloropropane	ND		ug/l	1.0	--	1
Dibromochloromethane	ND		ug/l	1.0	--	1
1,1,2-Trichloroethane	ND		ug/l	1.0	--	1
Tetrachloroethene	ND		ug/l	1.0	--	1
Chlorobenzene	ND		ug/l	1.0	--	1
Trichlorofluoromethane	ND		ug/l	2.0	--	1
1,2-Dichloroethane	ND		ug/l	1.0	--	1
1,1,1-Trichloroethane	ND		ug/l	1.0	--	1
Bromodichloromethane	ND		ug/l	1.0	--	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	--	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	--	1
1,1-Dichloropropene	ND		ug/l	2.0	--	1
Bromoform	ND		ug/l	2.0	--	1
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Benzene	ND		ug/l	0.50	--	1
Toluene	ND		ug/l	1.0	--	1
Ethylbenzene	ND		ug/l	1.0	--	1
Chloromethane	ND		ug/l	2.0	--	1
Bromomethane	ND		ug/l	2.0	--	1
Vinyl chloride	ND		ug/l	1.0	--	1
Chloroethane	ND		ug/l	2.0	--	1
1,1-Dichloroethene	ND		ug/l	1.0	--	1
trans-1,2-Dichloroethene	ND		ug/l	1.0	--	1
Trichloroethene	ND		ug/l	1.0	--	1
1,2-Dichlorobenzene	ND		ug/l	1.0	--	1
1,3-Dichlorobenzene	ND		ug/l	1.0	--	1
1,4-Dichlorobenzene	ND		ug/l	1.0	--	1

Project Name: SEAPORT SQUARE PARCEL J**Lab Number:** L1405736**Project Number:** 34099-400**Report Date:** 03/24/14**SAMPLE RESULTS**

Lab ID: L1405736-01

Date Collected: 03/19/14 15:00

Client ID: HA-J3(OW)

Date Received: 03/19/14

Sample Location: Not Specified

Field Prep: Not Specified

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

Project Name: SEAPORT SQUARE PARCEL J**Lab Number:** L1405736**Project Number:** 34099-400**Report Date:** 03/24/14**SAMPLE RESULTS**

Lab ID: L1405736-01

Date Collected: 03/19/14 15:00

Client ID: HA-J3(OW)

Date Received: 03/19/14

Sample Location: Not Specified

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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MCP Volatile Organics - Westborough Lab

1,4-Dioxane	ND		ug/l	250	--	1
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Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	98		70-130
Toluene-d8	94		70-130
4-Bromofluorobenzene	98		70-130
Dibromofluoromethane	100		70-130

Project Name: SEAPORT SQUARE PARCEL J**Lab Number:** L1405736**Project Number:** 34099-400**Report Date:** 03/24/14**SAMPLE RESULTS**

Lab ID: L1405736-02
Client ID: HA-J3(OW)-TRIP
Sample Location: Not Specified
Matrix: Water
Analytical Method: 97,8260C
Analytical Date: 03/21/14 09:40
Analyst: MM

Date Collected: 03/19/14 00:00
Date Received: 03/19/14
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Methylene chloride	ND		ug/l	2.0	--	1
1,1-Dichloroethane	ND		ug/l	1.0	--	1
Chloroform	ND		ug/l	1.0	--	1
Carbon tetrachloride	ND		ug/l	1.0	--	1
1,2-Dichloropropane	ND		ug/l	1.0	--	1
Dibromochloromethane	ND		ug/l	1.0	--	1
1,1,2-Trichloroethane	ND		ug/l	1.0	--	1
Tetrachloroethene	ND		ug/l	1.0	--	1
Chlorobenzene	ND		ug/l	1.0	--	1
Trichlorofluoromethane	ND		ug/l	2.0	--	1
1,2-Dichloroethane	ND		ug/l	1.0	--	1
1,1,1-Trichloroethane	ND		ug/l	1.0	--	1
Bromodichloromethane	ND		ug/l	1.0	--	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	--	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	--	1
1,1-Dichloropropene	ND		ug/l	2.0	--	1
Bromoform	ND		ug/l	2.0	--	1
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Benzene	ND		ug/l	0.50	--	1
Toluene	ND		ug/l	1.0	--	1
Ethylbenzene	ND		ug/l	1.0	--	1
Chloromethane	ND		ug/l	2.0	--	1
Bromomethane	ND		ug/l	2.0	--	1
Vinyl chloride	ND		ug/l	1.0	--	1
Chloroethane	ND		ug/l	2.0	--	1
1,1-Dichloroethene	ND		ug/l	1.0	--	1
trans-1,2-Dichloroethene	ND		ug/l	1.0	--	1
Trichloroethene	ND		ug/l	1.0	--	1
1,2-Dichlorobenzene	ND		ug/l	1.0	--	1
1,3-Dichlorobenzene	ND		ug/l	1.0	--	1
1,4-Dichlorobenzene	ND		ug/l	1.0	--	1

Project Name: SEAPORT SQUARE PARCEL J**Lab Number:** L1405736**Project Number:** 34099-400**Report Date:** 03/24/14**SAMPLE RESULTS**

Lab ID: L1405736-02
 Client ID: HA-J3(OW)-TRIP
 Sample Location: Not Specified

Date Collected: 03/19/14 00:00
 Date Received: 03/19/14
 Field Prep: Not Specified

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

Project Name: SEAPORT SQUARE PARCEL J**Lab Number:** L1405736**Project Number:** 34099-400**Report Date:** 03/24/14**SAMPLE RESULTS**

Lab ID: L1405736-02
 Client ID: HA-J3(OW)-TRIP
 Sample Location: Not Specified

Date Collected: 03/19/14 00:00
 Date Received: 03/19/14
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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MCP Volatile Organics - Westborough Lab

1,4-Dioxane	ND		ug/l	250	--	1
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Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	98		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	102		70-130
Dibromofluoromethane	99		70-130

Project Name: SEAPORT SQUARE PARCEL J
Project Number: 34099-400

Lab Number: L1405736
Report Date: 03/24/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 97,8260C
Analytical Date: 03/21/14 08:35
Analyst: MM

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics - Westborough Lab for sample(s): 01-02 Batch: WG677072-3					
Methylene chloride	ND		ug/l	2.0	--
1,1-Dichloroethane	ND		ug/l	1.0	--
Chloroform	ND		ug/l	1.0	--
Carbon tetrachloride	ND		ug/l	1.0	--
1,2-Dichloropropane	ND		ug/l	1.0	--
Dibromochloromethane	ND		ug/l	1.0	--
1,1,2-Trichloroethane	ND		ug/l	1.0	--
Tetrachloroethene	ND		ug/l	1.0	--
Chlorobenzene	ND		ug/l	1.0	--
Trichlorofluoromethane	ND		ug/l	2.0	--
1,2-Dichloroethane	ND		ug/l	1.0	--
1,1,1-Trichloroethane	ND		ug/l	1.0	--
Bromodichloromethane	ND		ug/l	1.0	--
trans-1,3-Dichloropropene	ND		ug/l	0.50	--
cis-1,3-Dichloropropene	ND		ug/l	0.50	--
1,1-Dichloropropene	ND		ug/l	2.0	--
Bromoform	ND		ug/l	2.0	--
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	--
Benzene	ND		ug/l	0.50	--
Toluene	ND		ug/l	1.0	--
Ethylbenzene	ND		ug/l	1.0	--
Chloromethane	ND		ug/l	2.0	--
Bromomethane	ND		ug/l	2.0	--
Vinyl chloride	ND		ug/l	1.0	--
Chloroethane	ND		ug/l	2.0	--
1,1-Dichloroethene	ND		ug/l	1.0	--
trans-1,2-Dichloroethene	ND		ug/l	1.0	--
Trichloroethene	ND		ug/l	1.0	--
1,2-Dichlorobenzene	ND		ug/l	1.0	--
1,3-Dichlorobenzene	ND		ug/l	1.0	--
1,4-Dichlorobenzene	ND		ug/l	1.0	--

Project Name: SEAPORT SQUARE PARCEL J
Project Number: 34099-400

Lab Number: L1405736
Report Date: 03/24/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 97,8260C
Analytical Date: 03/21/14 08:35
Analyst: MM

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics - Westborough Lab for sample(s): 01-02 Batch: WG677072-3					
Methyl tert butyl ether	ND		ug/l	2.0	--
p/m-Xylene	ND		ug/l	2.0	--
o-Xylene	ND		ug/l	1.0	--
cis-1,2-Dichloroethene	ND		ug/l	1.0	--
Dibromomethane	ND		ug/l	2.0	--
1,2,3-Trichloropropane	ND		ug/l	2.0	--
Styrene	ND		ug/l	1.0	--
Dichlorodifluoromethane	ND		ug/l	2.0	--
Acetone	ND		ug/l	5.0	--
Carbon disulfide	ND		ug/l	2.0	--
2-Butanone	ND		ug/l	5.0	--
4-Methyl-2-pentanone	ND		ug/l	5.0	--
2-Hexanone	ND		ug/l	5.0	--
Bromochloromethane	ND		ug/l	2.0	--
Tetrahydrofuran	ND		ug/l	2.0	--
2,2-Dichloropropane	ND		ug/l	2.0	--
1,2-Dibromoethane	ND		ug/l	2.0	--
1,3-Dichloropropane	ND		ug/l	2.0	--
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	--
Bromobenzene	ND		ug/l	2.0	--
n-Butylbenzene	ND		ug/l	2.0	--
sec-Butylbenzene	ND		ug/l	2.0	--
tert-Butylbenzene	ND		ug/l	2.0	--
o-Chlorotoluene	ND		ug/l	2.0	--
p-Chlorotoluene	ND		ug/l	2.0	--
1,2-Dibromo-3-chloropropane	ND		ug/l	2.0	--
Hexachlorobutadiene	ND		ug/l	0.60	--
Isopropylbenzene	ND		ug/l	2.0	--
p-Isopropyltoluene	ND		ug/l	2.0	--
Naphthalene	ND		ug/l	2.0	--
n-Propylbenzene	ND		ug/l	2.0	--

Project Name: SEAPORT SQUARE PARCEL J
Project Number: 34099-400

Lab Number: L1405736
Report Date: 03/24/14

**Method Blank Analysis
Batch Quality Control**

Analytical Method: 97,8260C
Analytical Date: 03/21/14 08:35
Analyst: MM

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics - Westborough Lab for sample(s): 01-02 Batch: WG677072-3					
1,2,3-Trichlorobenzene	ND		ug/l	2.0	--
1,2,4-Trichlorobenzene	ND		ug/l	2.0	--
1,3,5-Trimethylbenzene	ND		ug/l	2.0	--
1,2,4-Trimethylbenzene	ND		ug/l	2.0	--
Ethyl ether	ND		ug/l	2.0	--
Isopropyl Ether	ND		ug/l	2.0	--
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0	--
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	--
1,4-Dioxane	ND		ug/l	250	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	96		70-130
Toluene-d8	93		70-130
4-Bromofluorobenzene	98		70-130
Dibromofluoromethane	98		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: SEAPORT SQUARE PARCEL J

Lab Number: L1405736

Project Number: 34099-400

Report Date: 03/24/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 01-02 Batch: WG677072-1 WG677072-2								
Methylene chloride	105		101		70-130	4		20
1,1-Dichloroethane	97		91		70-130	6		20
Chloroform	102		93		70-130	9		20
Carbon tetrachloride	102		98		70-130	4		20
1,2-Dichloropropane	95		90		70-130	5		20
Dibromochloromethane	93		96		70-130	3		20
1,1,2-Trichloroethane	96		95		70-130	1		20
Tetrachloroethene	95		95		70-130	0		20
Chlorobenzene	93		92		70-130	1		20
Trichlorofluoromethane	103		100		70-130	3		20
1,2-Dichloroethane	99		93		70-130	6		20
1,1,1-Trichloroethane	102		97		70-130	5		20
Bromodichloromethane	100		95		70-130	5		20
trans-1,3-Dichloropropene	91		96		70-130	5		20
cis-1,3-Dichloropropene	98		94		70-130	4		20
1,1-Dichloropropene	98		91		70-130	7		20
Bromoform	88		94		70-130	7		20
1,1,2,2-Tetrachloroethane	93		98		70-130	5		20
Benzene	95		92		70-130	3		20
Toluene	91		95		70-130	4		20
Ethylbenzene	90		94		70-130	4		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: SEAPORT SQUARE PARCEL J

Lab Number: L1405736

Project Number: 34099-400

Report Date: 03/24/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 01-02 Batch: WG677072-1 WG677072-2								
Chloromethane	81		75		70-130	8		20
Bromomethane	76		80		70-130	5		20
Vinyl chloride	90		85		70-130	6		20
Chloroethane	99		92		70-130	7		20
1,1-Dichloroethene	104		97		70-130	7		20
trans-1,2-Dichloroethene	103		93		70-130	10		20
Trichloroethene	100		91		70-130	9		20
1,2-Dichlorobenzene	96		98		70-130	2		20
1,3-Dichlorobenzene	93		96		70-130	3		20
1,4-Dichlorobenzene	94		98		70-130	4		20
Methyl tert butyl ether	104		96		70-130	8		20
p/m-Xylene	93		95		70-130	2		20
o-Xylene	92		95		70-130	3		20
cis-1,2-Dichloroethene	100		96		70-130	4		20
Dibromomethane	101		95		70-130	6		20
1,2,3-Trichloropropane	91		94		70-130	3		20
Styrene	106		113		70-130	6		20
Dichlorodifluoromethane	78		73		70-130	7		20
Acetone	155	Q	160	Q	70-130	3		20
Carbon disulfide	98		91		70-130	7		20
2-Butanone	118		111		70-130	6		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: SEAPORT SQUARE PARCEL J

Project Number: 34099-400

Lab Number: L1405736

Report Date: 03/24/14

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
MCP Volatile Organics - Westborough Lab Associated sample(s): 01-02 Batch: WG677072-1 WG677072-2								
4-Methyl-2-pentanone	98		99		70-130	1		20
2-Hexanone	104		116		70-130	11		20
Bromochloromethane	102		96		70-130	6		20
Tetrahydrofuran	90		96		70-130	6		20
2,2-Dichloropropane	103		97		70-130	6		20
1,2-Dibromoethane	96		92		70-130	4		20
1,3-Dichloropropane	94		95		70-130	1		20
1,1,1,2-Tetrachloroethane	92		94		70-130	2		20
Bromobenzene	92		97		70-130	5		20
n-Butylbenzene	95		94		70-130	1		20
sec-Butylbenzene	92		96		70-130	4		20
tert-Butylbenzene	93		97		70-130	4		20
o-Chlorotoluene	92		94		70-130	2		20
p-Chlorotoluene	94		96		70-130	2		20
1,2-Dibromo-3-chloropropane	74		88		70-130	17		20
Hexachlorobutadiene	102		101		70-130	1		20
Isopropylbenzene	95		96		70-130	1		20
p-Isopropyltoluene	94		97		70-130	3		20
Naphthalene	98		101		70-130	3		20
n-Propylbenzene	92		95		70-130	3		20
1,2,3-Trichlorobenzene	104		100		70-130	4		20

Lab Control Sample Analysis Batch Quality Control

Project Name: SEAPORT SQUARE PARCEL J
Project Number: 34099-400

Lab Number: L1405736
Report Date: 03/24/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 01-02 Batch: WG677072-1 WG677072-2								
1,2,4-Trichlorobenzene	102		99		70-130	3		20
1,3,5-Trimethylbenzene	91		98		70-130	7		20
1,2,4-Trimethylbenzene	93		98		70-130	5		20
Ethyl ether	100		88		70-130	13		20
Isopropyl Ether	95		91		70-130	4		20
Ethyl-Tert-Butyl-Ether	97		92		70-130	5		20
Tertiary-Amyl Methyl Ether	100		93		70-130	7		20
1,4-Dioxane	110		117		70-130	6		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	99		92		70-130
Toluene-d8	93		94		70-130
4-Bromofluorobenzene	95		98		70-130
Dibromofluoromethane	102		95		70-130

PETROLEUM HYDROCARBONS

Project Name: SEAPORT SQUARE PARCEL J**Lab Number:** L1405736**Project Number:** 34099-400**Report Date:** 03/24/14**SAMPLE RESULTS**

Lab ID: L1405736-01
Client ID: HA-J3(OW)
Sample Location: Not Specified
Matrix: Water
Analytical Method: 100, VPH-04-1.1
Analytical Date: 03/20/14 14:29
Analyst: BS

Date Collected: 03/19/14 15:00
Date Received: 03/19/14
Field Prep: Not Specified

Quality Control Information

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

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,5-Dibromotoluene-PID	93		70-130
2,5-Dibromotoluene-FID	99		70-130

Project Name: SEAPORT SQUARE PARCEL J**Lab Number:** L1405736**Project Number:** 34099-400**Report Date:** 03/24/14**SAMPLE RESULTS**

Lab ID: L1405736-01
 Client ID: HA-J3(OW)
 Sample Location: Not Specified
 Matrix: Water
 Analytical Method: 98,EPH-04-1.1
 Analytical Date: 03/24/14 11:36
 Analyst: SR

M.S. Analytical Date: 03/21/14 18:13
 M.S. Analyst: MW

Date Collected: 03/19/14 15:00
 Date Received: 03/19/14
 Field Prep: Not Specified
 Extraction Method: EPA 3510C
 Extraction Date: 03/19/14 21:49
 Cleanup Method1: EPH-04-1
 Cleanup Date1: 03/21/14

Quality Control Information

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

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

Project Name: SEAPORT SQUARE PARCEL J**Lab Number:** L1405736**Project Number:** 34099-400**Report Date:** 03/24/14**SAMPLE RESULTS**

Lab ID: L1405736-01

Date Collected: 03/19/14 15:00

Client ID: HA-J3(OW)

Date Received: 03/19/14

Sample Location: Not Specified

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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EPH w/MS Targets - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Chloro-Octadecane	41		40-140
o-Terphenyl	45		40-140
2-Fluorobiphenyl	55		40-140
2-Bromonaphthalene	55		40-140
O-Terphenyl-MS	62		40-140

Project Name: SEAPORT SQUARE PARCEL J
Project Number: 34099-400

Lab Number: L1405736
Report Date: 03/24/14

SAMPLE RESULTS

Lab ID: L1405736-03
 Client ID: HA-J5(OW)
 Sample Location: Not Specified
 Matrix: Water
 Analytical Method: 100, VPH-04-1.1
 Analytical Date: 03/21/14 12:23
 Analyst: BS

Date Collected: 03/19/14 12:00
 Date Received: 03/19/14
 Field Prep: Not Specified

Quality Control Information

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

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Volatile Petroleum Hydrocarbons - Westborough Lab

C5-C8 Aliphatics	ND		ug/l	50.0	--	1
C9-C12 Aliphatics	ND		ug/l	50.0	--	1
C9-C10 Aromatics	ND		ug/l	50.0	--	1
C5-C8 Aliphatics, Adjusted	ND		ug/l	50.0	--	1
C9-C12 Aliphatics, Adjusted	ND		ug/l	50.0	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,5-Dibromotoluene-PID	82		70-130
2,5-Dibromotoluene-FID	85		70-130

Project Name: SEAPORT SQUARE PARCEL J**Lab Number:** L1405736**Project Number:** 34099-400**Report Date:** 03/24/14**SAMPLE RESULTS**

Lab ID: L1405736-03
 Client ID: HA-J5(OW)
 Sample Location: Not Specified
 Matrix: Water
 Analytical Method: 98,EPH-04-1.1
 Analytical Date: 03/22/14 14:01
 Analyst: SR

Date Collected: 03/19/14 12:00
 Date Received: 03/19/14
 Field Prep: Not Specified
 Extraction Method: EPA 3510C
 Extraction Date: 03/21/14 12:26
 Cleanup Method1: EPH-04-1
 Cleanup Date1: 03/21/14

Quality Control Information

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

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Chloro-Octadecane	60		40-140
o-Terphenyl	105		40-140
2-Fluorobiphenyl	94		40-140
2-Bromonaphthalene	87		40-140

Project Name: SEAPORT SQUARE PARCEL J
Project Number: 34099-400

Lab Number: L1405736
Report Date: 03/24/14

**Method Blank Analysis
Batch Quality Control**

Analytical Method: 98,EPH-04-1.1
Analytical Date: 03/24/14 11:05
Analyst: SR

M.S. Analytical Date: 03/21/14 16:35
M.S. Analyst: MW

Extraction Method: EPA 3510C
Extraction Date: 03/19/14 21:49
Cleanup Method1: EPH-04-1
Cleanup Date1: 03/21/14

Parameter	Result	Qualifier	Units	RL	MDL
EPH w/MS Targets - Westborough Lab for sample(s): 01 Batch: WG676616-1					
C9-C18 Aliphatics	ND		ug/l	100	--
C19-C36 Aliphatics	ND		ug/l	100	--
C11-C22 Aromatics	ND		ug/l	100	--
C11-C22 Aromatics, Adjusted	ND		ug/l	100	--
Naphthalene	ND		ug/l	0.400	--
2-Methylnaphthalene	ND		ug/l	0.400	--
Acenaphthylene	ND		ug/l	0.400	--
Acenaphthene	ND		ug/l	0.400	--
Fluorene	ND		ug/l	0.400	--
Phenanthrene	ND		ug/l	0.400	--
Anthracene	ND		ug/l	0.400	--
Fluoranthene	ND		ug/l	0.400	--
Pyrene	ND		ug/l	0.400	--
Benzo(a)anthracene	ND		ug/l	0.400	--
Chrysene	ND		ug/l	0.400	--
Benzo(b)fluoranthene	ND		ug/l	0.400	--
Benzo(k)fluoranthene	ND		ug/l	0.400	--
Benzo(a)pyrene	ND		ug/l	0.200	--
Indeno(1,2,3-cd)Pyrene	ND		ug/l	0.400	--
Dibenzo(a,h)anthracene	ND		ug/l	0.400	--
Benzo(ghi)perylene	ND		ug/l	0.400	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
Chloro-Octadecane	50		40-140
o-Terphenyl	56		40-140
2-Fluorobiphenyl	68		40-140
2-Bromonaphthalene	65		40-140
O-Terphenyl-MS	65		40-140

Project Name: SEAPORT SQUARE PARCEL J
Project Number: 34099-400

Lab Number: L1405736
Report Date: 03/24/14

**Method Blank Analysis
Batch Quality Control**

Analytical Method: 100, VPH-04-1.1
Analytical Date: 03/20/14 10:34
Analyst: BS

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Petroleum Hydrocarbons - Westborough Lab for sample(s): 01 Batch: WG676792-3					
C5-C8 Aliphatics	ND		ug/l	50.0	--
C9-C12 Aliphatics	ND		ug/l	50.0	--
C9-C10 Aromatics	ND		ug/l	50.0	--
C5-C8 Aliphatics, Adjusted	ND		ug/l	50.0	--
C9-C12 Aliphatics, Adjusted	ND		ug/l	50.0	--
Benzene	ND		ug/l	2.00	--
Toluene	ND		ug/l	2.00	--
Ethylbenzene	ND		ug/l	2.00	--
p/m-Xylene	ND		ug/l	2.00	--
o-Xylene	ND		ug/l	2.00	--
Methyl tert butyl ether	ND		ug/l	3.00	--
Naphthalene	ND		ug/l	4.00	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2,5-Dibromotoluene-PID	86		70-130
2,5-Dibromotoluene-FID	91		70-130

Project Name: SEAPORT SQUARE PARCEL J
Project Number: 34099-400

Lab Number: L1405736
Report Date: 03/24/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 98,EPH-04-1.1
Analytical Date: 03/22/14 11:53
Analyst: SR

Extraction Method: EPA 3510C
Extraction Date: 03/21/14 12:26
Cleanup Method1: EPH-04-1
Cleanup Date1: 03/21/14

Parameter	Result	Qualifier	Units	RL	MDL
Extractable Petroleum Hydrocarbons - Westborough Lab for sample(s): 03 Batch: WG677081-1					
C9-C18 Aliphatics	ND		ug/l	100	--
C19-C36 Aliphatics	ND		ug/l	100	--
C11-C22 Aromatics	ND		ug/l	100	--
C11-C22 Aromatics, Adjusted	ND		ug/l	100	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
Chloro-Octadecane	76		40-140
o-Terphenyl	71		40-140
2-Fluorobiphenyl	72		40-140
2-Bromonaphthalene	75		40-140

Project Name: SEAPORT SQUARE PARCEL J
Project Number: 34099-400

Lab Number: L1405736
Report Date: 03/24/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 100, VPH-04-1.1
 Analytical Date: 03/21/14 11:22
 Analyst: BS

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Petroleum Hydrocarbons - Westborough Lab for sample(s): 03 Batch: WG677390-3					
C5-C8 Aliphatics	ND		ug/l	50.0	--
C9-C12 Aliphatics	ND		ug/l	50.0	--
C9-C10 Aromatics	ND		ug/l	50.0	--
C5-C8 Aliphatics, Adjusted	ND		ug/l	50.0	--
C9-C12 Aliphatics, Adjusted	ND		ug/l	50.0	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2,5-Dibromotoluene-PID	80		70-130
2,5-Dibromotoluene-FID	84		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: SEAPORT SQUARE PARCEL J

Project Number: 34099-400

Lab Number: L1405736

Report Date: 03/24/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
EPH w/MS Targets - Westborough Lab Associated sample(s): 01 Batch: WG676616-2 WG676616-3								
C9-C18 Aliphatics	49		50		40-140	2		25
C19-C36 Aliphatics	80		79		40-140	1		25
C11-C22 Aromatics	81		70		40-140	15		25
Naphthalene	64		61		40-140	5		25
2-Methylnaphthalene	72		66		40-140	9		25
Acenaphthylene	67		64		40-140	5		25
Acenaphthene	75		76		40-140	1		25
Fluorene	70		71		40-140	1		25
Phenanthrene	90		74		40-140	20		25
Anthracene	67		71		40-140	6		25
Fluoranthene	89		84		40-140	6		25
Pyrene	84		82		40-140	2		25
Benzo(a)anthracene	74		79		40-140	7		25
Chrysene	74		79		40-140	7		25
Benzo(b)fluoranthene	91		80		40-140	13		25
Benzo(k)fluoranthene	92		83		40-140	10		25
Benzo(a)pyrene	69		62		40-140	11		25
Indeno(1,2,3-cd)Pyrene	81		86		40-140	6		25
Dibenzo(a,h)anthracene	73		78		40-140	7		25
Benzo(ghi)perylene	78		84		40-140	7		25
Nonane (C9)	25	Q	31		30-140	21		25

Lab Control Sample Analysis

Batch Quality Control

Project Name: SEAPORT SQUARE PARCEL J

Project Number: 34099-400

Lab Number: L1405736

Report Date: 03/24/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
EPH w/MS Targets - Westborough Lab Associated sample(s): 01 Batch: WG676616-2 WG676616-3								
Decane (C10)	36	Q	40		40-140	11		25
Dodecane (C12)	54		53		40-140	2		25
Tetradecane (C14)	62		60		40-140	3		25
Hexadecane (C16)	68		66		40-140	3		25
Octadecane (C18)	75		74		40-140	1		25
Nonadecane (C19)	78		77		40-140	1		25
Eicosane (C20)	79		78		40-140	1		25
Docosane (C22)	81		80		40-140	1		25
Tetracosane (C24)	83		82		40-140	1		25
Hexacosane (C26)	82		81		40-140	1		25
Octacosane (C28)	81		80		40-140	1		25
Triacontane (C30)	83		81		40-140	2		25
Hexatriacontane (C36)	81		79		40-140	3		25

Lab Control Sample Analysis

Batch Quality Control

Project Name: SEAPORT SQUARE PARCEL J

Lab Number: L1405736

Project Number: 34099-400

Report Date: 03/24/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
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EPH w/MS Targets - Westborough Lab Associated sample(s): 01 Batch: WG676616-2 WG676616-3

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
Chloro-Octadecane	74		75		40-140
o-Terphenyl	89		74		40-140
2-Fluorobiphenyl	91		81		40-140
2-Bromonaphthalene	87		77		40-140
O-Terphenyl-MS	40		35	Q	40-140
% Naphthalene Breakthrough	0		0		
% 2-Methylnaphthalene Breakthrough	0		0		

Lab Control Sample Analysis

Batch Quality Control

Project Name: SEAPORT SQUARE PARCEL J

Lab Number: L1405736

Project Number: 34099-400

Report Date: 03/24/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Petroleum Hydrocarbons - Westborough Lab Associated sample(s): 01 Batch: WG676792-1 WG676792-2								
C5-C8 Aliphatics	94		88		70-130	7		25
C9-C12 Aliphatics	101		94		70-130	7		25
C9-C10 Aromatics	98		96		70-130	2		25
Benzene	102		96		70-130	6		25
Toluene	106		100		70-130	6		25
Ethylbenzene	106		101		70-130	5		25
p/m-Xylene	106		101		70-130	5		25
o-Xylene	107		103		70-130	4		25
Methyl tert butyl ether	106		103		70-130	3		25
Naphthalene	113		113		70-130	0		25
1,2,4-Trimethylbenzene	98		96		70-130	2		25
Pentane	84		78		70-130	7		25
2-Methylpentane	95		88		70-130	7		25
2,2,4-Trimethylpentane	104		97		70-130	7		25
n-Nonane	105		98		30-130	7		25
n-Decane	92		86		70-130	7		25
n-Butylcyclohexane	108		102		70-130	6		25

Lab Control Sample Analysis

Batch Quality Control

Project Name: SEAPORT SQUARE PARCEL J
Project Number: 34099-400

Lab Number: L1405736
Report Date: 03/24/14

Parameter	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>%Recovery</i> Limits	<i>RPD</i>	<i>Qual</i>	<i>RPD</i> Limits
-----------	-------------------------	-------------	--------------------------	-------------	----------------------------	------------	-------------	----------------------

Volatile Petroleum Hydrocarbons - Westborough Lab Associated sample(s): 01 Batch: WG676792-1 WG676792-2

<i>Surrogate</i>	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>Acceptance</i> Criteria
2,5-Dibromotoluene-PID	112		109		70-130
2,5-Dibromotoluene-FID	116		115		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: SEAPORT SQUARE PARCEL J

Project Number: 34099-400

Lab Number: L1405736

Report Date: 03/24/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Extractable Petroleum Hydrocarbons - Westborough Lab Associated sample(s): 03 Batch: WG677081-2 WG677081-3								
C9-C18 Aliphatics	62		49		40-140	23		25
C19-C36 Aliphatics	92		74		40-140	22		25
C11-C22 Aromatics	75		94		40-140	22		25
Naphthalene	65		72		40-140	10		25
2-Methylnaphthalene	71		80		40-140	12		25
Acenaphthylene	63		72		40-140	13		25
Acenaphthene	70		79		40-140	12		25
Fluorene	69		82		40-140	17		25
Phenanthrene	73		86		40-140	16		25
Anthracene	76		99		40-140	26	Q	25
Fluoranthene	76		89		40-140	16		25
Pyrene	78		90		40-140	14		25
Benzo(a)anthracene	72		86		40-140	18		25
Chrysene	73		87		40-140	18		25
Benzo(b)fluoranthene	74		89		40-140	18		25
Benzo(k)fluoranthene	80		105		40-140	27	Q	25
Benzo(a)pyrene	71		86		40-140	19		25
Indeno(1,2,3-cd)Pyrene	71		88		40-140	21		25
Dibenzo(a,h)anthracene	68		84		40-140	21		25
Benzo(ghi)perylene	69		85		40-140	21		25
Nonane (C9)	42		31		30-140	30	Q	25

Lab Control Sample Analysis Batch Quality Control

Project Name: SEAPORT SQUARE PARCEL J
Project Number: 34099-400

Lab Number: L1405736
Report Date: 03/24/14

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Extractable Petroleum Hydrocarbons - Westborough Lab Associated sample(s): 03 Batch: WG677081-2 WG677081-3								
Decane (C10)	53		41		40-140	26	Q	25
Dodecane (C12)	66		53		40-140	22		25
Tetradecane (C14)	74		58		40-140	24		25
Hexadecane (C16)	80		65		40-140	21		25
Octadecane (C18)	88		72		40-140	20		25
Nonadecane (C19)	90		73		40-140	21		25
Eicosane (C20)	91		73		40-140	22		25
Docosane (C22)	93		75		40-140	21		25
Tetracosane (C24)	95		76		40-140	22		25
Hexacosane (C26)	94		75		40-140	22		25
Octacosane (C28)	92		74		40-140	22		25
Triacontane (C30)	94		76		40-140	21		25
Hexatriacontane (C36)	93		75		40-140	21		25

Surrogate	LCS		LCSD		Acceptance Criteria
	%Recovery	Qual	%Recovery	Qual	
Chloro-Octadecane	93		66		40-140
o-Terphenyl	92		139		40-140
2-Fluorobiphenyl	74		86		40-140
2-Bromonaphthalene	72		80		40-140
% Naphthalene Breakthrough	0		0		
% 2-Methylnaphthalene Breakthrough	0		0		

Lab Control Sample Analysis

Batch Quality Control

Project Name: SEAPORT SQUARE PARCEL J

Lab Number: L1405736

Project Number: 34099-400

Report Date: 03/24/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Petroleum Hydrocarbons - Westborough Lab Associated sample(s): 03 Batch: WG677390-1 WG677390-2								
C5-C8 Aliphatics	95		91		70-130	5		25
C9-C12 Aliphatics	96		91		70-130	6		25
C9-C10 Aromatics	97		96		70-130	1		25
Benzene	100		98		70-130	2		25
Toluene	104		102		70-130	2		25
Ethylbenzene	104		102		70-130	2		25
p/m-Xylene	104		102		70-130	2		25
o-Xylene	105		104		70-130	1		25
Methyl tert butyl ether	105		104		70-130	1		25
Naphthalene	119		116		70-130	3		25
1,2,4-Trimethylbenzene	97		96		70-130	1		25
Pentane	90		86		70-130	5		25
2-Methylpentane	95		91		70-130	4		25
2,2,4-Trimethylpentane	100		96		70-130	4		25
n-Nonane	100		95		30-130	5		25
n-Decane	88		82		70-130	7		25
n-Butylcyclohexane	104		98		70-130	6		25

Lab Control Sample Analysis

Batch Quality Control

Project Name: SEAPORT SQUARE PARCEL J
Project Number: 34099-400

Lab Number: L1405736
Report Date: 03/24/14

Parameter	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>%Recovery</i> Limits	<i>RPD</i>	<i>Qual</i>	<i>RPD</i> Limits
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Volatile Petroleum Hydrocarbons - Westborough Lab Associated sample(s): 03 Batch: WG677390-1 WG677390-2

<i>Surrogate</i>	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>Acceptance</i> <i>Criteria</i>
2,5-Dibromotoluene-PID	118		113		70-130
2,5-Dibromotoluene-FID	122		118		70-130

Project Name: SEAPORT SQUARE PARCEL J
Project Number: 34099-400

Lab Number: L1405736
Report Date: 03/24/14

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Reagent H2O Preserved Vials Frozen on: NA

Cooler Information Custody Seal

Cooler

A Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1405736-01A	Vial HCl preserved	A	N/A	3.0	Y	Absent	MCP-8260-10(14)
L1405736-01B	Vial HCl preserved	A	N/A	3.0	Y	Absent	MCP-8260-10(14)
L1405736-01C	Vial HCl preserved	A	N/A	3.0	Y	Absent	MCP-8260-10(14)
L1405736-01D	Amber 1000ml HCl preserved	A	<2	3.0	Y	Absent	EPH-MS-10(14),EPHD-GC-10(14)
L1405736-01E	Amber 1000ml HCl preserved	A	<2	3.0	Y	Absent	EPH-MS-10(14),EPHD-GC-10(14)
L1405736-01F	Vial HCl preserved	A	N/A	3.0	Y	Absent	VPH-DELUX-10(14)
L1405736-01G	Vial HCl preserved	A	N/A	3.0	Y	Absent	VPH-DELUX-10(14)
L1405736-01H	Vial HCl preserved	A	N/A	3.0	Y	Absent	VPH-DELUX-10(14)
L1405736-02A	Vial HCl preserved	A	N/A	3.0	Y	Absent	MCP-8260-10(14)
L1405736-03T	Vial HCl preserved	A	N/A	3.0	Y	Absent	VPH-10(14)
L1405736-03U	Vial HCl preserved	A	N/A	3.0	Y	Absent	VPH-10(14)
L1405736-03V	Vial HCl preserved	A	N/A	3.0	Y	Absent	VPH-10(14)
L1405736-03Z1	Amber 1000ml HCl preserved	A	<2	3.0	Y	Absent	EPH-10(14)
L1405736-03Z2	Amber 1000ml HCl preserved	A	<2	3.0	Y	Absent	EPH-10(14)

Container Comments

L1405736-01E

L1405736-03Z2

*Values in parentheses indicate holding time in days



Project Name: SEAPORT SQUARE PARCEL J
Project Number: 34099-400

Lab Number: L1405736
Report Date: 03/24/14

GLOSSARY

Acronyms

EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NI	- Not Ignitable.
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.

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.

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.
- 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.

Report Format: Data Usability Report



Project Name: SEAPORT SQUARE PARCEL J
Project Number: 34099-400

Lab Number: L1405736
Report Date: 03/24/14

Data Qualifiers

- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.
- J** - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- ND** - Not detected at the reporting limit (RL) for the sample.

Project Name: SEAPORT SQUARE PARCEL J
Project Number: 34099-400

Lab Number: L1405736
Report Date: 03/24/14

REFERENCES

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

LIMITATION OF LIABILITIES

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

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



Certification Information

Last revised December 11, 2013

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

Westborough Facility

EPA 524.2: Acetone, 2-Butanone (Methyl ethyl ketone (MEK)), Tert-butyl alcohol, 2-Hexanone, Tetrahydrofuran, 1,3,5-Trichlorobenzene, 4-Methyl-2-pentanone (MIBK), Carbon disulfide, Diethyl ether.

EPA 8260C: 1,2,4,5-Tetramethylbenzene, 4-Ethyltoluene, Iodomethane (methyl iodide), Methyl methacrylate, Azobenzene.

EPA 8330A/B: PETN, Picric Acid, Nitroglycerine, 2,6-DANT, 2,4-DANT.

EPA 8270D: 1-Methylnaphthalene, Dimethylnaphthalene, 1,4-Diphenylhydrazine.

EPA 625: 4-Chloroaniline, 4-Methylphenol.

SM4500: Soil: Total Phosphorus, TKN, NO₂, NO₃.

EPA 9071: Total Petroleum Hydrocarbons, Oil & Grease.

Mansfield Facility

EPA 8270D: Biphenyl.

EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

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

Drinking Water

EPA 200.8: Sb,As,Ba,Be,Cd,Cr,Cu,Pb,Ni,Se,Tl; **EPA 200.7:** Ba,Be,Ca,Cd,Cr,Cu,Na; **EPA 245.1:** Mercury;

EPA 300.0: Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500CI-D, SM2320B, SM2540C, SM4500H-B**

EPA 332: Perchlorate.

Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT, Enterolert-QT.**

Non-Potable Water

EPA 200.8: Al,Sb,As,Be,Cd,Cr,Cu,Pb,Mn,Ni,Se,Ag,Tl,Zn;

EPA 200.7: Al,Sb,As,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Mo,Ni,K,Se,Ag,Na,Sr,Ti,Tl,V,Zn;

EPA 245.1, SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2340B, SM2320B, SM4500CL-E, SM4500F-BC, SM426C, SM4500NH3-BH, EPA 350.1: Ammonia-N, **LACHAT 10-107-06-1-B:** Ammonia-N, **SM4500NO3-F, EPA 353.2:** Nitrate-N, **SM4500NH3-BC-NES, EPA 351.1, SM4500P-E, SM4500P-B, E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, SM14 510AC, EPA 420.1, SM4500-CN-CE, SM2540D.**

EPA 624: Volatile Halocarbons & Aromatics,

EPA 608: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs

EPA 625: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045:** PCB-Oil.

Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9222D-MF.**

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



Haley & Aldrich, Inc.
465 Medford St.,
Suite 2200,
Boston, MA 02129-1402

CHAIN OF CUSTODY RECORD

Phone (617) 886-7400
Fax (617) 886-7600

Page _____ of _____

H&A FILE NO. 34099-400
PROJECT NAME Seaport Square Parcel J
H&A CONTACT Katelyn Tripp, Titania Ng

LABORATORY ALPHA ANALYTICAL
ADDRESS WESTBOROUGH, MA
CONTACT Gina Hall

DELIVERY DATE _____
TURNAROUND TIME 3-DAY
PROJECT MANAGER Katelyn Tripp

Sample No.	Date	Time	Depth	Type	Analysis Requested										Number of Containers	Comments (special instructions, precautions, additional method numbers, etc.)		
					1. VOCs (8260)	2. EPH Deluxe w/ PAH-SDM	3. VPH Deluxe											
HA-J3(OW)	3/19/14	1500	--	AQ	*	*	*										8	Laboratory to use applicable DEP CAM methods, unless otherwise directed. Trip blank for VOCs
HA-J5(OW)	↓	1200	--	AQ	*	*	*										5	
HA-J3(OW)-Trip			--	AQ	*	*	*										1	

FOR EPH and VPH: HA-J3 (EPH deluxe; VPH deluxe); for HA-J5 (EPH ranges only; VPH ranges only)

Sampled and Relinquished by
Sign A. Powell
Print S. Powell
Firm HA
Date 3/19/14 Time _____

Received by
Sign M. Ayub
Print M. Ayub
Firm HA
Date 3/19/14 Time 6:30

LIQUID					
X		X			
	X				
AF	AF	AF			
40 mL	1 L	40 mL			

Sampling Comments
VOA Vial
Amber Glass
Plastic Bottle
Preservative
Volume

Relinquished by
Sign M. Ayub
Print M. Ayub
Firm HA
Date 3/19/14 Time _____

Received by
Sign Wayne Pinner
Print Wayne Pinner
Firm Alpha
Date 3/19/14 Time 6:55

SOLID					

Evidence samples were tampered with? YES NO
If YES, please explain in section below.

Relinquished by
Sign Wayne Pinner
Print Wayne Pinner
Firm Alpha
Date 3/19/14 Time 18:18

Received by
Sign Blake Buckner
Print Blake Buckner
Firm ALPHA
Date 3/19/14 Time 18:18

PRESERVATION KEY					
A Sample chilled	C NaOH	E H ₂ SO ₄	G Methanol		
B Sample filtered	D HNO ₃	F HCL	H Water/NaHSO ₄ (circle)		

Presumptive Certainty Data Package (Laboratory to use applicable DEP CAM methods)

If Presumptive Certainty Data Package is needed, initial all sections:

NO The required minimum field QC samples, as designated in BWSC CAM-VII have been or will be collected, as appropriate, to meet the requirements of Presumptive Certainty.

NO Matrix Spike (MS) samples for MCP Metals and/or Cyanide are included and identified herein.

This Chain of Custody Record (specify) _____ includes X does not include samples defined as Drinking Water Samples.

NA If this Chain of Custody Record identifies samples defined as Drinking Water Samples, Trip Blanks and Field Duplicates are included and identified and analysis of TICs are required, as appropriate. Laboratory should (specify if applicable) _____ analyze

Required Reporting Limits and Data Quality Objectives

<input type="checkbox"/> RC-S1	<input type="checkbox"/> S1	<input type="checkbox"/> GW1
<input type="checkbox"/> RC-S2	<input type="checkbox"/> S2	<input checked="" type="checkbox"/> GW2
<input type="checkbox"/> RC-GW1	<input type="checkbox"/> S3	<input type="checkbox"/> GW3
<input checked="" type="checkbox"/> RC-GW2		



Haley & Aldrich, Inc.
465 Medford St.,
Suite 2200,
Boston, MA 02129-1402

CHAIN OF CUSTODY RECORD

Phone (617) 886-7400
Fax (617) 886-7600
Page _____ of _____

H&A FILE NO. 34099-400
PROJECT NAME Seaport Square Parcel J
H&A CONTACT Katelyn Tripp, Titania Ng

LABORATORY ALPHA ANALYTICAL
ADDRESS WESTBOROUGH, MA
CONTACT Gina Hall

DELIVERY DATE _____
TURNAROUND TIME 3-DAY
PROJECT MANAGER Katelyn Tripp

Sample No.	Date	Time	Depth	Type	Analysis Requested										Number of Containers	Comments (special instructions, precautions, additional method numbers, etc.)		
					1. VOCs (8260)	2. EPH Deluxe w/ PAH-SDM	3. VPH Deluxe											
HA-J3(OW)	3/19/14	1500	--	AQ	*	*	*										8	Laboratory to use applicable DEP CAM methods, unless otherwise directed. TRIP blank for VOCs
HA-J5(OW)	↓	1200	--	AQ	*	*	*										5	
HA-J3(OW)-Trip			--	AQ	*	*	*										1	

Sampled and Relinquished by
Sign A. Powell
Print S. Powell
Firm HA
Date 3/19/14 Time _____

Received by
Sign M. Ayub
Print M. Ayub
Firm HA
Date 3/19/14 Time 6:30

LIQUID					
X			X		
		X			
AF	AF	AF			
40 mL	1 L	40 ml			

Sampling Comments
VOA Vial
Amber Glass
Plastic Bottle
Preservative
Volume

Relinquished by
Sign M. Ayub
Print M. Ayub
Firm HA
Date 3/19/14 Time _____

Received by
Sign Wayne Pinner
Print Wayne Pinner
Firm Alpha
Date 3/19/14 Time 6:55

SOLID					

Evidence samples were tampered with? YES NO
If YES, please explain in section below.

Relinquished by
Sign Wayne Pinner
Print Wayne Pinner
Firm Alpha
Date 3/19/14 Time 1818

Received by
Sign Blake Buckner
Print Blake Buckner
Firm ALPHA
Date 3/19/14 Time 1818

PRESERVATION KEY					
A Sample chilled	C NaOH	E H ₂ SO ₄	G Methanol		
B Sample filtered	D HNO ₃	F HCL	H Water/NaHSO ₄ (circle)		

Presumptive Certainty Data Package (Laboratory to use applicable DEP CAM methods)

If Presumptive Certainty Data Package is needed, initial all sections:

NO The required minimum field QC samples, as designated in BWSC CAM-VII have been or will be collected, as appropriate, to meet the requirements of Presumptive Certainty.

NO Matrix Spike (MS) samples for MCP Metals and/or Cyanide are included and identified herein.

This Chain of Custody Record (specify) _____ includes X does not include samples defined as Drinking Water Samples.

NA If this Chain of Custody Record identifies samples defined as Drinking Water Samples, Trip Blanks and Field Duplicates are included and identified and analysis of TICs are required, as appropriate. Laboratory should (specify if applicable) _____ analyze

Required Reporting Limits and Data Quality Objectives

<input type="checkbox"/> RC-S1	<input type="checkbox"/> S1	<input type="checkbox"/> GW1
<input type="checkbox"/> RC-S2	<input type="checkbox"/> S2	<input checked="" type="checkbox"/> GW2
<input type="checkbox"/> RC-GW1	<input type="checkbox"/> S3	<input type="checkbox"/> GW3
<input checked="" type="checkbox"/> RC-GW2		

7A
Volatile Organics CONTINUING CALIBRATION CHECK

Lab Name: Alpha Analytical Labs

SDG No.: L1405736

Instrument ID: Jack.i Calibration Date: 21-MAR-2014 Time: 06:57

Lab File ID: 0321A05 Init. Calib. Date(s): 06-MAR-2 06-MAR-2

Sample No: 8260 CCAL Init. Calib. Times : 07:52 13:51

Compound	RRF	RRF	MIN RRF	%D	MAX %D	
=====	=====	=====	=====	=====	=====	
dichlorodifluoromethane	.59436	.46189	.1	-22	20	F
chloromethane	1.1336	.91566	.1	-19	20	
vinyl chloride	.92614	.83666	.1	-10	20	
bromomethane	.23458	.17763	.1	-24	20	F
chloroethane	.49041	.48552	.1	-1	20	
trichlorofluoromethane	.81322	.83455	.1	3	20	
ethyl ether	.27632	.2759	.05	0	20	
1,1,-dichloroethene	.49987	.51959	.1	4	20	
carbon disulfide	1.3911	1.3582	.1	-2	20	
freon-113	.55867	.58367	.1	4	20	
iodomethane	100	83.329	.05	-17	20	
acrolein	.10565	.10894	.05	3	20	
methylene chloride	.58704	.61738	.1	5	20	
acetone	100	155	.1	55	20	F
trans-1,2-dichloroethene	.56434	.58176	.1	3	20	
methyl acetate	.42089	.43702	.1	4	20	
methyl tert butyl ether	1.3276	1.3770	.1	4	20	
tert butyl alcohol	.04417	.04857	.05	10	20	F
Diisopropyl Ether	3.2284	3.0529	.01	-5	20	
1,1-dichloroethane	1.4406	1.3986	.2	-3	20	
acrylonitrile	.23504	.23145	.05	-2	20	
Halothane	.45961	.45095	.05	-2	20	
Ethyl-Tert-Butyl-Ether	2.5041	2.4274	.05	-3	20	
vinyl acetate	1.8007	1.7784	.05	-1	20	
cis-1,2-dichloroethene	.6273	.62791	.1	0	20	
2,2-dichloropropane	.88473	.90773	.05	3	20	
cyclohexane	1.7958	1.7001	.01	-5	30	
bromochloromethane	.28399	.28845	.05	2	20	
chloroform	1.0367	1.0538	.2	2	20	
carbontetrachloride	.77235	.79182	.1	3	20	
tetrahydrofuran	.21607	.19509	.05	-10	20	
ethyl acetate	.6533	.64215	.05	-2	20	
1,1,1-trichloroethane	.89953	.91582	.1	2	20	
1,1-dichloropropene	.86464	.84712	.05	-2	20	
2-butanone	.29131	.34469	.1	18	20	
benzene	2.5723	2.4503	.5	-5	20	
Tertiary-Amyl Methyl Ether	1.4812	1.4750	.05	0	20	
1,2-dichloroethane	.90699	.90075	.1	-1	20	

FORM VII MCP-8260-10

7A
CONTINUING CALIBRATION CHECK

Lab Name: Alpha Analytical Labs

SDG No.: L1405736

Instrument ID: Jack.i Calibration Date: 21-MAR-2014 Time: 06:57

Lab File ID: 0321A05 Init. Calib. Date(s): 06-MAR-2 06-MAR-2

Sample No: 8260 CCAL Init. Calib. Times : 07:52 13:51

Compound	RRF	RRF	MIN RRF	%D	MAX %D
=====	=====	=====	=====	=====	=====
methyl cyclohexane	.96989	.94706	.01	-2	30
trichloroethene	.59513	.59533	.2	0	20
dibromomethane	.30223	.30414	.05	1	20
1,2-dichloropropane	.83868	.79881	.1	-5	20
bromodichloromethane	.7528	.75342	.2	0	20
1,4-dioxane	.00318	.00351	.05	10	20
2-chloroethylvinyl ether	.43057	.41332	.05	-4	20
cis-1,3-dichloropropene	.9535	.93478	.2	-2	20
toluene	2.0071	1.8268	.4	-9	20
tetrachloroethene	.84549	.80265	.2	-5	20
4-methyl-2-pentanone	.2332	.22783	.1	-2	20
trans-1,3-dichloropropene	.97579	.89137	.1	-9	20
1,1,2-trichloroethane	.46572	.44816	.1	-4	20
ethyl-methacrylate	.81236	.75455	.01	-7	30
chlorodibromomethane	.65421	.61082	.1	-7	20
1,3-dichloropropane	1.0315	.97232	.05	-6	20
1,2-dibromoethane	.57758	.55352	.1	-4	20
2-hexanone	.50561	.52438	.1	4	20
chlorobenzene	2.1604	2.0137	.5	-7	20
ethyl benzene	3.7425	3.3764	.1	-10	20
1,1,1,2-tetrachloroethane	.73254	.67698	.05	-8	20
p/m xylene	1.4745	1.3779	.1	-7	20
o xylene	1.3716	1.2583	.3	-8	20
bromoform	.67689	.59775	.1	-12	20
styrene	2.2463	2.3792	.3	6	20
isopropylbenzene	6.6871	6.3285	.1	-5	20
bromobenzene	1.6052	1.4811	.05	-8	20
1,4-dichlorobutane	3.0213	2.7562	.01	-9	30
n-propylbenzene	6.8365	6.3067	.05	-8	20
1,1,2,2,-tetrachloroethane	1.2072	1.1282	.3	-7	20
4-ethyltoluene	6.1760	5.6363	.05	-9	20
2-chlorotoluene	4.8865	4.4893	.05	-8	20
1,2,3-trichloropropane	1.0222	.93215	.05	-9	20
1,3,5-trimethybenzene	5.0793	4.6315	.05	-9	20
trans-1,4-dichloro-2-butene	.51726	.44588	.05	-14	20
4-chorotoluene	4.4783	4.1984	.05	-6	20
tert-butylbenzene	4.0882	3.8003	.05	-7	20
1,2,4-trimethylbenzene	4.9118	4.5603	.05	-7	20

F

FORM VII MCP-8260-10



ANALYTICAL REPORT

Lab Number:	L1405735
Client:	Haley & Aldrich, Inc. 465 Medford Street, Suite 2200 Charlestown, MA 02129-1400
ATTN:	Katelyn Tripp
Phone:	(617) 886-7482
Project Name:	SEAPORT SQUARE PARCEL J
Project Number:	34099-400
Report Date:	03/24/14

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Certifications & Approvals: MA (M-MA086), NY (11148), CT (PH-0574), NH (2003), NJ NELAP (MA935), RI (LAO00065), ME (MA00086), PA (68-03671), USDA (Permit #P-330-11-00240), NC (666), TX (T104704476), DOD (L2217), US Army Corps of Engineers.

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



Project Name: SEAPORT SQUARE PARCEL J
Project Number: 34099-400

Lab Number: L1405735
Report Date: 03/24/14

Alpha Sample ID	Client ID	Sample Location	Collection Date/Time
L1405735-01	HA-J5(OW)	Not Specified	03/19/14 12:00

Project Name: SEAPORT SQUARE PARCEL J
Project Number: 34099-400

Lab Number: L1405735
Report Date: 03/24/14

Case Narrative

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

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet all of the requirements of NELAC, for all NELAC accredited parameters. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. 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. Performance criteria for CAM and RCP methods allow for some LCS compound failures to occur and still be within method compliance. In these instances, the specific failures are not narrated but are noted in the associated QC table. This information is also incorporated in the Data Usability format for 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: SEAPORT SQUARE PARCEL J
Project Number: 34099-400

Lab Number: L1405735
Report Date: 03/24/14

Case Narrative (continued)

Sample Receipt

The sample was field filtered for Dissolved Metals.

Total Metals

L1405735-01 (HA-J5(OW)) has elevated detection limits for all elements, with the exception of iron and mercury, due to the dilution required by matrix interferences encountered during analysis.

The WG677388-4 MS recovery, performed on L1405735-01 (HA-J5(OW)), is outside the acceptance criteria for iron (190%). A post digestion spike was performed and was within acceptance criteria.

Dissolved Metals

L1405735-01 (HA-J5(OW)) has elevated detection limits for all elements, with the exception of iron and mercury, due to the dilution required by matrix interferences encountered during analysis.

The WG677273-4 MS recovery, performed on L1405735-01 (HA-J5(OW)), is outside the acceptance criteria for mercury (58%). A post digestion spike was performed and yielded an unacceptable recovery of 75%. This has been attributed to sample matrix.

TPH

The WG676774-4 MS recovery (56%), performed on L1405735-01 (HA-J5(OW)), is outside the acceptance criteria; however, the associated LCS recovery was within criteria. No further action was taken.

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

Authorized Signature:

 Michelle M. Morris

Title: Technical Director/Representative

Date: 03/24/14

ORGANICS

VOLATILES

Project Name: SEAPORT SQUARE PARCEL J**Lab Number:** L1405735**Project Number:** 34099-400**Report Date:** 03/24/14**SAMPLE RESULTS**

Lab ID: L1405735-01
Client ID: HA-J5(OW)
Sample Location: Not Specified
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 03/21/14 12:40
Analyst: MM

Date Collected: 03/19/14 12:00
Date Received: 03/19/14
Field Prep: See Narrative

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	3.0	--	1
1,1-Dichloroethane	ND		ug/l	0.75	--	1
Chloroform	ND		ug/l	0.75	--	1
Carbon tetrachloride	ND		ug/l	0.50	--	1
1,2-Dichloropropane	ND		ug/l	1.8	--	1
Dibromochloromethane	ND		ug/l	0.50	--	1
1,1,2-Trichloroethane	ND		ug/l	0.75	--	1
Tetrachloroethene	ND		ug/l	0.50	--	1
Chlorobenzene	ND		ug/l	0.50	--	1
Trichlorofluoromethane	ND		ug/l	2.5	--	1
1,2-Dichloroethane	ND		ug/l	0.50	--	1
1,1,1-Trichloroethane	ND		ug/l	0.50	--	1
Bromodichloromethane	ND		ug/l	0.50	--	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	--	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	--	1
1,1-Dichloropropene	ND		ug/l	2.5	--	1
Bromoform	ND		ug/l	2.0	--	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	--	1
Benzene	ND		ug/l	0.50	--	1
Toluene	ND		ug/l	0.75	--	1
Ethylbenzene	ND		ug/l	0.50	--	1
Chloromethane	ND		ug/l	2.5	--	1
Bromomethane	ND		ug/l	1.0	--	1
Vinyl chloride	ND		ug/l	1.0	--	1
Chloroethane	ND		ug/l	1.0	--	1
1,1-Dichloroethene	ND		ug/l	0.50	--	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	--	1
Trichloroethene	ND		ug/l	0.50	--	1
1,2-Dichlorobenzene	ND		ug/l	2.5	--	1
1,3-Dichlorobenzene	ND		ug/l	2.5	--	1
1,4-Dichlorobenzene	ND		ug/l	2.5	--	1

Project Name: SEAPORT SQUARE PARCEL J**Lab Number:** L1405735**Project Number:** 34099-400**Report Date:** 03/24/14**SAMPLE RESULTS**

Lab ID: L1405735-01

Date Collected: 03/19/14 12:00

Client ID: HA-J5(OW)

Date Received: 03/19/14

Sample Location: Not Specified

Field Prep: See Narrative

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methyl tert butyl ether	ND		ug/l	1.0	--	1
p/m-Xylene	ND		ug/l	1.0	--	1
o-Xylene	ND		ug/l	1.0	--	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	--	1
Dibromomethane	ND		ug/l	5.0	--	1
1,4-Dichlorobutane	ND		ug/l	5.0	--	1
1,2,3-Trichloropropane	ND		ug/l	5.0	--	1
Styrene	ND		ug/l	1.0	--	1
Dichlorodifluoromethane	ND		ug/l	5.0	--	1
Acetone	ND		ug/l	5.0	--	1
Carbon disulfide	ND		ug/l	5.0	--	1
2-Butanone	ND		ug/l	5.0	--	1
Vinyl acetate	ND		ug/l	5.0	--	1
4-Methyl-2-pentanone	ND		ug/l	5.0	--	1
2-Hexanone	ND		ug/l	5.0	--	1
Ethyl methacrylate	ND		ug/l	5.0	--	1
Acrylonitrile	ND		ug/l	5.0	--	1
Bromochloromethane	ND		ug/l	2.5	--	1
Tetrahydrofuran	ND		ug/l	5.0	--	1
2,2-Dichloropropane	ND		ug/l	2.5	--	1
1,2-Dibromoethane	ND		ug/l	2.0	--	1
1,3-Dichloropropane	ND		ug/l	2.5	--	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	--	1
Bromobenzene	ND		ug/l	2.5	--	1
n-Butylbenzene	ND		ug/l	0.50	--	1
sec-Butylbenzene	ND		ug/l	0.50	--	1
tert-Butylbenzene	ND		ug/l	2.5	--	1
o-Chlorotoluene	ND		ug/l	2.5	--	1
p-Chlorotoluene	ND		ug/l	2.5	--	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	--	1
Hexachlorobutadiene	ND		ug/l	0.50	--	1
Isopropylbenzene	ND		ug/l	0.50	--	1
p-Isopropyltoluene	ND		ug/l	0.50	--	1
Naphthalene	ND		ug/l	2.5	--	1
n-Propylbenzene	ND		ug/l	0.50	--	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	--	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	--	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	--	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	--	1

Project Name: SEAPORT SQUARE PARCEL J**Lab Number:** L1405735**Project Number:** 34099-400**Report Date:** 03/24/14**SAMPLE RESULTS**

Lab ID: L1405735-01

Date Collected: 03/19/14 12:00

Client ID: HA-J5(OW)

Date Received: 03/19/14

Sample Location: Not Specified

Field Prep: See Narrative

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	--	1
Ethyl ether	ND		ug/l	2.5	--	1
Tert-Butyl Alcohol	ND		ug/l	10	--	1
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	105		70-130
Toluene-d8	90		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	111		70-130

Project Name: SEAPORT SQUARE PARCEL J**Lab Number:** L1405735**Project Number:** 34099-400**Report Date:** 03/24/14**SAMPLE RESULTS**

Lab ID: L1405735-01
Client ID: HA-J5(OW)
Sample Location: Not Specified
Matrix: Water
Analytical Method: 1,8260C-SIM(M)
Analytical Date: 03/21/14 12:40
Analyst: MM

Date Collected: 03/19/14 12:00
Date Received: 03/19/14
Field Prep: See Narritive

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS-SIM - Westborough Lab						
1,4-Dioxane	ND		ug/l	3.0	--	1

Project Name: SEAPORT SQUARE PARCEL J**Lab Number:** L1405735**Project Number:** 34099-400**Report Date:** 03/24/14**SAMPLE RESULTS**

Lab ID: L1405735-01

Date Collected: 03/19/14 12:00

Client ID: HA-J5(OW)

Date Received: 03/19/14

Sample Location: Not Specified

Field Prep: See Narrative

Matrix: Water

Analytical Method: 14,504.1

Extraction Date: 03/20/14 10:30

Analytical Date: 03/20/14 13:07

Analyst: GP

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Microextractables by GC - Westborough Lab							
1,2-Dibromoethane	ND		ug/l	0.010	--	1	A
1,2-Dibromo-3-chloropropane	ND		ug/l	0.010	--	1	A

Project Name: SEAPORT SQUARE PARCEL J

Lab Number: L1405735

Project Number: 34099-400

Report Date: 03/24/14

**Method Blank Analysis
Batch Quality Control**

Analytical Method: 14,504.1

Analytical Date: 03/20/14 12:18

Analyst: GP

Extraction Date: 03/20/14 10:30

Parameter	Result	Qualifier	Units	RL	MDL
Microextractables by GC - Westborough Lab for sample(s): 01 Batch: WG676735-1					
1,2-Dibromoethane	ND		ug/l	0.010	-- A
1,2-Dibromo-3-chloropropane	ND		ug/l	0.010	-- A

Project Name: SEAPORT SQUARE PARCEL J**Lab Number:** L1405735**Project Number:** 34099-400**Report Date:** 03/24/14**Method Blank Analysis
Batch Quality Control**

Analytical Method: 1,8260C-SIM(M)

Analytical Date: 03/21/14 08:51

Analyst: MM

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01 Batch: WG677055-3					
1,4-Dioxane	ND		ug/l	3.0	--

Project Name: SEAPORT SQUARE PARCEL J
Project Number: 34099-400

Lab Number: L1405735
Report Date: 03/24/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 03/21/14 08:51
Analyst: MM

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG677328-3					
Methylene chloride	ND		ug/l	3.0	--
1,1-Dichloroethane	ND		ug/l	0.75	--
Chloroform	ND		ug/l	0.75	--
Carbon tetrachloride	ND		ug/l	0.50	--
1,2-Dichloropropane	ND		ug/l	1.8	--
Dibromochloromethane	ND		ug/l	0.50	--
1,1,2-Trichloroethane	ND		ug/l	0.75	--
2-Chloroethylvinyl ether	ND		ug/l	10	--
Tetrachloroethene	ND		ug/l	0.50	--
Chlorobenzene	ND		ug/l	0.50	--
Trichlorofluoromethane	ND		ug/l	2.5	--
1,2-Dichloroethane	ND		ug/l	0.50	--
1,1,1-Trichloroethane	ND		ug/l	0.50	--
Bromodichloromethane	ND		ug/l	0.50	--
trans-1,3-Dichloropropene	ND		ug/l	0.50	--
cis-1,3-Dichloropropene	ND		ug/l	0.50	--
1,1-Dichloropropene	ND		ug/l	2.5	--
Bromoform	ND		ug/l	2.0	--
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	--
Benzene	ND		ug/l	0.50	--
Toluene	ND		ug/l	0.75	--
Ethylbenzene	ND		ug/l	0.50	--
Chloromethane	ND		ug/l	2.5	--
Bromomethane	ND		ug/l	1.0	--
Vinyl chloride	ND		ug/l	1.0	--
Chloroethane	ND		ug/l	1.0	--
1,1-Dichloroethene	ND		ug/l	0.50	--
trans-1,2-Dichloroethene	ND		ug/l	0.75	--
Trichloroethene	ND		ug/l	0.50	--
1,2-Dichlorobenzene	ND		ug/l	2.5	--
1,3-Dichlorobenzene	ND		ug/l	2.5	--

Project Name: SEAPORT SQUARE PARCEL J
Project Number: 34099-400

Lab Number: L1405735
Report Date: 03/24/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 03/21/14 08:51
Analyst: MM

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG677328-3					
1,4-Dichlorobenzene	ND		ug/l	2.5	--
Methyl tert butyl ether	ND		ug/l	1.0	--
p/m-Xylene	ND		ug/l	1.0	--
o-Xylene	ND		ug/l	1.0	--
cis-1,2-Dichloroethene	ND		ug/l	0.50	--
Dibromomethane	ND		ug/l	5.0	--
1,4-Dichlorobutane	ND		ug/l	5.0	--
1,2,3-Trichloropropane	ND		ug/l	5.0	--
Styrene	ND		ug/l	1.0	--
Dichlorodifluoromethane	ND		ug/l	5.0	--
Acetone	ND		ug/l	5.0	--
Carbon disulfide	ND		ug/l	5.0	--
2-Butanone	ND		ug/l	5.0	--
Vinyl acetate	ND		ug/l	5.0	--
4-Methyl-2-pentanone	ND		ug/l	5.0	--
2-Hexanone	ND		ug/l	5.0	--
Ethyl methacrylate	ND		ug/l	5.0	--
Acrylonitrile	ND		ug/l	5.0	--
Bromochloromethane	ND		ug/l	2.5	--
Tetrahydrofuran	ND		ug/l	5.0	--
2,2-Dichloropropane	ND		ug/l	2.5	--
1,2-Dibromoethane	ND		ug/l	2.0	--
1,3-Dichloropropane	ND		ug/l	2.5	--
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	--
Bromobenzene	ND		ug/l	2.5	--
n-Butylbenzene	ND		ug/l	0.50	--
sec-Butylbenzene	ND		ug/l	0.50	--
tert-Butylbenzene	ND		ug/l	2.5	--
o-Chlorotoluene	ND		ug/l	2.5	--
p-Chlorotoluene	ND		ug/l	2.5	--
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	--

Project Name: SEAPORT SQUARE PARCEL J
Project Number: 34099-400

Lab Number: L1405735
Report Date: 03/24/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 03/21/14 08:51
Analyst: MM

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG677328-3					
Hexachlorobutadiene	ND		ug/l	0.50	--
Isopropylbenzene	ND		ug/l	0.50	--
p-Isopropyltoluene	ND		ug/l	0.50	--
Naphthalene	ND		ug/l	2.5	--
n-Propylbenzene	ND		ug/l	0.50	--
1,2,3-Trichlorobenzene	ND		ug/l	2.5	--
1,2,4-Trichlorobenzene	ND		ug/l	2.5	--
1,3,5-Trimethylbenzene	ND		ug/l	2.5	--
1,3,5-Trichlorobenzene	ND		ug/l	2.0	--
1,2,4-Trimethylbenzene	ND		ug/l	2.5	--
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	--
Ethyl ether	ND		ug/l	2.5	--
Methyl Acetate	ND		ug/l	10	--
Ethyl Acetate	ND		ug/l	10	--
Isopropyl Ether	ND		ug/l	2.0	--
Cyclohexane	ND		ug/l	10	--
Tert-Butyl Alcohol	ND		ug/l	10	--
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0	--
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	--
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		ug/l	10	--
Methyl cyclohexane	ND		ug/l	10	--
p-Diethylbenzene	ND		ug/l	2.0	--
4-Ethyltoluene	ND		ug/l	2.0	--
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	--

Project Name: SEAPORT SQUARE PARCEL J**Lab Number:** L1405735**Project Number:** 34099-400**Report Date:** 03/24/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 03/21/14 08:51
 Analyst: MM

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG677328-3					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	106		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	99		70-130
Dibromofluoromethane	112		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: SEAPORT SQUARE PARCEL J

Project Number: 34099-400

Lab Number: L1405735

Report Date: 03/24/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Microextractables by GC - Westborough Lab Associated sample(s): 01 Batch: WG676735-2									
1,2-Dibromoethane	116		-		70-130	-		20	A
1,2-Dibromo-3-chloropropane	105		-		70-130	-		20	A

Lab Control Sample Analysis

Batch Quality Control

Project Name: SEAPORT SQUARE PARCEL J

Lab Number: L1405735

Project Number: 34099-400

Report Date: 03/24/14

Parameter	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>%Recovery</i> Limits	<i>RPD</i>	<i>Qual</i>	<i>RPD</i> Limits
Volatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01 Batch: WG677055-1 WG677055-2								
1,4-Dioxane	99		99		70-130	0		25

Lab Control Sample Analysis

Batch Quality Control

Project Name: SEAPORT SQUARE PARCEL J
Project Number: 34099-400

Lab Number: L1405735
Report Date: 03/24/14

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: WG677328-1 WG677328-2								
Methylene chloride	95		93		70-130	2		20
1,1-Dichloroethane	89		99		70-130	11		20
Chloroform	91		102		70-130	11		20
Carbon tetrachloride	96		106		63-132	10		20
1,2-Dichloropropane	88		101		70-130	14		20
Dibromochloromethane	99		98		63-130	1		20
1,1,2-Trichloroethane	94		95		70-130	1		20
2-Chloroethylvinyl ether	113		124		70-130	9		20
Tetrachloroethene	99		96		70-130	3		20
Chlorobenzene	94		92		75-130	2		25
Trichlorofluoromethane	91		102		62-150	11		20
1,2-Dichloroethane	96		105		70-130	9		20
1,1,1-Trichloroethane	92		104		67-130	12		20
Bromodichloromethane	95		107		67-130	12		20
trans-1,3-Dichloropropene	95		95		70-130	0		20
cis-1,3-Dichloropropene	92		104		70-130	12		20
1,1-Dichloropropene	89		105		70-130	16		20
Bromoform	84		91		54-136	8		20
1,1,2,2-Tetrachloroethane	88		88		67-130	0		20
Benzene	89		100		70-130	12		25
Toluene	91		91		70-130	0		25

Lab Control Sample Analysis

Batch Quality Control

Project Name: SEAPORT SQUARE PARCEL J

Project Number: 34099-400

Lab Number: L1405735

Report Date: 03/24/14

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: WG677328-1 WG677328-2								
Ethylbenzene	92		93		70-130	1		20
Chloromethane	82		93		64-130	13		20
Bromomethane	69		78		39-139	12		20
Vinyl chloride	82		93		55-140	13		20
Chloroethane	80		90		55-138	12		20
1,1-Dichloroethene	92		104		61-145	12		25
trans-1,2-Dichloroethene	93		107		70-130	14		20
Trichloroethene	92		104		70-130	12		25
1,2-Dichlorobenzene	94		95		70-130	1		20
1,3-Dichlorobenzene	91		94		70-130	3		20
1,4-Dichlorobenzene	94		95		70-130	1		20
Methyl tert butyl ether	99		109		63-130	10		20
p/m-Xylene	93		93		70-130	0		20
o-Xylene	95		93		70-130	2		20
cis-1,2-Dichloroethene	88		100		70-130	13		20
Dibromomethane	94		105		70-130	11		20
1,4-Dichlorobutane	90		93		70-130	3		20
1,2,3-Trichloropropane	93		93		64-130	0		20
Styrene	113		104		70-130	8		20
Dichlorodifluoromethane	76		83		36-147	9		20
Acetone	153	Q	160	Q	58-148	4		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: SEAPORT SQUARE PARCEL J

Lab Number: L1405735

Project Number: 34099-400

Report Date: 03/24/14

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: WG677328-1 WG677328-2								
Carbon disulfide	86		98		51-130	13		20
2-Butanone	111		120		63-138	8		20
Vinyl acetate	87		100		70-130	14		20
4-Methyl-2-pentanone	98		106		59-130	8		20
2-Hexanone	118		107		57-130	10		20
Ethyl methacrylate	103		97		70-130	6		20
Acrylonitrile	87		96		70-130	10		20
Bromochloromethane	94		105		70-130	11		20
Tetrahydrofuran	93		103		58-130	10		20
2,2-Dichloropropane	90		101		63-133	12		20
1,2-Dibromoethane	97		98		70-130	1		20
1,3-Dichloropropane	99		96		70-130	3		20
1,1,1,2-Tetrachloroethane	98		96		64-130	2		20
Bromobenzene	94		100		70-130	6		20
n-Butylbenzene	94		96		53-136	2		20
sec-Butylbenzene	92		97		70-130	5		20
tert-Butylbenzene	93		98		70-130	5		20
o-Chlorotoluene	91		94		70-130	3		20
p-Chlorotoluene	86		93		70-130	8		20
1,2-Dibromo-3-chloropropane	109		94		41-144	15		20
Hexachlorobutadiene	92		102		63-130	10		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: SEAPORT SQUARE PARCEL J
Project Number: 34099-400

Lab Number: L1405735
Report Date: 03/24/14

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: WG677328-1 WG677328-2								
Isopropylbenzene	92		97		70-130	5		20
p-Isopropyltoluene	93		98		70-130	5		20
Naphthalene	96		97		70-130	1		20
n-Propylbenzene	93		96		69-130	3		20
1,2,3-Trichlorobenzene	94		98		70-130	4		20
1,2,4-Trichlorobenzene	94		96		70-130	2		20
1,3,5-Trimethylbenzene	94		96		64-130	2		20
1,3,5-Trichlorobenzene	94		94		70-130	0		20
1,2,4-Trimethylbenzene	94		96		70-130	2		20
trans-1,4-Dichloro-2-butene	96		93		70-130	3		20
Ethyl ether	101		112		59-134	10		20
Methyl Acetate	96		113		70-130	16		20
Ethyl Acetate	88		99		70-130	12		20
Isopropyl Ether	85		96		70-130	12		20
Cyclohexane	86		98		70-130	13		20
Tert-Butyl Alcohol	109		116		70-130	6		20
Ethyl-Tert-Butyl-Ether	87		100		70-130	14		20
Tertiary-Amyl Methyl Ether	92		102		66-130	10		20
1,1,2-Trichloro-1,2,2-Trifluoroethane	95		103		70-130	8		20
Methyl cyclohexane	92		101		70-130	9		20
p-Diethylbenzene	92		94		70-130	2		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: SEAPORT SQUARE PARCEL J
Project Number: 34099-400

Lab Number: L1405735
Report Date: 03/24/14

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: WG677328-1 WG677328-2								
4-Ethyltoluene	92		97		70-130	5		20
1,2,4,5-Tetramethylbenzene	92		96		70-130	4		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	92		99		70-130
Toluene-d8	95		92		70-130
4-Bromofluorobenzene	94		103		70-130
Dibromofluoromethane	91		102		70-130

Matrix Spike Analysis

Batch Quality Control

Project Name: SEAPORT SQUARE PARCEL J

Lab Number: L1405735

Project Number: 34099-400

Report Date: 03/24/14

<i>Parameter</i>	<i>Native Sample</i>	<i>MS Added</i>	<i>MS Found</i>	<i>MS %Recovery</i>	<i>Qual</i>	<i>MSD Found</i>	<i>MSD %Recovery</i>	<i>Qual</i>	<i>Recovery Limits</i>	<i>RPD</i>	<i>Qual</i>	<i>RPD Limits</i>	<i>Column</i>
Microextractables by GC - Westborough Lab Associated sample(s): 01 QC Batch ID: WG676735-3 QC Sample: L1405735-01 Client ID: HA-J5(OW)													
1,2-Dibromoethane	ND	0.257	0.303	118		-	-		70-130	-		20	A
1,2-Dibromo-3-chloropropane	ND	0.257	0.281	109		-	-		70-130	-		20	A

SEMIVOLATILES

Project Name: SEAPORT SQUARE PARCEL J**Lab Number:** L1405735**Project Number:** 34099-400**Report Date:** 03/24/14**SAMPLE RESULTS**

Lab ID: L1405735-01
 Client ID: HA-J5(OW)
 Sample Location: Not Specified
 Matrix: Water
 Analytical Method: 1,8270D
 Analytical Date: 03/21/14 22:34
 Analyst: RC

Date Collected: 03/19/14 12:00
 Date Received: 03/19/14
 Field Prep: See Narrative
 Extraction Method: EPA 3510C
 Extraction Date: 03/20/14 00:54

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzidine	ND		ug/l	20	--	1
1,2,4-Trichlorobenzene	ND		ug/l	5.0	--	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	--	1
1,2-Dichlorobenzene	ND		ug/l	2.0	--	1
1,3-Dichlorobenzene	ND		ug/l	2.0	--	1
1,4-Dichlorobenzene	ND		ug/l	2.0	--	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	--	1
2,4-Dinitrotoluene	ND		ug/l	5.0	--	1
2,6-Dinitrotoluene	ND		ug/l	5.0	--	1
Azobenzene	ND		ug/l	2.0	--	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	--	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	--	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	--	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	--	1
Hexachlorocyclopentadiene	ND		ug/l	20	--	1
Isophorone	ND		ug/l	5.0	--	1
Nitrobenzene	ND		ug/l	2.0	--	1
NDPA/DPA	ND		ug/l	2.0	--	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	--	1
Butyl benzyl phthalate	ND		ug/l	5.0	--	1
Di-n-butylphthalate	ND		ug/l	5.0	--	1
Di-n-octylphthalate	ND		ug/l	5.0	--	1
Diethyl phthalate	ND		ug/l	5.0	--	1
Dimethyl phthalate	ND		ug/l	5.0	--	1
Aniline	ND		ug/l	2.0	--	1
4-Chloroaniline	ND		ug/l	5.0	--	1
2-Nitroaniline	ND		ug/l	5.0	--	1
3-Nitroaniline	ND		ug/l	5.0	--	1
4-Nitroaniline	ND		ug/l	5.0	--	1
Dibenzofuran	ND		ug/l	2.0	--	1
n-Nitrosodimethylamine	ND		ug/l	2.0	--	1

Project Name: SEAPORT SQUARE PARCEL J**Lab Number:** L1405735**Project Number:** 34099-400**Report Date:** 03/24/14**SAMPLE RESULTS**

Lab ID: L1405735-01

Date Collected: 03/19/14 12:00

Client ID: HA-J5(OW)

Date Received: 03/19/14

Sample Location: Not Specified

Field Prep: See Narrative

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,6-Trichlorophenol	ND		ug/l	5.0	--	1
p-Chloro-m-cresol	ND		ug/l	2.0	--	1
2-Chlorophenol	ND		ug/l	2.0	--	1
2,4-Dichlorophenol	ND		ug/l	5.0	--	1
2,4-Dimethylphenol	ND		ug/l	5.0	--	1
2-Nitrophenol	ND		ug/l	10	--	1
4-Nitrophenol	ND		ug/l	10	--	1
2,4-Dinitrophenol	ND		ug/l	20	--	1
4,6-Dinitro-o-cresol	ND		ug/l	10	--	1
Phenol	ND		ug/l	5.0	--	1
2-Methylphenol	ND		ug/l	5.0	--	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	--	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	--	1
Benzoic Acid	ND		ug/l	50	--	1
Benzyl Alcohol	ND		ug/l	2.0	--	1
Carbazole	ND		ug/l	2.0	--	1
Pyridine	ND		ug/l	5.0	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	22		21-120
Phenol-d6	14		10-120
Nitrobenzene-d5	59		23-120
2-Fluorobiphenyl	59		15-120
2,4,6-Tribromophenol	76		10-120
4-Terphenyl-d14	76		41-149

Project Name: SEAPORT SQUARE PARCEL J
Project Number: 34099-400

Lab Number: L1405735
Report Date: 03/24/14

SAMPLE RESULTS

Lab ID: L1405735-01
 Client ID: HA-J5(OW)
 Sample Location: Not Specified
 Matrix: Water
 Analytical Method: 1,8270D-SIM
 Analytical Date: 03/24/14 15:22
 Analyst: MW

Date Collected: 03/19/14 12:00
 Date Received: 03/19/14
 Field Prep: See Narrative
 Extraction Method: EPA 3510C
 Extraction Date: 03/24/14 11:51

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	ND		ug/l	0.20	--	1
2-Chloronaphthalene	ND		ug/l	0.20	--	1
Fluoranthene	ND		ug/l	0.20	--	1
Hexachlorobutadiene	ND		ug/l	0.50	--	1
Naphthalene	ND		ug/l	0.20	--	1
Benzo(a)anthracene	ND		ug/l	0.20	--	1
Benzo(a)pyrene	ND		ug/l	0.20	--	1
Benzo(b)fluoranthene	ND		ug/l	0.20	--	1
Benzo(k)fluoranthene	ND		ug/l	0.20	--	1
Chrysene	ND		ug/l	0.20	--	1
Acenaphthylene	ND		ug/l	0.20	--	1
Anthracene	ND		ug/l	0.20	--	1
Benzo(ghi)perylene	ND		ug/l	0.20	--	1
Fluorene	ND		ug/l	0.20	--	1
Phenanthrene	ND		ug/l	0.20	--	1
Dibenzo(a,h)anthracene	ND		ug/l	0.20	--	1
Indeno(1,2,3-cd)Pyrene	ND		ug/l	0.20	--	1
Pyrene	ND		ug/l	0.20	--	1
1-Methylnaphthalene	ND		ug/l	0.20	--	1
2-Methylnaphthalene	ND		ug/l	0.20	--	1
Pentachlorophenol	ND		ug/l	0.80	--	1
Hexachlorobenzene	ND		ug/l	0.80	--	1
Hexachloroethane	ND		ug/l	0.80	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	39		21-120
Phenol-d6	27		10-120
Nitrobenzene-d5	78		23-120
2-Fluorobiphenyl	67		15-120
2,4,6-Tribromophenol	85		10-120
4-Terphenyl-d14	68		41-149

Project Name: SEAPORT SQUARE PARCEL J
Project Number: 34099-400

Lab Number: L1405735
Report Date: 03/24/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 03/21/14 21:13
Analyst: RC

Extraction Method: EPA 3510C
Extraction Date: 03/20/14 00:54

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG676624-1					
Benzidine	ND		ug/l	20	--
1,2,4-Trichlorobenzene	ND		ug/l	5.0	--
Bis(2-chloroethyl)ether	ND		ug/l	2.0	--
1,2-Dichlorobenzene	ND		ug/l	2.0	--
1,3-Dichlorobenzene	ND		ug/l	2.0	--
1,4-Dichlorobenzene	ND		ug/l	2.0	--
3,3'-Dichlorobenzidine	ND		ug/l	5.0	--
2,4-Dinitrotoluene	ND		ug/l	5.0	--
2,6-Dinitrotoluene	ND		ug/l	5.0	--
Azobenzene	ND		ug/l	2.0	--
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	--
4-Bromophenyl phenyl ether	ND		ug/l	2.0	--
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	--
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	--
Hexachlorocyclopentadiene	ND		ug/l	20	--
Isophorone	ND		ug/l	5.0	--
Nitrobenzene	ND		ug/l	2.0	--
NDPA/DPA	ND		ug/l	2.0	--
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	--
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	--
Aniline	ND		ug/l	2.0	--
4-Chloroaniline	ND		ug/l	5.0	--
2-Nitroaniline	ND		ug/l	5.0	--
3-Nitroaniline	ND		ug/l	5.0	--
4-Nitroaniline	ND		ug/l	5.0	--
Dibenzofuran	ND		ug/l	2.0	--
n-Nitrosodimethylamine	ND		ug/l	2.0	--

Project Name: SEAPORT SQUARE PARCEL J
Project Number: 34099-400

Lab Number: L1405735
Report Date: 03/24/14

**Method Blank Analysis
Batch Quality Control**

Analytical Method: 1,8270D
Analytical Date: 03/21/14 21:13
Analyst: RC

Extraction Method: EPA 3510C
Extraction Date: 03/20/14 00:54

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG676624-1					
2,4,6-Trichlorophenol	ND		ug/l	5.0	--
p-Chloro-m-cresol	ND		ug/l	2.0	--
2-Chlorophenol	ND		ug/l	2.0	--
2,4-Dichlorophenol	ND		ug/l	5.0	--
2,4-Dimethylphenol	ND		ug/l	5.0	--
2-Nitrophenol	ND		ug/l	10	--
4-Nitrophenol	ND		ug/l	10	--
2,4-Dinitrophenol	ND		ug/l	20	--
4,6-Dinitro-o-cresol	ND		ug/l	10	--
Phenol	ND		ug/l	5.0	--
2-Methylphenol	ND		ug/l	5.0	--
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	--
2,4,5-Trichlorophenol	ND		ug/l	5.0	--
Benzoic Acid	ND		ug/l	50	--
Benzyl Alcohol	ND		ug/l	2.0	--
Carbazole	ND		ug/l	2.0	--
Pyridine	ND		ug/l	5.0	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	23		21-120
Phenol-d6	13		10-120
Nitrobenzene-d5	57		23-120
2-Fluorobiphenyl	48		15-120
2,4,6-Tribromophenol	58		10-120
4-Terphenyl-d14	77		41-149

Project Name: SEAPORT SQUARE PARCEL J
Project Number: 34099-400

Lab Number: L1405735
Report Date: 03/24/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D-SIM
Analytical Date: 03/24/14 14:08
Analyst: MW

Extraction Method: EPA 3510C
Extraction Date: 03/24/14 11:51

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01 Batch: WG677437-1					
Acenaphthene	ND		ug/l	0.20	--
2-Chloronaphthalene	ND		ug/l	0.20	--
Fluoranthene	ND		ug/l	0.20	--
Hexachlorobutadiene	ND		ug/l	0.50	--
Naphthalene	ND		ug/l	0.20	--
Benzo(a)anthracene	ND		ug/l	0.20	--
Benzo(a)pyrene	ND		ug/l	0.20	--
Benzo(b)fluoranthene	ND		ug/l	0.20	--
Benzo(k)fluoranthene	ND		ug/l	0.20	--
Chrysene	ND		ug/l	0.20	--
Acenaphthylene	ND		ug/l	0.20	--
Anthracene	ND		ug/l	0.20	--
Benzo(ghi)perylene	ND		ug/l	0.20	--
Fluorene	ND		ug/l	0.20	--
Phenanthrene	ND		ug/l	0.20	--
Dibenzo(a,h)anthracene	ND		ug/l	0.20	--
Indeno(1,2,3-cd)Pyrene	ND		ug/l	0.20	--
Pyrene	ND		ug/l	0.20	--
1-Methylnaphthalene	ND		ug/l	0.20	--
2-Methylnaphthalene	ND		ug/l	0.20	--
Pentachlorophenol	ND		ug/l	0.80	--
Hexachlorobenzene	ND		ug/l	0.80	--
Hexachloroethane	ND		ug/l	0.80	--

Project Name: SEAPORT SQUARE PARCEL J
Project Number: 34099-400

Lab Number: L1405735
Report Date: 03/24/14

**Method Blank Analysis
Batch Quality Control**

Analytical Method: 1,8270D-SIM
Analytical Date: 03/24/14 14:08
Analyst: MW

Extraction Method: EPA 3510C
Extraction Date: 03/24/14 11:51

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01 Batch: WG677437-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	41		21-120
Phenol-d6	30		10-120
Nitrobenzene-d5	74		23-120
2-Fluorobiphenyl	62		15-120
2,4,6-Tribromophenol	73		10-120
4-Terphenyl-d14	72		41-149

Lab Control Sample Analysis

Batch Quality Control

Project Name: SEAPORT SQUARE PARCEL J
Project Number: 34099-400

Lab Number: L1405735
Report Date: 03/24/14

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: WG676624-2 WG676624-3								
Benzidine	13		14		10-75	7		30
1,2,4-Trichlorobenzene	40		39		39-98	3		30
Bis(2-chloroethyl)ether	55		50		40-140	10		30
1,2-Dichlorobenzene	40		40		40-140	0		30
1,3-Dichlorobenzene	37	Q	36	Q	40-140	3		30
1,4-Dichlorobenzene	38		37		36-97	3		30
3,3'-Dichlorobenzidine	74		66		40-140	11		30
2,4-Dinitrotoluene	93		89		24-96	4		30
2,6-Dinitrotoluene	91		87		40-140	4		30
Azobenzene	74		67		40-140	10		30
4-Chlorophenyl phenyl ether	70		67		40-140	4		30
4-Bromophenyl phenyl ether	80		74		40-140	8		30
Bis(2-chloroisopropyl)ether	55		52		40-140	6		30
Bis(2-chloroethoxy)methane	68		60		40-140	13		30
Hexachlorocyclopentadiene	21	Q	22	Q	40-140	5		30
Isophorone	68		64		40-140	6		30
Nitrobenzene	58		56		40-140	4		30
NDPA/DPA	80		72		40-140	11		30
Bis(2-ethylhexyl)phthalate	81		78		40-140	4		30
Butyl benzyl phthalate	86		80		40-140	7		30
Di-n-butylphthalate	81		78		40-140	4		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: SEAPORT SQUARE PARCEL J
Project Number: 34099-400

Lab Number: L1405735
Report Date: 03/24/14

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: WG676624-2 WG676624-3								
Di-n-octylphthalate	88		82		40-140	7		30
Diethyl phthalate	81		74		40-140	9		30
Dimethyl phthalate	75		71		40-140	5		30
Aniline	20	Q	21	Q	40-140	5		30
4-Chloroaniline	36	Q	36	Q	40-140	0		30
2-Nitroaniline	96		91		52-143	5		30
3-Nitroaniline	46		42		25-145	9		30
4-Nitroaniline	70		66		51-143	6		30
Dibenzofuran	66		64		40-140	3		30
n-Nitrosodimethylamine	24		22		22-74	9		30
2,4,6-Trichlorophenol	80		76		30-130	5		30
p-Chloro-m-cresol	76		72		23-97	5		30
2-Chlorophenol	51		48		27-123	6		30
2,4-Dichlorophenol	63		62		30-130	2		30
2,4-Dimethylphenol	68		63		30-130	8		30
2-Nitrophenol	80		77		30-130	4		30
4-Nitrophenol	46		43		10-80	7		30
2,4-Dinitrophenol	108		100		20-130	8		30
4,6-Dinitro-o-cresol	106		98		20-164	8		30
Phenol	22		20		12-110	10		30
2-Methylphenol	47		46		30-130	2		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: SEAPORT SQUARE PARCEL J
Project Number: 34099-400

Lab Number: L1405735
Report Date: 03/24/14

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: WG676624-2 WG676624-3								
3-Methylphenol/4-Methylphenol	46		42		30-130	9		30
2,4,5-Trichlorophenol	84		81		30-130	4		30
Benzoic Acid	44		43		10-164	2		30
Benzyl Alcohol	41		39		26-116	5		30
Carbazole	78		73		55-144	7		30
Pyridine	12		13		10-66	8		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	27		27		21-120
Phenol-d6	20		19		10-120
Nitrobenzene-d5	71		67		23-120
2-Fluorobiphenyl	64		62		15-120
2,4,6-Tribromophenol	86		81		10-120
4-Terphenyl-d14	78		70		41-149

Lab Control Sample Analysis

Batch Quality Control

Project Name: SEAPORT SQUARE PARCEL J
Project Number: 34099-400

Lab Number: L1405735
Report Date: 03/24/14

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: WG677437-2 WG677437-3								
Acenaphthene	71		74		37-111	4		40
2-Chloronaphthalene	69		74		40-140	7		40
Fluoranthene	82		83		40-140	1		40
Hexachlorobutadiene	61		69		40-140	12		40
Naphthalene	63		69		40-140	9		40
Benzo(a)anthracene	91		92		40-140	1		40
Benzo(a)pyrene	77		75		40-140	3		40
Benzo(b)fluoranthene	77		78		40-140	1		40
Benzo(k)fluoranthene	78		73		40-140	7		40
Chrysene	76		75		40-140	1		40
Acenaphthylene	76		81		40-140	6		40
Anthracene	75		75		40-140	0		40
Benzo(ghi)perylene	72		68		40-140	6		40
Fluorene	84		85		40-140	1		40
Phenanthrene	76		78		40-140	3		40
Dibenzo(a,h)anthracene	71		68		40-140	4		40
Indeno(1,2,3-cd)Pyrene	76		72		40-140	5		40
Pyrene	77		78		26-127	1		40
1-Methylnaphthalene	69		73		40-140	6		40
2-Methylnaphthalene	71		76		40-140	7		40
Pentachlorophenol	72		74		9-103	3		40

Lab Control Sample Analysis

Batch Quality Control

Project Name: SEAPORT SQUARE PARCEL J

Project Number: 34099-400

Lab Number: L1405735

Report Date: 03/24/14

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: WG677437-2 WG677437-3								
Hexachlorobenzene	72		73		40-140	1		40
Hexachloroethane	66		75		40-140	13		40

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	44		50		21-120
Phenol-d6	33		35		10-120
Nitrobenzene-d5	76		85		23-120
2-Fluorobiphenyl	65		72		15-120
2,4,6-Tribromophenol	83		80		10-120
4-Terphenyl-d14	70		72		41-149

PCBS

Project Name: SEAPORT SQUARE PARCEL J**Lab Number:** L1405735**Project Number:** 34099-400**Report Date:** 03/24/14**SAMPLE RESULTS**

Lab ID: L1405735-01
Client ID: HA-J5(OW)
Sample Location: Not Specified
Matrix: Water
Analytical Method: 5,608
Analytical Date: 03/20/14 14:51
Analyst: JW

Date Collected: 03/19/14 12:00
Date Received: 03/19/14
Field Prep: See Narrative
Extraction Method: EPA 608
Extraction Date: 03/20/14 04:34
Cleanup Method1: EPA 3665A
Cleanup Date1: 03/20/14
Cleanup Method2: EPA 3660B
Cleanup Date2: 03/20/14

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/l	0.250	--	1	A
Aroclor 1221	ND		ug/l	0.250	--	1	A
Aroclor 1232	ND		ug/l	0.250	--	1	A
Aroclor 1242	ND		ug/l	0.250	--	1	A
Aroclor 1248	ND		ug/l	0.250	--	1	A
Aroclor 1254	ND		ug/l	0.250	--	1	A
Aroclor 1260	ND		ug/l	0.200	--	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	75		30-150	A
Decachlorobiphenyl	63		30-150	A

Project Name: SEAPORT SQUARE PARCEL J**Lab Number:** L1405735**Project Number:** 34099-400**Report Date:** 03/24/14

**Method Blank Analysis
Batch Quality Control**

Analytical Method: 5,608
 Analytical Date: 03/20/14 15:04
 Analyst: JW

Extraction Method: EPA 608
 Extraction Date: 03/20/14 04:34
 Cleanup Method1: EPA 3665A
 Cleanup Date1: 03/20/14
 Cleanup Method2: EPA 3660B
 Cleanup Date2: 03/20/14

Parameter	Result	Qualifier	Units	RL	MDL	Column
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 01 Batch: WG676650-1						
Aroclor 1016	ND		ug/l	0.250	--	A
Aroclor 1221	ND		ug/l	0.250	--	A
Aroclor 1232	ND		ug/l	0.250	--	A
Aroclor 1242	ND		ug/l	0.250	--	A
Aroclor 1248	ND		ug/l	0.250	--	A
Aroclor 1254	ND		ug/l	0.250	--	A
Aroclor 1260	ND		ug/l	0.200	--	A

Surrogate	%Recovery	Qualifier	Acceptance	
			Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	68		30-150	A
Decachlorobiphenyl	66		30-150	A

Matrix Spike Analysis

Batch Quality Control

Project Name: SEAPORT SQUARE PARCEL J
Project Number: 34099-400

Lab Number: L1405735
Report Date: 03/24/14

<i>Parameter</i>	<i>Native Sample</i>	<i>MS Added</i>	<i>MS Found</i>	<i>MS %Recovery</i>	<i>Qual</i>	<i>MSD Found</i>	<i>MSD %Recovery</i>	<i>Qual</i>	<i>Recovery Limits</i>	<i>RPD</i>	<i>Qual</i>	<i>RPD Limits</i>	<i>Column</i>
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01 QC Batch ID: WG676650-3 QC Sample: L1405735-01 Client ID: HA-J5(OW)													
Aroclor 1016	ND	1	0.851	85		-	-		40-140	-		50	A
Aroclor 1260	ND	1	0.772	77		-	-		40-140	-		50	A

<i>Surrogate</i>	<i>MS % Recovery</i>	<i>Qualifier</i>	<i>MSD % Recovery</i>	<i>Qualifier</i>	<i>Acceptance Criteria</i>	<i>Column</i>
2,4,5,6-Tetrachloro-m-xylene	78				30-150	A
Decachlorobiphenyl	64				30-150	A

Lab Control Sample Analysis Batch Quality Control

Project Name: SEAPORT SQUARE PARCEL J
Project Number: 34099-400

Lab Number: L1405735
Report Date: 03/24/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01 Batch: WG676650-2									
Aroclor 1016	84		-		40-140	-		50	A
Aroclor 1260	82		-		40-140	-		50	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	80				30-150	A
Decachlorobiphenyl	77				30-150	A

Lab Duplicate Analysis

Batch Quality Control

Project Name: SEAPORT SQUARE PARCEL J
Project Number: 34099-400

Lab Number: L1405735
Report Date: 03/24/14

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01 QC Batch ID: WG676650-4 QC Sample: L1405667-02 Client ID: DUP Sample						
Aroclor 1016	ND	ND	ug/l	NC		50 A
Aroclor 1221	ND	ND	ug/l	NC		50 A
Aroclor 1232	ND	ND	ug/l	NC		50 A
Aroclor 1242	ND	ND	ug/l	NC		50 A
Aroclor 1248	ND	ND	ug/l	NC		50 A
Aroclor 1254	ND	ND	ug/l	NC		50 A
Aroclor 1260	ND	ND	ug/l	NC		50 A

Surrogate	%Recovery	Qualifier	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	78		80		30-150	A
Decachlorobiphenyl	76		76		30-150	A

METALS

Project Name: SEAPORT SQUARE PARCEL J
Project Number: 34099-400

Lab Number: L1405735
Report Date: 03/24/14

SAMPLE RESULTS

Lab ID: L1405735-01
 Client ID: HA-J5(OW)
 Sample Location: Not Specified
 Matrix: Water

Date Collected: 03/19/14 12:00
 Date Received: 03/19/14
 Field Prep: See Narrative

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Westborough Lab											
Antimony, Total	ND		mg/l	0.00400	--	4	03/24/14 08:51	03/24/14 15:55	EPA 3005A	1,6020A	BM
Arsenic, Total	0.01748		mg/l	0.00200	--	4	03/24/14 08:51	03/24/14 15:55	EPA 3005A	1,6020A	BM
Cadmium, Total	ND		mg/l	0.00080	--	4	03/24/14 08:51	03/24/14 15:55	EPA 3005A	1,6020A	BM
Chromium, Total	0.00614		mg/l	0.00400	--	4	03/24/14 08:51	03/24/14 15:55	EPA 3005A	1,6020A	BM
Copper, Total	0.00436		mg/l	0.00400	--	4	03/24/14 08:51	03/24/14 15:55	EPA 3005A	1,6020A	BM
Iron, Total	2.9		mg/l	0.05	--	1	03/24/14 08:51	03/24/14 12:46	EPA 3005A	19,200.7	JH
Lead, Total	ND		mg/l	0.00400	--	4	03/24/14 08:51	03/24/14 15:55	EPA 3005A	1,6020A	BM
Mercury, Total	ND		mg/l	0.0002	--	1	03/21/14 09:11	03/21/14 11:43	EPA 245.1	3,245.1	MC
Nickel, Total	0.00603		mg/l	0.00200	--	4	03/24/14 08:51	03/24/14 15:55	EPA 3005A	1,6020A	BM
Selenium, Total	ND		mg/l	0.0200	--	4	03/24/14 08:51	03/24/14 15:55	EPA 3005A	1,6020A	BM
Silver, Total	ND		mg/l	0.00160	--	4	03/24/14 08:51	03/24/14 15:55	EPA 3005A	1,6020A	BM
Zinc, Total	ND		mg/l	0.04000	--	4	03/24/14 08:51	03/24/14 15:55	EPA 3005A	1,6020A	BM
Dissolved Metals - Westborough Lab											
Antimony, Dissolved	ND		mg/l	0.00400	--	4	03/24/14 10:48	03/24/14 16:51	NA	1,6020A	BM
Arsenic, Dissolved	0.01534		mg/l	0.00200	--	4	03/24/14 10:48	03/24/14 16:51	NA	1,6020A	BM
Cadmium, Dissolved	ND		mg/l	0.00080	--	4	03/24/14 10:48	03/24/14 16:51	NA	1,6020A	BM
Chromium, Dissolved	ND		mg/l	0.00400	--	4	03/24/14 10:48	03/24/14 16:51	NA	1,6020A	BM
Copper, Dissolved	ND		mg/l	0.00400	--	4	03/24/14 10:48	03/24/14 16:51	NA	1,6020A	BM
Iron, Dissolved	0.07		mg/l	0.05	--	1	03/24/14 10:48	03/24/14 12:09	NA	19,200.7	TT
Lead, Dissolved	ND		mg/l	0.00400	--	4	03/24/14 10:48	03/24/14 16:51	NA	1,6020A	BM
Mercury, Dissolved	ND		mg/l	0.0002	--	1	03/22/14 11:30	03/22/14 14:14	EPA 245.1	3,245.1	AK
Nickel, Dissolved	0.00265		mg/l	0.00200	--	4	03/24/14 10:48	03/24/14 16:51	NA	1,6020A	BM
Selenium, Dissolved	ND		mg/l	0.0200	--	4	03/24/14 10:48	03/24/14 16:51	NA	1,6020A	BM
Silver, Dissolved	ND		mg/l	0.00160	--	4	03/24/14 10:48	03/24/14 16:51	NA	1,6020A	BM
Zinc, Dissolved	ND		mg/l	0.04000	--	4	03/24/14 10:48	03/24/14 16:51	NA	1,6020A	BM



Project Name: SEAPORT SQUARE PARCEL J
Project Number: 34099-400

Lab Number: L1405735
Report Date: 03/24/14

Method Blank Analysis Batch Quality Control

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Westborough Lab for sample(s): 01 Batch: WG676992-1									
Mercury, Total	ND	mg/l	0.0002	--	1	03/21/14 09:11	03/21/14 11:38	3,245.1	MC

Prep Information

Digestion Method: EPA 245.1

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Dissolved Metals - Westborough Lab for sample(s): 01 Batch: WG677273-1									
Mercury, Dissolved	ND	mg/l	0.0002	--	1	03/22/14 11:30	03/22/14 14:11	3,245.1	AK

Prep Information

Digestion Method: EPA 245.1

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Westborough Lab for sample(s): 01 Batch: WG677386-1									
Antimony, Total	ND	mg/l	0.00100	--	1	03/24/14 08:51	03/24/14 15:43	1,6020A	BM
Arsenic, Total	ND	mg/l	0.00050	--	1	03/24/14 08:51	03/24/14 15:43	1,6020A	BM
Cadmium, Total	ND	mg/l	0.00020	--	1	03/24/14 08:51	03/24/14 15:43	1,6020A	BM
Chromium, Total	ND	mg/l	0.00100	--	1	03/24/14 08:51	03/24/14 15:43	1,6020A	BM
Copper, Total	ND	mg/l	0.00100	--	1	03/24/14 08:51	03/24/14 15:43	1,6020A	BM
Lead, Total	ND	mg/l	0.00100	--	1	03/24/14 08:51	03/24/14 15:43	1,6020A	BM
Nickel, Total	ND	mg/l	0.00050	--	1	03/24/14 08:51	03/24/14 15:43	1,6020A	BM
Selenium, Total	ND	mg/l	0.00500	--	1	03/24/14 08:51	03/24/14 15:43	1,6020A	BM
Silver, Total	ND	mg/l	0.00040	--	1	03/24/14 08:51	03/24/14 15:43	1,6020A	BM
Zinc, Total	ND	mg/l	0.01000	--	1	03/24/14 08:51	03/24/14 15:43	1,6020A	BM

Prep Information

Digestion Method: EPA 3005A



Project Name: SEAPORT SQUARE PARCEL J
Project Number: 34099-400

Lab Number: L1405735
Report Date: 03/24/14

Method Blank Analysis Batch Quality Control

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Westborough Lab for sample(s): 01 Batch: WG677388-1									
Iron, Total	ND	mg/l	0.05	--	1	03/24/14 08:51	03/24/14 12:38	19,200.7	JH

Prep Information

Digestion Method: EPA 3005A

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Dissolved Metals - Westborough Lab for sample(s): 01 Batch: WG677420-1									
Antimony, Dissolved	ND	mg/l	0.00100	--	1	03/24/14 10:48	03/24/14 16:39	1,6020A	BM
Arsenic, Dissolved	ND	mg/l	0.00050	--	1	03/24/14 10:48	03/24/14 16:39	1,6020A	BM
Cadmium, Dissolved	ND	mg/l	0.00020	--	1	03/24/14 10:48	03/24/14 16:39	1,6020A	BM
Chromium, Dissolved	ND	mg/l	0.00100	--	1	03/24/14 10:48	03/24/14 16:39	1,6020A	BM
Copper, Dissolved	ND	mg/l	0.00100	--	1	03/24/14 10:48	03/24/14 16:39	1,6020A	BM
Lead, Dissolved	ND	mg/l	0.00100	--	1	03/24/14 10:48	03/24/14 16:39	1,6020A	BM
Nickel, Dissolved	ND	mg/l	0.00050	--	1	03/24/14 10:48	03/24/14 16:39	1,6020A	BM
Selenium, Dissolved	ND	mg/l	0.00500	--	1	03/24/14 10:48	03/24/14 16:39	1,6020A	BM
Silver, Dissolved	ND	mg/l	0.00040	--	1	03/24/14 10:48	03/24/14 16:39	1,6020A	BM
Zinc, Dissolved	ND	mg/l	0.01000	--	1	03/24/14 10:48	03/24/14 16:39	1,6020A	BM

Prep Information

Digestion Method: NA

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Dissolved Metals - Westborough Lab for sample(s): 01 Batch: WG677424-1									
Iron, Dissolved	ND	mg/l	0.05	--	1	03/24/14 10:48	03/24/14 12:01	19,200.7	TT

Prep Information

Digestion Method: NA

Lab Control Sample Analysis

Batch Quality Control

Project Name: SEAPORT SQUARE PARCEL J
Project Number: 34099-400

Lab Number: L1405735
Report Date: 03/24/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01 Batch: WG676992-2								
Mercury, Total	100		-		85-115	-		
Dissolved Metals - Westborough Lab Associated sample(s): 01 Batch: WG677273-2								
Mercury, Dissolved	97		-		85-115	-		
Total Metals - Westborough Lab Associated sample(s): 01 Batch: WG677386-2								
Antimony, Total	98		-		80-120	-		
Arsenic, Total	105		-		80-120	-		
Cadmium, Total	108		-		80-120	-		
Chromium, Total	99		-		80-120	-		
Copper, Total	106		-		80-120	-		
Lead, Total	105		-		80-120	-		
Nickel, Total	102		-		80-120	-		
Selenium, Total	106		-		80-120	-		
Silver, Total	100		-		80-120	-		
Zinc, Total	102		-		80-120	-		
Total Metals - Westborough Lab Associated sample(s): 01 Batch: WG677388-2								
Iron, Total	91		-		85-115	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: SEAPORT SQUARE PARCEL J
Project Number: 34099-400

Lab Number: L1405735
Report Date: 03/24/14

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Dissolved Metals - Westborough Lab Associated sample(s): 01 Batch: WG677420-2					
Antimony, Dissolved	89	-	80-120	-	
Arsenic, Dissolved	100	-	80-120	-	
Cadmium, Dissolved	100	-	80-120	-	
Chromium, Dissolved	95	-	80-120	-	
Copper, Dissolved	102	-	80-120	-	
Lead, Dissolved	100	-	80-120	-	
Nickel, Dissolved	98	-	80-120	-	
Selenium, Dissolved	98	-	80-120	-	
Silver, Dissolved	92	-	80-120	-	
Zinc, Dissolved	97	-	80-120	-	
Dissolved Metals - Westborough Lab Associated sample(s): 01 Batch: WG677424-2					
Iron, Dissolved	88	-	85-115	-	

Matrix Spike Analysis Batch Quality Control

Project Name: SEAPORT SQUARE PARCEL J
Project Number: 34099-400

Lab Number: L1405735
Report Date: 03/24/14

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG676992-4 QC Sample: L1405735-01 Client ID: HA-J5(OW)												
Mercury, Total	ND	0.005	0.0040	81		-	-		70-130	-		20
Dissolved Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG677273-4 QC Sample: L1405735-01 Client ID: HA-J5(OW)												
Mercury, Dissolved	ND	0.005	0.0029	58	Q	-	-		75-125	-		20
Total Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG677386-4 QC Sample: L1405735-01 Client ID: HA-J5(OW)												
Antimony, Total	ND	0.5	0.5244	105		-	-		75-125	-		20
Arsenic, Total	0.01748	0.12	0.1436	105		-	-		75-125	-		20
Cadmium, Total	ND	0.051	0.05250	103		-	-		75-125	-		20
Chromium, Total	0.00614	0.2	0.2034	99		-	-		75-125	-		20
Copper, Total	0.00436	0.25	0.2562	101		-	-		75-125	-		20
Lead, Total	ND	0.51	0.5382	106		-	-		75-125	-		20
Nickel, Total	0.00603	0.5	0.5016	99		-	-		75-125	-		20
Selenium, Total	ND	0.12	0.135	112		-	-		75-125	-		20
Silver, Total	ND	0.05	0.04788	96		-	-		75-125	-		20
Zinc, Total	ND	0.5	0.5142	103		-	-		75-125	-		20
Total Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG677388-4 QC Sample: L1405735-01 Client ID: HA-J5(OW)												
Iron, Total	2.9	1	4.8	190	Q	-	-		75-125	-		20

Matrix Spike Analysis
Batch Quality Control

Project Name: SEAPORT SQUARE PARCEL J
Project Number: 34099-400

Lab Number: L1405735
Report Date: 03/24/14

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Dissolved Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG677420-4 QC Sample: L1405735-01 Client ID: HA-J5(OW)									
Antimony, Dissolved	ND	0.5	0.5264	105	-	-	75-125	-	20
Arsenic, Dissolved	0.01534	0.12	0.1391	103	-	-	75-125	-	20
Cadmium, Dissolved	ND	0.051	0.05130	100	-	-	75-125	-	20
Chromium, Dissolved	ND	0.2	0.1931	96	-	-	75-125	-	20
Copper, Dissolved	ND	0.25	0.2454	98	-	-	75-125	-	20
Lead, Dissolved	ND	0.51	0.5178	102	-	-	75-125	-	20
Nickel, Dissolved	0.00265	0.5	0.4866	97	-	-	75-125	-	20
Selenium, Dissolved	ND	0.12	0.128	107	-	-	75-125	-	20
Silver, Dissolved	ND	0.05	0.03882	78	-	-	75-125	-	20
Zinc, Dissolved	ND	0.5	0.4920	98	-	-	75-125	-	20
Dissolved Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG677424-4 QC Sample: L1405735-01 Client ID: HA-J5(OW)									
Iron, Dissolved	0.07	1	0.97	90	-	-	75-125	-	20

Lab Duplicate Analysis

Batch Quality Control

Project Name: SEAPORT SQUARE PARCEL J
Project Number: 34099-400

Lab Number: L1405735
Report Date: 03/24/14

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG676992-3 QC Sample: L1405735-01 Client ID: HA-J5(OW)						
Mercury, Total	ND	ND	mg/l	NC		20
Dissolved Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG677273-3 QC Sample: L1405735-01 Client ID: HA-J5(OW)						
Mercury, Dissolved	ND	ND	mg/l	NC		20
Total Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG677386-3 QC Sample: L1405735-01 Client ID: HA-J5(OW)						
Antimony, Total	ND	ND	mg/l	NC		20
Arsenic, Total	0.01748	0.01643	mg/l	6		20
Cadmium, Total	ND	ND	mg/l	NC		20
Chromium, Total	0.00614	0.00650	mg/l	6		20
Copper, Total	0.00436	0.00438	mg/l	0		20
Lead, Total	ND	ND	mg/l	NC		20
Nickel, Total	0.00603	0.00576	mg/l	5		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 - Westborough Lab Associated sample(s): 01 QC Batch ID: WG677388-3 QC Sample: L1405735-01 Client ID: HA-J5(OW)						
Iron, Total	2.9	3.2	mg/l	10		20

Lab Duplicate Analysis

Batch Quality Control

Project Name: SEAPORT SQUARE PARCEL J
Project Number: 34099-400

Lab Number: L1405735
Report Date: 03/24/14

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Dissolved Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG677420-3 QC Sample: L1405735-01 Client ID: HA-J5(OW)					
Antimony, Dissolved	ND	ND	mg/l	NC	20
Arsenic, Dissolved	0.01534	0.01456	mg/l	5	20
Cadmium, Dissolved	ND	ND	mg/l	NC	20
Chromium, Dissolved	ND	ND	mg/l	NC	20
Copper, Dissolved	ND	ND	mg/l	NC	20
Lead, Dissolved	ND	ND	mg/l	NC	20
Nickel, Dissolved	0.00265	0.00259	mg/l	2	20
Selenium, Dissolved	ND	ND	mg/l	NC	20
Silver, Dissolved	ND	ND	mg/l	NC	20
Zinc, Dissolved	ND	ND	mg/l	NC	20
Dissolved Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG677424-3 QC Sample: L1405735-01 Client ID: HA-J5(OW)					
Iron, Dissolved	0.07	0.06	mg/l	9	20

INORGANICS & MISCELLANEOUS

Project Name: SEAPORT SQUARE PARCEL J
Project Number: 34099-400

Lab Number: L1405735
Report Date: 03/24/14

SAMPLE RESULTS

Lab ID: L1405735-01
Client ID: HA-J5(OW)
Sample Location: Not Specified
Matrix: Water

Date Collected: 03/19/14 12:00
Date Received: 03/19/14
Field Prep: See Narritive

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total Suspended	61.		mg/l	5.0	NA	1	-	03/20/14 12:10	30,2540D	DW
Cyanide, Total	ND		mg/l	0.005	--	1	03/20/14 09:00	03/21/14 15:24	30,4500CN-CE	JO
Chlorine, Total Residual	ND		mg/l	0.02	--	1	-	03/20/14 00:28	30,4500CL-D	EL
TPH	ND		mg/l	4.00	--	1	03/20/14 10:30	03/20/14 12:45	74,1664A	ML
Phenolics, Total	ND		mg/l	0.03	--	1	03/20/14 12:15	03/20/14 19:12	4,420.1	TE
Chromium, Hexavalent	ND		mg/l	0.010	--	1	03/20/14 00:01	03/20/14 00:20	30,3500CR-D	EL
Anions by Ion Chromatography - Westborough Lab										
Chloride	1310		mg/l	50.0	--	100	-	03/20/14 00:16	44,300.0	AU



Project Name: SEAPORT SQUARE PARCEL J
Project Number: 34099-400

Lab Number: L1405735
Report Date: 03/24/14

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: WG676621-1										
Chromium, Hexavalent	ND		mg/l	0.010	--	1	03/20/14 00:01	03/20/14 00:19	30,3500CR-D	EL
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG676625-1										
Chlorine, Total Residual	ND		mg/l	0.02	--	1	-	03/20/14 00:28	30,4500CL-D	EL
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG676664-1										
Solids, Total Suspended	ND		mg/l	5.0	NA	1	-	03/20/14 12:10	30,2540D	DW
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG676697-1										
Cyanide, Total	ND		mg/l	0.005	--	1	03/20/14 09:00	03/21/14 15:17	30,4500CN-CE	JO
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG676774-1										
TPH	ND		mg/l	4.00	--	1	03/20/14 10:30	03/20/14 12:45	74,1664A	ML
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG676812-1										
Phenolics, Total	ND		mg/l	0.03	--	1	03/20/14 12:15	03/20/14 19:09	4,420.1	TE
Anions by Ion Chromatography - Westborough Lab for sample(s): 01 Batch: WG676871-1										
Chloride	ND		mg/l	0.500	--	1	-	03/19/14 17:15	44,300.0	AU

Lab Control Sample Analysis

Batch Quality Control

Project Name: SEAPORT SQUARE PARCEL J
Project Number: 34099-400

Lab Number: L1405735
Report Date: 03/24/14

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG676621-2								
Chromium, Hexavalent	102		-		85-115	-		20
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG676625-2								
Chlorine, Total Residual	97		-		90-110	-		
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG676697-2								
Cyanide, Total	100		-		90-110	-		
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG676774-2								
TPH	90		-		64-132	-		34
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG676812-2								
Phenolics, Total	101		-		70-130	-		
Anions by Ion Chromatography - Westborough Lab Associated sample(s): 01 Batch: WG676871-2								
Chloride	96		-		90-110	-		

Matrix Spike Analysis
Batch Quality Control

Project Name: SEAPORT SQUARE PARCEL J
Project Number: 34099-400

Lab Number: L1405735
Report Date: 03/24/14

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Qual	MSD Found	MSD %Recovery	MSD Qual	Recovery Limits	RPD	RPD Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG676621-4 QC Sample: L1405735-01 Client ID: HA-J5(OW)												
Chromium, Hexavalent	ND	0.1	0.109	109	-	-	-	-	85-115	-	-	20
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG676697-3 WG676697-4 QC Sample: L1405742-02 Client ID: MS Sample												
Cyanide, Total	ND	0.2	0.210	105	0.206	103	-	-	90-110	2	-	30
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG676774-4 QC Sample: L1405735-01 Client ID: HA-J5(OW)												
TPH	ND	20	11.1	56	Q	-	-	-	64-132	-	-	34
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG676812-4 QC Sample: L1405629-06 Client ID: MS Sample												
Phenolics, Total	ND	0.4	0.40	100	-	-	-	-	70-130	-	-	20
Anions by Ion Chromatography - Westborough Lab Associated sample(s): 01 QC Batch ID: WG676871-3 QC Sample: L1405568-03 Client ID: MS Sample												
Chloride	ND	4	3.77	94	-	-	-	-	40-151	-	-	18

Lab Duplicate Analysis

Batch Quality Control

Project Name: SEAPORT SQUARE PARCEL J
Project Number: 34099-400

Lab Number: L1405735
Report Date: 03/24/14

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG676621-3 QC Sample: L1405735-01 Client ID: HA-J5(OW)						
Chromium, Hexavalent	ND	ND	mg/l	NC		20
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG676625-3 QC Sample: L1405690-01 Client ID: DUP Sample						
Chlorine, Total Residual	ND	ND	mg/l	NC		20
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG676664-2 QC Sample: L1405649-01 Client ID: DUP Sample						
Solids, Total Suspended	110	100	mg/l	10		29
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG676697-5 QC Sample: L1405742-03 Client ID: DUP Sample						
Cyanide, Total	ND	ND	mg/l	NC		30
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG676774-3 QC Sample: L1405401-01 Client ID: DUP Sample						
TPH	ND	ND	mg/l	NC		34
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG676812-3 QC Sample: L1405629-06 Client ID: DUP Sample						
Phenolics, Total	ND	ND	mg/l	NC		20
Anions by Ion Chromatography - Westborough Lab Associated sample(s): 01 QC Batch ID: WG676871-4 QC Sample: L1405568-03 Client ID: DUP Sample						
Chloride	ND	ND	mg/l	NC		18

Project Name: SEAPORT SQUARE PARCEL J
Project Number: 34099-400

Lab Number: L1405735
Report Date: 03/24/14

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Reagent H2O Preserved Vials Frozen on: NA

Cooler Information Custody Seal

Cooler

A Absent
 B Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1405735-01A	Vial HCl preserved	A	N/A	3.0	Y	Absent	8260(14)
L1405735-01B	Vial HCl preserved	A	N/A	3.0	Y	Absent	8260(14)
L1405735-01C	Vial HCl preserved	A	N/A	3.0	Y	Absent	8260(14)
L1405735-01D	Vial HCl preserved	A	N/A	3.0	Y	Absent	8260-SIM(14)
L1405735-01E	Vial HCl preserved	A	N/A	3.0	Y	Absent	8260-SIM(14)
L1405735-01F	Vial HCl preserved	A	N/A	3.0	Y	Absent	8260-SIM(14)
L1405735-01G	Vial Na2S2O3 preserved	A	N/A	3.0	Y	Absent	504(14)
L1405735-01H	Vial Na2S2O3 preserved	A	N/A	3.0	Y	Absent	504(14)
L1405735-01I	Amber 1000ml unpreserved	A	7	3.0	Y	Absent	8270TCL(7),8270TCL-SIM(7)
L1405735-01I1	Amber 1000ml unpreserved	B	7	2.7	Y	Absent	8270TCL(7),8270TCL-SIM(7)
L1405735-01J	Amber 250ml unpreserved	A	7	3.0	Y	Absent	8270TCL(7),8270TCL-SIM(7)
L1405735-01J1	Amber 1000ml unpreserved	B	7	2.7	Y	Absent	8270TCL(7),8270TCL-SIM(7)
L1405735-01K	Amber 1000ml Na2S2O3	A	7	3.0	Y	Absent	PCB-608(7)
L1405735-01L	Amber 1000ml Na2S2O3	B	7	2.7	Y	Absent	PCB-608(7)
L1405735-01M	Amber 1000ml HCl preserved	A	<2	3.0	Y	Absent	TPH-1664(28)
L1405735-01N	Amber 1000ml HCl preserved	B	<2	2.7	Y	Absent	TPH-1664(28)
L1405735-01O	Amber 1000ml H2SO4 preserved	A	<2	3.0	Y	Absent	TPHENOL-420(28)
L1405735-01P	Amber 500ml unpreserved	A	7	3.0	Y	Absent	CL-300(28),TRC-4500(1)
L1405735-01Q	Plastic 1000ml unpreserved	A	7	3.0	Y	Absent	TSS-2540(7)
L1405735-01R	Plastic 250ml HNO3 preserved	A	<2	3.0	Y	Absent	CU-6020S(180),FE-RI(180),SE-6020S(180),ZN-6020S(180),CR-6020S(180),NI-6020S(180),PB-6020S(180),AG-6020S(180),AS-6020S(180),HG-R(28),SB-6020S(180),CD-6020S(180)

*Values in parentheses indicate holding time in days

Project Name: SEAPORT SQUARE PARCEL J**Project Number:** 34099-400**Lab Number:** L1405735**Report Date:** 03/24/14**Container Information**

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1405735-01S	Plastic 250ml HNO3 preserved	A	<2	3.0	Y	Absent	SE-6020T(180),CR-6020T(180),NI-6020T(180),CU-6020T(180),ZN-6020T(180),FE-UI(180),PB-6020T(180),HG-U(28),AS-6020T(180),SB-6020T(180),AG-6020T(180),CD-6020T(180)
L1405735-01W	Plastic 250ml NaOH preserved	A	>12	3.0	Y	Absent	TCN-4500(14)
L1405735-01X	Plastic 500ml unpreserved	A	7	3.0	Y	Absent	HEXCR-3500(1)

Container Comments

L1405735-01R

L1405735-01S

*Values in parentheses indicate holding time in days

Project Name: SEAPORT SQUARE PARCEL J
Project Number: 34099-400

Lab Number: L1405735
Report Date: 03/24/14

GLOSSARY

Acronyms

EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NI	- Not Ignitable.
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.

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.

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.
- 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.

Report Format: Data Usability Report



Project Name: SEAPORT SQUARE PARCEL J
Project Number: 34099-400

Lab Number: L1405735
Report Date: 03/24/14

Data Qualifiers

- 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.

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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.
- 5 Methods for the Organic Chemical Analysis of Municipal and Industrial Wastewater. Appendix A, Part 136, 40 CFR (Code of Federal Regulations).
- 14 Methods for the Determination of Organic Compounds in Finished Drinking Water and Raw Source Water. EPA/600/4-88/039, Revised July 1991.
- 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.
- 30 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WPCF. 18th Edition. 1992.
- 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.

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

Last revised December 11, 2013

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

Westborough Facility

EPA 524.2: Acetone, 2-Butanone (Methyl ethyl ketone (MEK)), Tert-butyl alcohol, 2-Hexanone, Tetrahydrofuran, 1,3,5-Trichlorobenzene, 4-Methyl-2-pentanone (MIBK), Carbon disulfide, Diethyl ether.

EPA 8260C: 1,2,4,5-Tetramethylbenzene, 4-Ethyltoluene, Iodomethane (methyl iodide), Methyl methacrylate, Azobenzene.

EPA 8330A/B: PETN, Picric Acid, Nitroglycerine, 2,6-DANT, 2,4-DANT.

EPA 8270D: 1-Methylnaphthalene, Dimethylnaphthalene, 1,4-Diphenylhydrazine.

EPA 625: 4-Chloroaniline, 4-Methylphenol.

SM4500: Soil: Total Phosphorus, TKN, NO₂, NO₃.

EPA 9071: Total Petroleum Hydrocarbons, Oil & Grease.

Mansfield Facility

EPA 8270D: Biphenyl.

EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

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

Drinking Water

EPA 200.8: Sb,As,Ba,Be,Cd,Cr,Cu,Pb,Ni,Se,Tl; **EPA 200.7:** Ba,Be,Ca,Cd,Cr,Cu,Na; **EPA 245.1:** Mercury;

EPA 300.0: Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500CI-D, SM2320B, SM2540C, SM4500H-B**

EPA 332: Perchlorate.

Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT, Enterolert-QT.**

Non-Potable Water

EPA 200.8: Al,Sb,As,Be,Cd,Cr,Cu,Pb,Mn,Ni,Se,Ag,Tl,Zn;

EPA 200.7: Al,Sb,As,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Mo,Ni,K,Se,Ag,Na,Sr,Ti,Tl,V,Zn;

EPA 245.1, SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2340B, SM2320B, SM4500CL-E, SM4500F-BC, SM426C, SM4500NH3-BH, EPA 350.1: Ammonia-N, **LACHAT 10-107-06-1-B:** Ammonia-N, **SM4500NO3-F, EPA 353.2:** Nitrate-N, **SM4500NH3-BC-NES, EPA 351.1, SM4500P-E, SM4500P-B, E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, SM14 510AC, EPA 420.1, SM4500-CN-CE, SM2540D.**

EPA 624: Volatile Halocarbons & Aromatics,

EPA 608: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs

EPA 625: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045:** PCB-Oil.

Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9222D-MF.**

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

