



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Region 1  
5 Post Office Square, Suite 100  
BOSTON, MA 02109-3912

**CERTIFIED MAIL RETURN RECEIPT REQUESTED**

**AUG 15 2014**

Curtis S. Ruotolo  
Sitework Coordinator  
Dimeo Construction Company  
75 Chapman Street  
Providence RI 02905

Re: Authorization to discharge under the Remediation General Permit (RGP) –  
MAG910000. Residences at Morrissey Boulevard site located at 25 Morrissey Boulevard,  
Dorchester, MA 02125, Suffolk County; Authorization # MAG910634

Dear Mr. Ruotolo:

Based on the review of a Notice of Intent (NOI) submitted by Haley & Aldrich, on behalf of Qianlong Criterion Ventures LLC, for the site referenced above, the U.S. 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 exceeded Appendix III limits. The checklist also includes other parameters for which your laboratory reports indicated there was insufficient sensitivity to detect these parameters at the minimum levels established in Appendix VI of the RGP, and total metals based on historic contamination.

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 to five (1-5) range. (See the RGP Appendix IV for Massachusetts facilities).

Therefore, the limits for arsenic of 36 ug/L, trivalent chromium of 100 ug/L, lead of 8.5 ug/L, and iron of 1,000 ug/L, are required to achieve permit compliance at your site.

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 this project will terminate on September 15, 2016. Because the project completion is after the permit expiration date, you are required to reapply for continuity of permit coverage by submitting a Notice of Intent (NOI) to EPA after the RGP is reissued. Also, regardless of your project termination date 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](mailto: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, BWSC  
Corrine M. McKenzie, Haley & Aldrich, Inc.

**2010 Remediation General Permit  
Summary of Monitoring Parameters<sup>[1]</sup>**

<b>NPDES Authorization Number:</b>	<b>MAG910634</b>
Authorization Issued:	August, 2014
Facility/Site Name:	Residences at Morrissey Boulevard
Facility/Site Address:	25 Morrissey Boulevard, Dorchester, MA 02125, Suffolk County
	Email address of owner: akaye@criteriondp.com
Legal Name of Operator:	Dimeo Construction Company
Operator contact name, title, and Address:	Curtis Ruotolo, Sitework Coordinator, 75 Chapman Street, Providence RI, 02905, Providence County.
	Email: CRuotolo@Dimeo.com
Estimated date of the site's Completion:	September 15, 2016
Category and Sub-Category:	Petroleum Related Site Remediation. Subcategory C. Petroleum Sites with additional Contamination. & Contaminated Construction Dewatering. Subcategory A. General Urban Fill Sites
RGP Termination Date:	September 10, 2015
Receiving Water:	Savin Hill Cove via outfall SD0122

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

	<b><u>Parameter</u></b>	<b><u>Effluent Limit/Method#/ML</u></b> (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) <sup>1</sup>	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) <sup>2, 3</sup>	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

	<b>Parameter</b>	<b>Effluent Limit/Method#/ML</b> (All Effluent Limits are shown as Daily Maximum Limit, unless denoted by a **, in that case it will be a Monthly Average Limit)
	8. (m,p,o) Xylenes (X)	(limited as ug/L total BTEX) Me#8260C/ ML 2ug/L
✓	9. Total Benzene, Toluene, Ethyl Benzene, and Xylenes (BTEX) <sup>4</sup>	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 <sup>5</sup>	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) <sup>6</sup>	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)]	6.0 ug/L /Me#8270D/ML 5ug/L,Me#606/ML 10ug/L & Me#625/ML

	<b>Parameter</b>	<b>Effluent Limit/Method#/ML</b> (All Effluent Limits are shown as Daily Maximum Limit, unless denoted by a **, in that case it will be a Monthly Average Limit)
	Phthalate]	5ug/L
	35. Total Group I Polycyclic Aromatic Hydrocarbons (PAH)	10.0 ug/L
	a. Benzo(a) Anthracene <sup>7</sup>	0.0038 ug/L /Me#8270D/ ML 5ug/L, Me#610/ML 5ug/L& Me#625/ML 5ug/L
	b. Benzo(a) Pyrene <sup>7</sup>	0.0038 ug/L /Me#8270D/ ML 5ug/L, Me#610/ML 5ug/L& Me#625/ML 5ug/L
	c. Benzo(b)Fluoranthene <sup>7</sup>	0.0038 ug/L /Me#8270D/ ML 5ug/L, Me#610/ML 5ug/L& Me#625/ML 5ug/L
	d. Benzo(k)Fluoranthene <sup>7</sup>	0.0038 ug/L /Me#8270D/ ML 5ug/L, Me#610/ML 5ug/L& Me#625/ML 5ug/L
	e. Chrysene <sup>7</sup>	0.0038 ug/L /Me#8270D/ML 5ug/L, Me#610/ML 5ug/L& Me#625/ML 5ug/L
	f. Dibenzo(a,h)anthracene <sup>7</sup>	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 <sup>7</sup>	0.0038 ug/L /Me#8270D/ML 5ug/L, Me#610/ML 5ug/L& Me#625/ML5ug/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 <sup>5</sup>	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/ML5ug/L,Me#610/ML 5ug/L & Me#625/ML 5ug/L
	37. Total Polychlorinated Biphenyls (PCBs) <sup>8,9</sup>	0.000064 ug/L/Me# 608/ ML 0.5 ug/L
✓	38. Chloride	Monitor only/Me# 300.0/ ML 100 ug/L

	<b>Metal Parameters</b>	<b>Total Recoverable MA/Metal Limit H<sup>10</sup> = 50 mg/l CaCO<sub>3</sub>, Units = ug/l<sup>(11/12)</sup></b>		<b>Minimum level=ML</b>	
			<b>Saltwater Limits</b>		
	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	02
	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

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

Footnotes:

<sup>1</sup> 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).

<sup>2</sup> 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.

<sup>3</sup> 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).

<sup>4</sup> BTEX = sum of Benzene, Toluene, Ethylbenzene, and total Xylenes.

<sup>5</sup> 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.

<sup>6</sup> 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.*

<sup>7</sup> 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.

<sup>8</sup> 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.

<sup>9</sup>Although 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).

<sup>10</sup> Hardness. Cadmium, Chromium III, Copper, Lead, Nickel, Silver, and Zinc are Hardness Dependent.

<sup>11</sup> 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 =  $1,000 \times 2 = 2,000$  ug/L., etc. not to exceed the DF=5.

<sup>12</sup> 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).

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

<sup>14</sup> Temperature sampling per Method 170.1

**NOTICE OF INTENT (NOI)  
TEMPORARY CONSTRUCTION DEWATERING  
RESIDENCES AT MORRISSEY BOULEVARD  
25 MORRISSEY BOULEVARD  
DORCHESTER, MASSACHUSETTS**

by

**Haley & Aldrich, Inc.  
Boston, Massachusetts**

on behalf of

**Qianlong Criterion Ventures LLC  
Waltham, Massachusetts**

for

**US Environmental Protection Agency  
Boston, Massachusetts**

**File No. 40414-042  
July 2014**

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

Tel: 617.886.7400  
Fax: 617.886.7600  
HaleyAldrich.com



22 July 2014  
File No. 40414-042

US Environmental Protection Agency  
5 Post Office Square, Suite 100  
Mail Code OEP06-4  
Boston, Massachusetts 02109-3912

Attention: Ms. Shelly Puleo

Subject: Notice of Intent (NOI)  
Temporary Construction Dewatering  
25 Morrissey Boulevard  
Dorchester, Massachusetts

Dear Ms. Puleo:

On behalf of our client, Qianlong Criterion Ventures LLC (Qianlong Criterion), 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. Temporary dewatering is planned in support of the construction of the proposed Residences at Morrissey Boulevard in Dorchester, Massachusetts, as shown on Figure 1, Project Locus. We anticipate construction dewatering will be conducted, as necessary, during below grade excavation and planned construction.

The site is bounded to the north by the JFK/UMass MBTA red line station, to the east by William T. Morrissey Boulevard, to the south by paved parking associated with Shaw's Supermarket, beyond which lies the Shaw's Supermarket, and to the west by MBTA railroad tracks and the elevated I-93 (Southeast Expressway). Existing site grades typically slope up gradually to the south, ranging from approximately El. 14 to El. 19. Boston City Base (BCB) Datum.

## **SITE HISTORY**

Historic site use was evaluated based on a review of historical Sanborn Fire Insurance maps dated 1899, 1923, 1950, 1964, 1988, 1990, 1992, 1993, 1994, 1995, 1998, and 2002. The site was formerly a marshy wetland bordering Savin Hill Cove which was filled in the late 1890s and early 1900s. The property was operated as a Gulf Oil service station from approximately 1956 to 1969 and was used for car storage and parking from 1956 to 1985. The service station had 6 USTs which were removed between 1979 and 1981. Beginning in the 1980's the site was used as an auto impoundment and junk yard. The USTs were removed between 1979 and 1981. Between 1989 and January 1990, the on-site structure was demolished and debris associated with the impound/scrap yard (drums of hydraulic oil, batteries, paints and solvents) were removed from the property under the direction of the MassDEP. Heating oil tanks were also removed at that time. The Site has been vacant and a portion used for surface parking for Shaw's Supermarket since 1989.

## **PROPOSED CONSTRUCTION**

The proposed Residences at Morrissey Boulevard will consist of two residential structures (“East Building” and “West Building”) separated by a courtyard and a street (“Main Street”). The East building will have five stories of residential space and a partially below-grade parking level. The West building will have two levels of above-grade parking beneath a portion of the building. There are residential units located on the ground floor on a portion of the West Building fronting on the new Main Street. Site grades will be raised up to 4 ft are planned below the West Building and elsewhere on the site in the areas surrounding the buildings. Proposed finished floor elevation of the East Building parking level is El. 9.5 ft and El. 20 for the 1<sup>st</sup> floor, proposed finished floor elevation of the West Building 1<sup>st</sup> floor is between El. 19 (residential) and El. 20 (parking).

## **REGULATORY BACKGROUND**

A release was initially detected and reported at the Site in 1992 based on the results of an investigation that detected petroleum contaminated soils. In January 1994, Green excavated approximately 8,000 cy of soil including 4,500 cy of TPH contaminated soil and 3,500 cy of fill materials suitable for reuse. During excavation approximately 50,000-gallons of groundwater were pumped from the excavation, treated via granular activated carbon (GAC) and discharged to the onsite stormwater sewer under a National Pollutant Discharge Elimination System (NPDES) permit. Excavated soils were deemed suitable for reuse by Green and were screened to remove cobbles and other materials greater than 2 inch size and to aerate the soils. In February 1994, a soil sample was collected from the stockpiled material and confirmatory soil samples were collected from the sidewall of the excavation. Concentrations of TPH and PAHs greater than applicable Method 1 S-3 Criteria were detected, at which point operations ceased until January 1996. In January 1996 Green excavated test pits and collected additional soil samples to characterize materials at the site the results of which were provided to MassDEP in an Interim Measure Status Report. According to the status report, the TPH contaminated stockpile was screened and screen tailings were placed back into the dewatered excavation to prevent contact between the TPH contaminated soil and the groundwater table. The screened TPH soils were then placed back into the excavation as the soils could not be blended with the bioremediation additive given the weather conditions. Although additional in-situ remediation was proposed, no additional remedial activities were conducted at the Site.

Due diligence assessments were conducted by ECS in 2000 and 2003 associated with potential sale of the property. Soil and groundwater testing was conducted as part of these assessments. MCP Phase II investigations were also conducted by ECS in March 2007 to update the site data and collect additional information on soil and groundwater quality necessary for conduct of a site wide risk characterization and to determine the nature and extent of the contamination.

The primary contaminants of concern detected in historical investigations at the Site included petroleum hydrocarbons, metals and PAHs in soil. Low concentrations of petroleum related VOCs and metals barium, chromium and lead are present in groundwater below the applicable risk based standards. PCBs and chlorinated VOCs have not been detected at the Site in soil or groundwater to date.

The subject site is a MassDEP Disposal Site with a release tracking number RTN 3-4210 originally listed on January 15, 1993. The Site achieved regulatory closure under the Massachusetts Contingency Plan (MCP) in 2007 with the submittal of a Class A-3 Response Action Outcome (RAO) Statement based on the results of additional investigations and the outcome of a MCP Phase II risk characterization. The RAO relies on an Activity and Use Limitation (AUL) to maintain a condition of "No Significant Risk".

The AUL permits use of the Site for multi-family housing, manufacturing, industrial, and commercial uses, parking areas, children's daycare, public park, and other passive recreational uses, and landscaping and routine maintenance of landscape areas, subject to relevant obligations. The AUL does not permit use or development of the site for single family residential use, gardening, or other agricultural uses which utilize the soils for the cultivation of edible plants, and excavation and off-site relocation of soils from the site unless an LSP renders an Opinion which states that such excavation and relocation is consistent with maintaining a condition of No Significant Risk.

### **GROUNDWATER SAMPLING**

As part of a precharacterization program conducted at the Site in June 2014, Haley & Aldrich sampled six (6) observation wells. Groundwater samples were submitted to Alpha Analytical, Inc. of Westborough, Massachusetts (Alpha) for potential contaminants of concern including VOCs, EPH, VPH, and free cyanide. In support of the NOI, one unfiltered groundwater sample was obtained from observation well HA14-GP-13(OW), on 23 June 2014. The groundwater sample was submitted to Alpha for analysis of SVOCs, PAHs, total metals, pesticides, PCBs, Total Suspended Solids (TSS), chloride, total cyanide, amenable cyanide, physiologically available cyanide, total phenolics, total residual chlorine, and pH.

Results of the analysis indicate methyl tert butyl ether, naphthalene, total iron, and total cyanide concentrations above NPDES RGP effluent limits for Category III sites, but below the applicable RCGW-2 Reportable Concentrations in the MCP. The results of water quality testing are summarized in Table I. Locations of the observation wells are shown on Figure 2.

Appendix III of the RGP Permit indicates that the limits for cyanide are based on EPA's water quality criteria for free cyanide and that there currently is no EPA approved test method for free cyanide, therefore total cyanide must be reported. However since the 2010 RGP permit was published, Method 9016 was approved by EPA in June 2010 for free cyanide in water, soils and solid wastes by microdiffusion. This new Method was approved by EPA and replaces the old Method 4500 that is prone to numerous interferences that unpredictable and difficult to mitigate. There is substantial evidence that Method 4500 causes detection of CN that was not really present in the sample. Total and free cyanide testing has been conducted at the site. The results indicate that total cyanide is present, but free cyanide is non-detectable above the laboratory reporting limit of 5 ug/L. Accordingly we will be using the newer Method 9016 to monitor free cyanide levels in the construction dewatering effluent. Since free cyanide is below discharge criteria, no additional treatment for cyanide is planned.

In addition total iron will not be exceeded at the discharge point based on the appropriate dilution factor in consideration of the multiple discharges into the drain pipe before it reaches its discharge point.

Accordingly it is planned to provide on-site treatment to remove dissolved VOC constituents.

### **DILUTION FACTOR APPLICATION FOR METALS**

A Dilution Factor (DF) was calculated for the detected level of total iron greater than the applicable effluent limits. The DF is applicable to iron, and the calculated DF was used to find the appropriate Dilution Range concentrations for these metals. Although we understand the DF cannot be utilized for saltwater discharge, we have calculated the DF for Site drainage to the storm drain which runs approximately 0.5 miles and collects discharge from numerous other catch basins along Morrissey Boulevard prior to discharge into Savin Hill Cove. 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 150 gallons per minute (GPM) or approximately 0.33 cubic feet per second (cfs), and  $Q_s$  is the receiving storm drain flow rate, assumed to be 17.8 cfs<sup>1</sup> for the 42 inch storm drain pipe assumed to be approximately one-third full. Using these assumed values, the DF is equal to 49.4. According to Appendix IV of the Remediation General Permit, the ceiling limitation for the calculated dilution factor of 49.4 for iron is 5000 ug/L. If testing of the dewatering effluent indicates that the iron concentrations are greater than 5000 ug/L, pretreatment of the dewatering effluent will be conducted.

### **DEWATERING SYSTEM AND OFF-SITE DISCHARGE**

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 September 2014. On average, we estimate effluent discharge rates of about 50 gallons per minute (gpm) or less, with occasional peak flows of approximately 150 gpm during significant precipitation events. Temporary dewatering will be conducted from sumps located in excavations.

Construction dewatering under this RGP NOI will include piping and discharging to storm drains located near the site. The storm drains travel south/southeast along Morrissey Boulevard to discharge directly into the Savin Hill Cove approximately 0.5-miles from the site. The proposed discharge route is shown on Figure 2.

An effluent treatment system will be designed by the Contractor to meet NPDES RGP discharge criteria. Prior to discharge, collected water will be routed through a sedimentation tank with baffles for oil/water separation and bag filters to remove suspended solids and undissolved chemical constituents. Granular activated carbon (GAC) units will be used to remove VOCs (MTBE and other VOCs), as shown on Figure 3. In addition it may be necessary to adjust the pH of the discharge water during the construction process involving placement of fresh concrete.

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<sup>1</sup> 17.8 cfs based on calculations which indicate a 42 inch storm drain has a velocity of 40,000 gpm when full and when one-third full the velocity of the 42 inch storm drain would be 8,000 gpm or 17.8 cfs.

## APPENDICES

The completed "Suggested Notice of Intent" (NOI) form as provided in the RGP is enclosed in Appendix A. The Site is owned by Qianlong Criterion. Haley & Aldrich will monitor the Contractor's dewatering activities on behalf of Qianlong Criterion. In accordance with the requirements for this NOI submission, Qianlong Criterion as the owner and Dimeo Construction as the operator are listed as co-permittees for this NPDES RGP, and therefore both have signed the NOI form.

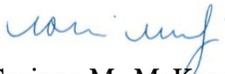
A Best Management Practices Plan (BMPP), which outlines the proposed discharge operations covered under the RGP, is included in Appendix B. Appendices C and D include National Register of Historic Places and Endangered Species Act Documentation, respectively. Appendix E provides the BWSC Permit Application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

## 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.



Corinne M. McKenzie  
Senior Scientist



Keith E. Johnson, P.E., LSP  
Vice President

### Attachments:

- Table I – Summary of Groundwater Quality Data
- Figure 1 – Site Locus
- Figure 2 – Subsurface Exploration and Discharge Location Plan
- Figure 3 – Proposed Treatment System Schematic
- 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: Qianlong Criterion Ventures LLC; Attn: Andrew Kaye; Jay Zachariah  
Dimeo Construction; Curtis Ruotolo

TABLE I - SUMMARY OF GROUNDWATER QUALITY DATA  
 25 MORRISSEY BOULEVARD  
 DORCHESTER, MASSACHUSETTS  
 FILE NO. 40414-042

SAMPLE DESIGNATION SAMPLING DATE LAB SAMPLE ID	NPDES RGP Effluent Limits	MCP RCGW-2 Reportable Criteria (ug/l)	HA14-GP-13(OW) 6/4/2014 L1412036-01 L1412343-06	HA14-GP-13(OW) 6/23/2014 L1413760-01 L1415003-01	EX-MW1 6/5/2014 L1412228-02 L1412343-05	EX-MW1 6/6/2014 L1412343-05	EX-MW2 6/4/2014 L1412036-02 L1412343-04	EX-MW2 6/6/2014 L1412343-04	EX-MW4 6/6/2014 L1412343-02	EX-MW5 6/6/2014 L1412343-01	HA14-GP-11 (OW) 6/5/2014 L1412228-01 L1412343-03	HA14-GP-11 (OW) 6/6/2014 L1412343-03	HA14-GP-13 (OW) 6/6/2014 L1412343-06
<b>VOCs (ug/l)</b>													
2-Butanone	NA	50000	ND(25)	-	ND(2.5)	-	ND(2.5)	-	ND(2.5)	5.4	ND(2.5)	-	-
Acetone	Monitor Only	50000	ND(25)	-	5.4	-	ND(2.5)	-	ND(2.5)	16	ND(2.5)	-	-
Benzene	100*	1000	13	-	ND(0.25)	-	ND(0.25)	-	ND(0.25)	ND(0.25)	ND(0.25)	-	-
Isopropylbenzene	NA	100000	ND(10)	-	ND(1)	-	ND(1)	-	ND(1)	ND(1)	2.2	-	-
Methyl tert butyl ether	70	50000	630	-	3.5	-	10	-	18	9.1	ND(1)	-	-
Naphthalene	20	700	34	-	ND(1)	-	ND(1)	-	ND(1)	ND(1)	ND(1)	-	-
Total VOCs	NA	NA	677	-	8.9	-	10	-	18	30.5	2.2	-	-
<b>SVOCs by GC/MS (ug/l)</b>													
Carbazole	NA	NA	-	2.8	-	-	-	-	-	-	-	-	-
Total SVOCs	NA	NA	-	2.8	-	-	-	-	-	-	-	-	-
<b>SVOCs by GC/MS-SIM</b>													
Total Group I PAH	10	NA	-	ND	-	-	-	-	-	-	-	-	-
Acenaphthene	NA	10000	-	6.5	-	-	-	-	-	-	-	-	-
Anthracene	NA	30	-	1.2	-	-	-	-	-	-	-	-	-
Fluoranthene	NA	200	-	1.3	-	-	-	-	-	-	-	-	-
Fluorene	NA	40	-	4.7	-	-	-	-	-	-	-	-	-
Naphthalene	20	700	-	13	-	-	-	-	-	-	-	-	-
Phenanthrene	NA	10000	-	7.6	-	-	-	-	-	-	-	-	-
Pyrene	NA	20	-	0.84	-	-	-	-	-	-	-	-	-
Total Group II PAH	100	NA	-	35.15	-	-	-	-	-	-	-	-	-
1-Methylnaphthalene	NA	NA	-	4.9	-	-	-	-	-	-	-	-	-
2-Chloronaphthalene	NA	100000	-	ND(0.1)	-	-	-	-	-	-	-	-	-
2-Methylnaphthalene	NA	2000	-	2.4	-	-	-	-	-	-	-	-	-
Hexachlorobenzene	NA	1	-	ND(0.4)	-	-	-	-	-	-	-	-	-
Hexachlorobutadiene	NA	50	-	ND(0.25)	-	-	-	-	-	-	-	-	-
Hexachloroethane	NA	100	-	ND(0.4)	-	-	-	-	-	-	-	-	-
Pentachlorophenol	1	200	-	ND(0.4)	-	-	-	-	-	-	-	-	-
<b>Total Metals (ug/l)</b>													
Antimony, Total	5.6	8000	-	ND(1)	-	-	-	-	-	-	-	-	-
Arsenic, Total	36	900	-	4.34	-	-	-	-	-	-	-	-	-
Cadmium, Total	8.9	4	-	ND(0.1)	-	-	-	-	-	-	-	-	-
Chromium, Total	100	300	-	ND(0.5)	-	-	-	-	-	-	-	-	-
Chromium, Hexavalent	50.3	300	-	ND(5)	-	-	-	-	-	-	-	-	-
Copper, Total	3.7	100000	-	ND(0.5)	-	-	-	-	-	-	-	-	-
Iron, Total	1000	NA	-	1700	-	-	-	-	-	-	-	-	-
Lead, Total	8.5	10	-	0.85	-	-	-	-	-	-	-	-	-
Mercury, Total	1.1	20	-	ND(0.1)	-	-	-	-	-	-	-	-	-
Nickel, Total	8.2	200	-	1.87	-	-	-	-	-	-	-	-	-
Selenium, Total	71	100	-	ND(2.5)	-	-	-	-	-	-	-	-	-
Silver, Total	2.2	7	-	ND(0.2)	-	-	-	-	-	-	-	-	-
Zinc, Total	85.6	900	-	18.28	-	-	-	-	-	-	-	-	-

**TABLE I - SUMMARY OF GROUNDWATER QUALITY DATA**  
**25 MORRISSEY BOULEVARD**  
**DORCHESTER, MASSACHUSETTS**  
**FILE NO. 40414-042**

SAMPLE DESIGNATION SAMPLING DATE LAB SAMPLE ID	NPDES RGP Effluent Limits	MCP RCGW-2 Reportable Criteria (ug/l)	HA14-GP-13(OW) 6/4/2014 L1412036-01 L1412343-06	HA14-GP-13(OW) 6/23/2014 L1413760-01 L1415003-01	EX-MW1 6/5/2014 L1412228-02 L1412343-05	EX-MW1 6/6/2014 L1412343-05	EX-MW2 6/4/2014 L1412036-02 L1412343-04	EX-MW2 6/6/2014 L1412343-04	EX-MW4 6/6/2014 L1412343-02	EX-MW5 6/6/2014 L1412343-01	HA14-GP-11 (OW) 6/5/2014 L1412228-01 L1412343-03	HA14-GP-11 (OW) 6/6/2014 L1412343-03	HA14-GP-13 (OW) 6/6/2014 L1412343-06
<b>EPH (ug/l)</b>													
C11-C22 Aromatics, Adjusted	<b>5000</b>	5000	ND(50)	-	ND(50)	-	ND(50)	-	ND(50)	ND(50)	ND(50)	-	-
C19-C36 Aliphatics	<b>5000</b>	50000	ND(50)	-	ND(50)	-	ND(50)	-	ND(50)	ND(50)	ND(50)	-	-
C9-C18 Aliphatics	<b>5000</b>	5000	ND(50)	-	ND(50)	-	ND(50)	-	ND(50)	ND(50)	ND(50)	-	-
<b>VPH (ug/l)</b>													
C5-C8 Aliphatics, Adjusted	<b>5000</b>	3000	ND(50)	-	ND(25)	-	ND(25)	-	ND(25)	ND(25)	ND(25)	-	-
C9-C10 Aromatics	<b>5000</b>	4000	ND(50)	-	ND(25)	-	ND(25)	-	ND(25)	ND(25)	55.9	-	-
C9-C12 Aliphatics, Adjusted	<b>5000</b>	5000	ND(50)	-	ND(25)	-	ND(25)	-	ND(25)	63.3	82.5	-	-
<b>PCBs (ug/l)</b>													
Total PCBs	<b>0.000064</b>	5	ND	-	-	-	-	-	-	-	-	-	-
<b>Microextractables by GC (ug/l)</b>													
1,2-Dibromoethane	<b>0.05</b>	2	-	ND(0.005)	-	-	-	-	-	-	-	-	-
<b>General Chemistry</b>													
pH (SU)	<b>6.5 to 8.3</b>	NA	-	8.2	-	-	-	-	-	-	-	-	-
Cyanide, Free (ug/l)	<b>NA</b>	30	ND(1)	-	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Chloride (ug/l)	<b>Monitor Only</b>	NA	-	3440000	-	-	-	-	-	-	-	-	-
Chlorine, Total Residual (ug/l)	<b>7.5</b>	NA	-	ND(10)	-	-	-	-	-	-	-	-	-
Cyanide, Total (ug/l)	<b>1</b>	30	-	9	-	-	-	-	-	-	-	-	-
Phenolics, Total (ug/l)	<b>NA</b>	NA	-	ND(15)	-	-	-	-	-	-	-	-	-
Solids, Total Suspended (ug/l)	<b>30000</b>	NA	-	ND(2500)	-	-	-	-	-	-	-	-	-

**ABBREVIATIONS & NOTES:**

NA: Not applicable

ND(2.5): Not detected; number in parentheses is half the laboratory reporting limit

\* : 100 ug/l represents the effluent limit for the sum of Benzene, Toluene, Ethyl Benzene, and Xylene concentrations.

1. NPDES Effluent Limits taken from Appendix III of the EPA Remediation & Miscellaneous Contaminated Sites General Permit.

2. NPDES RGP effluent limits provided for saltwater receiving waters.

3. This table includes only those compounds detected on the dates indicated.

4. **Bold values exceed MCP RCGW-2 concentrations.**

5. **Red values exceed NPDES RGP effluent limits to saltwater.**

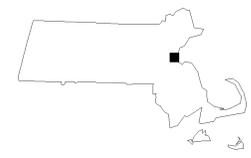
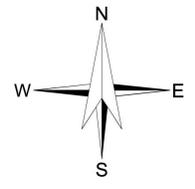


**SITE**

SITE COORDINATES: 42°19'11"N, 71°35'W

**HALEY & ALDRICH**

RESIDENCES AT MORRISSEY BOULEVARD  
25 MORRISSEY BOULEVARD  
DORCHESTER, MASSACHUSETTS



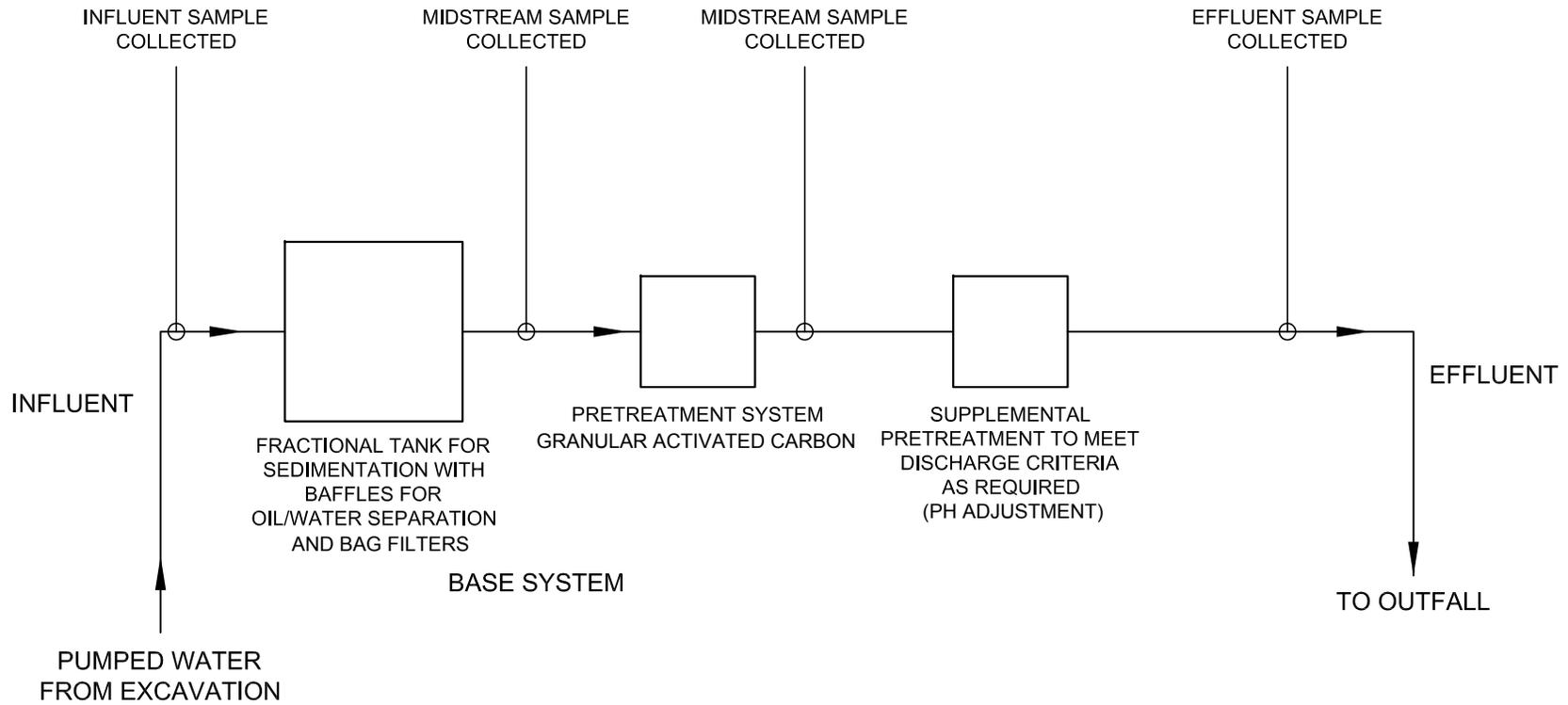
PROJECT LOCUS

SCALE: 1:24,000  
JULY 2014

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

FIGURE 1





**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**

RESIDENCES AT MORRISSEY BOULEVARD  
25 MORRISSEY BOULEVARD  
DORCHESTER, MASSACHUSETTS

**PROPOSED TREATMENT SYSTEM SCHEMATIC**

SCALE: NONE  
JULY 2014

**FIGURE 3**

**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 <b>facility/site</b> : Residences on Morrissey Boulevard		Facility/site mailing address:	
Location of <b>facility/site</b> :	Facility SIC code(s):	Street: 25 Morrissey Boulevard	
longitude: 71°3'4" W			
latitude: 42°19'10" N			
b) Name of <b>facility/site owner</b> : Qianlong Criterion Ventures LLC		Town: Dorchester	
Email address of facility/site owner: akaye@criteriondp.com		State: MA	Zip: 02125
Telephone no. of facility/site <b>owner</b> : 781-890-5600		County: Suffolk	
Fax no. of facility/site <b>owner</b> :		<b>Owner is (check one):</b> 1. Federal <input type="radio"/> 2. State/Tribal <input type="radio"/> 3. Private <input checked="" type="radio"/> 4. Other <input type="radio"/> if so, describe:	
Address of <b>owner</b> (if different from site):			
Street: 1601 Trapelo Road, Suite 280			
Town: Waltham	State: MA	Zip: 02451	County: Middlesex
c) Legal name of <b>operator</b> : Dimeo Construction Company		Operator telephone no.: 401-330-2249	
		Operator fax no.: 401-941-0435	Operator email: CRuotolo@Dimeo.com
Operator contact name and title: Curtis Ruotolo, Sitework Coordinator			
Address of <b>operator</b> (if different from owner):		Street: 75 Chapman Street	
Town: Providence	State: RI	Zip: 02905	County: Providence

d) Check Y for "yes" or N for "no" for the following:  
 1. Has a prior NPDES permit exclusion been granted for the discharge? Y  N , if Y, number:   
 2. Has a prior NPDES application (Form 1 & 2C) ever been filed for the discharge?  
 Y  N , if Y, date and tracking #:   
 3. Is the discharge a "new discharge" as defined by 40 CFR 122.2? Y  N   
 4. For sites in Massachusetts, is the discharge covered under the Massachusetts Contingency Plan (MCP) and exempt from state permitting? Y  N

e) Is site/facility subject to any State permitting, license, or other action which is causing the generation of discharge? Y  N   
 If Y, please list:  
 1. site identification # assigned by the state of NH or MA:   
 2. permit or license # assigned:   
 3. state agency contact information: name, location, and telephone number:

f) Is the site/facility covered by any other EPA permit, including:  
 1. Multi-Sector General Permit? Y  N ,  
 if Y, number:   
 2. Final Dewatering General Permit? Y  N ,  
 if Y, number:   
 3. EPA Construction General Permit? Y  N ,  
 if Y, number:   
 4. Individual NPDES permit? Y  N ,  
 if Y, number:   
 5. any other water quality related individual or general permit? Y   
 N , if Y, number:

g) Is the site/facility located within or does it discharge to an Area of Critical Environmental Concern (ACEC)? Y  N

h) Based on the facility/site information and any historical sampling data, identify the sub-category into which the potential discharge falls.

<u>Activity Category</u>	<u>Activity Sub-Category</u>
I - Petroleum Related Site Remediation	A. Gasoline Only Sites <input type="checkbox"/> B. Fuel Oils and Other Oil Sites (including Residential Non-Business Remediation Discharges). <input type="checkbox"/> C. Petroleum Sites with Additional Contamination <input checked="" type="checkbox"/>
II - Non Petroleum Site Remediation	A. Volatile Organic Compound (VOC) Only Sites <input type="checkbox"/> B. VOC Sites with Additional Contamination <input type="checkbox"/> C. Primarily Heavy Metal Sites <input type="checkbox"/>
III - Contaminated Construction Dewatering	A. General Urban Fill Sites <input checked="" type="checkbox"/> B. Known Contaminated Sites <input type="checkbox"/>

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

**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:	
Temporary Construction Dewatering	
b) Provide the following information about each discharge:	
1) Number of discharge points: <input type="text" value="2"/>	2) What is the <b>maximum</b> and <b>average flow rate</b> of discharge (in cubic feet per second, ft <sup>3</sup> /s)? Max. flow <input type="text" value="0.33"/> Is <b>maximum</b> flow a <b>design value</b> ? Y <input type="radio"/> N <input checked="" type="radio"/> Average flow (include units) <input type="text" value="0.11 cfs"/> Is average flow a design value or estimate? <input type="text" value="estimate"/>
3) Latitude and longitude of each discharge within 100 feet:	
pt.1: lat. <input n"="" type="text" value="42°19'12\"/> long. <input type="text" value="71°3'3\" w"=""/>	pt.2: lat. <input n"="" type="text" value="42°19'10\"/> long. <input type="text" value="71°3'2\" w"=""/>
pt.3: lat. <input type="text"/> long. <input type="text"/>	pt.4: lat. <input type="text"/> long. <input type="text"/>
pt.5: lat. <input type="text"/> long. <input type="text"/>	pt.6: lat. <input type="text"/> long. <input type="text"/>
pt.7: lat. <input type="text"/> long. <input type="text"/>	pt.8: lat. <input type="text"/> long. <input type="text"/> etc.
4) If hydrostatic testing, total volume of the discharge (gals): <input type="text"/>	5) Is the discharge intermittent <input checked="" type="radio"/> or seasonal <input type="radio"/> ? Is discharge ongoing? Y <input type="radio"/> N <input checked="" type="radio"/>
c) Expected dates of discharge (mm/dd/yy): start <input type="text" value="9/15/2014"/> end <input type="text" value="9/15/2016"/>	
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). <input type="text" value="See Figures 2 and 3"/>	

**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)		<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	GRAB	2540D	5000	ND		ND	
2. Total Residual Chlorine (TRC)		<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	GRAB	4500CL-D	20	ND		ND	
3. Total Petroleum Hydrocarbons (TPH)		<input type="checkbox"/>	<input checked="" type="checkbox"/>	6	GRAB	MA VPH, EPH	50, 100	138.4		33.6	
4. Cyanide (CN)	57125	<input type="checkbox"/>	<input checked="" type="checkbox"/>	11	GRAB	4500CN-CE, 9016	2	9		0.8	
5. Benzene (B)	71432	<input type="checkbox"/>	<input checked="" type="checkbox"/>	6	GRAB	8260C	0.5	13		2.2	
6. Toluene (T)	108883	<input checked="" type="checkbox"/>	<input type="checkbox"/>	6	GRAB	8260C	10, 1	ND		ND	
7. Ethylbenzene (E)	100414	<input checked="" type="checkbox"/>	<input type="checkbox"/>	6	GRAB	8260C	10, 1	ND		ND	
8. (m,p,o) Xylenes (X)	108883; 106423; 95476; 1330207	<input checked="" type="checkbox"/>	<input type="checkbox"/>	6	GRAB	8260C	10, 1, 2	ND		ND	
9. Total BTEX <sup>2</sup>	n/a	<input type="checkbox"/>	<input checked="" type="checkbox"/>	6	GRAB	8260C	NA	13		2.2	
10. Ethylene Dibromide (EDB) (1,2-Dibromoethane) <sup>3</sup>	106934	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	GRAB	8260C	0.01	ND		ND	
11. Methyl-tert-Butyl Ether (MtBE)	1634044	<input checked="" type="checkbox"/>	<input type="checkbox"/>	6	GRAB	8260C	2	630		112	
12. tert-Butyl Alcohol (TBA) (Tertiary-Butanol)	75650	<input checked="" type="checkbox"/>	<input type="checkbox"/>	6	GRAB	8260C	20, 2	ND		ND	

\* 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.

<sup>2</sup> BTEX = Sum of Benzene, Toluene, Ethylbenzene, total Xylenes.

<sup>3</sup> 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	<input checked="" type="checkbox"/>	<input type="checkbox"/>	6	GRAB	8260C	20, 2	ND		ND	
14. Naphthalene	91203	<input type="checkbox"/>	<input checked="" type="checkbox"/>	6	GRAB	8260C	2	34		5.6	
15. Carbon Tetrachloride	56235	<input checked="" type="checkbox"/>	<input type="checkbox"/>	6	GRAB	8260C	10, 1	ND		ND	
16. 1,2 Dichlorobenzene (o-DCB)	95501	<input checked="" type="checkbox"/>	<input type="checkbox"/>	6	GRAB	8260C	10, 1	ND		ND	
17. 1,3 Dichlorobenzene (m-DCB)	541731	<input checked="" type="checkbox"/>	<input type="checkbox"/>	6	GRAB	8260C	10, 1	ND		ND	
18. 1,4 Dichlorobenzene (p-DCB)	106467	<input checked="" type="checkbox"/>	<input type="checkbox"/>	6	GRAB	8260C	10, 1	ND		ND	
18a. Total dichlorobenzene		<input checked="" type="checkbox"/>	<input type="checkbox"/>	6	GRAB	8260C	NA	ND		ND	
19. 1,1 Dichloroethane (DCA)	75343	<input checked="" type="checkbox"/>	<input type="checkbox"/>	6	GRAB	8260C	10, 1	ND		ND	
20. 1,2 Dichloroethane (DCA)	107062	<input checked="" type="checkbox"/>	<input type="checkbox"/>	6	GRAB	8260C	10, 1	ND		ND	
21. 1,1 Dichloroethene (DCE)	75354	<input checked="" type="checkbox"/>	<input type="checkbox"/>	6	GRAB	8260C	10, 1	ND		ND	
22. cis-1,2 Dichloroethene (DCE)	156592	<input checked="" type="checkbox"/>	<input type="checkbox"/>	6	GRAB	8260C	10, 1	ND		ND	
23. Methylene Chloride	75092	<input checked="" type="checkbox"/>	<input type="checkbox"/>	6	GRAB	8260C	20, 2	ND		ND	
24. Tetrachloroethene (PCE)	127184	<input checked="" type="checkbox"/>	<input type="checkbox"/>	6	GRAB	8260C	10, 1	ND		ND	
25. 1,1,1 Trichloro-ethane (TCA)	71556	<input checked="" type="checkbox"/>	<input type="checkbox"/>	6	GRAB	8260C	10, 1	ND		ND	
26. 1,1,2 Trichloro-ethane (TCA)	79005	<input checked="" type="checkbox"/>	<input type="checkbox"/>	6	GRAB	8260C	10, 1	ND		ND	
27. Trichloroethene (TCE)	79016	<input checked="" type="checkbox"/>	<input type="checkbox"/>	6	GRAB	8260C	10, 1	ND		ND	

<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	<input checked="" type="checkbox"/>	<input type="checkbox"/>	6	GRAB	8260C	10, 1	ND		ND	
29. Acetone	67641	<input checked="" type="checkbox"/>	<input type="checkbox"/>	6	GRAB	8260C	50, 5	16		3.5	
30. 1,4 Dioxane	123911	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	GRAB	8260C-SIM	2500, 250	ND		ND	
31. Total Phenols	108952	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	GRAB	420.1	5	ND		ND	
32. Pentachlorophenol (PCP)	87865	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	GRAB	8270D	0.8	ND		ND	
33. Total Phthalates (Phthalate esters) <sup>4</sup>		<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	GRAB	8270D	NA	ND		ND	
34. Bis (2-Ethylhexyl) Phthalate [Di-(ethylhexyl) Phthalate]	117817	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	GRAB	8270D	3	ND		ND	
35. Total Group I Polycyclic Aromatic Hydrocarbons (PAH)		<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	GRAB			ND		ND	
a. Benzo(a) Anthracene	56553	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	GRAB	8270D-SIM	0.2	ND		ND	
b. Benzo(a) Pyrene	50328	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	GRAB	8270D-SIM	0.2	ND		ND	
c. Benzo(b)Fluoranthene	205992	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	GRAB	8270D-SIM	0.2	ND		ND	
d. Benzo(k)Fluoranthene	207089	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	GRAB	8270D-SIM	0.2	ND		ND	
e. Chrysene	21801	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	GRAB	8270D-SIM	0.2	ND		ND	
f. Dibenzo(a,h)anthracene	53703	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	GRAB	8270D-SIM	0.2	ND		ND	
g. Indeno(1,2,3-cd) Pyrene	193395	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	GRAB	8270D-SIM	0.2	ND		ND	
36. Total Group II Polycyclic Aromatic Hydrocarbons (PAH)		<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	GRAB			35.15		35.15	

<sup>4</sup> The 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	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	GRAB	8270D-SIM	0.2	6.5		6.5	
i. Acenaphthylene	208968	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	GRAB	8270D-SIM	0.2	ND		ND	
j. Anthracene	120127	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	GRAB	8270D-SIM	0.2	1.2		1.2	
k. Benzo(ghi) Perylene	191242	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	GRAB	8270D-SIM	0.2	ND		ND	
l. Fluoranthene	206440	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	GRAB	8270D-SIM	0.2	1.3		1.3	
m. Fluorene	86737	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	GRAB	8270D-SIM	0.2	4.7		4.7	
n. Naphthalene	91203	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	GRAB	8270D-SIM	0.2	13		13	
o. Phenanthrene	85018	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	GRAB	8270D-SIM	0.2	7.6		7.6	
p. Pyrene	129000	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	GRAB	8270D-SIM	0.2	0.84		0.84	
37. Total Polychlorinated Biphenyls (PCBs)	85687; 84742; 117840; 84662; 131113; 117817.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	GRAB	608	0.2, 0.25	ND		ND	
38. Chloride	16887006	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	GRAB	300.0	100	3440000		3440000.	
39. Antimony	7440360	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	GRAB	6020	02	ND		ND	
40. Arsenic	7440382	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	GRAB	6020	1	4.34		4.34	
41. Cadmium	7440439	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	GRAB	6020	0.2	ND		ND	
42. Chromium III (trivalent)	16065831	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	GRAB	6020	1	ND		ND	
43. Chromium VI (hexavalent)	18540299	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	GRAB	3500CR-D	10	ND		ND	
44. Copper	7440508	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	GRAB	6020	1	ND		ND	
45. Lead	7439921	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	GRAB	6020	0.2	0.85		0.85	
46. Mercury	7439976	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	GRAB	245.1	0.2	ND		ND	
47. Nickel	7440020	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	GRAB	6020	0.2	1.87		1.87	
48. Selenium	7782492	<input checked="" type="checkbox"/>	<input type="checkbox"/>	3	GRAB	1632A	5	ND		ND	
49. Silver	7440224	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	GRAB	6020	0.4	ND		ND	
50. Zinc	7440666	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	GRAB	6020	5	18.28		18.28	
51. Iron	7439896	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	GRAB	200.7	50	1700		1700	
Other (describe):		<input type="checkbox"/>	<input type="checkbox"/>								

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

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

<p><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 <input checked="" type="radio"/> N <input type="radio"/></p>	<p>If yes, which metals?          Iron</p>										
<p><i>Step 2:</i> For any metals which exceed the <b>Appendix III</b> limits, calculate the <b>dilution factor (DF)</b> 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?</p> <table border="1"> <tr> <td>Metal: Iron</td> <td>DF: 49.4</td> </tr> <tr> <td>Metal: _____</td> <td>DF: _____</td> </tr> <tr> <td>Metal: _____</td> <td>DF: _____</td> </tr> <tr> <td>Metal: _____</td> <td>DF: _____</td> </tr> <tr> <td>Etc.</td> <td></td> </tr> </table>	Metal: Iron	DF: 49.4	Metal: _____	DF: _____	Metal: _____	DF: _____	Metal: _____	DF: _____	Etc.		<p>Look up the limit calculated at the corresponding dilution factor in <b>Appendix IV</b>. Do any of the metals in the <b>influent</b> have the potential to exceed the corresponding <b>effluent</b> limits in Appendix IV (i.e., is the influent concentration above the limit set at the calculated dilution factor)?          Y <input type="radio"/> N <input checked="" type="radio"/> If Y, list which metals:</p>
Metal: Iron	DF: 49.4										
Metal: _____	DF: _____										
Metal: _____	DF: _____										
Metal: _____	DF: _____										
Etc.											

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

<p>a) A description of the treatment system, including a schematic of the proposed or existing treatment system:</p> <p>See Attached Figure 3</p>						
<p>b) Identify each applicable treatment unit (check all that apply):</p>	Frac. tank <input checked="" type="checkbox"/>	Air stripper <input type="checkbox"/>	Oil/water separator <input checked="" type="checkbox"/>	Equalization tanks <input type="checkbox"/>	Bag filter <input checked="" type="checkbox"/>	GAC filter <input checked="" type="checkbox"/>
	Chlorination <input type="checkbox"/>	De-chlorination <input type="checkbox"/>	Other (please describe):	pH adjustment and additional pretreatment as necessary to meet NPDES RGP Discharge Criteria.		

c) Proposed **average** and **maximum flow rates** (gallons per minute) for the discharge and the **design flow rate(s)** (gallons per minute) of the treatment system:  
 Average flow rate of discharge  gpm Maximum flow rate of treatment system  gpm  
 Design flow rate of treatment system  gpm

d) A description of chemical additives being used or planned to be used (attach MSDS sheets):

**5. Receiving surface water(s).** Please provide information about the receiving water(s), using separate sheets as necessary:

a) Identify the discharge pathway:	Direct to receiving water <input type="checkbox"/>	Within facility (sewer) <input type="checkbox"/>	Storm drain <input checked="" type="checkbox"/>	Wetlands <input type="checkbox"/>	Other (describe): <input type="text"/>
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b) Provide a narrative description of the discharge pathway, including the name(s) of the receiving waters:

c) Attach a detailed map(s) indicating the site location and location of the outfall to the receiving water:  
 1. For multiple discharges, number the discharges sequentially.  
 2. For indirect dischargers, indicate the location of the discharge to the indirect conveyance and the discharge to surface water  
 The map should also include the location and distance to the nearest sanitary sewer as well as the locus of nearby sensitive receptors (based on USGS topographical mapping), such as surface waters, drinking water supplies, and wetland areas.

d) Provide the state water quality classification of the receiving water

e) Provide the reported or calculated seven day-ten year low flow (7Q10) of the receiving water  cfs  
 Please attach any calculation sheets used to support stream flow and dilution calculations.

f) Is the receiving water a listed 303(d) water quality impaired or limited water? Y  N  If yes, for which pollutant(s)?

Is there a final TMDL? Y  N  If yes, for which pollutant(s)?

**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.

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

b) If you selected Criterion D or F, has consultation with the federal services been completed? Y  N  Underway

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

d) Attach documentation of ESA eligibility as described in the NOI instructions and required by Appendix VII, Part I.C, Step 4.

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

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.

**7. Supplemental information.**

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

Laboratory Data is provided in Appendix F

**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:	Residences on Morrissey Boulevard
Owner signature:	
Printed Name & Title:	QUANTUM CONCRETE SERVICES LLC,
Date:	7/21/2014

**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:	Residences on Morrissey Boulevard
Operator signature:	
Printed Name & Title:	Curtis S. Ruotolo, P.E.
Date:	July 23, 2014

**APPENDIX B**

**Best Management Practices Plan (BMPP)**

**NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM  
REMEDIAION GENERAL PERMIT  
TEMPORARY CONSTRUCTION DEWATERING  
RESIDENCES AT MORRISSEY BOULEVARD  
25 MORRISSEY BOULEVARD  
DORCHESTER, 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 during the construction of the proposed Residences at Morrissey Boulevard located at 25 Morrissey Boulevard in Dorchester, Massachusetts. This Best Management Practices Plan (BMPP) has been prepared as an Appendix to the RGP and will be posted at the site during the time period that temporary construction dewatering is occurring at the site.

**Water Treatment and Management**

Construction dewatering will be conducted using a combination of drainage ditches and sumps located inside the excavation. The treatment system will be designed by the Contractor. Prior to discharge, collected water will likely be routed through a sedimentation tank with baffles for oil/water separation, bag filters, and granular activated carbon (GAC), as required, to remove suspended solids and undissolved chemical constituents. Supplemental pretreatment, including pH adjustment, may be required to meet discharge criteria as shown on the Proposed Treatment System Schematic included in Figure 3. Construction dewatering under this RGP NOI will include piping and discharging to storm drains located in Morrissey Boulevard and near the site. The storm drains travel south/southeast and discharge directly into Savin Hill Cove.

**Discharge Monitoring and Compliance**

Regular sampling and testing will be conducted by the Contractor at the treated effluent as required by the RGP. This includes chemical testing required within the first month 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

**NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM  
REMEDATION GENERAL PERMIT  
TEMPORARY CONSTRUCTION DEWATERING  
RESIDENCES AT MORRISSEY BOULEVARD  
25 MORRISSEY BOULEVARD  
DORCHESTER, MASSACHUSETTS**

fractionation tanks, filters, hoses, pumps, and flow meters. Equipment will be monitored daily for potential issues or unscheduled maintenance requirements.

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

**Miscellaneous Items**

It is anticipated that the excavation support system, erosion control measures, and the nature of the site and surrounding infrastructure will minimize potential runoff to or from the site. The project specifications also include requirements for erosion control.

Site security for the treatment system will be covered within the overall site security plan. .

No adverse affects of designated water uses of surrounding surface water bodies is anticipated. Old Harbor is the nearest surface water body to the site located approximately 0.3 miles from the construction activities on site. Dewatering effluent will be pumped to a sedimentation tank with baffles for oil/water separation, bag filters, and GAC, as required, prior to discharge to the storm drains.

**Management of Treatment System Materials**

Groundwater analytical data for the site is below the applicable MCP RCGW-2 criteria but above the NPDES RGP criteria for methyl tert butyl ether, naphthalene, total iron, and free cyanide. 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 on the site for any equipment or materials storage which may be possible sources of pollution away from any dewatering activities.

Sediment from the fractionalization tank used in the treatment system will be characterized and disposed of as soil at an appropriate receiving facility in accordance with applicable laws and regulations. GAC will be recycled and/or removed from the site to an appropriate receiving facility. Bag filters will be placed in drums and manifested for off-site disposal.

**APPENDIX C**

**Endangered Species Act Documentation**

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# MASSACHUSETTS AREAS OF CRITICAL ENVIRONMENTAL CONCERN

November 2010

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**Total Approximate Acreage: 268,000 acres**

Approximate acreage and designation date follow ACEC names below.

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**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

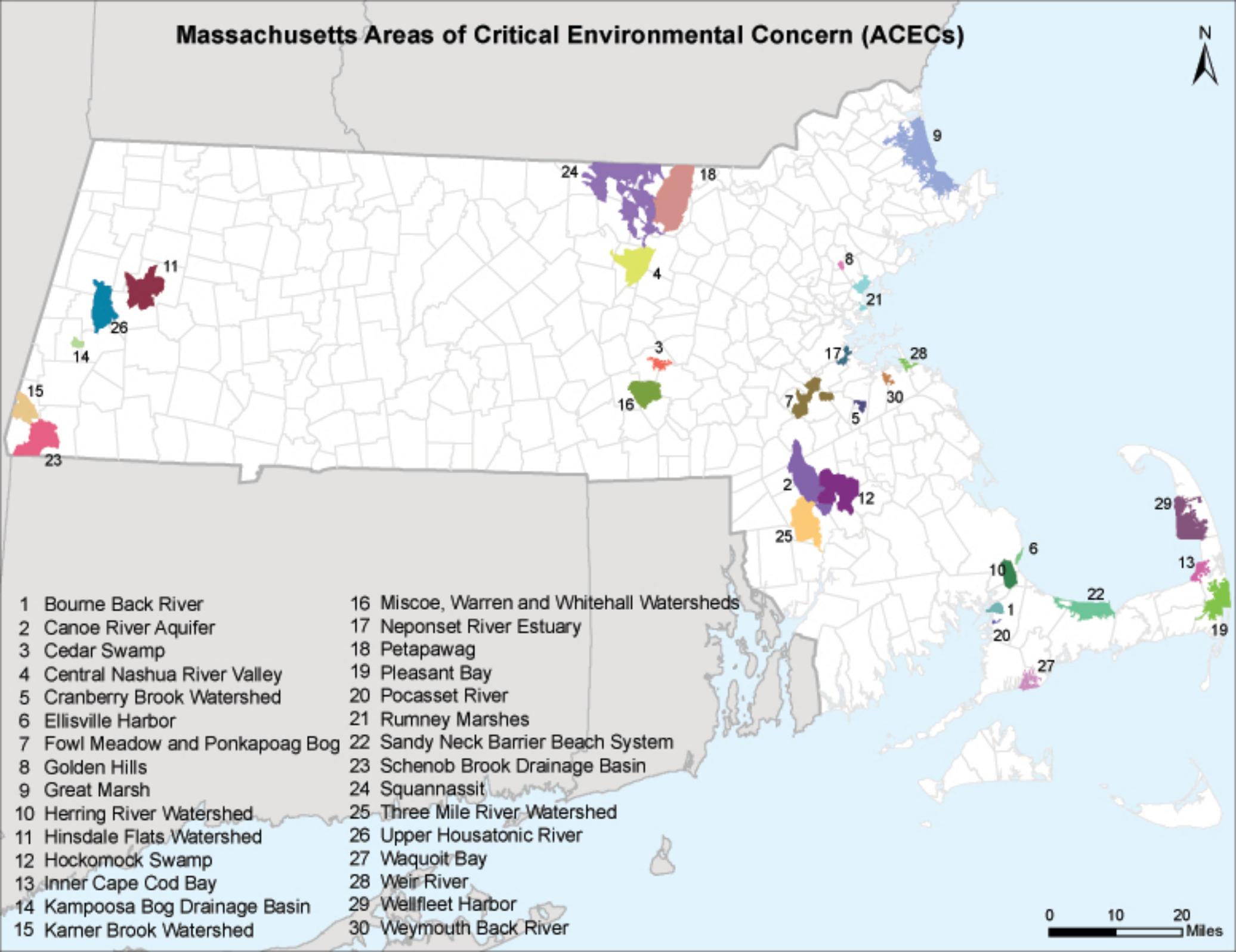
**Weymouth Back River**

(800 acres, 1982) Hingham and Weymouth

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

<b>TOWN</b>	<b>ACEC</b>	<b>TOWN</b>	<b>ACEC</b>
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		

# Massachusetts Areas of Critical Environmental Concern (ACECs)



- |                                 |  |
|---------------------------------|--|
| 1 Bourne Back River             | 16 Miscoe, Warren and Whitehall Watersheds |
| 2 Canoe River Aquifer           | 17 Neponset River Estuary                  |
| 3 Cedar Swamp                   | 18 Petapawag                               |
| 4 Central Nashua River Valley   | 19 Pleasant Bay                            |
| 5 Cranberry Brook Watershed     | 20 Pocasset River                          |
| 6 Ellisville Harbor             | 21 Rumney Marshes                          |
| 7 Fowl Meadow and Ponkapoag Bog | 22 Sandy Neck Barrier Beach System         |
| 8 Golden Hills                  | 23 Schenob Brook Drainage Basin            |
| 9 Great Marsh                   | 24 Squannassit                             |
| 10 Herring River Watershed      | 25 Three Mile River Watershed              |
| 11 Hinsdale Flats Watershed     | 26 Upper Housatonic River                  |
| 12 Hockomock Swamp              | 27 Waquoit Bay                             |
| 13 Inner Cape Cod Bay           | 28 Weir River                              |
| 14 Kamposoa Bog Drainage Basin  | 29 Wellfleet Harbor                        |
| 15 Kerner Brook Watershed       | 30 Weymouth Back River                     |



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

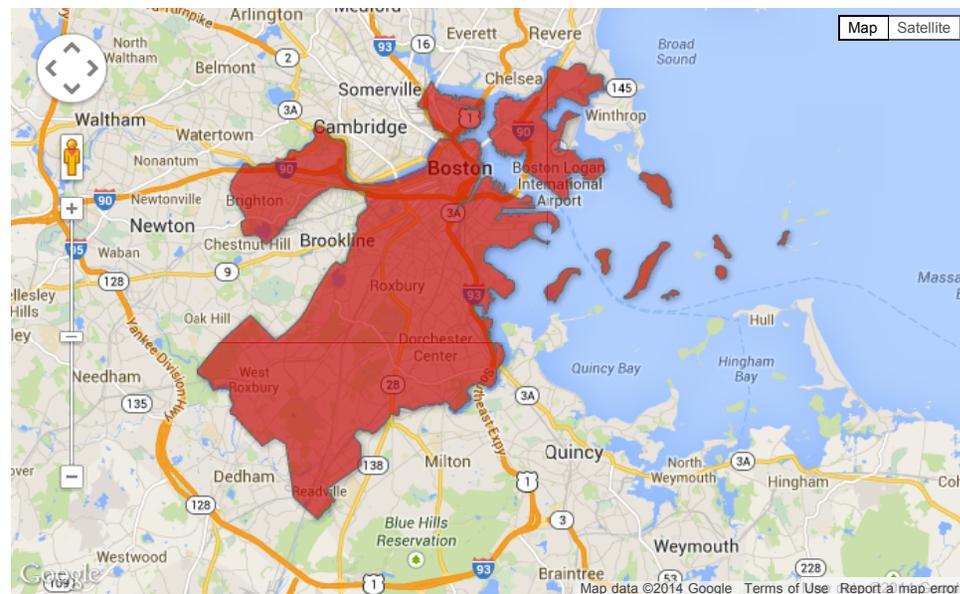
COUNTY	SPECIES	FEDERAL STATUS	GENERAL LOCATION/HABITAT	TOWNS
Barnstable	Piping Plover	Threatened	Coastal Beaches	All Towns
	Roseate Tern	Endangered	Coastal beaches and the Atlantic Ocean	All Towns
	Northeastern beach tiger beetle	Threatened	Coastal Beaches	Chatham
	Sandplain gerardia	Endangered	Open 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.

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 its 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:  or Species (Common Name):  or Species (Scientific Name):



Showing 1 to 46 of 46 entries

Search:

Town	Taxonomic Group	Scientific Name	Common Name	MESA Status	Most Recent Obs
BOSTON	Butterfly/Moth	<i>Abagrotis nefascia</i>	Coastal Heathland Cutworm	SC	2001
BOSTON	Bird	<i>Accipiter striatus</i>	Sharp-shinned Hawk	SC	1898
BOSTON	Vascular Plant	<i>Ageratina aromatica</i>	Lesser Snakeroot	E	1896
BOSTON	Amphibian	<i>Ambystoma laterale</i>	Blue-spotted Salamander	SC	2013
BOSTON	Bird	<i>Ammodramus savannarum</i>	Grasshopper Sparrow	T	1993
BOSTON	Butterfly/Moth	<i>Apodrepanulatrix liberaria</i>	New Jersey Tea Inchworm	E	Historic
BOSTON	Vascular Plant	<i>Aristida purpurascens</i>	Purple Needlegrass	T	Historic
BOSTON	Vascular Plant	<i>Aristida tuberculosa</i>	Seabeach Needlegrass	T	1877
BOSTON	Vascular Plant	<i>Asclepias verticillata</i>	Linear-leaved Milkweed	T	1878
BOSTON	Bird	<i>Bartramia longicauda</i>	Upland Sandpiper	E	1993
BOSTON	Vascular Plant	<i>Boechera missouriensis</i>	Green Rock-cress	T	1930
BOSTON	Vascular Plant	<i>Carex striata</i>	Walter's Sedge	E	Historic
BOSTON	Bird	<i>Charadrius melodus</i>	Piping Plover	T	2011
BOSTON	Beetle	<i>Cicindela duodecimguttata</i>	Twelve-spotted Tiger Beetle	SC	1910
BOSTON	Beetle	<i>Cicindela purpurea</i>	Cow Path Tiger Beetle	SC	1928
BOSTON	Beetle	<i>Cicindela rufiventris hentzii</i>	Eastern Red-bellied Tiger Beetle	T	1927
BOSTON	Vascular Plant	<i>Desmodium cuspidatum</i>	Large-bracted Tick-trefoil	T	1896
BOSTON	Vascular Plant	<i>Eriophorum gracile</i>	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	Liatris 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

Show 10 entries

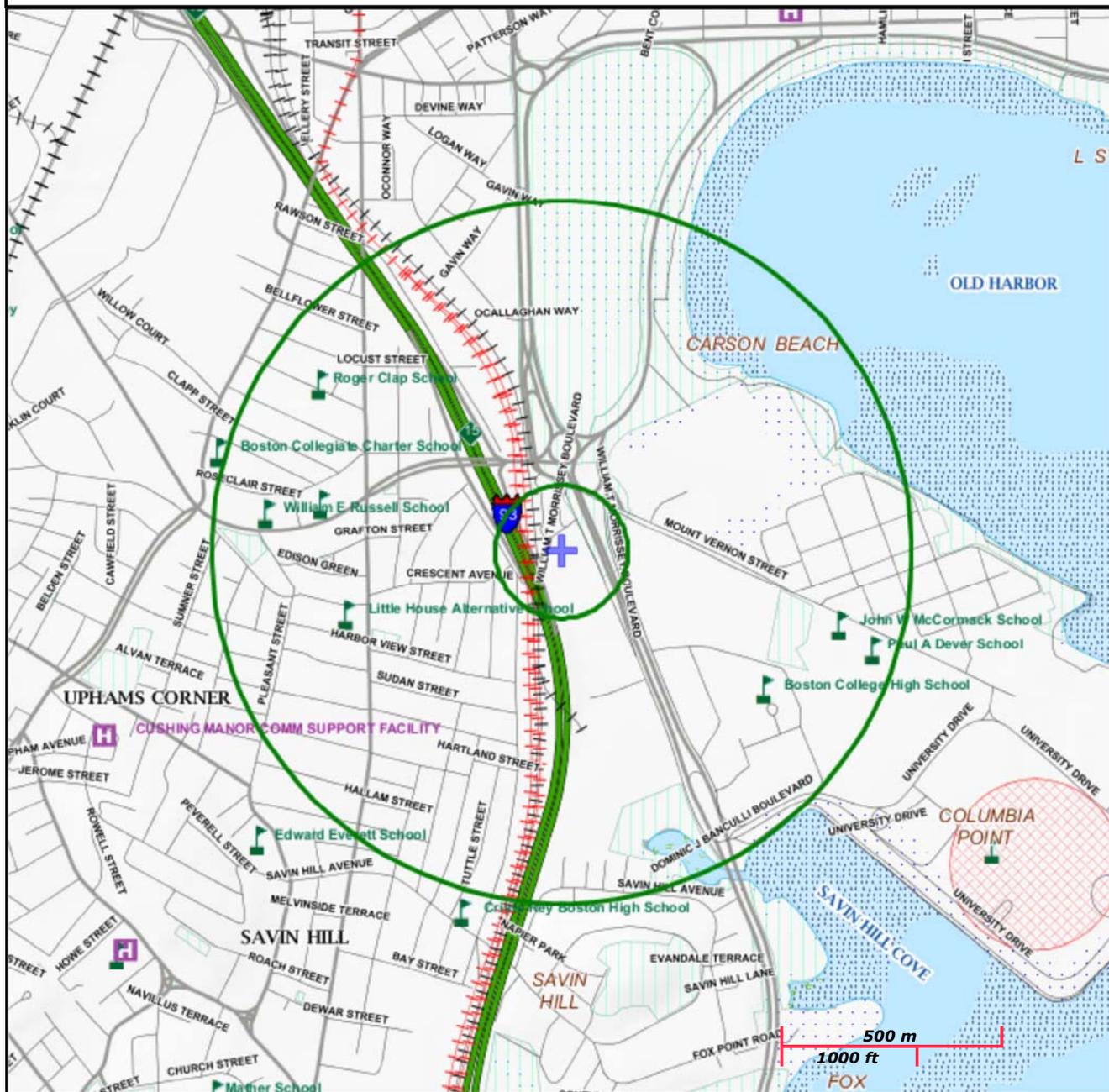
Show Additional Info

# MassDEP - Bureau of Waste Site Cleanup

**Site Information:**  
 25 MORRISSEY BOULEVARD  
 25 MORRISSEY BOULEVARD BOSTON, MA  
 3-000004210  
**NAD83 UTM Meters:**  
 5208974mN , -7909396mE (Zone: 18)  
 July 14, 2014

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

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/>



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.		



# 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

**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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## 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.](#)



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# Massachusetts Cultural Resource Information System

## MACRIS

### MACRIS Search Results

Search Criteria: Town(s): Boston; Street Name: Morrissey; Resource Type(s): Area, Building, Burial Ground, Object, Structure;

Inv. No.	Property Name	Street	Town	Year
BOS.9656	Old Harbor Reservation Parkway - Columbia Circle	Columbia Rd	Boston	1924
BOS.9173	Old Colony Railroad Bridge (Milepost #4.27)	Morrissey Ave	Boston	1911
BOS.9169	Old Colony Railroad Bridge (Milepost #4.33)	Morrissey Blvd	Boston	1926
BOS.9189	Dorchester Bay Bridge - Beades Memorial Bridge	Morrissey Blvd	Boston	1927
BOS.9500	Savin Hill Beach - Malibu Beach	Morrissey Blvd	Boston	1899
BOS.9501	Savin Hill Beach - Malibu Beach Playground	Morrissey Blvd	Boston	2000
BOS.13803	Savin Hill Beach - Malibu Beach Bath House	Morrissey Blvd	Boston	r 1985

## National Register of Historic Places: Listed Properties 1966 to 2012

Reference Number	Resource Name	Address	State	County	City	Primary Cert	Primary Certdate
87000885	Abbotsford	300 Walnut Ave.	MASSACHUSETTS	Suffolk	Boston	LI	19870916
82004456	Adams-Nervine Asylum	990-1020 Centre St.	MASSACHUSETTS	Suffolk	Boston	LI	19820601
71000087	African Meetinghouse	8 Smith St.	MASSACHUSETTS	Suffolk	Boston	LI	19711007
80000678	All Saints' Church	211 Ashmont St.	MASSACHUSETTS	Suffolk	Boston	LI	19800616
97001377	Allston Congregational Church	31-41 Quint Ave.	MASSACHUSETTS	Suffolk	Boston	LI	19971107
74000382	Ames Building	1 Court St.	MASSACHUSETTS	Suffolk	Boston	LI	19740426
77001541	Appleton, Nathan, Residence	39-40 Beacon St.	MASSACHUSETTS	Suffolk	Boston	LI	19771222
73000313	Arlington Street Church	Arlington and Boylston Sts.	MASSACHUSETTS	Suffolk	Boston	LI	19730504
73000314	Armory of the First Corps of Cadets	97-105 Arlington St. and 130 Columbus Ave.	MASSACHUSETTS	Suffolk	Boston	LI	19730522
66000127	Arnold Arboretum	22 Divinity Ave.	MASSACHUSETTS	Suffolk	Boston	LI	19661015
87001478	Austin, Francis B., House	58 High St.	MASSACHUSETTS	Suffolk	Boston	LI	19881021
05000459	Ayer, Frederick, Mansion	395 Commonwealth Avenue	MASSACHUSETTS	Suffolk	Boston	LI	20050405
73001948	Back Bay Historic District	Roughly bounded by the Charles River, Arlington, Providence, Boylston and Newbury Sts., and Charlesgate East	MASSACHUSETTS	Suffolk	Boston	LI	19730814
98001381	Baker Congregational Church	760 Saratoga St.	MASSACHUSETTS	Suffolk	Boston	LI	19981119
83004285	Baker, Sarah J., School	33 Perrin St.	MASSACHUSETTS	Suffolk	Boston	LI	19830707
80000462	Beach-Knapp District	Roughly bounded by Harrison Ave., Washington, Kneeland, and Beach Sts.	MASSACHUSETTS	Suffolk	Boston	LI	19801209
66000130	Beacon Hill Historic District	Bounded by Beacon St., the Charles River Embankment, and Pinckney, Revere, and Hancock Sts.	MASSACHUSETTS	Suffolk	Boston	LI	19661015
79000368	Bedford Building	89-103 Bedford St.	MASSACHUSETTS	Suffolk	Boston	LI	19790821
89002251	Bellevue Standpipe	On Bellevue Hill at Washington St. and Roxbury Pkwy.	MASSACHUSETTS	Suffolk	Boston	LI	19900118
04000023	Benedict Fenwick School	150 Magnolia St.	MASSACHUSETTS	Suffolk	Boston	LI	20040211
02000548	Bennington Street Burying Ground	Bennington St., bet. Swift and harmony Sts.	MASSACHUSETTS	Suffolk	Boston	LI	20020522
80000677	Berger Factory	37 Williams St.	MASSACHUSETTS	Suffolk	Boston	LI	19800409
85000316	Bigelow School	350 W. 4th St.	MASSACHUSETTS	Suffolk	Boston	LI	19850221
73000315	Blackstone Block Historic District	Area bound by Union, Hanover, Blackstone, and North Sts.	MASSACHUSETTS	Suffolk	Boston	LI	19730526
74002350	Blake, James, House	735 Columbia Rd.	MASSACHUSETTS	Suffolk	Boston	LI	19740501
80004396	Boston African American National Historic Site	Museum of Afro American History, Dudley Station, Box 5	MASSACHUSETTS	Suffolk	Boston	LI	19801010
66000132	Boston Athenaeum	10 1/2 Beacon St.	MASSACHUSETTS	Suffolk	Boston	LI	19661015
87000760	Boston Common	Beacon, Park, Tremont, Boylston, and Charles St.	MASSACHUSETTS	Suffolk	Boston	LI	19870227
72000144	Boston Common and Public Garden	Beacon, Park, Tremont, Boylston, and Arlington Sts.	MASSACHUSETTS	Suffolk	Boston	LI	19720712
01001557	Boston Consumptives Hospital	249 River St.	MASSACHUSETTS	Suffolk	Boston	LI	20020207
80000453	Boston Edison Electric Illuminating Company	25-39 Boylston St.	MASSACHUSETTS	Suffolk	Boston	LI	19801209
85003323	Boston Harbor Islands Archeological District	Address Restricted	MASSACHUSETTS	Suffolk	Boston	LI	19851221
66000133	Boston Light	Little Brewster Island, Boston Harbor	MASSACHUSETTS	Suffolk	Boston	LI	19661015
74002222	Boston National Historical Park	Inner harbor at mouth of Charles River	MASSACHUSETTS	Suffolk	Boston	LI	19741026
66000134	Boston Naval Shipyard	E of Chelsea St., Charlestown	MASSACHUSETTS	Suffolk	Boston	LI	19661115
87000761	Boston Public Garden	Beacon, Charles, Boylston, and Arlington Sts.	MASSACHUSETTS	Suffolk	Boston	LI	19870227
73000317	Boston Public Library	Copley Sq.	MASSACHUSETTS	Suffolk	Boston	LI	19730506
07000861	Boston Transit Commission Building	15 Beacon St.	MASSACHUSETTS	Suffolk	Boston	LI	20070831
98001082	Boston Young Men's Christian Association	312-320 Huntington Ave.	MASSACHUSETTS	Suffolk	Boston	LI	19980820
80000451	Boston Young Men's Christian Union	48 Boylston St.	MASSACHUSETTS	Suffolk	Boston	LI	19801209
90001145	Bowditch School	80--82 Greene St.	MASSACHUSETTS	Suffolk	Boston	LI	19900803
80000450	Boylston Building	2-22 Boylston St.	MASSACHUSETTS	Suffolk	Boston	LI	19801209
01000088	Brighton Center Historic District	Academy Hill R., Chestnut Hill Ave., Dighton, Elko, Henshaw, Leicester, Market, Washington, and Winship Sts.	MASSACHUSETTS	Suffolk	Boston	LI	20010220
97000920	Brighton Evangelical Congregational Church	404-410 Washington St.	MASSACHUSETTS	Suffolk	Boston	LI	19970821
66000141	Brook Farm	670 Baker St.	MASSACHUSETTS	Suffolk	Boston	LI	19661015
85002015	Building at 138--142 Portland Street	138--142 Portland St.	MASSACHUSETTS	Suffolk	Boston	LI	19850905
86000274	Bulfinch Triangle Historic District	Roughly bounded by Canal, Market, Merrimac, and Causeway Sts.	MASSACHUSETTS	Suffolk	Boston	LI	19860227
66000138	Bunker Hill Monument	Breed's Hill	MASSACHUSETTS	Suffolk	Boston	LI	19661015
87001771	Bunker Hill School	65 Baldwin St.	MASSACHUSETTS	Suffolk	Boston	LI	19871015
90001095	Calf Pasture Pumping Station Complex	435 Mount Vernon St.	MASSACHUSETTS	Suffolk	Boston	LI	19900802
98001361	Cathedral of St. George Historic District	517-523-525 E. Broadway	MASSACHUSETTS	Suffolk	Boston	LI	19981125
80000676	Charles Playhouse	74-78 Warenton St.	MASSACHUSETTS	Suffolk	Boston	LI	19800616
10000506	Charles River Reservation (Speedway)--Upper Basin Headquarters	1420-1440 Soldiers Field Rd	MASSACHUSETTS	Suffolk	Boston	LI	20100719
83000601	Charles Street African Methodist Episcopal Church	551 Warren St.	MASSACHUSETTS	Suffolk	Boston	LI	19830901
97000969	Charlestown Heights	Roughly bounded by St. Martin, Bunker Hill, Medford, and Sackville Sts.	MASSACHUSETTS	Suffolk	Boston	LI	19980108
89002271	Chestnut Hill Reservoir Historic District	Beacon St. and Commonwealth Ave.	MASSACHUSETTS	Suffolk	Boston	LI	19900118
86000140	Christ Church	1220 River Rd.	MASSACHUSETTS	Suffolk	Boston	LI	19860130
99001614	Church Green Buildings Historic District	101-113 Summer St.	MASSACHUSETTS	Suffolk	Boston	LI	19991230
74000911	Clapp Houses	199 and 195 Boston St.	MASSACHUSETTS	Suffolk	Boston	LI	19740502
83004097	Codman Building	55 Kilby St.	MASSACHUSETTS	Suffolk	Boston	LI	19831019
83000602	Codman Square District	Norfolk, Talbot, Epping, Lithgow, Centre, and Moultrie Sts.	MASSACHUSETTS	Suffolk	Boston	LI	19830623
05000559	Collins Building	213-217 Washington St.	MASSACHUSETTS	Suffolk	Boston	LI	20050608
08001284	Compton Building	159, 161-175 Devonshire St., 18-20 Arch St.	MASSACHUSETTS	Suffolk	Boston	LI	20081231
99001304	Congregation Adath Jeshurun	397 Blue Hill Ave.	MASSACHUSETTS	Suffolk	Boston	LI	19991112
87001396	Congress Street Fire Station	344 Congress St.	MASSACHUSETTS	Suffolk	Boston	LI	19870903
74000385	Copp's Hill Burial Ground	Charter, Snowhill, and Hull Sts.	MASSACHUSETTS	Suffolk	Boston	LI	19740418
90000631	Copp's Hill Terrace	Between Commercial and Charter Sts. W of Jackson Place	MASSACHUSETTS	Suffolk	Boston	LI	19900419
72000145	Crowninshield House	164 Marlborough St.	MASSACHUSETTS	Suffolk	Boston	LI	19720223
73000321	Custom House District	Between J.F.K. Expwy. and Kirby St. and S. Market and High and Battery March Sts.	MASSACHUSETTS	Suffolk	Boston	LI	19730511
73000318	Cyclorama Building	543-547 Tremont St.	MASSACHUSETTS	Suffolk	Boston	LI	19730413
00000871	Dearborn School	25 Ambrose St.	MASSACHUSETTS	Suffolk	Boston	LI	20000802
80000448	Dill Building	11-25 Stuart St.	MASSACHUSETTS	Suffolk	Boston	LI	19801209
80001683	Dillaway School	16-20 Kenilworth St.	MASSACHUSETTS	Suffolk	Boston	LI	19800409

National Register of Historic Places: Listed Properties 1966 to 2012

Reference Number	Resource Name	Address	State	County	City	Primary Cert	Primary Certdate
85000317	Dimock Community Health Center Complex	41 and 55 Dimock St.	MASSACHUSETTS	Suffolk	Boston	LI	19850221
87002549	District 13 Police Station	28 Seaverns Ave.	MASSACHUSETTS	Suffolk	Boston	LI	19880210
66000050	Dorchester Heights National Historic Site	South Boston	MASSACHUSETTS	Suffolk	Boston	LI	19661015
74000915	Dorchester North Burying Ground	Stroughton St. and Columbia Rd.	MASSACHUSETTS	Suffolk	Boston	LI	19740418
08000089	Dorchester Park	Bounded by Dorchester Ave., Richmond, Adams & Richview Sts.	MASSACHUSETTS	Suffolk	Boston	LI	20080220
85000318	Dorchester Pottery Works	101-105 Victory Rd.	MASSACHUSETTS	Suffolk	Boston	LI	19850221
97001239	Dorchester Temple Baptist Church	670 Washington St.	MASSACHUSETTS	Suffolk	Boston	LI	19980116
80000675	Dorchester-Milton Lower Mills Industrial District	Both sides of Neponset River	MASSACHUSETTS	Suffolk	Boston	LI	19800402
01000304	Dorchester--Milton Lower Mills Industrial District (Boundary Increase)	Roughly: Adams River, Medway Sts., Millers Lane, Eliot and Adams Sts.	MASSACHUSETTS	Suffolk	Boston	LI	20010406
96001063	Douglass, Frederick, Square Historic District	Roughly bounded by Hammond St., Cobat St., Windsor St., and Westminister St., Lower Roxbury	MASSACHUSETTS	Suffolk	Boston	LI	19961003
85003074	Dudley Station Historic District	Washington, Warren, and Dudley Sts.	MASSACHUSETTS	Suffolk	Boston	LI	19851205
98000149	Eagle Hill Historic District	Roughly bounded by Border, Lexington, Trenton, and Falcon Sts.	MASSACHUSETTS	Suffolk	Boston	LI	19980226
06000127	East Boston High School, Old	127 Marion St.	MASSACHUSETTS	Suffolk	Boston	LI	20060315
10000039	EDNA G. shipwreck (Eastern Rig dragger)	Address Restricted	MASSACHUSETTS	Suffolk	Boston	LI	20101122
10001066	Egleston Substation	3025 Washington St	MASSACHUSETTS	Suffolk	Boston	LI	20101227
74000388	Eliot Burying Ground	Eustis and Washington Sts.	MASSACHUSETTS	Suffolk	Boston	LI	19740625
93001587	Eliot Congregational Church	56 Dale St., corner 118--120 Walnut St.	MASSACHUSETTS	Suffolk	Boston	LI	19940209
88000959	Eliot Hall	7A Eliot St.	MASSACHUSETTS	Suffolk	Boston	LI	19880715
85003375	Engine House No. 34	444 Western Ave.	MASSACHUSETTS	Suffolk	Boston	LI	19851024
66000366	Ether Dome, Massachusetts General Hospital	Fruit St.	MASSACHUSETTS	Suffolk	Boston	LI	19661015
09000612	Evergreen Cemetery	2060 Commonwealth Ave.	MASSACHUSETTS	Suffolk	Boston	LI	20090814
09000717	Fairview Cemetery	45 Fairview Ave.	MASSACHUSETTS	Suffolk	Boston	LI	20090916
66000368	Faneuil Hall	Dock Sq.	MASSACHUSETTS	Suffolk	Boston	LI	19661015
94001492	Faneuil, Peter, School	60 Joy St.	MASSACHUSETTS	Suffolk	Boston	LI	19941216
12000069	Fenway Park	24, & 2-4 Yawkey Wy., 64-76 Brookline Ave., & 70-80 Lansdowne St.	MASSACHUSETTS	Suffolk	Boston	LI	20120307
78000473	Fenway Studios	30 Ipswich St.	MASSACHUSETTS	Suffolk	Boston	LI	19780913
84002875	Fenway-Boylston Street District	Fenway, Boylston, Westland, and Hemenway Sts.	MASSACHUSETTS	Suffolk	Boston	LI	19840904
81000620	Fields Corner Municipal Building	1 Arcadia St., 195 Adams St.	MASSACHUSETTS	Suffolk	Boston	LI	19811112
86001909	Filene's Department Store	426 Washington St.	MASSACHUSETTS	Suffolk	Boston	LI	19860724
72000146	First Baptist Church	Commonwealth Ave. and Clarendon St.	MASSACHUSETTS	Suffolk	Boston	LI	19720223
88000955	First Church of Jamaica Plain	6 Eliot St.	MASSACHUSETTS	Suffolk	Boston	LI	19880715
99001308	First Congregational Church of Hyde Park	6 Webster St.	MASSACHUSETTS	Suffolk	Boston	LI	19991112
04001219	Forest Hills Cemetery	95 Forest Hills Ave.	MASSACHUSETTS	Suffolk	Boston	LI	20041117
70000921	Fort Independence	Castle Island	MASSACHUSETTS	Suffolk	Boston	LI	19701015
04000959	Fort Point Channel Historic District	Necco Court, Thomson Place, A, Binford, Congress, Farnsworth, Melcher, Midway, Sleeper, Stillings, Summer Sts.	MASSACHUSETTS	Suffolk	Boston	LI	20040910
70000540	Fort Warren	Georges Island, Boston Harbor	MASSACHUSETTS	Suffolk	Boston	LI	19700829
02000081	Frances and Isabella Apartments	430-432 and 434-436 Dudley St.	MASSACHUSETTS	Suffolk	Boston	LI	20020222
73000319	Fulton-Commercial Streets District	Fulton, Commercial, Mercantile, Lewis, and Richmond Sts.	MASSACHUSETTS	Suffolk	Boston	LI	19730321
00000160	Fulton-Commercial Streets Historic District (Boundary Increase)	81-95 Richmond St.	MASSACHUSETTS	Suffolk	Boston	LI	20000303
83000603	Gardner, Isabella Stewart, Museum	280 The Fenway	MASSACHUSETTS	Suffolk	Boston	LI	19830127
66000653	Garrison, William Lloyd, House	125 Highland St.	MASSACHUSETTS	Suffolk	Boston	LI	19661015
80000674	Garrison, William Lloyd, School	20 Hutchings St.	MASSACHUSETTS	Suffolk	Boston	LI	19800416
01001048	Gibson House	137 Beacon St.	MASSACHUSETTS	Suffolk	Boston	LI	20010807
07000510	Goldsmith Block	41 Ruggles St., 746-750 Shawmut Ave.	MASSACHUSETTS	Suffolk	Boston	LI	20070605
88000908	Goodwin, Ozias, House	7 Jackson Ave.	MASSACHUSETTS	Suffolk	Boston	LI	19880623
88000957	Greek Orthodox Cathedral of New England	520 Parker St.	MASSACHUSETTS	Suffolk	Boston	LI	19880630
02000154	Greenwood Memorial United Methodist Church	378A-380 Washington St.	MASSACHUSETTS	Suffolk	Boston	LI	20020308
82004453	Haffenreffer Brewery	Germania St.	MASSACHUSETTS	Suffolk	Boston	LI	19820502
73000325	Hale, Edward Everett, House	12 Morley St.	MASSACHUSETTS	Suffolk	Boston	LI	19790321
66000764	Harding, Chester, House	16 Beacon St.	MASSACHUSETTS	Suffolk	Boston	LI	19661015
02001190	Harrison Square Historic District	Bounded by MBTA Braintree line embankment, Park, Everett, Freeport, Mill, Asland, Blanche Sts., Victory Rd.	MASSACHUSETTS	Suffolk	Boston	LI	20021022
86000375	Harriswood Crescent	60--88 Harold St.	MASSACHUSETTS	Suffolk	Boston	LI	19860313
83000605	Harvard Avenue Fire Station	16 Harvard Ave.	MASSACHUSETTS	Suffolk	Boston	LI	19830331
00000415	Harvard Avenue Historic District	Roughly bounded by Linden St., Commonwealth Ave., Harvard Ave., and Park Vale Ave.	MASSACHUSETTS	Suffolk	Boston	LI	20000428
87000757	Harvard Stadium	60 N. Harvard St.	MASSACHUSETTS	Suffolk	Boston	LI	19870227
04000085	Haskell, Edward H., Home for Nurses	220 Fister Ave., 63 Parker Hill Ave.	MASSACHUSETTS	Suffolk	Boston	LI	20040226
80000446	Hayden Building	681-683 Washington St.	MASSACHUSETTS	Suffolk	Boston	LI	19801209
66000765	Headquarters House	55 Beacon St.	MASSACHUSETTS	Suffolk	Boston	LI	19661015
04000534	Hibernian Hall	182-186 Dudley St.	MASSACHUSETTS	Suffolk	Boston	LI	20040602
10000300	Highland Spring Brewery Bottling and Storage Buildings	154-166 Terrace St	MASSACHUSETTS	Suffolk	Boston	LI	20100528
05000879	Home for Aged Couples	409, 419 Walnut Ave. and 2055 Columbus Ave.	MASSACHUSETTS	Suffolk	Boston	LI	20050811
93001573	House at 1 Bay Street	1 Bay St.	MASSACHUSETTS	Suffolk	Boston	LI	19940209
87001398	House at 17 Cranston Street	17 Cranston St.	MASSACHUSETTS	Suffolk	Boston	LI	19871120
74002044	Howe, Samuel Gridley and Julia Ward, House	13 Chestnut St.	MASSACHUSETTS	Suffolk	Boston	LI	19740913
87001399	Hoxie, Timothy, House	135 Hillside St.	MASSACHUSETTS	Suffolk	Boston	LI	19871120
79000369	International Trust Company Building	39-47 Milk St.	MASSACHUSETTS	Suffolk	Boston	LI	19790910
74000391	John Adams Courthouse	Pemberton Sq.	MASSACHUSETTS	Suffolk	Boston	LI	19740508
73000854	John Eliot Square District	John Eliot Sq.	MASSACHUSETTS	Suffolk	Boston	LI	19730423
08000793	Joshua Bates School	731 Harrison Ave.	MASSACHUSETTS	Suffolk	Boston	LI	20080822
74002045	King's Chapel	Tremont and School Sts.	MASSACHUSETTS	Suffolk	Boston	LI	19740502
73000855	Kittredge, Alvah, House	12 Linwood St.	MASSACHUSETTS	Suffolk	Boston	LI	19730508
83000606	Lawrence Model Lodging Houses	79, 89, 99 and 109 E. Canton St.	MASSACHUSETTS	Suffolk	Boston	LI	19830922
83004098	Leather District	Roughly bounded by Atlantic Ave., Kneeland, Lincoln, and Essex Sts.	MASSACHUSETTS	Suffolk	Boston	LI	19831221
80000460	Liberty Tree District	Roughly bounded by Harrison Ave., Washington, Essex and Beach Sts.	MASSACHUSETTS	Suffolk	Boston	LI	19801209

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86001911	Locke--Ober Restaurant	3--4 Winter Pl.	MASSACHUSETTS	Suffolk	Boston	LI	19860724
87001481	Long Island Head Light	Long Island	MASSACHUSETTS	Suffolk	Boston	LI	19870615
66000768	Long Wharf and Customhouse Block	Foot of State St.	MASSACHUSETTS	Suffolk	Boston	LI	19661113
83000604	Loring, Harrison, House	789 E. Broadway St.	MASSACHUSETTS	Suffolk	Boston	LI	19830901
72000544	Loring-Greenough House	12 South St.	MASSACHUSETTS	Suffolk	Boston	LI	19720426
94001494	Lower Roxbury Historic District	Roughly, area surrounding Coventry, Cunard, and Walpole Sts.	MASSACHUSETTS	Suffolk	Boston	LI	19941209
83004099	LUNA (tugboat)	NDC Pier, Charles River	MASSACHUSETTS	Suffolk	Boston	LI	19831006
99001302	Mariner's House	11 North Square	MASSACHUSETTS	Suffolk	Boston	LI	19991112
70000682	Massachusetts General Hospital	Fruit Street	MASSACHUSETTS	Suffolk	Boston	LI	19701230
66000770	Massachusetts Historical Society Building	1154 Boylston St.	MASSACHUSETTS	Suffolk	Boston	LI	19661015
93001489	Massachusetts Mental Health Center	74 Fenwood Rd.	MASSACHUSETTS	Suffolk	Boston	LI	19940121
89000974	Massachusetts School of Art	364 Brookline Ave.	MASSACHUSETTS	Suffolk	Boston	LI	19890803
66000771	Massachusetts Statehouse	Beacon Hill	MASSACHUSETTS	Suffolk	Boston	LI	19661015
82004450	McKay, Donald, House	78-80 White St.	MASSACHUSETTS	Suffolk	Boston	LI	19820602
80000445	Metropolitan Theatre	252-272 Tremont St.	MASSACHUSETTS	Suffolk	Boston	LI	19801209
89001747	Mission Hill Triangle Historic District	Roughly bounded by Smith St., Worthington St., Tremont St., and Huntington Ave.	MASSACHUSETTS	Suffolk	Boston	LI	19891106
87001128	Monument Square Historic District	Monument Sq.	MASSACHUSETTS	Suffolk	Boston	LI	19870602
90001536	Monument Square Historic District	Roughly bounded by Jamaicaaway, Pond, Centre and Eliot Sts.	MASSACHUSETTS	Suffolk	Boston	LI	19901011
84002890	Moreland Street Historic District	Roughly bounded by Kearsarge, Blue Hill Aves., Warren, Waverly, and Winthrop Sts.	MASSACHUSETTS	Suffolk	Boston	LI	19840329
04001572	Morton Street, Metropolitan Park System of Greater Boston	Morton St.	MASSACHUSETTS	Suffolk	Boston	LI	20050124
09000767	Mount Hope Cemetery	355 Walk Hill St.	MASSACHUSETTS	Suffolk	Boston	LI	20090924
89000004	Mount Pleasant Historic District	Roughly bounded by Forest St. and Mount Pleasant Ave.	MASSACHUSETTS	Suffolk	Boston	LI	19890209
04000426	Nazing Court Apartments	224-236 Seaver St. and 1-8 Nazing Court	MASSACHUSETTS	Suffolk	Boston	LI	20040512
76001979	Nell, William C., House	3 Smith Ct.	MASSACHUSETTS	Suffolk	Boston	LI	19760511
04001573	Neponset Valley Parkway, Metropolitan Park System of Greater Boston	Neponset Valley Parkway	MASSACHUSETTS	Suffolk	Boston	LI	20050124
80000672	New England Conservatory of Music	290 Huntington Ave.	MASSACHUSETTS	Suffolk	Boston	LI	19800514
87001394	New Riding Club	52 Hemenway St.	MASSACHUSETTS	Suffolk	Boston	LI	19870820
83000607	Newspaper Row	322-328 Washington St., 5-23 Milk St., and 11 Hawley St.	MASSACHUSETTS	Suffolk	Boston	LI	19830707
04000189	Nix's Mate Daybeacon	Nubble Channel, The Narrows, Boston Harbor	MASSACHUSETTS	Suffolk	Boston	LI	20040318
97000971	North Terminal Garage	600 Commercial St.	MASSACHUSETTS	Suffolk	Boston	LI	19970911
80000465	Oak Square School	35 Nonantum St.	MASSACHUSETTS	Suffolk	Boston	LI	19801110
08000795	Ohabei Shalom Cemetery	147 Wordsworth St.	MASSACHUSETTS	Suffolk	Boston	LI	20080819
70000687	Old City Hall	School and Providence Sts.	MASSACHUSETTS	Suffolk	Boston	LI	19701230
73000322	Old Corner Bookstore	NW corner of Washington and School Sts.	MASSACHUSETTS	Suffolk	Boston	LI	19730411
08000693	Old Harbor Reservation Parkways, Metropolitan Park System of Greater Boston	William J. Day Blvd., Columbia Rd. between Farragut Rd and Kosciuszko Cir., Old Colony Ave. between Pacuska Ave.	MASSACHUSETTS	Suffolk	Boston	LI	20080724
66000776	Old North Church	193 Salem St.	MASSACHUSETTS	Suffolk	Boston	LI	19661015
70000690	Old South Church in Boston	645 Boylston St.	MASSACHUSETTS	Suffolk	Boston	LI	19701230
66000778	Old South Meetinghouse	Milk and Washington Sts.	MASSACHUSETTS	Suffolk	Boston	LI	19661015
66000779	Old State House	Washington and State Sts.	MASSACHUSETTS	Suffolk	Boston	LI	19661015
70000691	Old West Church	131 Cambridge St.	MASSACHUSETTS	Suffolk	Boston	LI	19701230
70000539	Otis, (First) Harrison Gray, House	141 Cambridge St.	MASSACHUSETTS	Suffolk	Boston	LI	19701230
73001955	Otis, (Second) Harrison Gray, House	85 Mt. Vernon St.	MASSACHUSETTS	Suffolk	Boston	LI	19730727
02001039	Paine Furniture Building	75-81 Arlington St.	MASSACHUSETTS	Suffolk	Boston	LI	20020912
74000390	Park Street District	Tremont, Park, and Beacon Sts.	MASSACHUSETTS	Suffolk	Boston	LI	19740501
66000782	Parkman, Francis, House	50 Chestnut St.	MASSACHUSETTS	Suffolk	Boston	LI	19661015
01000872	Peabody, The	195-197 Ashmont St.	MASSACHUSETTS	Suffolk	Boston	LI	20010808
74000907	Phipps Street Burying Ground	Phipps St.	MASSACHUSETTS	Suffolk	Boston	LI	19740514
80000458	Piano Row District	Boston Common, Park Sq., Boylston Pl. and Tremont St.	MASSACHUSETTS	Suffolk	Boston	LI	19801209
74000917	Pierce House	24 Oakton Ave.	MASSACHUSETTS	Suffolk	Boston	LI	19740426
68000042	Pierce-Hichborn House	29 North Sq.	MASSACHUSETTS	Suffolk	Boston	LI	19681124
03000781	Publicity Building	40-44 Bromfield St.	MASSACHUSETTS	Suffolk	Boston	LI	20030820
66000784	Quincy Market	S. Market St.	MASSACHUSETTS	Suffolk	Boston	LI	19661113
66000785	Revere, Paul, House	19 North Sq.	MASSACHUSETTS	Suffolk	Boston	LI	19661015
86001504	Richardson Block	113--151 Pearl and 109--119 High Sts.	MASSACHUSETTS	Suffolk	Boston	LI	19860809
95001450	Riviera, The	270 Huntington Ave.	MASSACHUSETTS	Suffolk	Boston	LI	19951207
98001330	Roslindale Baptist Church	52 Cummins Hwy.	MASSACHUSETTS	Suffolk	Boston	LI	19981105
82004448	Roughan Hall	15-18 City Sq.	MASSACHUSETTS	Suffolk	Boston	LI	19820415
73000856	Roxbury High Fort	Beech Glen St. at Fort Ave.	MASSACHUSETTS	Suffolk	Boston	LI	19730423
89000147	Roxbury Highlands Historic District	Roughly bounded by Dudley St., Washington St., and Columbus Ave.	MASSACHUSETTS	Suffolk	Boston	LI	19890222
89002125	Roxbury Presbyterian Church	328 Warren St.	MASSACHUSETTS	Suffolk	Boston	LI	19910315
80000463	Russia Wharf Buildings	518-540 Atlantic Ave., 270 Congress St. and 276-290 Congress St.	MASSACHUSETTS	Suffolk	Boston	LI	19801202
87001495	Saint Augustine Chapel and Cemetery	Dorchester St. between W. Sixth and Tudor Sts.	MASSACHUSETTS	Suffolk	Boston	LI	19870918
12000783	Saint Mark's Episcopal Church	73 Columbia Rd.	MASSACHUSETTS	Suffolk	Boston	LI	20120910
03000385	Savin Hill Historic District	Roughly bounded by Savin Hill Ave., Morrissey Blvd., Dorchester Bay, and I-93	MASSACHUSETTS	Suffolk	Boston	LI	20030509
86001486	Sears' Crescent and Sears' Block	38--68 and 70--72 Cornhill	MASSACHUSETTS	Suffolk	Boston	LI	19860809
90001992	Sears Roebuck and Company Mail Order Store	309 Park Dr. and 201 Brookline Ave.	MASSACHUSETTS	Suffolk	Boston	LI	19910115
70000731	Sears, David, House	42 Beacon St.	MASSACHUSETTS	Suffolk	Boston	LI	19701230
86001913	Second Brazer Building	25--29 State St.	MASSACHUSETTS	Suffolk	Boston	LI	19860724
10000391	Second Church in Boston	874, 876, 880 Beacon St	MASSACHUSETTS	Suffolk	Boston	LI	20100624
12000978	Sherman Apartments Historic District	544-546 Washington, 4-6, 12-14, 18 Lyndhurst Sts.	MASSACHUSETTS	Suffolk	Boston	LI	20121128
80000444	Shubert, Sam S., Theatre	263-265 Tremont St.	MASSACHUSETTS	Suffolk	Boston	LI	19801209
05000936	South Boston Boat Clubs Historic District	1793-1849 William J. Day Blvd.	MASSACHUSETTS	Suffolk	Boston	LI	20050901
73000324	South End District	South Bay area between Huntington and Harrison Aves.	MASSACHUSETTS	Suffolk	Boston	LI	19730508
75000299	South Station Headhouse	Atlantic Ave. and Summer St.	MASSACHUSETTS	Suffolk	Boston	LI	19750213

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89002169	St. Joseph's Roman Catholic Church Complex	Bounded by Circuit, Regent, Hulbert, and Fenwick Sts.	MASSACHUSETTS	Suffolk	Boston	LI	19891228
97001472	St. Luke's and St. Margaret's Church	5-7 St. Luke's Rd.	MASSACHUSETTS	Suffolk	Boston	LI	19971112
98001292	St. Mary's Episcopal Church	14-16 Cushing Ave.	MASSACHUSETTS	Suffolk	Boston	LI	19981030
70000730	St. Paul's Church	136 Tremont St.	MASSACHUSETTS	Suffolk	Boston	LI	19701230
75000300	St. Stephen's Church	Hanover St. between Clark and Harris Sts.	MASSACHUSETTS	Suffolk	Boston	LI	19750414
80000671	Stearns, R. H., House	140 Tremont St.	MASSACHUSETTS	Suffolk	Boston	LI	19800616
05001509	Stony Brook Reservation Parkways, Metropolitan Park System of Great Boston MPS	Dedham, Enneking, Turtle Pond Parkways, Smith Field, Reservation, W. Border Rds.	MASSACHUSETTS	Suffolk	Boston	LI	20060103
97000970	Students House	96 The Fenway	MASSACHUSETTS	Suffolk	Boston	LI	19970911
80000670	Suffolk County Jail	215 Charles St.	MASSACHUSETTS	Suffolk	Boston	LI	19800423
87001889	Sumner Hill Historic District	Roughly bounded by Seaverns Ave., Everett St., Carolina Ave., & Newbern St.	MASSACHUSETTS	Suffolk	Boston	LI	19871022
73001953	Sumner, Charles, House	20 Hancock St.	MASSACHUSETTS	Suffolk	Boston	LI	19731107
75000301	Symphony and Horticultural Halls	Massachusetts and Huntington Aves.	MASSACHUSETTS	Suffolk	Boston	LI	19750530
99000633	Symphony Hall	301 Massachusetts Avenue	MASSACHUSETTS	Suffolk	Boston	LI	19990120
88000427	Temple Place Historic District	11--55, 26--58 Temple Pl.	MASSACHUSETTS	Suffolk	Boston	LI	19880726
12000099	Terminal Storage Warehouse District	267-281 Medford St., 40 & 50 Terminal St.	MASSACHUSETTS	Suffolk	Boston	LI	20120312
90001757	Textile District	Roughly, Essex St. from Phillips Sq. to Columbia St. and Chauncy St. from Phillips Sq. to Rowe Pl.	MASSACHUSETTS	Suffolk	Boston	LI	19901129
73000850	Town Hill District	Bounded roughly by Rutherford Ave. and Main and Warren Sts.	MASSACHUSETTS	Suffolk	Boston	LI	19730511
66000788	Tremont Street Subway	Beneath Tremont, Boylston, and Washington Sts.	MASSACHUSETTS	Suffolk	Boston	LI	19661015
70000733	Trinity Church	Copley Sq.	MASSACHUSETTS	Suffolk	Boston	LI	19700701
92000356	Trinity Neighborhood House	406 Meridian St.	MASSACHUSETTS	Suffolk	Boston	LI	19920414
72000150	Trinity Rectory	Clarendon and Newbury Sts.	MASSACHUSETTS	Suffolk	Boston	LI	19720223
04001430	Truman Parkway--Metropolitan Park System of Greater Boston	Truman Parkway	MASSACHUSETTS	Suffolk	Boston	LI	20050105
66000789	U.S.S. CONSTITUTION	Boston Naval Shipyard	MASSACHUSETTS	Suffolk	Boston	LI	19661015
03000645	Union Oyster House	41-43 Union Street	MASSACHUSETTS	Suffolk	Boston	LI	20030527
80000669	Union Wharf	295-353 Commercial St.	MASSACHUSETTS	Suffolk	Boston	LI	19800622
80000668	United Shoe Machinery Corporation Building	138-164 Federal St.	MASSACHUSETTS	Suffolk	Boston	LI	19800819
11000160	United State Post Office, Courthouse, and Federal Building	5 Post Office Square	MASSACHUSETTS	Suffolk	Boston	LI	20110408
90001537	Upham's Corner Market	600 Columbia Rd.	MASSACHUSETTS	Suffolk	Boston	LI	19901011
86000084	USS CASSIN YOUNG (destroyer)	Charlestown Navy Yard	MASSACHUSETTS	Suffolk	Boston	LI	19860114
84000421	Vermont Building	6-12 Thacher St.	MASSACHUSETTS	Suffolk	Boston	LI	19841113
04001432	VFW Parkway, Metropolitan Park System of Greater Boston	VFW Parkway, bet. Spring And Centre Sts.	MASSACHUSETTS	Suffolk	Boston	LI	20050105
79000370	Washington Street Theatre District	511-559 Washington St.	MASSACHUSETTS	Suffolk	Boston	LI	19790319
73002284	WENTWORTH, ALICE S. (schooner)	Pier 4, Northern Ave.	MASSACHUSETTS	Suffolk	Boston	RN	19740101
80000455	West Street District	West St.	MASSACHUSETTS	Suffolk	Boston	LI	19801209
82000486	Wigglesworth Building	89-83 Franklin St.	MASSACHUSETTS	Suffolk	Boston	LI	19821021
80000443	Wilbur Theatre	244-250 Tremont St.	MASSACHUSETTS	Suffolk	Boston	LI	19801209
74000392	Winthrop Building	7 Water St.	MASSACHUSETTS	Suffolk	Boston	LI	19740418
80000442	Wirth, Jacob, Buildings	31-39 Stuart St.	MASSACHUSETTS	Suffolk	Boston	LI	19801209
99000593	Woodbourne Historic District	Roughly bounded by Walk Hill, Goodway, and Wachusett Sts.	MASSACHUSETTS	Suffolk	Boston	LI	19990604
74000393	Youth's Companion Building	209 Columbus Ave.	MASSACHUSETTS	Suffolk	Boston	LI	19740502
04000119	YWCA Boston	140 Clarendon St.	MASSACHUSETTS	Suffolk	Boston	LI	20040303
85002339	Hoosac Stores 1 & 2-Hoosac Stores 3	25 and 115 Water St.	MASSACHUSETTS	Suffolk	Charlestown	LI	19850814
85000030	Bellingham Square Historic District	Roughly bounded by Broadway, Shawmut, Chestnut, and Shurtleff Sts.	MASSACHUSETTS	Suffolk	Chelsea	LI	19850103
74000908	Bellingham-Cary House	34 Parker St.	MASSACHUSETTS	Suffolk	Chelsea	LI	19740906
01000089	Chelsea Garden Cemetery	Shawmut St.	MASSACHUSETTS	Suffolk	Chelsea	LI	20010209
09000144	Chelsea Square Historic District	Roughly area around Broadway, Medford. Tremont, Park, Cross and Winnisimmet Sts.	MASSACHUSETTS	Suffolk	Chelsea	LI	19820408
93000283	Congregation Agudath Shalom	145 Walnut St.	MASSACHUSETTS	Suffolk	Chelsea	LI	19930416
88000718	Downtown Chelsea Residential Historic District	Roughly bounded by Shurtleff, Marginal, and Division Sts. and Bellingham Sq.	MASSACHUSETTS	Suffolk	Chelsea	LI	19880622
82004464	Kimball, C. Henry, House	295 Washington St.	MASSACHUSETTS	Suffolk	Chelsea	LI	19820415
73000851	Naval Hospital Boston Historic District	1 Broadway	MASSACHUSETTS	Suffolk	Chelsea	LI	19730814
01001198	Dorchester Heights Historic District	Roughly a one block area surrounding Telegraph Hill	MASSACHUSETTS	Suffolk	Dorchester	LI	20011101
76002003	Trotter, William Monroe, House	97 Sawyer Ave.	MASSACHUSETTS	Suffolk	Dorchester	LI	19760511
92001874	Richards, Ellen H. Swallow, House	32 Eliot St.	MASSACHUSETTS	Suffolk	Jamaica Plain	LI	19920331
84000430	Church of Christ	265 Beech St.	MASSACHUSETTS	Suffolk	Revere	LI	19841113
01001559	Immaculate Conception Rectory	108 Beach St.	MASSACHUSETTS	Suffolk	Revere	LI	20020211
03000642	Revere Beach Reservation	Revere Beach Boulevard, Eliot Circle to Northern Circle	MASSACHUSETTS	Suffolk	Revere	LI	20030527
98000871	Revere Beach Reservation Historic District	Roughly bounded by Eliot Circle, Revere Beach Blvd., Northern Circle, and Atlantic Ocean	MASSACHUSETTS	Suffolk	Revere	LI	19980715
12000070	Revere City Hall and Police Station	281 Broadway & 23 Pleasant St.	MASSACHUSETTS	Suffolk	Revere	LI	20120307
82000485	Ronan, Mary, T., School	154 Bradstreet Ave.	MASSACHUSETTS	Suffolk	Revere	LI	19821210
04000025	Rumney Marsh Burying Ground	Butler St. at Elm and Bixby Sts.	MASSACHUSETTS	Suffolk	Revere	LI	20040211
09000709	Slade Spice Mill	770 Revere Beach Parkway	MASSACHUSETTS	Suffolk	Revere	LI	19720630
03001471	Winthrop Parkway, Metropolitan Parkway System of Greater Boston	Winthrop Parkway	MASSACHUSETTS	Suffolk	Revere	LI	20040121
91000925	Roslindale Congregational Church	25 Cummins Hwy., at jct. with Summer Ave.	MASSACHUSETTS	Suffolk	Roslindale	LI	19910726
66000787	Shirley-Eustis House	31-37 Shirley St.	MASSACHUSETTS	Suffolk	Roxbury	LI	19661015
86001378	US Post Office Garage	135 A St.	MASSACHUSETTS	Suffolk	South Boston	LI	19860626
87001401	Westerly Burial Ground	Centre St.	MASSACHUSETTS	Suffolk	West Roxbury	LI	19871120
07000144	Fort Banks Mortar Battery	Kennedy Dr.	MASSACHUSETTS	Suffolk	Winthrop	LI	20070312
97000878	Newton, Edward B., School	45 Pauline St.	MASSACHUSETTS	Suffolk	Winthrop	LI	19970818
10000098	Winthrop Center/Metcalf Square Historic District	roughly bounded by Lincoln, Winthrop Sts., Winthrop Cemetery, Buchanan, Fremont, Pauline, Hermon and Belcher Sts.	MASSACHUSETTS	Suffolk	Winthrop	LI	20100323
03001469	Winthrop Shore Dr., Metropolitan Park System of Greater Boston	Winthrop Shore Dr.	MASSACHUSETTS	Suffolk	Winthrop	LI	20040121
90000162	Winthrop, Deane, House	40 Shirley St.	MASSACHUSETTS	Suffolk	Winthrop	LI	19900309

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Reference Number	State	County	City	Resource Name	Address	Listed Date	Resource Type
87000885	MASSACHUSETTS	Suffolk	Boston	Abbotsford	300 Walnut Ave.	19870916	BUILDING
82004456	MASSACHUSETTS	Suffolk	Boston	Adams-Nervine Asylum	990-1020 Centre St.	19820601	BUILDING
71000087	MASSACHUSETTS	Suffolk	Boston	African Meetinghouse	8 Smith St.	19711007	BUILDING
80000678	MASSACHUSETTS	Suffolk	Boston	All Saints' Church	211 Ashmont St.	19800616	BUILDING
97001377	MASSACHUSETTS	Suffolk	Boston	Allston Congregational Church	31-41 Quint Ave.	19971107	BUILDING
74000382	MASSACHUSETTS	Suffolk	Boston	Ames Building	1 Court St.	19740426	BUILDING
77001541	MASSACHUSETTS	Suffolk	Boston	Appleton, Nathan, Residence	39-40 Beacon St.	19771222	BUILDING
73000313	MASSACHUSETTS	Suffolk	Boston	Arlington Street Church	Arlington and Boylston Sts.	19730504	BUILDING
73000314	MASSACHUSETTS	Suffolk	Boston	Armory of the First Corps of Cadets	97-105 Arlington St. and 130 Columbus Ave.	19730522	BUILDING
66000127	MASSACHUSETTS	Suffolk	Boston	Arnold Arboretum	22 Divinity Ave.	19661015	SITE
87001478	MASSACHUSETTS	Suffolk	Boston	Austin, Francis B., House	58 High St.	19881021	BUILDING
05000459	MASSACHUSETTS	Suffolk	Boston	Ayer, Frederick, Mansion	395 Commonwealth Avenue	20050405	BUILDING
73001948	MASSACHUSETTS	Suffolk	Boston	Back Bay Historic District	Roughly bounded by the Charles River, Arlington, Providence, Boylston and Newbury Sts., and Charlesgate East	19730814	DISTRICT
98001381	MASSACHUSETTS	Suffolk	Boston	Baker Congregational Church	760 Saratoga St.	19981119	BUILDING
83004285	MASSACHUSETTS	Suffolk	Boston	Baker, Sarah J., School	33 Perrin St.	19830707	BUILDING
80000462	MASSACHUSETTS	Suffolk	Boston	Beach-Knapp District	Roughly bounded by Harrison Ave., Washington, Kneeland, and Beach Sts.	19801209	DISTRICT
66000130	MASSACHUSETTS	Suffolk	Boston	Beacon Hill Historic District	Bounded by Beacon St., the Charles River Embankment, and Pinckney, Revere, and Hancock Sts.	19661015	DISTRICT
79000368	MASSACHUSETTS	Suffolk	Boston	Bedford Building	89-103 Bedford St.	19790821	BUILDING
89002251	MASSACHUSETTS	Suffolk	Boston	Bellevue Standpipe	On Bellevue Hill at Washington St. and Roxbury Pkwy.	19900118	STRUCTURE
85000030	MASSACHUSETTS	Suffolk	Chelsea	Bellingham Square Historic District	Roughly bounded by Broadway, Shawmut, Chestnut, and Shurtleff Sts.	19850103	DISTRICT
74000908	MASSACHUSETTS	Suffolk	Chelsea	Bellingham-Cary House	34 Parker St.	19740906	BUILDING
04000023	MASSACHUSETTS	Suffolk	Boston	Benedict Fenwick School	150 Magnolia St.	20040211	BUILDING
02000548	MASSACHUSETTS	Suffolk	Boston	Bennington Street Burying Ground	Bennington St., bet. Swift and harmony Sts.	20020522	SITE
80000677	MASSACHUSETTS	Suffolk	Boston	Berger Factory	37 Williams St.	19800409	BUILDING
85000316	MASSACHUSETTS	Suffolk	Boston	Bigelow School	350 W. 4th St.	19850221	BUILDING
73000315	MASSACHUSETTS	Suffolk	Boston	Blackstone Block Historic District	Area bound by Union, Hanover, Blackstone, and North Sts.	19730526	DISTRICT
74002350	MASSACHUSETTS	Suffolk	Boston	Blake, James, House	735 Columbia Rd.	19740501	BUILDING
80004396	MASSACHUSETTS	Suffolk	Boston	Boston African American National Historic Site	Museum of Afro American History, Dudley Station, Box 5	19801010	DISTRICT
66000132	MASSACHUSETTS	Suffolk	Boston	Boston Athenaeum	10 1/2 Beacon St.	19661015	BUILDING
87000760	MASSACHUSETTS	Suffolk	Boston	Boston Common	Beacon, Park, Tremont, Boylston, and Charles St.	19870227	DISTRICT
72000144	MASSACHUSETTS	Suffolk	Boston	Boston Common and Public Garden	Beacon, Park, Tremont, Boylston, and Arlington Sts.	19720712	DISTRICT
01001557	MASSACHUSETTS	Suffolk	Boston	Boston Consumptives Hospital	249 River St.	20020207	DISTRICT
80000453	MASSACHUSETTS	Suffolk	Boston	Boston Edison Electric Illuminating Company	25-39 Boylston St.	19801209	BUILDING
85003323	MASSACHUSETTS	Suffolk	Boston	Boston Harbor Islands Archeological District	Address Restricted	19851221	DISTRICT
66000133	MASSACHUSETTS	Suffolk	Boston	Boston Light	Little Brewster Island, Boston Harbor	19661015	STRUCTURE
74002222	MASSACHUSETTS	Suffolk	Boston	Boston National Historical Park	Inner harbor at mouth of Charles River	19741026	DISTRICT
66000134	MASSACHUSETTS	Suffolk	Boston	Boston Naval Shipyard	E of Chelsea St., Charlestown	19661115	DISTRICT
87000761	MASSACHUSETTS	Suffolk	Boston	Boston Public Garden	Beacon, Charles, Boylston, and Arlington Sts.	19870227	DISTRICT
73000317	MASSACHUSETTS	Suffolk	Boston	Boston Public Library	Copley Sq.	19730506	BUILDING
07000861	MASSACHUSETTS	Suffolk	Boston	Boston Transit Commission Building	15 Beacon St.	20070831	BUILDING
98001082	MASSACHUSETTS	Suffolk	Boston	Boston Young Men's Christian Association	312-320 Huntington Ave.	19980820	BUILDING
80000451	MASSACHUSETTS	Suffolk	Boston	Boston Young Men's Christian Union	48 Boylston St.	19801209	BUILDING
90001145	MASSACHUSETTS	Suffolk	Boston	Bowditch School	80--82 Greene St.	19900803	BUILDING
80000450	MASSACHUSETTS	Suffolk	Boston	Boylston Building	2-22 Boylston St.	19801209	BUILDING
01000088	MASSACHUSETTS	Suffolk	Boston	Brighton Center Historic District	Academy Hill R., Chestnut Hill Ave., Dighton, Elko, Henshaw, Leicester, Market, Washington, and Winship Sts.	20010220	DISTRICT
97000920	MASSACHUSETTS	Suffolk	Boston	Brighton Evangelical Congregational Church	404-410 Washington St.	19970821	BUILDING
66000141	MASSACHUSETTS	Suffolk	Boston	Brook Farm	670 Baker St.	19661015	SITE
85002015	MASSACHUSETTS	Suffolk	Boston	Building at 138--142 Portland Street	138--142 Portland St.	19850905	BUILDING
86000274	MASSACHUSETTS	Suffolk	Boston	Bulfinch Triangle Historic District	Roughly bounded by Canal, Market, Merrimac, and Causeway Sts.	19860227	DISTRICT
66000138	MASSACHUSETTS	Suffolk	Boston	Bunker Hill Monument	Breed's Hill	19661015	STRUCTURE
87001771	MASSACHUSETTS	Suffolk	Boston	Bunker Hill School	65 Baldwin St.	19871015	BUILDING
90001095	MASSACHUSETTS	Suffolk	Boston	Calf Pasture Pumping Station Complex	435 Mount Vernon St.	19900802	BUILDING
98001361	MASSACHUSETTS	Suffolk	Boston	Cathedral of St. George Historic District	517-523-525 E. Broadway	19981125	DISTRICT
80000676	MASSACHUSETTS	Suffolk	Boston	Charles Playhouse	74-78 Warenton St.	19800616	BUILDING
10000506	MASSACHUSETTS	Suffolk	Boston	Charles River Reservation (Speedway)--Upper Basin Headquarters	1420-1440 Soldiers Field Rd	20100719	BUILDING
83000601	MASSACHUSETTS	Suffolk	Boston	Charles Street African Methodist Episcopal Church	551 Warren St.	20140415	BUILDING
97000969	MASSACHUSETTS	Suffolk	Boston	Charlestown Heights	Roughly bounded by St. Martin, Bunker Hill, Medford, and Sackville Sts.	19980108	SITE
01000089	MASSACHUSETTS	Suffolk	Chelsea	Chelsea Garden Cemetery	70 Central Ave. (formerly Shawmut St.)	20010209	SITE
09000144	MASSACHUSETTS	Suffolk	Chelsea	Chelsea Square Historic District	Roughly area around Broadway, Medford. Tremont, Park, Cross and Winnisimmet Sts.	19820408	DISTRICT
89002271	MASSACHUSETTS	Suffolk	Boston	Chestnut Hill Reservoir Historic District	Beacon St. and Commonwealth Ave.	19900118	DISTRICT
86000140	MASSACHUSETTS	Suffolk	Boston	Christ Church	1220 River Rd.	19860130	BUILDING
99001614	MASSACHUSETTS	Suffolk	Boston	Church Green Buildings Historic District	101-113 Summer St.	19991230	DISTRICT
84000430	MASSACHUSETTS	Suffolk	Revere	Church of Christ	265 Beech St.	19841113	BUILDING
74000911	MASSACHUSETTS	Suffolk	Boston	Clapp Houses	199 and 195 Boston St.	19740502	BUILDING
83004097	MASSACHUSETTS	Suffolk	Boston	Codman Building	55 Kilby St.	19831019	BUILDING
83000602	MASSACHUSETTS	Suffolk	Boston	Codman Square District	Norfolk, Talbot, Epping, Lithgow, Centre, and Moultrie Sts.	20140415	DISTRICT
05000559	MASSACHUSETTS	Suffolk	Boston	Collins Building	213-217 Washington St.	20050608	BUILDING
08001284	MASSACHUSETTS	Suffolk	Boston	Compton Building	159, 161-175 Devonshire St., 18-20 Arch St.	20081231	BUILDING
99001304	MASSACHUSETTS	Suffolk	Boston	Congregation Adath Jeshurun	397 Blue Hill Ave.	19991112	BUILDING
93000283	MASSACHUSETTS	Suffolk	Chelsea	Congregation Agudath Shalom	145 Walnut St.	19930416	BUILDING
87001396	MASSACHUSETTS	Suffolk	Boston	Congress Street Fire Station	344 Congress St.	19870903	BUILDING
74000385	MASSACHUSETTS	Suffolk	Boston	Copp's Hill Burial Ground	Charter, Snowhill, and Hull Sts.	19740418	SITE
90000631	MASSACHUSETTS	Suffolk	Boston	Copp's Hill Terrace	Between Commercial and Charter Sts. W of Jackson Place	19900419	SITE
72000145	MASSACHUSETTS	Suffolk	Boston	Crowninshield House	164 Marlborough St.	19720223	BUILDING

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73000321	MASSACHUSETTS	Suffolk	Boston	Custom House District	Between J.F.K. Expwy. and Kirby St. and S. Market and High and Battery March Sts.	19730511	DISTRICT
73000318	MASSACHUSETTS	Suffolk	Boston	Cyclorama Building	543-547 Tremont St.	19730413	BUILDING
13000928	MASSACHUSETTS	Suffolk	Boston	Davidson, Sarah, Apartment Block	3 Gaylord St.	20131218	BUILDING
00000871	MASSACHUSETTS	Suffolk	Boston	Dearborn School	25 Ambrose St.	20000802	BUILDING
80000448	MASSACHUSETTS	Suffolk	Boston	Dill Building	11-25 Stuart St.	19801209	BUILDING
80001683	MASSACHUSETTS	Suffolk	Boston	Dillaway School	16-20 Kenilworth St.	19800409	BUILDING
85000317	MASSACHUSETTS	Suffolk	Boston	Dimock Community Health Center Complex	41 and 55 Dimock St.	19850221	BUILDING
87002549	MASSACHUSETTS	Suffolk	Boston	District 13 Police Station	28 Seaverns Ave.	19880210	BUILDING
01001198	MASSACHUSETTS	Suffolk	Dorchester	Dorchester Heights Historic District	Roughly a one block area surrounding Telegraph Hill	20011101	DISTRICT
66000050	MASSACHUSETTS	Suffolk	Boston	Dorchester Heights National Historic Site	South Boston	19661015	STRUCTURE
74000915	MASSACHUSETTS	Suffolk	Boston	Dorchester North Burying Ground	Stroughton St. and Columbia Rd.	19740418	DISTRICT
08000089	MASSACHUSETTS	Suffolk	Boston	Dorchester Park	Bounded by Dorchester Ave., Richmond, Adams & Richview Sts.	20080220	SITE
85000318	MASSACHUSETTS	Suffolk	Boston	Dorchester Pottery Works	101-105 Victory Rd.	19850221	BUILDING
97001239	MASSACHUSETTS	Suffolk	Boston	Dorchester Temple Baptist Church	670 Washington St.	19980116	BUILDING
80000675	MASSACHUSETTS	Suffolk	Boston	Dorchester-Milton Lower Mills Industrial District	Both sides of Neponset River	19800402	DISTRICT
01000304	MASSACHUSETTS	Suffolk	Boston	Dorchester--Milton Lower Mills Industrial District (Boundary Increase)	Roughly: Adams, River, Medway Sts., Millers Lane, Eliot and Adams Sts.	20010406	DISTRICT
96001063	MASSACHUSETTS	Suffolk	Boston	Douglass, Frederick, Square Historic District	Roughly bounded by Hammond St., Cobat St., Windsor St., and Westminster St., Lower Roxbury	19961003	DISTRICT
88000718	MASSACHUSETTS	Suffolk	Chelsea	Downtown Chelsea Residential Historic District	Roughly bounded by Shurtleff, Marginal, and Division Sts. and Bellingham Sq.	19880622	DISTRICT
85003074	MASSACHUSETTS	Suffolk	Boston	Dudley Station Historic District	Washington, Warren, and Dudley Sts.	19851205	DISTRICT
98000149	MASSACHUSETTS	Suffolk	Boston	Eagle Hill Historic District	Roughly bounded by Border, Lexington, Trenton, and Falcon Sts.	19980226	DISTRICT
06000127	MASSACHUSETTS	Suffolk	Boston	East Boston High School, Old	127 Marion St.	20060315	BUILDING
10000039	MASSACHUSETTS	Suffolk	Boston	EDNA G. shipwreck (Eastern Rig dragger)	Address Restricted	20101122	SITE
10001066	MASSACHUSETTS	Suffolk	Boston	Egleston Substation	3025 Washington St.	20101227	BUILDING
74000388	MASSACHUSETTS	Suffolk	Boston	Eliot Burying Ground	Eustis and Washington Sts.	19740625	SITE
93001587	MASSACHUSETTS	Suffolk	Boston	Eliot Congregational Church	56 Dale St., corner 118--120 Walnut St.	19940209	BUILDING
88000959	MASSACHUSETTS	Suffolk	Boston	Eliot Hall	7A Eliot St.	19880715	BUILDING
85003375	MASSACHUSETTS	Suffolk	Boston	Engine House No. 34	444 Western Ave.	19851024	BUILDING
66000366	MASSACHUSETTS	Suffolk	Boston	Ether Dome, Massachusetts General Hospital	Fruit St.	19661015	BUILDING
09000612	MASSACHUSETTS	Suffolk	Boston	Evergreen Cemetery	2060 Commonwealth Ave.	20090814	SITE
09000717	MASSACHUSETTS	Suffolk	Boston	Fairview Cemetery	45 Fairview Ave.	20090916	SITE
66000368	MASSACHUSETTS	Suffolk	Boston	Faneuil Hall	Dock Sq.	19661015	BUILDING
94001492	MASSACHUSETTS	Suffolk	Boston	Faneuil, Peter, School	60 Joy St.	19941216	BUILDING
12000069	MASSACHUSETTS	Suffolk	Boston	Fenway Park	24, & 2-4 Yawkey Wy., 64-76 Brookline Ave., & 70-80 Lansdowne St.	20120307	BUILDING
78000473	MASSACHUSETTS	Suffolk	Boston	Fenway Studios	30 Ipswich St.	19780913	BUILDING
84002875	MASSACHUSETTS	Suffolk	Boston	Fenway-Boylston Street District	Fenway, Boylston, Westland, and Hemenway Sts.	19840904	DISTRICT
81000620	MASSACHUSETTS	Suffolk	Boston	Fields Corner Municipal Building	1 Arcadia St., 195 Adams St.	19811112	BUILDING
86001909	MASSACHUSETTS	Suffolk	Boston	Filene's Department Store	426 Washington St.	19860724	BUILDING
72000146	MASSACHUSETTS	Suffolk	Boston	First Baptist Church	Commonwealth Ave. and Clarendon St.	19720223	BUILDING
88000955	MASSACHUSETTS	Suffolk	Boston	First Church of Jamaica Plain	6 Eliot St.	19880715	BUILDING
99001308	MASSACHUSETTS	Suffolk	Boston	First Congregational Church of Hyde Park	6 Webster St.	19991112	BUILDING
04001219	MASSACHUSETTS	Suffolk	Boston	Forest Hills Cemetery	95 Forest Hills Ave.	20041117	SITE
07000144	MASSACHUSETTS	Suffolk	Winthrop	Fort Banks Mortar Battery	Kennedy Dr.	20070312	SITE
70000921	MASSACHUSETTS	Suffolk	Boston	Fort Independence	Castle Island	19701015	SITE
04000959	MASSACHUSETTS	Suffolk	Boston	Fort Point Channel Historic District	Necco Court, Thomson Place, A, Binford, Congress, Farnsworth, Melcher, Midway, Sleeper, Stillings, Summer Sts.	20040910	DISTRICT
70000540	MASSACHUSETTS	Suffolk	Boston	Fort Warren	Georges Island, Boston Harbor	19700829	DISTRICT
02000081	MASSACHUSETTS	Suffolk	Boston	Frances and Isabella Apartments	430-432 and 434-436 Dudley St.	20020222	BUILDING
73000319	MASSACHUSETTS	Suffolk	Boston	Fulton-Commercial Streets District	Fulton, Commercial, Mercantile, Lewis, and Richmond Sts.	19730321	DISTRICT
00000160	MASSACHUSETTS	Suffolk	Boston	Fulton-Commercial Streets Historic District (Boundary Increase)	81-95 Richmond St.	20000303	DISTRICT
83000603	MASSACHUSETTS	Suffolk	Boston	Gardner, Isabella Stewart, Museum	280 The Fenway	20140415	BUILDING
66000653	MASSACHUSETTS	Suffolk	Boston	Garrison, William Lloyd, House	125 Highland St.	19661015	BUILDING
80000674	MASSACHUSETTS	Suffolk	Boston	Garrison, William Lloyd, School	20 Hutchings St.	19800416	BUILDING
01001048	MASSACHUSETTS	Suffolk	Boston	Gibson House	137 Beacon St.	20010807	BUILDING
07000510	MASSACHUSETTS	Suffolk	Boston	Goldsmith Block	41 Ruggles St., 746-750 Shawmut Ave.	20070605	BUILDING
88000908	MASSACHUSETTS	Suffolk	Boston	Goodwin, Ozias, House	7 Jackson Ave.	19880623	BUILDING
88000957	MASSACHUSETTS	Suffolk	Boston	Greek Orthodox Cathedral of New England	520 Parker St.	19880630	BUILDING
02000154	MASSACHUSETTS	Suffolk	Boston	Greenwood Memorial United Methodist Church	378A-380 Washington St.	20020308	BUILDING
82004453	MASSACHUSETTS	Suffolk	Boston	Haffenreffer Brewery	Germania St.	19820502	BUILDING
73000325	MASSACHUSETTS	Suffolk	Boston	Hale, Edward Everett, House	12 Morley St.	19790321	BUILDING
66000764	MASSACHUSETTS	Suffolk	Boston	Harding, Chester, House	16 Beacon St.	19661015	BUILDING
02001190	MASSACHUSETTS	Suffolk	Boston	Harrison Square Historic District	Bounded by MBTA Braintree line embankment, Park, Everett, Freeport, Mill, Asland, Blanche Sts., Victory Rd.	20021022	DISTRICT
86000375	MASSACHUSETTS	Suffolk	Boston	Harriswood Crescent	60--88 Harold St.	19860313	BUILDING
83000605	MASSACHUSETTS	Suffolk	Boston	Harvard Avenue Fire Station	16 Harvard Ave.	20140415	BUILDING
00000415	MASSACHUSETTS	Suffolk	Boston	Harvard Avenue Historic District	Roughly bounded by Linden St., Commonwealth Ave., Harvard Ave., and Park Vale Ave.	20000428	DISTRICT
87000757	MASSACHUSETTS	Suffolk	Boston	Harvard Stadium	60 N. Harvard St.	19870227	STRUCTURE
04000085	MASSACHUSETTS	Suffolk	Boston	Haskell, Edward H., Home for Nurses	220 Fisher Ave., 63 Parker Hill Ave.	20040226	BUILDING
80000446	MASSACHUSETTS	Suffolk	Boston	Hayden Building	681-683 Washington St.	19801209	BUILDING
66000765	MASSACHUSETTS	Suffolk	Boston	Headquarters House	55 Beacon St.	19661015	BUILDING
04000534	MASSACHUSETTS	Suffolk	Boston	Hibernian Hall	182-186 Dudley St.	20040602	BUILDING
10000300	MASSACHUSETTS	Suffolk	Boston	Highland Spring Brewery Bottling and Storage Buildings	154-166 Terrace St.	20100528	BUILDING
05000879	MASSACHUSETTS	Suffolk	Boston	Home for Aged Couples	409, 419 Walnut Ave. and 2055 Columbus Ave.	20050811	BUILDING
85002339	MASSACHUSETTS	Suffolk	Charlestown	Hoosac Stores 1 & 2-Hoosac Stores 3	25 and 115 Water St.	19850814	DISTRICT
93001573	MASSACHUSETTS	Suffolk	Boston	House at 1 Bay Street	1 Bay St.	19940209	BUILDING
87001398	MASSACHUSETTS	Suffolk	Boston	House at 17 Cranston Street	17 Cranston St.	19871120	BUILDING
74002044	MASSACHUSETTS	Suffolk	Boston	Howe, Samuel Gridley and Julia Ward, House	13 Chestnut St.	19740913	BUILDING
87001399	MASSACHUSETTS	Suffolk	Boston	Hoxie, Timothy, House	135 Hillside St.	19871120	BUILDING

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01001559	MASSACHUSETTS	Suffolk	Revere	Immaculate Conception Rectory	108 Beach St.	20020211	BUILDING
79000369	MASSACHUSETTS	Suffolk	Boston	International Trust Company Building	39-47 Milk St.	19790910	BUILDING
74000391	MASSACHUSETTS	Suffolk	Boston	John Adams Courthouse	Pemberton Sq.	19740508	BUILDING
73000854	MASSACHUSETTS	Suffolk	Boston	John Eliot Square District	John Eliot Sq.	19730423	DISTRICT
08000793	MASSACHUSETTS	Suffolk	Boston	Joshua Bates School	731 Harrison Ave.	20080822	BUILDING
82004464	MASSACHUSETTS	Suffolk	Chelsea	Kimball, C. Henry, House	295 Washington St.	19820415	BUILDING
74002045	MASSACHUSETTS	Suffolk	Boston	King's Chapel	Tremont and School Sts.	19740502	BUILDING
73000855	MASSACHUSETTS	Suffolk	Boston	Kittredge, Alvah, House	12 Linwood St.	19730508	BUILDING
83000606	MASSACHUSETTS	Suffolk	Boston	Lawrence Model Lodging Houses	79, 89, 99 and 109 E. Canton St.	20140415	BUILDING
83004098	MASSACHUSETTS	Suffolk	Boston	Leather District	Roughly bounded by Atlantic Ave., Kneeland, Lincoln, and Essex Sts.	19831221	DISTRICT
80000460	MASSACHUSETTS	Suffolk	Boston	Liberty Tree District	Roughly bounded by Harrison Ave., Washington, Essex and Beach Sts.	19801209	DISTRICT
86001911	MASSACHUSETTS	Suffolk	Boston	Locke--Ober Restaurant	3--4 Winter Pl.	19860724	BUILDING
87001481	MASSACHUSETTS	Suffolk	Boston	Long Island Head Light	Long Island	19870615	STRUCTURE
66000768	MASSACHUSETTS	Suffolk	Boston	Long Wharf and Customhouse Block	Foot of State St.	19661113	STRUCTURE
83000604	MASSACHUSETTS	Suffolk	Boston	Loring, Harrison, House	789 E. Broadway St.	19830901	BUILDING
72000544	MASSACHUSETTS	Suffolk	Boston	Loring-Greenough House	12 South St.	19720426	BUILDING
94001494	MASSACHUSETTS	Suffolk	Boston	Lower Roxbury Historic District	Roughly, area surrounding Coventry, Cunard, and Walpole Sts.	19941209	DISTRICT
83004099	MASSACHUSETTS	Suffolk	Boston	LUNA (tugboat)	NDC Pier, Charles River	19831006	STRUCTURE
99001302	MASSACHUSETTS	Suffolk	Boston	Mariner's House	11 North Square	19991112	BUILDING
70000682	MASSACHUSETTS	Suffolk	Boston	Massachusetts General Hospital	Fruit Street	19701230	BUILDING
66000770	MASSACHUSETTS	Suffolk	Boston	Massachusetts Historical Society Building	1154 Boylston St.	19661015	BUILDING
93001489	MASSACHUSETTS	Suffolk	Boston	Massachusetts Mental Health Center	74 Fenwood Rd.	19940121	DISTRICT
89000974	MASSACHUSETTS	Suffolk	Boston	Massachusetts School of Art	364 Brookline Ave.	19890803	BUILDING
66000771	MASSACHUSETTS	Suffolk	Boston	Massachusetts Statehouse	Beacon Hill	19661015	BUILDING
82004450	MASSACHUSETTS	Suffolk	Boston	McKay, Donald, House	78-80 White St.	19820602	BUILDING
80000445	MASSACHUSETTS	Suffolk	Boston	Metropolitan Theatre	252-272 Tremont St.	19801209	BUILDING
89001747	MASSACHUSETTS	Suffolk	Boston	Mission Hill Triangle Historic District	Roughly bounded by Smith St., Worthington St., Tremont St., and Huntington Ave.	19891106	DISTRICT
87001128	MASSACHUSETTS	Suffolk	Boston	Monument Square Historic District	Monument Sq.	19870602	DISTRICT
90001536	MASSACHUSETTS	Suffolk	Boston	Monument Square Historic District	Roughly bounded by Jamaicaaway, Pond, Centre and Eliot Sts.	19901011	DISTRICT
84002890	MASSACHUSETTS	Suffolk	Boston	Moreland Street Historic District	Roughly bounded by Kearsarge, Blue Hill Aves., Warren, Waverly, and Winthrop Sts.	19840329	DISTRICT
04001572	MASSACHUSETTS	Suffolk	Boston	Morton Street, Metropolitan Park System of Greater Boston	Morton St.	20050124	DISTRICT
09000767	MASSACHUSETTS	Suffolk	Boston	Mount Hope Cemetery	355 Walk Hill St.	20090924	SITE
89000004	MASSACHUSETTS	Suffolk	Boston	Mount Pleasant Historic District	Roughly bounded by Forest St. and Mount Pleasant Ave.	19890209	DISTRICT
73000851	MASSACHUSETTS	Suffolk	Chelsea	Naval Hospital Boston Historic District	1 Broadway	19730814	DISTRICT
04000426	MASSACHUSETTS	Suffolk	Boston	Nazing Court Apartments	224-236 Seaver St. and 1-8 Nazing Court	20040512	BUILDING
76001979	MASSACHUSETTS	Suffolk	Boston	Nell, William C., House	3 Smith Ct.	19760511	BUILDING
04001573	MASSACHUSETTS	Suffolk	Boston	Neponset Valley Parkway, Metropolitan Park System of Greater Boston	Neponset Valley Parkway	20050124	DISTRICT
80000672	MASSACHUSETTS	Suffolk	Boston	New England Conservatory of Music	290 Huntington Ave.	19800514	BUILDING
87001394	MASSACHUSETTS	Suffolk	Boston	New Riding Club	52 Hemenway St.	19870820	BUILDING
83000607	MASSACHUSETTS	Suffolk	Boston	Newspaper Row	322-328 Washington St., 5-23 Milk St., and 11 Hawley St.	20140415	BUILDING
97000878	MASSACHUSETTS	Suffolk	Winthrop	Newton, Edward B., School	131 Pauline St. (formerly 45 Pauline St.)	19970818	BUILDING
04000189	MASSACHUSETTS	Suffolk	Boston	Nix's Mate Daybeacon	Nubble Channel, The Narrows, Boston Harbor	20040318	STRUCTURE
97000971	MASSACHUSETTS	Suffolk	Boston	North Terminal Garage	600 Commercial St.	19970911	BUILDING
80000465	MASSACHUSETTS	Suffolk	Boston	Oak Square School	35 Nonantum St.	19801110	BUILDING
08000795	MASSACHUSETTS	Suffolk	Boston	Ohabei Shalom Cemetery	147 Wordsworth St.	20080819	SITE
70000687	MASSACHUSETTS	Suffolk	Boston	Old City Hall	School and Providence Sts.	19701230	BUILDING
73000322	MASSACHUSETTS	Suffolk	Boston	Old Corner Bookstore	NW corner of Washington and School Sts.	19730411	BUILDING
08000693	MASSACHUSETTS	Suffolk	Boston	Old Harbor Reservation Parkways, Metropolitan Park System of Greater Boston	William J. Day Blvd., Columbia Rd. between Farragut Rd and Kosciuszko Cir., Old Colony Ave. between Pacuska Ave.	20080724	DISTRICT
66000776	MASSACHUSETTS	Suffolk	Boston	Old North Church	193 Salem St.	19661015	BUILDING
70000690	MASSACHUSETTS	Suffolk	Boston	Old South Church in Boston	645 Boylston St.	19701230	BUILDING
66000778	MASSACHUSETTS	Suffolk	Boston	Old South Meetinghouse	Milk and Washington Sts.	19661015	BUILDING
66000779	MASSACHUSETTS	Suffolk	Boston	Old State House	Washington and State Sts.	19661015	BUILDING
70000691	MASSACHUSETTS	Suffolk	Boston	Old West Church	131 Cambridge St.	19701230	BUILDING
70000539	MASSACHUSETTS	Suffolk	Boston	Otis, (First) Harrison Gray, House	141 Cambridge St.	19701230	BUILDING
73001955	MASSACHUSETTS	Suffolk	Boston	Otis, (Second) Harrison Gray, House	85 Mt. Vernon St.	19730727	BUILDING
02001039	MASSACHUSETTS	Suffolk	Boston	Paine Furniture Building	75-81 Arlington St.	20020912	BUILDING
74000390	MASSACHUSETTS	Suffolk	Boston	Park Street District	Tremont, Park, and Beacon Sts.	19740501	DISTRICT
66000782	MASSACHUSETTS	Suffolk	Boston	Parkman, Francis, House	50 Chestnut St.	19661015	BUILDING
01000872	MASSACHUSETTS	Suffolk	Boston	Peabody, The	195-197 Ashmont St.	20010808	BUILDING
74000907	MASSACHUSETTS	Suffolk	Boston	Phipps Street Burying Ground	Phipps St.	19740514	SITE
80000458	MASSACHUSETTS	Suffolk	Boston	Piano Row District	Boston Common, Park Sq., Boylston Pl. and Tremont St.	19801209	DISTRICT
74000917	MASSACHUSETTS	Suffolk	Boston	Pierce House	24 Oakton Ave.	19740426	BUILDING
68000042	MASSACHUSETTS	Suffolk	Boston	Pierce-Hichborn House	29 North Sq.	19681124	BUILDING
13000929	MASSACHUSETTS	Suffolk	Boston	Pilgrim Congregational Church	540-544 Columbia Rd.	20131218	BUILDING
03000781	MASSACHUSETTS	Suffolk	Boston	Publicity Building	40-44 Bromfield St.	20030820	BUILDING
66000784	MASSACHUSETTS	Suffolk	Boston	Quincy Market	S. Market St.	19661113	BUILDING
03000642	MASSACHUSETTS	Suffolk	Revere	Revere Beach Reservation	Revere Beach Boulevard, Eliot Circle to Northern Circle	20030527	SITE
98000871	MASSACHUSETTS	Suffolk	Revere	Revere Beach Reservation Historic District	Roughly bounded by Eliot Circle, Revere Beach Blvd., Northern Circle, and Atlantic Ocean	19980715	DISTRICT
12000070	MASSACHUSETTS	Suffolk	Revere	Revere City Hall and Police Station	281 Broadway & 23 Pleasant St.	20120307	BUILDING
66000785	MASSACHUSETTS	Suffolk	Boston	Revere, Paul, House	19 North Sq.	19661015	BUILDING
92001874	MASSACHUSETTS	Suffolk	Jamaica Plain	Richards, Ellen H. Swallow, House	32 Eliot St.	19920331	BUILDING
86001504	MASSACHUSETTS	Suffolk	Boston	Richardson Block	113--151 Pearl and 109--119 High Sts.	19860809	BUILDING
95001450	MASSACHUSETTS	Suffolk	Boston	Riviera, The	270 Huntington Ave.	19951207	BUILDING
82000485	MASSACHUSETTS	Suffolk	Revere	Ronan, Mary, T., School	154 Bradstreet Ave.	20140415	BUILDING
98001330	MASSACHUSETTS	Suffolk	Boston	Roslindale Baptist Church	52 Cummins Hwy.	19981105	BUILDING

National Register of Historic Places: Listed Properties as of 06/01/2014

Reference Number	State	County	City	Resource Name	Address	Listed Date	Resource Type
91000925	MASSACHUSETTS	Suffolk	Roslindale	Roslindale Congregational Church	25 Cummins Hwy., at jct. with Summer Ave.	19910726	BUILDING
13000621	MASSACHUSETTS	Suffolk	Boston	Roslindale Substation	4228 Washington St.	20130827	BUILDING
82004448	MASSACHUSETTS	Suffolk	Boston	Roughan Hall	15-18 City Sq.	19820415	BUILDING
73000856	MASSACHUSETTS	Suffolk	Boston	Roxbury High Fort	Beech Glen St. at Fort Ave.	19730423	SITE
89000147	MASSACHUSETTS	Suffolk	Boston	Roxbury Highlands Historic District	Roughly bounded by Dudley St., Washington St., and Columbus Ave.	19890222	DISTRICT
89002125	MASSACHUSETTS	Suffolk	Boston	Roxbury Presbyterian Church	328 Warren St.	19910315	BUILDING
04000025	MASSACHUSETTS	Suffolk	Revere	Rumney Marsh Burying Ground	Butler St. at Elm and Bixby Sts.	20040211	SITE
80000463	MASSACHUSETTS	Suffolk	Boston	Russia Wharf Buildings	518-540 Atlantic Ave., 270 Congress St. and 276-290 Congress St.	19801202	BUILDING
87001495	MASSACHUSETTS	Suffolk	Boston	Saint Augustine Chapel and Cemetery	Dorchester St. between W. Sixth and Tudor Sts.	19870918	DISTRICT
12000783	MASSACHUSETTS	Suffolk	Boston	Saint Mark's Episcopal Church	73 Columbia Rd.	20120910	BUILDING
03000385	MASSACHUSETTS	Suffolk	Boston	Savin Hill Historic District	Roughly bounded by Savin Hill Ave., Morrissey Blvd., Dorchester Bay, and I-93	20030509	DISTRICT
86001486	MASSACHUSETTS	Suffolk	Boston	Sears' Crescent and Sears' Block	38--68 and 70--72 Cornhill	19860809	BUILDING
90001992	MASSACHUSETTS	Suffolk	Boston	Sears Roebuck and Company Mail Order Store	309 Park Dr. and 201 Brookline Ave.	19910115	BUILDING
70000731	MASSACHUSETTS	Suffolk	Boston	Sears, David, House	42 Beacon St.	19701230	BUILDING
86001913	MASSACHUSETTS	Suffolk	Boston	Second Brazer Building	25--29 State St.	19860724	BUILDING
10000391	MASSACHUSETTS	Suffolk	Boston	Second Church in Boston	874, 876, 880 Beacon St	20100624	BUILDING
12000978	MASSACHUSETTS	Suffolk	Boston	Sherman Apartments Historic District	544-546 Washington, 4-6, 12-14, 18 Lyndhurst Sts.	20121128	DISTRICT
66000787	MASSACHUSETTS	Suffolk	Roxbury	Shirley-Eustis House	31-37 Shirley St.	19661015	BUILDING
80000444	MASSACHUSETTS	Suffolk	Boston	Shubert, Sam S., Theatre	263-265 Tremont St.	19801209	BUILDING
09000709	MASSACHUSETTS	Suffolk	Revere	Slade Spice Mill	770 Revere Beach Parkway	19720630	STRUCTURE
05000936	MASSACHUSETTS	Suffolk	Boston	South Boston Boat Clubs Historic District	1793-1849 William J. Day Blvd.	20050901	DISTRICT
73000324	MASSACHUSETTS	Suffolk	Boston	South End District	South Bay area between Huntington and Harrison Aves.	19730508	DISTRICT
75000299	MASSACHUSETTS	Suffolk	Boston	South Station Headhouse	Atlantic Ave. and Summer St.	19750213	BUILDING
89002169	MASSACHUSETTS	Suffolk	Boston	St. Joseph's Roman Catholic Church Complex	Bounded by Circuit, Regent, Hulbert, and Fenwick Sts.	19891228	DISTRICT
97001472	MASSACHUSETTS	Suffolk	Boston	St. Luke's and St. Margaret's Church	5-7 St. Luke's Rd.	19971112	DISTRICT
98001292	MASSACHUSETTS	Suffolk	Boston	St. Mary's Episcopal Church	14-16 Cushing Ave.	19981030	BUILDING
70000730	MASSACHUSETTS	Suffolk	Boston	St. Paul's Church	136 Tremont St.	19701230	BUILDING
75000300	MASSACHUSETTS	Suffolk	Boston	St. Stephen's Church	Hanover St. between Clark and Harris Sts.	19750414	BUILDING
80000671	MASSACHUSETTS	Suffolk	Boston	Stearns, R. H., House	140 Tremont St.	19800616	BUILDING
05001509	MASSACHUSETTS	Suffolk	Boston	Stony Brook Reservation Parkways, Metropolitan Park System of Great Boston MPS	Dedham, Enneking, Turtle Pond Parkways, Smith Field, Reservation, W. Border Rds.	20060103	DISTRICT
97000970	MASSACHUSETTS	Suffolk	Boston	Students House	96 The Fenway	19970911	BUILDING
80000670	MASSACHUSETTS	Suffolk	Boston	Suffolk County Jail	215 Charles St.	19800423	BUILDING
87001889	MASSACHUSETTS	Suffolk	Boston	Sumner Hill Historic District	Roughly bounded by Seaverns Ave., Everett St., Carolina Ave., & Newbern St.	19871022	DISTRICT
73001953	MASSACHUSETTS	Suffolk	Boston	Sumner, Charles, House	20 Hancock St.	19731107	BUILDING
75000301	MASSACHUSETTS	Suffolk	Boston	Symphony and Horticultural Halls	Massachusetts and Huntington Aves.	19750530	BUILDING
99000633	MASSACHUSETTS	Suffolk	Boston	Symphony Hall	301 Massachusetts Avenue	19990120	BUILDING
88000427	MASSACHUSETTS	Suffolk	Boston	Temple Place Historic District	11--55, 26--58 Temple Pl.	19880726	DISTRICT
12000099	MASSACHUSETTS	Suffolk	Boston	Terminal Storage Warehouse District	267-281 Medford St., 40 & 50 Terminal St.	20120312	DISTRICT
90001757	MASSACHUSETTS	Suffolk	Boston	Textile District	Roughly, Essex St. from Phillips Sq. to Columbia St. and Chauncy St. from Phillips Sq. to Rowe Pl.	19901129	DISTRICT
73000850	MASSACHUSETTS	Suffolk	Boston	Town Hill District	Bounded roughly by Rutherford Ave. and Main and Warren Sts.	19730511	DISTRICT
66000788	MASSACHUSETTS	Suffolk	Boston	Tremont Street Subway	Beneath Tremont, Boylston, and Washington Sts.	19661015	STRUCTURE
70000733	MASSACHUSETTS	Suffolk	Boston	Trinity Church	Copley Sq.	19700701	BUILDING
92000356	MASSACHUSETTS	Suffolk	Boston	Trinity Neighborhood House	406 Meridian St.	19920414	BUILDING
72000150	MASSACHUSETTS	Suffolk	Boston	Trinity Rectory	Clarendon and Newbury Sts.	19720223	BUILDING
76002003	MASSACHUSETTS	Suffolk	Dorchester	Trotter, William Monroe, House	97 Sawyer Ave.	19760511	BUILDING
04001430	MASSACHUSETTS	Suffolk	Boston	Truman Parkway--Metropolitan Park System of Greater Boston	Truman Parkway	20050105	DISTRICT
66000789	MASSACHUSETTS	Suffolk	Boston	U.S.S. CONSTITUTION	Boston Naval Shipyard	19661015	STRUCTURE
03000645	MASSACHUSETTS	Suffolk	Boston	Union Oyster House	41-43 Union Street	20030527	BUILDING
80000669	MASSACHUSETTS	Suffolk	Boston	Union Wharf	295-353 Commercial St.	19800622	BUILDING
80000668	MASSACHUSETTS	Suffolk	Boston	United Shoe Machinery Corporation Building	138-164 Federal St.	19800819	BUILDING
11000160	MASSACHUSETTS	Suffolk	Boston	United State Post Office, Courthouse, and Federal Building	5 Post Office Square	20110408	BUILDING
90001537	MASSACHUSETTS	Suffolk	Boston	Upham's Corner Market	600 Columbia Rd.	19901011	BUILDING
86001378	MASSACHUSETTS	Suffolk	South Boston	US Post Office Garage	135 A St.	19860626	BUILDING
86000084	MASSACHUSETTS	Suffolk	Boston	USS CASSIN YOUNG (destroyer)	Charlestown Navy Yard	19860114	STRUCTURE
84000421	MASSACHUSETTS	Suffolk	Boston	Vermont Building	6-12 Thacher St.	19841113	BUILDING
04001432	MASSACHUSETTS	Suffolk	Boston	VFW Parkway, Metropolitan Park System of Greater Boston	VFW Parkway, bet. Spring And Centre Sts.	20050105	DISTRICT
13000930	MASSACHUSETTS	Suffolk	Boston	Walton and Roslin Halls	702-708 & 710-726 Washington St., 3-5 Walton St.	20131218	BUILDING
79000370	MASSACHUSETTS	Suffolk	Boston	Washington Street Theatre District	511-559 Washington St.	19790319	DISTRICT
80000455	MASSACHUSETTS	Suffolk	Boston	West Street District	West St.	19801209	DISTRICT
87001401	MASSACHUSETTS	Suffolk	West Roxbury	Westerly Burial Ground	Centre St.	19871120	SITE
82000486	MASSACHUSETTS	Suffolk	Boston	Wigglesworth Building	89-83 Franklin St.	20140415	BUILDING
80000443	MASSACHUSETTS	Suffolk	Boston	Wilbur Theatre	244-250 Tremont St.	19801209	BUILDING
74000392	MASSACHUSETTS	Suffolk	Boston	Winthrop Building	7 Water St.	19740418	BUILDING
10000098	MASSACHUSETTS	Suffolk	Winthrop	Winthrop Center/Metcalf Square Historic District	roughly bounded by Lincoln, Winthrop Sts., Winthrop Cemetery, Buchanan, Fremont, Pauline, Hermon and Belcher Sts.	20100323	DISTRICT
03001471	MASSACHUSETTS	Suffolk	Revere	Winthrop Parkway, Metropolitan Parkway System of Greater Boston	Winthrop Parkway	20040121	DISTRICT
03001469	MASSACHUSETTS	Suffolk	Winthrop	Winthrop Shore Dr., Metropolitan Park System of Greater Boston	Winthrop Shore Dr.	20040121	DISTRICT
90000162	MASSACHUSETTS	Suffolk	Winthrop	Winthrop, Deane, House	34 Shirley St. (formerly 40 Shirley St.)	19900309	BUILDING
80000442	MASSACHUSETTS	Suffolk	Boston	Wirth, Jacob, Buildings	31-39 Stuart St.	19801209	BUILDING
99000593	MASSACHUSETTS	Suffolk	Boston	Woodbourne Historic District	Roughly bounded by Walk Hill, Goodway, and Wachusett Sts.	19990604	DISTRICT
74000393	MASSACHUSETTS	Suffolk	Boston	Youth's Companion Building	209 Columbus Ave.	19740502	BUILDING
04000119	MASSACHUSETTS	Suffolk	Boston	YWCA Boston	140 Clarendon St.	20040303	BUILDING

**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:**

Company Name: Qianlong Criterion Ventures LLC Address: 1601 Trapelo Road, Suite 280, Waltham, MA 02451

Phone number: 781-890-5600 Fax number: \_\_\_\_\_

Contact person name: Andrew Kaye Title: Project Executive

Cell number: 508-320-7711 Email address: akaye@criteriondp.com

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

**Owner's Information** (if different from above):

Owner of property being dewatered: \_\_\_\_\_

Owner's mailing address: \_\_\_\_\_ Phone number: \_\_\_\_\_

**Location of Discharge & Proposed Treatment System(s):**

Street number and name: 25 Morrissey Boulevard Neighborhood Dorchester

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

Describe Proposed Pre-Treatment System(s): Sedimentation Tank, bag filters, granulated activated carbon (if required)

BWSC Outfall No. SDO122 Receiving Waters Savin Hill Cove

**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](mailto: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:	L1412343
Client:	Haley & Aldrich, Inc. 465 Medford Street, Suite 2200 Charlestown, MA 02129-1400
ATTN:	Keith Johnson
Phone:	(617) 886-7400
Project Name:	25 MORRISSEY BOULEVARD
Project Number:	40414-041
Report Date:	06/12/14

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.

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



**Project Name:** 25 MORRISSEY BOULEVARD  
**Project Number:** 40414-041

**Lab Number:** L1412343  
**Report Date:** 06/12/14

<b>Alpha Sample ID</b>	<b>Client ID</b>	<b>Sample Location</b>	<b>Collection Date/Time</b>
L1412343-01	EX-MW5	Not Specified	06/06/14 11:15
L1412343-02	EX-MW4	Not Specified	06/06/14 12:45
L1412343-03	HA14-GP-11 (OW)	Not Specified	06/06/14 13:10
L1412343-04	EX-MW2	Not Specified	06/06/14 13:35
L1412343-05	EX-MW1	Not Specified	06/06/14 13:50
L1412343-06	HA14-GP-13 (OW)	Not Specified	06/06/14 14:00

Project Name: 25 MORRISSEY BOULEVARD

Lab Number: L1412343

Project Number: 40414-041

Report Date: 06/12/14

**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.**

<b>An affirmative response to questions A through F is required for "Presumptive Certainty" status</b>		
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
<b>A response to questions G, H and I is required for "Presumptive Certainty" status</b>		
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
<b>For any questions answered "No", please refer to the case narrative section on the following page(s).</b>		

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



**Project Name:** 25 MORRISSEY BOULEVARD  
**Project Number:** 40414-041

**Lab Number:** L1412343  
**Report Date:** 06/12/14

### 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.

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**Project Name:** 25 MORRISSEY BOULEVARD  
**Project Number:** 40414-041

**Lab Number:** L1412343  
**Report Date:** 06/12/14

### Case Narrative (continued)

#### MCP Related Narratives

##### Volatile Organics

In reference to question H:

The initial calibration, associated with L1412343-01 (EX-MW5) and -02 (EX-MW4), did not meet the method required minimum response factor on the lowest calibration standard for 1,4-dioxane (0.00513) as well as the average response factor for 1,4-dioxane.

The continuing calibration standard, associated with L1412343-01 (EX-MW5) and -02 (EX-MW4), 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:

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

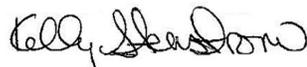
##### EPH

In reference to question I:

All samples were 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:

 Kelly Stenstrom

Title: Technical Director/Representative

Date: 06/12/14

# ORGANICS

# VOLATILES

**Project Name:** 25 MORRISSEY BOULEVARD**Lab Number:** L1412343**Project Number:** 40414-041**Report Date:** 06/12/14**SAMPLE RESULTS**

**Lab ID:** L1412343-01  
**Client ID:** EX-MW5  
**Sample Location:** Not Specified  
**Matrix:** Water  
**Analytical Method:** 97,8260C  
**Analytical Date:** 06/11/14 20:28  
**Analyst:** MS

**Date Collected:** 06/06/14 11:15  
**Date Received:** 06/06/14  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>						
Methylene chloride	ND		ug/l	2.0	--	1
1,1-Dichloroethane	ND		ug/l	1.0	--	1
Chloroform	ND		ug/l	1.0	--	1
Carbon tetrachloride	ND		ug/l	1.0	--	1
1,2-Dichloropropane	ND		ug/l	1.0	--	1
Dibromochloromethane	ND		ug/l	1.0	--	1
1,1,2-Trichloroethane	ND		ug/l	1.0	--	1
Tetrachloroethene	ND		ug/l	1.0	--	1
Chlorobenzene	ND		ug/l	1.0	--	1
Trichlorofluoromethane	ND		ug/l	2.0	--	1
1,2-Dichloroethane	ND		ug/l	1.0	--	1
1,1,1-Trichloroethane	ND		ug/l	1.0	--	1
Bromodichloromethane	ND		ug/l	1.0	--	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	--	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	--	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	--	1
1,1-Dichloropropene	ND		ug/l	2.0	--	1
Bromoform	ND		ug/l	2.0	--	1
1,1,1,2-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

Project Name: 25 MORRISSEY BOULEVARD

Lab Number: L1412343

Project Number: 40414-041

Report Date: 06/12/14

## SAMPLE RESULTS

Lab ID: L1412343-01

Date Collected: 06/06/14 11:15

Client ID: EX-MW5

Date Received: 06/06/14

Sample Location: Not Specified

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>						
1,4-Dichlorobenzene	ND		ug/l	1.0	--	1
Methyl tert butyl ether	9.1		ug/l	2.0	--	1
p/m-Xylene	ND		ug/l	2.0	--	1
o-Xylene	ND		ug/l	1.0	--	1
Xylene (Total)	ND		ug/l	1.0	--	1
cis-1,2-Dichloroethene	ND		ug/l	1.0	--	1
1,2-Dichloroethene (total)	ND		ug/l	1.0	--	1
Dibromomethane	ND		ug/l	2.0	--	1
1,2,3-Trichloropropane	ND		ug/l	2.0	--	1
Styrene	ND		ug/l	1.0	--	1
Dichlorodifluoromethane	ND		ug/l	2.0	--	1
Acetone	16		ug/l	5.0	--	1
Carbon disulfide	ND		ug/l	2.0	--	1
2-Butanone	5.4		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

**Project Name:** 25 MORRISSEY BOULEVARD**Lab Number:** L1412343**Project Number:** 40414-041**Report Date:** 06/12/14**SAMPLE RESULTS**

Lab ID: L1412343-01

Date Collected: 06/06/14 11:15

Client ID: EX-MW5

Date Received: 06/06/14

Sample Location: Not Specified

Field Prep: Not Specified

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	95		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	99		70-130

**Project Name:** 25 MORRISSEY BOULEVARD**Lab Number:** L1412343**Project Number:** 40414-041**Report Date:** 06/12/14**SAMPLE RESULTS**

**Lab ID:** L1412343-02  
**Client ID:** EX-MW4  
**Sample Location:** Not Specified  
**Matrix:** Water  
**Analytical Method:** 97,8260C  
**Analytical Date:** 06/11/14 21:01  
**Analyst:** MS

**Date Collected:** 06/06/14 12:45  
**Date Received:** 06/06/14  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>						
Methylene chloride	ND		ug/l	2.0	--	1
1,1-Dichloroethane	ND		ug/l	1.0	--	1
Chloroform	ND		ug/l	1.0	--	1
Carbon tetrachloride	ND		ug/l	1.0	--	1
1,2-Dichloropropane	ND		ug/l	1.0	--	1
Dibromochloromethane	ND		ug/l	1.0	--	1
1,1,2-Trichloroethane	ND		ug/l	1.0	--	1
Tetrachloroethene	ND		ug/l	1.0	--	1
Chlorobenzene	ND		ug/l	1.0	--	1
Trichlorofluoromethane	ND		ug/l	2.0	--	1
1,2-Dichloroethane	ND		ug/l	1.0	--	1
1,1,1-Trichloroethane	ND		ug/l	1.0	--	1
Bromodichloromethane	ND		ug/l	1.0	--	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	--	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	--	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	--	1
1,1-Dichloropropene	ND		ug/l	2.0	--	1
Bromoform	ND		ug/l	2.0	--	1
1,1,1,2-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

**Project Name:** 25 MORRISSEY BOULEVARD**Lab Number:** L1412343**Project Number:** 40414-041**Report Date:** 06/12/14**SAMPLE RESULTS**

Lab ID: L1412343-02

Date Collected: 06/06/14 12:45

Client ID: EX-MW4

Date Received: 06/06/14

Sample Location: Not Specified

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>						
1,4-Dichlorobenzene	ND		ug/l	1.0	--	1
Methyl tert butyl ether	18		ug/l	2.0	--	1
p/m-Xylene	ND		ug/l	2.0	--	1
o-Xylene	ND		ug/l	1.0	--	1
Xylene (Total)	ND		ug/l	1.0	--	1
cis-1,2-Dichloroethene	ND		ug/l	1.0	--	1
1,2-Dichloroethene (total)	ND		ug/l	1.0	--	1
Dibromomethane	ND		ug/l	2.0	--	1
1,2,3-Trichloropropane	ND		ug/l	2.0	--	1
Styrene	ND		ug/l	1.0	--	1
Dichlorodifluoromethane	ND		ug/l	2.0	--	1
Acetone	ND		ug/l	5.0	--	1
Carbon disulfide	ND		ug/l	2.0	--	1
2-Butanone	ND		ug/l	5.0	--	1
4-Methyl-2-pentanone	ND		ug/l	5.0	--	1
2-Hexanone	ND		ug/l	5.0	--	1
Bromochloromethane	ND		ug/l	2.0	--	1
Tetrahydrofuran	ND		ug/l	2.0	--	1
2,2-Dichloropropane	ND		ug/l	2.0	--	1
1,2-Dibromoethane	ND		ug/l	2.0	--	1
1,3-Dichloropropane	ND		ug/l	2.0	--	1
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Bromobenzene	ND		ug/l	2.0	--	1
n-Butylbenzene	ND		ug/l	2.0	--	1
sec-Butylbenzene	ND		ug/l	2.0	--	1
tert-Butylbenzene	ND		ug/l	2.0	--	1
o-Chlorotoluene	ND		ug/l	2.0	--	1
p-Chlorotoluene	ND		ug/l	2.0	--	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.0	--	1
Hexachlorobutadiene	ND		ug/l	0.60	--	1
Isopropylbenzene	ND		ug/l	2.0	--	1
p-Isopropyltoluene	ND		ug/l	2.0	--	1
Naphthalene	ND		ug/l	2.0	--	1
n-Propylbenzene	ND		ug/l	2.0	--	1
1,2,3-Trichlorobenzene	ND		ug/l	2.0	--	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	--	1
1,3,5-Trimethylbenzene	ND		ug/l	2.0	--	1
1,2,4-Trimethylbenzene	ND		ug/l	2.0	--	1
Ethyl ether	ND		ug/l	2.0	--	1

**Project Name:** 25 MORRISSEY BOULEVARD**Lab Number:** L1412343**Project Number:** 40414-041**Report Date:** 06/12/14**SAMPLE RESULTS**

Lab ID: L1412343-02

Date Collected: 06/06/14 12:45

Client ID: EX-MW4

Date Received: 06/06/14

Sample Location: Not Specified

Field Prep: Not Specified

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	93		70-130
Toluene-d8	89		70-130
4-Bromofluorobenzene	104		70-130
Dibromofluoromethane	97		70-130

**Project Name:** 25 MORRISSEY BOULEVARD  
**Project Number:** 40414-041

**Lab Number:** L1412343  
**Report Date:** 06/12/14

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 97,8260C  
Analytical Date: 06/11/14 14:57  
Analyst: MS

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics - Westborough Lab for sample(s): 01-02 Batch: WG697211-3					
Methylene chloride	ND		ug/l	2.0	--
1,1-Dichloroethane	ND		ug/l	1.0	--
Chloroform	ND		ug/l	1.0	--
Carbon tetrachloride	ND		ug/l	1.0	--
1,2-Dichloropropane	ND		ug/l	1.0	--
Dibromochloromethane	ND		ug/l	1.0	--
1,1,2-Trichloroethane	ND		ug/l	1.0	--
Tetrachloroethene	ND		ug/l	1.0	--
Chlorobenzene	ND		ug/l	1.0	--
Trichlorofluoromethane	ND		ug/l	2.0	--
1,2-Dichloroethane	ND		ug/l	1.0	--
1,1,1-Trichloroethane	ND		ug/l	1.0	--
Bromodichloromethane	ND		ug/l	1.0	--
trans-1,3-Dichloropropene	ND		ug/l	0.50	--
cis-1,3-Dichloropropene	ND		ug/l	0.50	--
1,3-Dichloropropene, Total	ND		ug/l	0.50	--
1,1-Dichloropropene	ND		ug/l	2.0	--
Bromoform	ND		ug/l	2.0	--
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	--
Benzene	ND		ug/l	0.50	--
Toluene	ND		ug/l	1.0	--
Ethylbenzene	ND		ug/l	1.0	--
Chloromethane	ND		ug/l	2.0	--
Bromomethane	ND		ug/l	2.0	--
Vinyl chloride	ND		ug/l	1.0	--
Chloroethane	ND		ug/l	2.0	--
1,1-Dichloroethene	ND		ug/l	1.0	--
trans-1,2-Dichloroethene	ND		ug/l	1.0	--
Trichloroethene	ND		ug/l	1.0	--
1,2-Dichlorobenzene	ND		ug/l	1.0	--
1,3-Dichlorobenzene	ND		ug/l	1.0	--

**Project Name:** 25 MORRISSEY BOULEVARD  
**Project Number:** 40414-041

**Lab Number:** L1412343  
**Report Date:** 06/12/14

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 97,8260C  
Analytical Date: 06/11/14 14:57  
Analyst: MS

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics - Westborough Lab for sample(s): 01-02 Batch: WG697211-3					
1,4-Dichlorobenzene	ND		ug/l	1.0	--
Methyl tert butyl ether	ND		ug/l	2.0	--
p/m-Xylene	ND		ug/l	2.0	--
o-Xylene	ND		ug/l	1.0	--
Xylene (Total)	ND		ug/l	1.0	--
cis-1,2-Dichloroethene	ND		ug/l	1.0	--
1,2-Dichloroethene (total)	ND		ug/l	1.0	--
Dibromomethane	ND		ug/l	2.0	--
1,2,3-Trichloropropane	ND		ug/l	2.0	--
Styrene	ND		ug/l	1.0	--
Dichlorodifluoromethane	ND		ug/l	2.0	--
Acetone	ND		ug/l	5.0	--
Carbon disulfide	ND		ug/l	2.0	--
2-Butanone	ND		ug/l	5.0	--
4-Methyl-2-pentanone	ND		ug/l	5.0	--
2-Hexanone	ND		ug/l	5.0	--
Bromochloromethane	ND		ug/l	2.0	--
Tetrahydrofuran	ND		ug/l	2.0	--
2,2-Dichloropropane	ND		ug/l	2.0	--
1,2-Dibromoethane	ND		ug/l	2.0	--
1,3-Dichloropropane	ND		ug/l	2.0	--
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	--
Bromobenzene	ND		ug/l	2.0	--
n-Butylbenzene	ND		ug/l	2.0	--
sec-Butylbenzene	ND		ug/l	2.0	--
tert-Butylbenzene	ND		ug/l	2.0	--
o-Chlorotoluene	ND		ug/l	2.0	--
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	--

**Project Name:** 25 MORRISSEY BOULEVARD  
**Project Number:** 40414-041

**Lab Number:** L1412343  
**Report Date:** 06/12/14

**Method Blank Analysis  
Batch Quality Control**

Analytical Method: 97,8260C  
Analytical Date: 06/11/14 14:57  
Analyst: MS

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics - Westborough Lab for sample(s): 01-02 Batch: WG697211-3					
p-Isopropyltoluene	ND		ug/l	2.0	--
Naphthalene	ND		ug/l	2.0	--
n-Propylbenzene	ND		ug/l	2.0	--
1,2,3-Trichlorobenzene	ND		ug/l	2.0	--
1,2,4-Trichlorobenzene	ND		ug/l	2.0	--
1,3,5-Trimethylbenzene	ND		ug/l	2.0	--
1,2,4-Trimethylbenzene	ND		ug/l	2.0	--
Ethyl ether	ND		ug/l	2.0	--
Isopropyl Ether	ND		ug/l	2.0	--
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0	--
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	--
1,4-Dioxane	ND		ug/l	250	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	102		70-130
Toluene-d8	105		70-130
4-Bromofluorobenzene	99		70-130
Dibromofluoromethane	100		70-130

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** 25 MORRISSEY BOULEVARD

**Project Number:** 40414-041

**Lab Number:** L1412343

**Report Date:** 06/12/14

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
MCP Volatile Organics - Westborough Lab Associated sample(s): 01-02 Batch: WG697211-1 WG697211-2								
Methylene chloride	92		90		70-130	2		20
1,1-Dichloroethane	91		86		70-130	6		20
Chloroform	94		93		70-130	1		20
Carbon tetrachloride	88		90		70-130	2		20
1,2-Dichloropropane	99		96		70-130	3		20
Dibromochloromethane	103		105		70-130	2		20
1,1,2-Trichloroethane	107		107		70-130	0		20
Tetrachloroethene	111		107		70-130	4		20
Chlorobenzene	101		101		70-130	0		20
Trichlorofluoromethane	87		84		70-130	4		20
1,2-Dichloroethane	108		104		70-130	4		20
1,1,1-Trichloroethane	96		101		70-130	5		20
Bromodichloromethane	99		98		70-130	1		20
trans-1,3-Dichloropropene	109		113		70-130	4		20
cis-1,3-Dichloropropene	101		96		70-130	5		20
1,1-Dichloropropene	93		100		70-130	7		20
Bromoform	98		93		70-130	5		20
1,1,2,2-Tetrachloroethane	102		102		70-130	0		20
Benzene	102		98		70-130	4		20
Toluene	111		111		70-130	0		20
Ethylbenzene	102		105		70-130	3		20

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: 25 MORRISSEY BOULEVARD

Lab Number: L1412343

Project Number: 40414-041

Report Date: 06/12/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 01-02 Batch: WG697211-1 WG697211-2								
Chloromethane	76		72		70-130	5		20
Bromomethane	95		90		70-130	5		20
Vinyl chloride	80		73		70-130	9		20
Chloroethane	103		96		70-130	7		20
1,1-Dichloroethene	93		87		70-130	7		20
trans-1,2-Dichloroethene	95		90		70-130	5		20
Trichloroethene	104		100		70-130	4		20
1,2-Dichlorobenzene	101		103		70-130	2		20
1,3-Dichlorobenzene	104		103		70-130	1		20
1,4-Dichlorobenzene	103		101		70-130	2		20
Methyl tert butyl ether	89		85		70-130	5		20
p/m-Xylene	103		105		70-130	2		20
o-Xylene	98		95		70-130	3		20
cis-1,2-Dichloroethene	91		89		70-130	2		20
Dibromomethane	133	Q	103		70-130	25	Q	20
1,2,3-Trichloropropane	107		105		70-130	2		20
Styrene	102		95		70-130	7		20
Dichlorodifluoromethane	81		77		70-130	5		20
Acetone	78		65	Q	70-130	18		20
Carbon disulfide	75		71		70-130	5		20
2-Butanone	100		110		70-130	10		20

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** 25 MORRISSEY BOULEVARD

**Project Number:** 40414-041

**Lab Number:** L1412343

**Report Date:** 06/12/14

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
MCP Volatile Organics - Westborough Lab Associated sample(s): 01-02 Batch: WG697211-1 WG697211-2								
4-Methyl-2-pentanone	90		93		70-130	3		20
2-Hexanone	91		97		70-130	6		20
Bromochloromethane	95		97		70-130	2		20
Tetrahydrofuran	91		89		70-130	2		20
2,2-Dichloropropane	92		90		70-130	2		20
1,2-Dibromoethane	106		108		70-130	2		20
1,3-Dichloropropane	100		111		70-130	10		20
1,1,1,2-Tetrachloroethane	100		104		70-130	4		20
Bromobenzene	95		96		70-130	1		20
n-Butylbenzene	106		108		70-130	2		20
sec-Butylbenzene	105		104		70-130	1		20
tert-Butylbenzene	102		102		70-130	0		20
o-Chlorotoluene	104		107		70-130	3		20
p-Chlorotoluene	104		104		70-130	0		20
1,2-Dibromo-3-chloropropane	88		101		70-130	14		20
Hexachlorobutadiene	94		98		70-130	4		20
Isopropylbenzene	100		95		70-130	5		20
p-Isopropyltoluene	105		104		70-130	1		20
Naphthalene	92		97		70-130	5		20
n-Propylbenzene	102		99		70-130	3		20
1,2,3-Trichlorobenzene	92		101		70-130	9		20

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** 25 MORRISSEY BOULEVARD

**Project Number:** 40414-041

**Lab Number:** L1412343

**Report Date:** 06/12/14

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
MCP Volatile Organics - Westborough Lab Associated sample(s): 01-02 Batch: WG697211-1 WG697211-2								
1,2,4-Trichlorobenzene	94		98		70-130	4		20
1,3,5-Trimethylbenzene	103		104		70-130	1		20
1,2,4-Trimethylbenzene	104		108		70-130	4		20
Ethyl ether	82		78		70-130	5		20
Isopropyl Ether	85		82		70-130	4		20
Ethyl-Tert-Butyl-Ether	86		86		70-130	0		20
Tertiary-Amyl Methyl Ether	101		98		70-130	3		20
1,4-Dioxane	87		94		70-130	8		20

Surrogate	LCS		LCSD		Acceptance Criteria
	%Recovery	Qual	%Recovery	Qual	
1,2-Dichloroethane-d4	106		99		70-130
Toluene-d8	111		112		70-130
4-Bromofluorobenzene	99		94		70-130
Dibromofluoromethane	95		96		70-130

# PETROLEUM HYDROCARBONS

**Project Name:** 25 MORRISSEY BOULEVARD**Lab Number:** L1412343**Project Number:** 40414-041**Report Date:** 06/12/14**SAMPLE RESULTS**

**Lab ID:** L1412343-01  
**Client ID:** EX-MW5  
**Sample Location:** Not Specified  
**Matrix:** Water  
**Analytical Method:** 100, VPH-04-1.1  
**Analytical Date:** 06/09/14 21:20  
**Analyst:** BS

**Date Collected:** 06/06/14 11:15  
**Date Received:** 06/06/14  
**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
<b>Volatile Petroleum Hydrocarbons - Westborough Lab</b>						
C5-C8 Aliphatics	ND		ug/l	50.0	--	1
C9-C12 Aliphatics	63.3		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	63.3		ug/l	50.0	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,5-Dibromotoluene-PID	97		70-130
2,5-Dibromotoluene-FID	98		70-130

**Project Name:** 25 MORRISSEY BOULEVARD**Lab Number:** L1412343**Project Number:** 40414-041**Report Date:** 06/12/14**SAMPLE RESULTS**

Lab ID: L1412343-01  
 Client ID: EX-MW5  
 Sample Location: Not Specified  
 Matrix: Water  
 Analytical Method: 98,EPH-04-1.1  
 Analytical Date: 06/11/14 08:19  
 Analyst: SR

Date Collected: 06/06/14 11:15  
 Date Received: 06/06/14  
 Field Prep: Not Specified  
 Extraction Method: EPA 3510C  
 Extraction Date: 06/07/14 09:42  
 Cleanup Method1: EPH-04-1  
 Cleanup Date1: 06/09/14

**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
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**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	69		40-140
o-Terphenyl	73		40-140
2-Fluorobiphenyl	68		40-140
2-Bromonaphthalene	66		40-140

**Project Name:** 25 MORRISSEY BOULEVARD**Lab Number:** L1412343**Project Number:** 40414-041**Report Date:** 06/12/14**SAMPLE RESULTS**

Lab ID: L1412343-02  
 Client ID: EX-MW4  
 Sample Location: Not Specified  
 Matrix: Water  
 Analytical Method: 100, VPH-04-1.1  
 Analytical Date: 06/09/14 22:00  
 Analyst: BS

Date Collected: 06/06/14 12:45  
 Date Received: 06/06/14  
 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
<b>Volatile Petroleum Hydrocarbons - Westborough Lab</b>						
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	96		70-130
2,5-Dibromotoluene-FID	98		70-130

**Project Name:** 25 MORRISSEY BOULEVARD**Lab Number:** L1412343**Project Number:** 40414-041**Report Date:** 06/12/14**SAMPLE RESULTS**

Lab ID: L1412343-02  
 Client ID: EX-MW4  
 Sample Location: Not Specified  
 Matrix: Water  
 Analytical Method: 98,EPH-04-1.1  
 Analytical Date: 06/11/14 08:50  
 Analyst: SR

Date Collected: 06/06/14 12:45  
 Date Received: 06/06/14  
 Field Prep: Not Specified  
 Extraction Method: EPA 3510C  
 Extraction Date: 06/07/14 09:42  
 Cleanup Method1: EPH-04-1  
 Cleanup Date1: 06/09/14

**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
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**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	66		40-140
o-Terphenyl	72		40-140
2-Fluorobiphenyl	66		40-140
2-Bromonaphthalene	65		40-140

Project Name: 25 MORRISSEY BOULEVARD

Lab Number: L1412343

Project Number: 40414-041

Report Date: 06/12/14

**Method Blank Analysis  
Batch Quality Control**

Analytical Method: 98,EPH-04-1.1

Extraction Method: EPA 3510C

Analytical Date: 06/11/14 03:35

Extraction Date: 06/07/14 09:42

Analyst: SR

Cleanup Method1: EPH-04-1

Cleanup Date1: 06/09/14

Parameter	Result	Qualifier	Units	RL	MDL
Extractable Petroleum Hydrocarbons - Westborough Lab for sample(s): 01-02 Batch: WG695960-1					
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	68		40-140
o-Terphenyl	86		40-140
2-Fluorobiphenyl	80		40-140
2-Bromonaphthalene	75		40-140

Project Name: 25 MORRISSEY BOULEVARD

Lab Number: L1412343

Project Number: 40414-041

Report Date: 06/12/14

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 100, VPH-04-1.1

Analytical Date: 06/09/14 10:43

Analyst: BS

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Petroleum Hydrocarbons - Westborough Lab for sample(s): 01-02 Batch: WG696592-3					
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	101		70-130
2,5-Dibromotoluene-FID	103		70-130

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** 25 MORRISSEY BOULEVARD

**Lab Number:** L1412343

**Project Number:** 40414-041

**Report Date:** 06/12/14

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Extractable Petroleum Hydrocarbons - Westborough Lab Associated sample(s): 01-02 Batch: WG695960-2 WG695960-3								
C9-C18 Aliphatics	68		74		40-140	8		25
C19-C36 Aliphatics	84		91		40-140	8		25
C11-C22 Aromatics	84		72		40-140	15		25
Naphthalene	74		66		40-140	11		25
2-Methylnaphthalene	79		70		40-140	12		25
Acenaphthylene	73		62		40-140	16		25
Acenaphthene	79		69		40-140	14		25
Fluorene	80		69		40-140	15		25
Phenanthrene	82		70		40-140	16		25
Anthracene	85		72		40-140	17		25
Fluoranthene	84		73		40-140	14		25
Pyrene	85		74		40-140	14		25
Benzo(a)anthracene	80		70		40-140	13		25
Chrysene	83		72		40-140	14		25
Benzo(b)fluoranthene	82		70		40-140	16		25
Benzo(k)fluoranthene	89		76		40-140	16		25
Benzo(a)pyrene	82		69		40-140	17		25
Indeno(1,2,3-cd)Pyrene	84		71		40-140	17		25
Dibenzo(a,h)anthracene	83		70		40-140	17		25
Benzo(ghi)perylene	84		70		40-140	18		25
Nonane (C9)	55		61		30-140	10		25

## Lab Control Sample Analysis Batch Quality Control

**Project Name:** 25 MORRISSEY BOULEVARD  
**Project Number:** 40414-041

**Lab Number:** L1412343  
**Report Date:** 06/12/14

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Extractable Petroleum Hydrocarbons - Westborough Lab Associated sample(s): 01-02 Batch: WG695960-2 WG695960-3								
Decane (C10)	65		71		40-140	9		25
Dodecane (C12)	72		78		40-140	8		25
Tetradecane (C14)	76		82		40-140	8		25
Hexadecane (C16)	79		86		40-140	8		25
Octadecane (C18)	83		90		40-140	8		25
Nonadecane (C19)	84		91		40-140	8		25
Eicosane (C20)	84		91		40-140	8		25
Docosane (C22)	85		92		40-140	8		25
Tetracosane (C24)	86		93		40-140	8		25
Hexacosane (C26)	85		92		40-140	8		25
Octacosane (C28)	84		90		40-140	7		25
Triacontane (C30)	86		93		40-140	8		25
Hexatriacontane (C36)	83		89		40-140	7		25

Surrogate	LCS		LCSD		Acceptance Criteria
	%Recovery	Qual	%Recovery	Qual	
Chloro-Octadecane	69		77		40-140
o-Terphenyl	91		76		40-140
2-Fluorobiphenyl	76		67		40-140
2-Bromonaphthalene	75		65		40-140
% Naphthalene Breakthrough	0		0		
% 2-Methylnaphthalene Breakthrough	0		0		

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** 25 MORRISSEY BOULEVARD

**Lab Number:** L1412343

**Project Number:** 40414-041

**Report Date:** 06/12/14

<b>Parameter</b>	<b>LCS %Recovery</b>	<b>Qual</b>	<b>LCSD %Recovery</b>	<b>Qual</b>	<b>%Recovery Limits</b>	<b>RPD</b>	<b>Qual</b>	<b>RPD Limits</b>
Volatile Petroleum Hydrocarbons - Westborough Lab Associated sample(s): 01-02 Batch: WG696592-1 WG696592-2								
C5-C8 Aliphatics	106		103		70-130	3		25
C9-C12 Aliphatics	85		81		70-130	4		25
C9-C10 Aromatics	91		91		70-130	0		25
Benzene	102		101		70-130	1		25
Toluene	104		102		70-130	2		25
Ethylbenzene	103		101		70-130	2		25
p/m-Xylene	102		100		70-130	2		25
o-Xylene	102		101		70-130	1		25
Methyl tert butyl ether	100		98		70-130	2		25
Naphthalene	97		97		70-130	1		25
1,2,4-Trimethylbenzene	91		91		70-130	0		25
Pentane	107		105		70-130	2		25
2-Methylpentane	108		106		70-130	2		25
2,2,4-Trimethylpentane	104		101		70-130	3		25
n-Nonane	92		88		30-130	4		25
n-Decane	75		72		70-130	5		25
n-Butylcyclohexane	92		88		70-130	4		25

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** 25 MORRISSEY BOULEVARD

**Project Number:** 40414-041

**Lab Number:** L1412343

**Report Date:** 06/12/14

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): 01-02 Batch: WG696592-1 WG696592-2

<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	93		92		70-130
2,5-Dibromotoluene-FID	93		93		70-130

# **INORGANICS & MISCELLANEOUS**

Project Name: 25 MORRISSEY BOULEVARD

Lab Number: L1412343

Project Number: 40414-041

Report Date: 06/12/14

## SAMPLE RESULTS

Lab ID: L1412343-01

Date Collected: 06/06/14 11:15

Client ID: EX-MW5

Date Received: 06/06/14

Sample Location: Not Specified

Field Prep: Not Specified

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Cyanide, Free	ND		ug/l	2.00	--	1	06/11/14 16:40	06/11/14 23:25	109,9016	AT



Project Name: 25 MORRISSEY BOULEVARD

Lab Number: L1412343

Project Number: 40414-041

Report Date: 06/12/14

## SAMPLE RESULTS

Lab ID: L1412343-02

Date Collected: 06/06/14 12:45

Client ID: EX-MW4

Date Received: 06/06/14

Sample Location: Not Specified

Field Prep: Not Specified

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Cyanide, Free	ND		ug/l	2.00	--	1	06/11/14 16:40	06/11/14 23:25	109,9016	AT



Project Name: 25 MORRISSEY BOULEVARD

Lab Number: L1412343

Project Number: 40414-041

Report Date: 06/12/14

## SAMPLE RESULTS

Lab ID: L1412343-03  
 Client ID: HA14-GP-11 (OW)  
 Sample Location: Not Specified  
 Matrix: Water

Date Collected: 06/06/14 13:10  
 Date Received: 06/06/14  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Cyanide, Free	ND		ug/l	2.00	--	1	06/11/14 16:40	06/11/14 23:26	109,9016	AT



Project Name: 25 MORRISSEY BOULEVARD

Lab Number: L1412343

Project Number: 40414-041

Report Date: 06/12/14

## SAMPLE RESULTS

Lab ID: L1412343-04

Date Collected: 06/06/14 13:35

Client ID: EX-MW2

Date Received: 06/06/14

Sample Location: Not Specified

Field Prep: Not Specified

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Cyanide, Free	ND		ug/l	2.00	--	1	06/11/14 16:40	06/11/14 23:26	109,9016	AT



Project Name: 25 MORRISSEY BOULEVARD

Lab Number: L1412343

Project Number: 40414-041

Report Date: 06/12/14

## SAMPLE RESULTS

Lab ID: L1412343-05

Date Collected: 06/06/14 13:50

Client ID: EX-MW1

Date Received: 06/06/14

Sample Location: Not Specified

Field Prep: Not Specified

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Cyanide, Free	ND		ug/l	2.00	--	1	06/11/14 16:40	06/11/14 23:27	109,9016	AT



Project Name: 25 MORRISSEY BOULEVARD

Lab Number: L1412343

Project Number: 40414-041

Report Date: 06/12/14

## SAMPLE RESULTS

Lab ID: L1412343-06  
 Client ID: HA14-GP-13 (OW)  
 Sample Location: Not Specified  
 Matrix: Water

Date Collected: 06/06/14 14:00  
 Date Received: 06/06/14  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Cyanide, Free	ND		ug/l	2.00	--	1	06/11/14 16:40	06/11/14 23:27	109,9016	AT



Project Name: 25 MORRISSEY BOULEVARD

Lab Number: L1412343

Project Number: 40414-041

Report Date: 06/12/14

**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): 01-06 Batch: WG697169-1									
Cyanide, Free	ND	ug/l	2.00	--	1	06/11/14 16:40	06/11/14 23:24	109,9016	AT

## Lab Control Sample Analysis

Batch Quality Control

**Project Name:** 25 MORRISSEY BOULEVARD

**Lab Number:** L1412343

**Project Number:** 40414-041

**Report Date:** 06/12/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-06 Batch: WG697169-2								
Cyanide, Free	86		-		75-125	-		

**Matrix Spike Analysis**  
Batch Quality Control

**Project Name:** 25 MORRISSEY BOULEVARD  
**Project Number:** 40414-041

**Lab Number:** L1412343  
**Report Date:** 06/12/14

<b>Parameter</b>	<b>Native Sample</b>	<b>MS Added</b>	<b>MS Found</b>	<b>MS %Recovery</b>	<b>MSD Qual</b>	<b>MSD Found</b>	<b>MSD %Recovery</b>	<b>MSD Qual</b>	<b>Recovery Limits</b>	<b>RPD Qual</b>	<b>RPD Limits</b>
General Chemistry - Westborough Lab Associated sample(s): 01-06 QC Batch ID: WG697169-3 QC Sample: L1412343-01 Client ID: EX-MW5											
Cyanide, Free	ND	50	38.9	78	-	-	-	-	70-130	-	20

**Lab Duplicate Analysis**  
Batch Quality Control

Project Name: 25 MORRISSEY BOULEVARD

Project Number: 40414-041

Lab Number: L1412343

Report Date: 06/12/14

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-06 QC Batch ID: WG697169-4 QC Sample: L1412343-01 Client ID: EX-MW5						
Cyanide, Free	ND	ND	ug/l	NC		20

**Project Name:** 25 MORRISSEY BOULEVARD  
**Project Number:** 40414-041

**Lab Number:** L1412343  
**Report Date:** 06/12/14

### 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(*)
L1412343-01A	Vial HCl preserved	A	N/A	3.2	Y	Absent	MCP-8260-10(14)
L1412343-01B	Vial HCl preserved	A	N/A	3.2	Y	Absent	MCP-8260-10(14)
L1412343-01C	Vial HCl preserved	A	N/A	3.2	Y	Absent	VPH-10(14)
L1412343-01D	Vial HCl preserved	A	N/A	3.2	Y	Absent	VPH-10(14)
L1412343-01E	Vial HCl preserved	A	N/A	3.2	Y	Absent	VPH-10(14)
L1412343-01F	Amber 1000ml HCl preserved	A	<2	3.2	Y	Absent	EPH-10(14)
L1412343-01G	Amber 1000ml HCl preserved	A	<2	3.2	Y	Absent	EPH-10(14)
L1412343-01H	Brown Plastic 1000ml NaOH preser	A	>12	3.2	Y	Absent	FCN-9016(14)
L1412343-02A	Vial HCl preserved	A	N/A	3.2	Y	Absent	MCP-8260-10(14)
L1412343-02B	Vial HCl preserved	A	N/A	3.2	Y	Absent	MCP-8260-10(14)
L1412343-02C	Vial HCl preserved	A	N/A	3.2	Y	Absent	MCP-8260-10(14)
L1412343-02D	Vial HCl preserved	A	N/A	3.2	Y	Absent	VPH-10(14)
L1412343-02E	Vial HCl preserved	A	N/A	3.2	Y	Absent	VPH-10(14)
L1412343-02F	Vial HCl preserved	A	N/A	3.2	Y	Absent	VPH-10(14)
L1412343-02G	Amber 1000ml HCl preserved	A	<2	3.2	Y	Absent	EPH-10(14)
L1412343-02H	Amber 1000ml HCl preserved	A	<2	3.2	Y	Absent	EPH-10(14)
L1412343-02I	Brown Plastic 1000ml NaOH preser	A	>12	3.2	Y	Absent	FCN-9016(14)
L1412343-03A	Brown Plastic 1000ml NaOH preser	A	>12	3.2	Y	Absent	FCN-9016(14)
L1412343-04A	Brown Plastic 1000ml NaOH preser	A	>12	3.2	Y	Absent	FCN-9016(14)
L1412343-05A	Brown Plastic 1000ml NaOH preser	A	>12	3.2	Y	Absent	FCN-9016(14)
L1412343-06A	Brown Plastic 1000ml NaOH preser	A	>12	3.2	Y	Absent	FCN-9016(14)

\*Values in parentheses indicate holding time in days



**Project Name:** 25 MORRISSEY BOULEVARD  
**Project Number:** 40414-041

**Lab Number:** L1412343  
**Report Date:** 06/12/14

## 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

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

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

### Data Qualifiers

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

Report Format: Data Usability Report



**Project Name:** 25 MORRISSEY BOULEVARD  
**Project Number:** 40414-041

**Lab Number:** L1412343  
**Report Date:** 06/12/14

#### **Data Qualifiers**

- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.
- J** - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- ND** - Not detected at the reporting limit (RL) for the sample.

**Project Name:** 25 MORRISSEY BOULEVARD  
**Project Number:** 40414-041

**Lab Number:** L1412343  
**Report Date:** 06/12/14

## 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.
- 109 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Revision 0, June 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 April 15, 2014

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**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, NO<sub>2</sub>, NO<sub>3</sub>.

**EPA 9071:** Total Petroleum Hydrocarbons, Oil & Grease.

### Mansfield Facility

**EPA 8270D:** Biphenyl.

**EPA 2540D:** TSS

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

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**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.**

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

# CHAIN OF CUSTODY RECORD

H&A FILE NO. 40414-041 LABORATORY Alpha DELIVERY DATE 6/6/14  
 PROJECT NAME 25 Morrissey Boulevard ADDRESS Westborough, MA TURNAROUND TIME Standard  
 H&A CONTACT Corinne McKenzie CONTACT Gina Hall PROJECT MANAGER K. Johnson

Sample No.	Date	Time	Depth	Type	Analysis Requested													Number of Containers	Comments (special instructions, precautions, additional method numbers, etc.)		
					① VOA	ABNs	PAH only	MCP Metals	Pesticides	PCBs	② VPH	③ PAH Suite	④ PAH Suite	⑤ PAH Suite	⑥ PAH Suite	TTH (specify)	TCLP (specify)			Reactivity	Ignitability
EX-MW5	6/6/14	1115	-	Ag	X							X	X						X	8*	Laboratory to use applicable DEP CAM methods, unless otherwise directed. ① DOC 8260 ② VPH (S) ③ EPA (S) ④ FCN 9016
EX-MW4		1245			X							X	X						X	9	
EX-MW4-CP-11(a)		1310										X	X						X	1	
EX-MW2		1335										X	X						X	1	
EX-MW1		1350										X	X						X	1	
HA14-CP-13(pw)		1400										X	X						X	1	

Sampled and Relinquished by: Matthew Dodson Received by: Wayne Pinner LIQUID 21 TOTAL Sampling Comments: Broke 1 low 8260 vial only 1 in suite.

Sign: Matthew Dodson Sign: Wayne Pinner  
 Print: Matthew Dodson Print: Wayne Pinner  
 Firm: H&A Firm: Alpha  
 Date: 6/6/14 Time: 1410 Date: 6/6/14 Time: 1410  
 Relinquished by: Matthew Dodson Received by: Wayne Pinner  
 Sign: Matthew Dodson Sign: Wayne Pinner  
 Print: Matthew Dodson Print: Wayne Pinner  
 Firm: H&A Firm: Alpha  
 Date: 6/6/14 Time: 1410 Date: 6/6/14 Time: 1410

Relinquished by: Matthew Dodson Received by: Wayne Pinner SOLID

Sign: Matthew Dodson Sign: Wayne Pinner  
 Print: Matthew Dodson Print: Wayne Pinner  
 Firm: H&A Firm: Alpha  
 Date: 6/6/14 Time: 1818 Date: 6/6/14 Time: 1818

Relinquished by: Matthew Dodson Received by: Wayne Pinner

Sign: Matthew Dodson Sign: Wayne Pinner  
 Print: Matthew Dodson Print: Wayne Pinner  
 Firm: H&A Firm: Alpha  
 Date: 6/6/14 Time: 1818 Date: 6/6/14 Time: 1818

**PRESERVATION KEY**

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

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

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

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.

Matrix Spike (MS) samples for MCP Metals and/or Cyanide are included and identified herein.

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

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

RC-S1     S1     GW1  
 RC-S2     S2     GW2  
 RC-GW1     S3     GW3  
 RC-GW2

7A  
CONTINUING CALIBRATION CHECK

Lab Name: Alpha Analytical Labs

SDG No.: L1412343

Instrument ID: Jack.i                      Calibration Date: 11-JUN-2014    Time: 12:44

Lab File ID: 0611A01                      Init. Calib. Date(s): 10-JUN-2    10-JUN-2

Sample No: wg696-1,31,10                Init. Calib. Times    : 14:46                      19:44

Compound	RRF	RRF	MIN RRF	%D	MAX %D	
=====	=====	=====	=====	=====	=====	
dichlorodifluoromethane	.89437	.7282	.1	-19	20	
chloromethane	1.2695	.9603	.1	-24	20	F
vinyl chloride	1.0163	.81737	.1	-20	20	
bromomethane	.36239	.34298	.1	-5	20	
chloroethane	.42021	.43142	.1	3	20	
trichlorofluoromethane	1.0107	.88005	.1	-13	20	
ethyl ether	.33863	.27923	.05	-18	20	
1,1,-dichloroethene	.53047	.49433	.1	-7	20	
carbon disulfide	1.1216	.84176	.1	-25	20	F
freon-113	.53967	.43938	.1	-19	20	
methylene chloride	.5825	.53412	.1	-8	20	
acetone	100	77.633	.1	-22	20	F
trans-1,2-dichloroethene	.55497	.52684	.1	-5	20	
methyl tert butyl ether	1.4369	1.2760	.1	-11	20	
tert butyl alcohol	.04726	.04396	.05	-7	20	F
Diisopropyl Ether	2.6978	2.2941	.01	-15	20	
1,1-dichloroethane	1.3312	1.2107	.2	-9	20	
Halothane	.45152	.37831	.05	-16	20	
Ethyl-Tert-Butyl-Ether	2.3707	2.0347	.05	-14	20	
cis-1,2-dichloroethene	.68698	.62229	.1	-9	20	
2,2-dichloropropane	1.0294	.94577	.05	-8	20	
bromochloromethane	.29671	.28295	.05	-5	20	
chloroform	1.1943	1.1190	.2	-6	20	
carbontetrachloride	.90992	.80329	.1	-12	20	
tetrahydrofuran	.22992	.20927	.05	-9	20	
1,1,1-trichloroethane	1.0643	1.0255	.1	-4	20	
1,1-dichloropropene	.99978	.93268	.05	-7	20	
2-butanone	.30081	.30034	.1	0	20	
benzene	2.8525	2.9034	.5	2	20	
Tertiary-Amyl Methyl Ether	1.7532	1.7646	.05	1	20	
1,2-dichloroethane	1.0219	1.1084	.1	8	20	
trichloroethene	.71954	.74843	.2	4	20	
dibromomethane	.27928	.37231	.05	33	20	F
1,2-dichloropropane	.86999	.86227	.1	-1	20	
bromodichloromethane	.92445	.91439	.2	-1	20	
1,4-dioxane	.00545	.00476	.05	-13	20	F
2-chloroethylvinyl ether	.45178	.40928	.05	-9	20	
cis-1,3-dichloropropene	1.1394	1.1499	.2	1	20	

FORM VII MCP-8260-10

7A  
CONTINUING CALIBRATION CHECK

Lab Name: Alpha Analytical Labs

SDG No.: L1412343

Instrument ID: Jack.i                      Calibration Date: 11-JUN-2014    Time: 12:44

Lab File ID: 0611A01                      Init. Calib. Date(s): 10-JUN-2    10-JUN-2

Sample No: wg696-1,31,10                Init. Calib. Times    : 14:46                      19:44

Compound	RRF	RRF	MIN RRF	%D	MAX %D
toluene	2.2104	2.4534	.4	11	20
tetrachloroethene	.92287	1.0261	.2	11	20
4-methyl-2-pentanone	.24016	.2158	.1	-10	20
trans-1,3-dichloropropene	1.0783	1.1800	.1	9	20
1,1,2-trichloroethane	.52536	.56439	.1	7	20
chlorodibromomethane	.70368	.72205	.1	3	20
1,3-dichloropropane	1.1205	1.1264	.05	1	20
1,2-dibromoethane	.59237	.62691	.1	6	20
2-hexanone	.57762	.52771	.1	-9	20
chlorobenzene	2.4041	2.4201	.5	1	20
ethyl benzene	4.2318	4.3133	.1	2	20
1,1,1,2-tetrachloroethane	.8015	.79794	.05	0	20
p/m xylene	1.5605	1.6082	.1	3	20
o xylene	1.4764	1.4453	.3	-2	20
styrene	2.4530	2.4966	.3	2	20
bromoform	.68597	.67257	.1	-2	20
isopropylbenzene	7.6649	7.6306	.1	0	20
bromobenzene	1.7649	1.6743	.05	-5	20
n-propylbenzene	9.4294	9.6494	.05	2	20
1,1,2,2,-tetrachloroethane	1.2112	1.2357	.3	2	20
2-chlorotoluene	6.0260	6.2398	.05	4	20
1,2,3-trichloropropane	1.0752	1.1498	.05	7	20
1,3,5-trimethybenzene	6.2992	6.4914	.05	3	20
4-chorotoluene	5.5714	5.7984	.05	4	20
tert-butylbenzene	5.6169	5.7114	.05	2	20
1,2,4-trimethylbenzene	6.4184	6.6678	.05	4	20
sec-butylbenzene	8.1834	8.6311	.01	5	20
p-isopropyltoluene	6.9695	7.2904	.05	5	20
1,3-dichlorobenzene	3.4108	3.5674	.6	5	20
1,4-dichlorobenzene	3.4132	3.5036	.5	3	20
n-butylbenzene	6.1028	6.5013	.05	7	20
1,2-dichlorobenzene	3.0652	3.0971	.4	1	20
1,2-dibromo-3-chloropropane	.21312	.18865	.05	-11	20
hexachlorobutadiene	.63787	.59715	.05	-6	20
1,2,4-trichlorobenzene	1.5459	1.4602	.2	-6	20
naphthalene	3.3372	3.0610	.05	-8	20
1,2,3-trichlorobenzene	1.2616	1.1607	.05	-8	20

FORM VII MCP-8260-10





## ANALYTICAL REPORT

Lab Number:	L1413760
Client:	Haley & Aldrich, Inc. 465 Medford Street, Suite 2200 Charlestown, MA 02129-1400
ATTN:	Keith Johnson
Phone:	(617) 886-7400
Project Name:	25 MORRISSEY BOULEVARD
Project Number:	40414-041
Report Date:	06/27/14

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.

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



**Project Name:** 25 MORRISSEY BOULEVARD  
**Project Number:** 40414-041

**Lab Number:** L1413760  
**Report Date:** 06/27/14

<b>Alpha Sample ID</b>	<b>Client ID</b>	<b>Sample Location</b>	<b>Collection Date/Time</b>
L1413760-01	HA14-GP-13(OW)	Not Specified	06/23/14 08:45

**Project Name:** 25 MORRISSEY BOULEVARD  
**Project Number:** 40414-041

**Lab Number:** L1413760  
**Report Date:** 06/27/14

### 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.

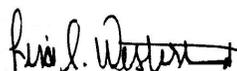
#### HOLD POLICY

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.

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

Authorized Signature:

 Lisa Westerlind

Title: Technical Director/Representative

Date: 06/27/14

# ORGANICS

# VOLATILES

**Project Name:** 25 MORRISSEY BOULEVARD**Lab Number:** L1413760**Project Number:** 40414-041**Report Date:** 06/27/14**SAMPLE RESULTS**

**Lab ID:** L1413760-01  
**Client ID:** HA14-GP-13(OW)  
**Sample Location:** Not Specified  
**Matrix:** Water  
**Analytical Method:** 14,504.1  
**Analytical Date:** 06/26/14 10:39  
**Analyst:** SH

**Date Collected:** 06/23/14 08:45  
**Date Received:** 06/23/14  
**Field Prep:** Not Specified  
**Extraction Date:** 06/26/14 08:30

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

**Project Name:** 25 MORRISSEY BOULEVARD**Lab Number:** L1413760**Project Number:** 40414-041**Report Date:** 06/27/14**Method Blank Analysis  
Batch Quality Control**

Analytical Method: 14,504.1

Analytical Date: 06/26/14 09:45

Analyst: SH

Extraction Date: 06/26/14 08:30

<b>Parameter</b>	<b>Result</b>	<b>Qualifier</b>	<b>Units</b>	<b>RL</b>	<b>MDL</b>
Microextractables by GC - Westborough Lab for sample(s): 01 Batch: WG700987-1					
1,2-Dibromoethane	ND		ug/l	0.010	-- A

## Lab Control Sample Analysis

Batch Quality Control

**Project Name:** 25 MORRISSEY BOULEVARD

**Project Number:** 40414-041

**Lab Number:** L1413760

**Report Date:** 06/27/14

<b>Parameter</b>	<b>LCS %Recovery</b>	<b>Qual</b>	<b>LCSD %Recovery</b>	<b>Qual</b>	<b>%Recovery Limits</b>	<b>RPD</b>	<b>Qual</b>	<b>RPD Limits</b>	<b>Column</b>
Microextractables by GC - Westborough Lab Associated sample(s): 01 Batch: WG700987-2									
1,2-Dibromoethane	106		-		70-130	-		20	A

## Matrix Spike Analysis

Batch Quality Control

**Project Name:** 25 MORRISSEY BOULEVARD  
**Project Number:** 40414-041

**Lab Number:** L1413760  
**Report Date:** 06/27/14

<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: WG700987-3 QC Sample: L1413760-01 Client ID: HA14-GP-13(OW)													
1,2-Dibromoethane	ND	0.256	0.280	109		-	-		70-130	-		20	A

# SEMIVOLATILES

**Project Name:** 25 MORRISSEY BOULEVARD**Lab Number:** L1413760**Project Number:** 40414-041**Report Date:** 06/27/14**SAMPLE RESULTS**

**Lab ID:** L1413760-01  
**Client ID:** HA14-GP-13(OW)  
**Sample Location:** Not Specified  
**Matrix:** Water  
**Analytical Method:** 1,8270D  
**Analytical Date:** 06/25/14 03:05  
**Analyst:** JB

**Date Collected:** 06/23/14 08:45  
**Date Received:** 06/23/14  
**Field Prep:** Not Specified  
**Extraction Method:** EPA 3510C  
**Extraction Date:** 06/24/14 01:12

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Semivolatile Organics by GC/MS - Westborough Lab</b>						
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:** 25 MORRISSEY BOULEVARD**Lab Number:** L1413760**Project Number:** 40414-041**Report Date:** 06/27/14**SAMPLE RESULTS**

Lab ID: L1413760-01  
 Client ID: HA14-GP-13(OW)  
 Sample Location: Not Specified

Date Collected: 06/23/14 08:45  
 Date Received: 06/23/14  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Semivolatile Organics by GC/MS - Westborough Lab</b>						
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	2.8		ug/l	2.0	--	1
Pyridine	ND		ug/l	5.0	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	36		21-120
Phenol-d6	23		10-120
Nitrobenzene-d5	69		23-120
2-Fluorobiphenyl	83		15-120
2,4,6-Tribromophenol	109		10-120
4-Terphenyl-d14	96		41-149

**Project Name:** 25 MORRISSEY BOULEVARD**Lab Number:** L1413760**Project Number:** 40414-041**Report Date:** 06/27/14**SAMPLE RESULTS**

Lab ID: L1413760-01  
 Client ID: HA14-GP-13(OW)  
 Sample Location: Not Specified  
 Matrix: Water  
 Analytical Method: 1,8270D-SIM  
 Analytical Date: 06/25/14 15:50  
 Analyst: MW

Date Collected: 06/23/14 08:45  
 Date Received: 06/23/14  
 Field Prep: Not Specified  
 Extraction Method: EPA 3510C  
 Extraction Date: 06/24/14 01:12

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Semivolatile Organics by GC/MS-SIM - Westborough Lab</b>						
Acenaphthene	6.5		ug/l	0.20	--	1
2-Chloronaphthalene	ND		ug/l	0.20	--	1
Fluoranthene	1.3		ug/l	0.20	--	1
Hexachlorobutadiene	ND		ug/l	0.50	--	1
Naphthalene	13		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	1.2		ug/l	0.20	--	1
Benzo(ghi)perylene	ND		ug/l	0.20	--	1
Fluorene	4.7		ug/l	0.20	--	1
Phenanthrene	7.6		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	0.84		ug/l	0.20	--	1
1-Methylnaphthalene	4.9		ug/l	0.20	--	1
2-Methylnaphthalene	2.4		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	37		21-120
Phenol-d6	24		10-120
Nitrobenzene-d5	84		23-120
2-Fluorobiphenyl	78		15-120
2,4,6-Tribromophenol	147	Q	10-120
4-Terphenyl-d14	88		41-149

**Project Name:** 25 MORRISSEY BOULEVARD  
**Project Number:** 40414-041

**Lab Number:** L1413760  
**Report Date:** 06/27/14

**Method Blank Analysis**  
**Batch Quality Control**

**Analytical Method:** 1,8270D  
**Analytical Date:** 06/24/14 19:22  
**Analyst:** JB

**Extraction Method:** EPA 3510C  
**Extraction Date:** 06/24/14 01:12

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG700234-1					
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:** 25 MORRISSEY BOULEVARD  
**Project Number:** 40414-041

**Lab Number:** L1413760  
**Report Date:** 06/27/14

**Method Blank Analysis  
Batch Quality Control**

**Analytical Method:** 1,8270D  
**Analytical Date:** 06/24/14 19:22  
**Analyst:** JB

**Extraction Method:** EPA 3510C  
**Extraction Date:** 06/24/14 01:12

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG700234-1					
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	35		21-120
Phenol-d6	21		10-120
Nitrobenzene-d5	65		23-120
2-Fluorobiphenyl	60		15-120
2,4,6-Tribromophenol	80		10-120
4-Terphenyl-d14	95		41-149

**Project Name:** 25 MORRISSEY BOULEVARD  
**Project Number:** 40414-041

**Lab Number:** L1413760  
**Report Date:** 06/27/14

**Method Blank Analysis**  
**Batch Quality Control**

**Analytical Method:** 1,8270D-SIM  
**Analytical Date:** 06/25/14 14:36  
**Analyst:** MW

**Extraction Method:** EPA 3510C  
**Extraction Date:** 06/24/14 01:12

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01 Batch: WG700236-1					
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: 25 MORRISSEY BOULEVARD

Lab Number: L1413760

Project Number: 40414-041

Report Date: 06/27/14

**Method Blank Analysis  
Batch Quality Control**

Analytical Method: 1,8270D-SIM  
 Analytical Date: 06/25/14 14:36  
 Analyst: MW

Extraction Method: EPA 3510C  
 Extraction Date: 06/24/14 01:12

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01 Batch: WG700236-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	34		21-120
Phenol-d6	22		10-120
Nitrobenzene-d5	82		23-120
2-Fluorobiphenyl	62		15-120
2,4,6-Tribromophenol	86		10-120
4-Terphenyl-d14	88		41-149

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: 25 MORRISSEY BOULEVARD

Project Number: 40414-041

Lab Number: L1413760

Report Date: 06/27/14

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: WG700234-2 WG700234-3								
Benzidine	56		24		10-75	80	Q	30
1,2,4-Trichlorobenzene	59		52		39-98	13		30
Bis(2-chloroethyl)ether	74		67		40-140	10		30
1,2-Dichlorobenzene	57		53		40-140	7		30
1,3-Dichlorobenzene	56		50		40-140	11		30
1,4-Dichlorobenzene	56		54		36-97	4		30
3,3'-Dichlorobenzidine	84		74		40-140	13		30
2,4-Dinitrotoluene	97	Q	103	Q	24-96	6		30
2,6-Dinitrotoluene	95		99		40-140	4		30
Azobenzene	84		88		40-140	5		30
4-Chlorophenyl phenyl ether	84		88		40-140	5		30
4-Bromophenyl phenyl ether	95		97		40-140	2		30
Bis(2-chloroisopropyl)ether	70		65		40-140	7		30
Bis(2-chloroethoxy)methane	78		72		40-140	8		30
Hexachlorocyclopentadiene	40		38	Q	40-140	5		30
Isophorone	77		74		40-140	4		30
Nitrobenzene	76		71		40-140	7		30
NDPA/DPA	97		99		40-140	2		30
Bis(2-ethylhexyl)phthalate	97		99		40-140	2		30
Butyl benzyl phthalate	100		102		40-140	2		30
Di-n-butylphthalate	99		105		40-140	6		30

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: 25 MORRISSEY BOULEVARD

Project Number: 40414-041

Lab Number: L1413760

Report Date: 06/27/14

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: WG700234-2 WG700234-3								
Di-n-octylphthalate	99		99		40-140	0		30
Diethyl phthalate	97		101		40-140	4		30
Dimethyl phthalate	94		102		40-140	8		30
Aniline	44		30	Q	40-140	38	Q	30
4-Chloroaniline	81		62		40-140	27		30
2-Nitroaniline	96		98		52-143	2		30
3-Nitroaniline	81		75		25-145	8		30
4-Nitroaniline	92		90		51-143	2		30
Dibenzofuran	77		83		40-140	8		30
n-Nitrosodimethylamine	40		37		22-74	8		30
2,4,6-Trichlorophenol	89		88		30-130	1		30
p-Chloro-m-cresol	84		82		23-97	2		30
2-Chlorophenol	67		63		27-123	6		30
2,4-Dichlorophenol	83		80		30-130	4		30
2,4-Dimethylphenol	75		72		30-130	4		30
2-Nitrophenol	79		75		30-130	5		30
4-Nitrophenol	44		53		10-80	19		30
2,4-Dinitrophenol	72		75		20-130	4		30
4,6-Dinitro-o-cresol	104		101		20-164	3		30
Phenol	27		27		12-110	0		30
2-Methylphenol	60		54		30-130	11		30

### Lab Control Sample Analysis Batch Quality Control

**Project Name:** 25 MORRISSEY BOULEVARD  
**Project Number:** 40414-041

**Lab Number:** L1413760  
**Report Date:** 06/27/14

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG700234-2 WG700234-3								
3-Methylphenol/4-Methylphenol	52		50		30-130	4		30
2,4,5-Trichlorophenol	96		99		30-130	3		30
Benzoic Acid	14		23		10-164	49	Q	30
Benzyl Alcohol	53		52		26-116	2		30
Carbazole	103		107		55-144	4		30
Pyridine	31		23		10-66	30		30

Surrogate	LCS		LCSD		Acceptance Criteria
	%Recovery	Qual	%Recovery	Qual	
2-Fluorophenol	40		37		21-120
Phenol-d6	26		25		10-120
Nitrobenzene-d5	77		71		23-120
2-Fluorobiphenyl	77		73		15-120
2,4,6-Tribromophenol	107		105		10-120
4-Terphenyl-d14	103		101		41-149

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** 25 MORRISSEY BOULEVARD

**Project Number:** 40414-041

**Lab Number:** L1413760

**Report Date:** 06/27/14

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01 Batch: WG700236-2 WG700236-3								
Acenaphthene	75		71		37-111	5		40
2-Chloronaphthalene	73		72		40-140	1		40
Fluoranthene	99		94		40-140	5		40
Hexachlorobutadiene	57		56		40-140	2		40
Naphthalene	71		69		40-140	3		40
Benzo(a)anthracene	100		94		40-140	6		40
Benzo(a)pyrene	102		92		40-140	10		40
Benzo(b)fluoranthene	107		102		40-140	5		40
Benzo(k)fluoranthene	95		84		40-140	12		40
Chrysene	98		92		40-140	6		40
Acenaphthylene	78		76		40-140	3		40
Anthracene	92		87		40-140	6		40
Benzo(ghi)perylene	100		81		40-140	21		40
Fluorene	82		77		40-140	6		40
Phenanthrene	90		86		40-140	5		40
Dibenzo(a,h)anthracene	104		89		40-140	16		40
Indeno(1,2,3-cd)Pyrene	102		85		40-140	18		40
Pyrene	103		97		26-127	6		40
1-Methylnaphthalene	73		70		40-140	4		40
2-Methylnaphthalene	76		73		40-140	4		40
Pentachlorophenol	77		73		9-103	5		40

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: 25 MORRISSEY BOULEVARD

Project Number: 40414-041

Lab Number: L1413760

Report Date: 06/27/14

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: WG700236-2 WG700236-3								
Hexachlorobenzene	87		84		40-140	4		40
Hexachloroethane	66		63		40-140	5		40

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	40		37		21-120
Phenol-d6	28		26		10-120
Nitrobenzene-d5	87		83		23-120
2-Fluorobiphenyl	69		67		15-120
2,4,6-Tribromophenol	111		102		10-120
4-Terphenyl-d14	92		86		41-149

# PCBS

**Project Name:** 25 MORRISSEY BOULEVARD**Lab Number:** L1413760**Project Number:** 40414-041**Report Date:** 06/27/14**SAMPLE RESULTS**

**Lab ID:** L1413760-01  
**Client ID:** HA14-GP-13(OW)  
**Sample Location:** Not Specified  
**Matrix:** Water  
**Analytical Method:** 5,608  
**Analytical Date:** 06/24/14 14:45  
**Analyst:** JW

**Date Collected:** 06/23/14 08:45  
**Date Received:** 06/23/14  
**Field Prep:** Not Specified  
**Extraction Method:** EPA 608  
**Extraction Date:** 06/24/14 01:13  
**Cleanup Method1:** EPA 3665A  
**Cleanup Date1:** 06/24/14  
**Cleanup Method2:** EPA 3660B  
**Cleanup Date2:** 06/24/14

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	56		30-150	A
Decachlorobiphenyl	30		30-150	A

**Project Name:** 25 MORRISSEY BOULEVARD**Lab Number:** L1413760**Project Number:** 40414-041**Report Date:** 06/27/14

**Method Blank Analysis  
Batch Quality Control**

Analytical Method: 5,608  
 Analytical Date: 06/24/14 15:25  
 Analyst: JW

Extraction Method: EPA 608  
 Extraction Date: 06/24/14 01:13  
 Cleanup Method1: EPA 3665A  
 Cleanup Date1: 06/24/14  
 Cleanup Method2: EPA 3660B  
 Cleanup Date2: 06/24/14

Parameter	Result	Qualifier	Units	RL	MDL	Column
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 01 Batch: WG700240-1						
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	63		30-150	A
Decachlorobiphenyl	72		30-150	A

## Matrix Spike Analysis

Batch Quality Control

**Project Name:** 25 MORRISSEY BOULEVARD  
**Project Number:** 40414-041

**Lab Number:** L1413760  
**Report Date:** 06/27/14

<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: WG700240-3 QC Sample: L1413760-01 Client ID: HA14-GP-13(OW)													
Aroclor 1016	ND	1	0.709	71		-	-		40-140	-		50	A
Aroclor 1260	ND	1	0.591	59		-	-		40-140	-		50	A

<i>Surrogate</i>	<i>MS</i>		<i>MSD</i>		<i>Acceptance Criteria</i>	<i>Column</i>
	<i>% Recovery</i>	<i>Qualifier</i>	<i>% Recovery</i>	<i>Qualifier</i>		
2,4,5,6-Tetrachloro-m-xylene	44				30-150	A
Decachlorobiphenyl	30				30-150	A

## Lab Control Sample Analysis

Batch Quality Control

Project Name: 25 MORRISSEY BOULEVARD

Project Number: 40414-041

Lab Number: L1413760

Report Date: 06/27/14

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: WG700240-2									
Aroclor 1016	75		-		40-140	-		50	A
Aroclor 1260	61		-		40-140	-		50	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	64				30-150	A
Decachlorobiphenyl	68				30-150	A

**Lab Duplicate Analysis**  
Batch Quality Control

**Project Name:** 25 MORRISSEY BOULEVARD  
**Project Number:** 40414-041

**Lab Number:** L1413760  
**Report Date:** 06/27/14

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01 QC Batch ID: WG700240-4 QC Sample: L1413594-01 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	44		20	Q	30-150	A
Decachlorobiphenyl	15	Q	10	Q	30-150	A



## METALS

**Project Name:** 25 MORRISSEY BOULEVARD  
**Project Number:** 40414-041

**Lab Number:** L1413760  
**Report Date:** 06/27/14

**SAMPLE RESULTS**

**Lab ID:** L1413760-01  
**Client ID:** HA14-GP-13(OW)  
**Sample Location:** Not Specified  
**Matrix:** Water

**Date Collected:** 06/23/14 08:45  
**Date Received:** 06/23/14  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
<b>Total Metals - Westborough Lab</b>											
Antimony, Total	ND		mg/l	0.00200	--	1	06/24/14 15:36	06/25/14 15:15	EPA 3005A	1,6020A	KL
Arsenic, Total	0.00434		mg/l	0.00050	--	1	06/24/14 15:36	06/25/14 15:15	EPA 3005A	1,6020A	KL
Cadmium, Total	ND		mg/l	0.00020	--	1	06/24/14 15:36	06/25/14 15:15	EPA 3005A	1,6020A	KL
Chromium, Total	ND		mg/l	0.00100	--	1	06/24/14 15:36	06/25/14 15:15	EPA 3005A	1,6020A	KL
Copper, Total	ND		mg/l	0.00100	--	1	06/24/14 15:36	06/25/14 15:15	EPA 3005A	1,6020A	KL
Iron, Total	1.7		mg/l	0.05	--	1	06/24/14 15:36	06/25/14 14:38	EPA 3005A	19,200.7	JH
Lead, Total	0.00085		mg/l	0.00050	--	1	06/24/14 15:36	06/25/14 15:15	EPA 3005A	1,6020A	KL
Mercury, Total	ND		mg/l	0.0002	--	1	06/24/14 12:34	06/25/14 10:29	EPA 245.1	3,245.1	AK
Nickel, Total	0.00187		mg/l	0.00050	--	1	06/24/14 15:36	06/25/14 15:15	EPA 3005A	1,6020A	KL
Selenium, Total	ND		mg/l	0.00500	--	1	06/24/14 15:36	06/25/14 15:15	EPA 3005A	1,6020A	KL
Silver, Total	ND		mg/l	0.00040	--	1	06/24/14 15:36	06/25/14 15:15	EPA 3005A	1,6020A	KL
Zinc, Total	0.01828		mg/l	0.01000	--	1	06/24/14 15:36	06/25/14 15:15	EPA 3005A	1,6020A	KL



**Project Name:** 25 MORRISSEY BOULEVARD  
**Project Number:** 40414-041

**Lab Number:** L1413760  
**Report Date:** 06/27/14

### 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: WG700407-1									
Mercury, Total	ND	mg/l	0.0002	--	1	06/24/14 12:34	06/25/14 10:16	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: WG700468-1									
Antimony, Total	ND	mg/l	0.00200	--	1	06/24/14 15:36	06/25/14 13:26	1,6020A	KL
Arsenic, Total	ND	mg/l	0.00050	--	1	06/24/14 15:36	06/25/14 13:26	1,6020A	KL
Cadmium, Total	ND	mg/l	0.00020	--	1	06/24/14 15:36	06/25/14 13:26	1,6020A	KL
Chromium, Total	ND	mg/l	0.00100	--	1	06/24/14 15:36	06/25/14 13:26	1,6020A	KL
Copper, Total	ND	mg/l	0.00100	--	1	06/24/14 15:36	06/25/14 13:26	1,6020A	KL
Lead, Total	ND	mg/l	0.00050	--	1	06/24/14 15:36	06/25/14 13:26	1,6020A	KL
Nickel, Total	ND	mg/l	0.00050	--	1	06/24/14 15:36	06/25/14 13:26	1,6020A	KL
Selenium, Total	ND	mg/l	0.00500	--	1	06/24/14 15:36	06/25/14 13:26	1,6020A	KL
Silver, Total	ND	mg/l	0.00040	--	1	06/24/14 15:36	06/25/14 13:26	1,6020A	KL
Zinc, Total	ND	mg/l	0.01000	--	1	06/24/14 15:36	06/25/14 13:26	1,6020A	KL

#### Prep Information

Digestion Method: EPA 3005A

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Westborough Lab for sample(s): 01 Batch: WG700469-1									
Iron, Total	ND	mg/l	0.05	--	1	06/24/14 15:36	06/25/14 14:31	19,200.7	JH

#### Prep Information

Digestion Method: EPA 3005A

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** 25 MORRISSEY BOULEVARD

**Project Number:** 40414-041

**Lab Number:** L1413760

**Report Date:** 06/27/14

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Total Metals - Westborough Lab Associated sample(s): 01 Batch: WG700407-2								
Mercury, Total	108		-		85-115	-		
Total Metals - Westborough Lab Associated sample(s): 01 Batch: WG700468-2								
Antimony, Total	82		-		80-120	-		
Arsenic, Total	94		-		80-120	-		
Cadmium, Total	116		-		80-120	-		
Chromium, Total	97		-		80-120	-		
Copper, Total	102		-		80-120	-		
Lead, Total	101		-		80-120	-		
Nickel, Total	100		-		80-120	-		
Selenium, Total	113		-		80-120	-		
Silver, Total	92		-		80-120	-		
Zinc, Total	106		-		80-120	-		
Total Metals - Westborough Lab Associated sample(s): 01 Batch: WG700469-2								
Iron, Total	98		-		85-115	-		

### Matrix Spike Analysis Batch Quality Control

**Project Name:** 25 MORRISSEY BOULEVARD  
**Project Number:** 40414-041

**Lab Number:** L1413760  
**Report Date:** 06/27/14

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: WG700407-4    QC Sample: L1413660-01    Client ID: MS Sample												
Mercury, Total	ND	0.005	0.0051	102		-	-		70-130	-		20
Total Metals - Westborough Lab Associated sample(s): 01    QC Batch ID: WG700468-4    QC Sample: L1413760-01    Client ID: HA14-GP-13(OW)												
Antimony, Total	ND	0.5	0.5350	107		-	-		75-125	-		20
Arsenic, Total	0.00434	0.12	0.1217	98		-	-		75-125	-		20
Cadmium, Total	ND	0.051	0.05391	106		-	-		75-125	-		20
Chromium, Total	ND	0.2	0.1850	92		-	-		75-125	-		20
Copper, Total	ND	0.25	0.2381	95		-	-		75-125	-		20
Lead, Total	0.00085	0.51	0.5188	102		-	-		75-125	-		20
Nickel, Total	0.00187	0.5	0.4576	91		-	-		75-125	-		20
Selenium, Total	ND	0.12	0.121	101		-	-		75-125	-		20
Silver, Total	ND	0.05	0.04603	92		-	-		75-125	-		20
Zinc, Total	0.01828	0.5	0.5036	97		-	-		75-125	-		20
Total Metals - Westborough Lab Associated sample(s): 01    QC Batch ID: WG700469-4    QC Sample: L1413760-01    Client ID: HA14-GP-13(OW)												
Iron, Total	1.7	1	2.6	90		-	-		75-125	-		20

## Lab Duplicate Analysis

Batch Quality Control

Project Name: 25 MORRISSEY BOULEVARD

Project Number: 40414-041

Lab Number: L1413760

Report Date: 06/27/14

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
<b>Total Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG700407-3 QC Sample: L1413660-01 Client ID: DUP Sample</b>						
Mercury, Total	ND	ND	mg/l	NC		20
<b>Total Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG700468-3 QC Sample: L1413760-01 Client ID: HA14-GP-13(OW)</b>						
Antimony, Total	ND	ND	mg/l	NC		20
Arsenic, Total	0.00434	0.00480	mg/l	10		20
Cadmium, Total	ND	ND	mg/l	NC		20
Chromium, Total	ND	ND	mg/l	NC		20
Copper, Total	ND	ND	mg/l	NC		20
Lead, Total	0.00085	0.00081	mg/l	5		20
Nickel, Total	0.00187	0.00182	mg/l	3		20
Selenium, Total	ND	ND	mg/l	NC		20
Silver, Total	ND	ND	mg/l	NC		20
Zinc, Total	0.01828	0.01922	mg/l	5		20
<b>Total Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG700469-3 QC Sample: L1413760-01 Client ID: HA14-GP-13(OW)</b>						
Iron, Total	1.7	1.7	mg/l	0		20

# **INORGANICS & MISCELLANEOUS**

**Project Name:** 25 MORRISSEY BOULEVARD  
**Project Number:** 40414-041

**Lab Number:** L1413760  
**Report Date:** 06/27/14

**SAMPLE RESULTS**

**Lab ID:** L1413760-01  
**Client ID:** HA14-GP-13(OW)  
**Sample Location:** Not Specified  
**Matrix:** Water

**Date Collected:** 06/23/14 08:45  
**Date Received:** 06/23/14  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
<b>General Chemistry - Westborough Lab</b>										
Solids, Total Suspended	ND		mg/l	5.0	NA	1	-	06/26/14 14:55	30,2540D	DW
Cyanide, Total	0.009		mg/l	0.005	--	1	06/24/14 11:50	06/26/14 10:38	30,4500CN-CE	ML
Chlorine, Total Residual	ND		mg/l	0.02	--	1	-	06/23/14 21:00	30,4500CL-D	JA
Phenolics, Total	ND		mg/l	0.03	--	1	06/25/14 11:15	06/25/14 17:08	4,420.1	MP
Chromium, Hexavalent	ND		mg/l	0.010	--	1	06/23/14 20:45	06/23/14 21:05	30,3500CR-D	EL
<b>Anions by Ion Chromatography - Westborough Lab</b>										
Chloride	3440		mg/l	125	--	250	-	06/27/14 00:44	44,300.0	JT



**Project Name:** 25 MORRISSEY BOULEVARD  
**Project Number:** 40414-041

**Lab Number:** L1413760  
**Report Date:** 06/27/14

**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: WG700200-1									
Chromium, Hexavalent	ND	mg/l	0.010	--	1	06/23/14 20:45	06/23/14 21:05	30,3500CR-D	EL
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG700201-1									
Chlorine, Total Residual	ND	mg/l	0.02	--	1	-	06/23/14 21:00	30,4500CL-D	JA
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG700356-1									
Cyanide, Total	ND	mg/l	0.005	--	1	06/24/14 11:50	06/26/14 10:15	30,4500CN-CE	ML
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG700737-1									
Phenolics, Total	ND	mg/l	0.03	--	1	06/25/14 11:15	06/25/14 17:05	4,420.1	MP
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG701006-1									
Solids, Total Suspended	ND	mg/l	5.0	NA	1	-	06/26/14 14:55	30,2540D	DW
Anions by Ion Chromatography - Westborough Lab for sample(s): 01 Batch: WG701344-1									
Chloride	ND	mg/l	0.500	--	1	-	06/26/14 19:31	44,300.0	JT

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** 25 MORRISSEY BOULEVARD

**Project Number:** 40414-041

**Lab Number:** L1413760

**Report Date:** 06/27/14

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG700200-2								
Chromium, Hexavalent	104		-		85-115	-		20
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG700201-2								
Chlorine, Total Residual	93		-		90-110	-		
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG700356-2								
Cyanide, Total	107		-		90-110	-		
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG700737-2								
Phenolics, Total	103		-		70-130	-		
Anions by Ion Chromatography - Westborough Lab Associated sample(s): 01 Batch: WG701344-2								
Chloride	90		-		90-110	-		

### Matrix Spike Analysis Batch Quality Control

**Project Name:** 25 MORRISSEY BOULEVARD  
**Project Number:** 40414-041

**Lab Number:** L1413760  
**Report Date:** 06/27/14

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Qual	MSD Found	MSD %Recovery	MSD Qual	Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG700200-4 QC Sample: L1413760-01 Client ID: HA14-GP-13(OW)												
Chromium, Hexavalent	ND	0.1	0.098	98	-	-	-	-	85-115	-	-	20
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG700356-3 QC Sample: L1413760-01 Client ID: HA14-GP-13(OW)												
Cyanide, Total	0.009	0.2	0.205	98	-	-	-	-	90-110	-	-	30
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG700737-4 QC Sample: L1413917-01 Client ID: MS Sample												
Phenolics, Total	ND	0.4	0.36	89	-	-	-	-	70-130	-	-	20
Anions by Ion Chromatography - Westborough Lab Associated sample(s): 01 QC Batch ID: WG701344-4 QC Sample: L1413733-01 Client ID: MS Sample												
Chloride	ND	4	3.55	89	-	-	-	-	40-151	-	-	18

## Lab Duplicate Analysis

Batch Quality Control

Project Name: 25 MORRISSEY BOULEVARD

Project Number: 40414-041

Lab Number: L1413760

Report Date: 06/27/14

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG700200-3 QC Sample: L1413760-01 Client ID: HA14-GP-13(OW)						
Chromium, Hexavalent	ND	ND	mg/l	NC		20
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG700201-3 QC Sample: L1413760-01 Client ID: HA14-GP-13(OW)						
Chlorine, Total Residual	ND	ND	mg/l	NC		20
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG700356-4 QC Sample: L1413760-01 Client ID: HA14-GP-13(OW)						
Cyanide, Total	0.009	0.008	mg/l	7		30
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG700737-3 QC Sample: L1413917-01 Client ID: DUP Sample						
Phenolics, Total	ND	ND	mg/l	NC		20
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG701006-2 QC Sample: L1413382-02 Client ID: DUP Sample						
Solids, Total Suspended	380	520	mg/l	31	Q	29
Anions by Ion Chromatography - Westborough Lab Associated sample(s): 01 QC Batch ID: WG701344-3 QC Sample: L1413733-01 Client ID: DUP Sample						
Chloride	ND	ND	mg/l	NC		18

**Project Name:** 25 MORRISSEY BOULEVARD  
**Project Number:** 40414-041

**Lab Number:** L1413760  
**Report Date:** 06/27/14

### 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(*)
L1413760-01A	Vial Na2S2O3 preserved	A	N/A	3.2	Y	Absent	504(14)
L1413760-01B	Vial Na2S2O3 preserved	A	N/A	3.2	Y	Absent	504(14)
L1413760-01C	Plastic 250ml HNO3 preserved	A	<2	3.2	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)
L1413760-01D	Plastic 250ml HNO3 preserved	A	<2	3.2	Y	Absent	HOLD-METAL(180)
L1413760-01E	Plastic 250ml NaOH preserved	A	>12	3.2	Y	Absent	TCN-4500(14)
L1413760-01F	Plastic 500ml unpreserved	A	7	3.2	Y	Absent	CL-300(28),TRC-4500(1)
L1413760-01G	Plastic 500ml unpreserved	A	7	3.2	Y	Absent	HEXCR-3500(1)
L1413760-01H	Plastic 1000ml unpreserved	A	7	3.2	Y	Absent	TSS-2540(7)
L1413760-01I	Amber 500ml H2SO4 preserved	A	<2	3.2	Y	Absent	TPHENOL-420(28)
L1413760-01L	Amber 1000ml Na2S2O3	A	7	3.2	Y	Absent	PCB-608(7)
L1413760-01M	Amber 1000ml Na2S2O3	A	7	3.2	Y	Absent	PCB-608(7)
L1413760-01O	Amber 1000ml unpreserved	A	7	3.2	Y	Absent	8270TCL(7)
L1413760-01P	Amber 1000ml unpreserved	A	7	3.2	Y	Absent	8270TCL(7)
L1413760-01Q	Amber 1000ml unpreserved	A	7	3.2	Y	Absent	8270TCL-SIM(7)
L1413760-01R	Amber 1000ml unpreserved	A	7	3.2	Y	Absent	8270TCL-SIM(7)

\*Values in parentheses indicate holding time in days



**Project Name:** 25 MORRISSEY BOULEVARD  
**Project Number:** 40414-041

**Lab Number:** L1413760  
**Report Date:** 06/27/14

## 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

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

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

### Data Qualifiers

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

Report Format: Data Usability Report



**Project Name:** 25 MORRISSEY BOULEVARD  
**Project Number:** 40414-041

**Lab Number:** L1413760  
**Report Date:** 06/27/14

#### **Data Qualifiers**

- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.
- J** - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- ND** - Not detected at the reporting limit (RL) for the sample.

**Project Name:** 25 MORRISSEY BOULEVARD  
**Project Number:** 40414-041

**Lab Number:** L1413760  
**Report Date:** 06/27/14

## 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.

## 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 April 15, 2014

### 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, NO<sub>2</sub>, NO<sub>3</sub>.

**EPA 9071:** Total Petroleum Hydrocarbons, Oil & Grease.

#### Mansfield Facility

**EPA 8270D:** Biphenyl.

**EPA 2540D:** TSS

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

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

#### Drinking Water

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

**EPA 300.0:** Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, 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.

H&A FILE NO. 40414-041 LABORATORY ALPHA ANALYTICAL DELIVERY DATE 6/23/14  
 PROJECT NAME 25 MORRISSEY BOULEVARD ADDRESS WESTBOROUGH, MA TURNAROUND TIME 5-DAY  
 H&A CONTACT CORINNE MCKENZIE CONTACT GINA HALL PROJECT MANAGER KEITH JOHNSON

Sample No.	Date	Time	Depth	Type	Analysis Requested											Number of Containers	Comments (special instructions, precautions, additional method numbers, etc.)	
					1. SVOCs 8270/8270-SIM	2. PCBs 608	3. TSS 160.2	4. EDB 504.1	5. TPH 1064	6. Total Phenol 420.1	7. Total Metals	8. Dissolved Metals	9. TRC 330.1, Cl	10. TCN 335.2	11. Hex Cr SM 3500			
HA14-GP-13(OW)	6/23/14	8:45	-	AQ	X	X	X	X	X	X	X	X	X	X	X	X	16	Laboratory to use applicable DEP CAM methods, unless otherwise directed.  7. NPDES RGP list of metals: Cd, Cr, Cu, Pb, Ni, Ag, Zn, As, Se, Sb, Hg and Fe 8. Dissolved NPDES RGP list of metals (Field Filtered) <b>**HOLD FIELD FILTERED SAMPLE</b>

Sampled and Relinquished by	Received by	LIQUID											Sampling Comments						
Sign <i>Chris Sullivan</i> Print Chris Sullivan Firm H&A Date 6/23/14 Time 13:00	Sign <i>M. Austin</i> Print M. Austin Firm H&A Date 6/23/14 Time 16:30				X													VOA Vial Amber Glass Plastic Bottle Preservative Volume (mL)	*Sample submitted for NPDES RGP permit application. Please follow appropriate testing methods and minimum detection levels as required by the EPA for the RGP.
Relinquished by	Received by	SOLID																	
Sign <i>M. Austin</i> Print M. Austin Firm H&A Date 6/23/14 Time 16:45	Sign <i>Jim Davis</i> Print Jim Davis Firm ALPHA Date 6-23-14 Time 16:45																	VOA Vial Amber Glass Clear Glass Preservative Volume	Evidence samples were tampered with? YES NO If YES, please explain in section below.
Relinquished by	Received by	PRESERVATION KEY																	
Sign <i>Jim Davis</i> Print Jim Davis Firm ALPHA Date 6-23-14 Time 18:00	Sign <i>Kellan McLeod</i> Print Kellan McLeod Firm Alpha Date 6/23/14 Time 18:00	A	B	C	D	E	F	G	H										

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

If Presumptive Certainty Data Package is needed, initial all sections:  
 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.  
 Matrix Spike (MS) samples for MCP Metals and/or Cyanide are included and identified herein.  
 This Chain of Custody Record (specify) \_\_\_\_\_ includes  does not include samples defined as Drinking Water Samples.  
 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 type="checkbox"/> GW2
<input type="checkbox"/> RC-GW1	<input type="checkbox"/> S3	<input type="checkbox"/> GW3
<input checked="" type="checkbox"/> RC-GW2		

H&A FILE NO. 40414-041  
PROJECT NAME 25 MORRISSEY BOULEVARD  
H&A CONTACT CORINNE MCKENZIE

LABORATORY ALPHA ANALYTICAL  
ADDRESS WESTBOROUGH, MA  
CONTACT GINA HALL

DELIVERY DATE 6/23/14  
TURNAROUND TIME 5-DAY  
PROJECT MANAGER KEITH JOHNSON

Sample No.	Date	Time	Depth	Type	Analysis Requested											Number of Containers	Comments (special instructions, precautions, additional method numbers, etc.)	
					1. SVOCs 8270/8270-SIM	2. PCBs 608	3. TSS 160.2	4. EDB 504.1	5. TPH 1664	6. Total Phenol 420.1	7. Total Metals	8. Dissolved Metals	9. TRC 330.1, Cl	10. TCN 335.2	11. Hex Cr SM 3500			
HA14-GP-13(OW)	6/23/14	8:45	-	AQ	X	X	X	X	X	X	X	X	X	X	X	X	16	Laboratory to use applicable DEP CAM methods, unless otherwise directed.  7. NPDES RGP list of metals: Cd, Cr, Cu, Pb, Ni, Ag, Zn, As, Se, Sb, Hg and Fe  8. Dissolved NPDES RGP list of metals (Field Filtered)  **HOLD FIELD FILTERED SAMPLE

Sampled and Relinquished by  
Sign *Chris Sullivan*  
Print Chris Sullivan  
Firm H&A  
Date 6/23/14 Time 13:00

Received by  
Sign *M. Austin*  
Print M. Austin  
Firm ALPHA  
Date 6/23/14 Time 16:30

LIQUID											VOA Vial		
					X								Amber Glass
	X	X				X	X						Plastic Bottle
	A	AH	A	AH	AF	AE	AD	AD	A	AC	A		Preservative
	1000	1000	1000	1000	1000	500	250	250	500	250	500		Volume (mL)

Sampling Comments  
\*Sample submitted for NPDES RGP permit application.  
Please follow appropriate testing methods and minimum detection levels as required by the EPA for the RGP.

Relinquished by  
Sign *M. Austin*  
Print M. Austin  
Firm H&A  
Date 6/23/14 Time 16:45

Received by  
Sign *Jim Davis*  
Print Jim Davis  
Firm ALPHA  
Date 6-23-14 Time 16:45

SOLID											VOA Vial		
													Amber Glass
													Clear Glass
													Preservative
													Volume

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

Relinquished by  
Sign *Jim Davis*  
Print Jim Davis  
Firm ALPHA  
Date 6-23-14 Time 18:00

Received by  
Sign *Kellan McLeod*  
Print Kellan McLeod  
Firm ALPHA  
Date 6/23/14 Time 18:00

PRESERVATION KEY											
A	Sample chilled	C	NaOH	E	H <sub>2</sub> SO <sub>4</sub>	G	Methanol				
B	Sample filtered	D	HNO <sub>3</sub>	F	HCL	H	Water (Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> (circle))				

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

If Presumptive Certainty Data Package is needed, initial all sections:  
 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.  
 Matrix Spike (MS) samples for MCP Metals and/or Cyanide are included and identified herein.  
 This Chain of Custody Record (specify) \_\_\_\_\_ includes  does not include samples defined as Drinking Water Samples.  
 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 type="checkbox"/> GW2
<input type="checkbox"/> RC-GW1	<input type="checkbox"/> S3	<input type="checkbox"/> GW3
<input checked="" type="checkbox"/> RC-GW2		



## ANALYTICAL REPORT

Lab Number:	L1415003
Client:	Haley & Aldrich, Inc. 465 Medford Street, Suite 2200 Charlestown, MA 02129-1400
ATTN:	Keith Johnson
Phone:	(617) 886-7400
Project Name:	25 MORRISSEY BOULEVARD
Project Number:	40414-041
Report Date:	07/14/14

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.

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



**Project Name:** 25 MORRISSEY BOULEVARD  
**Project Number:** 40414-041

**Lab Number:** L1415003  
**Report Date:** 07/14/14

<b>Alpha Sample ID</b>	<b>Client ID</b>	<b>Matrix</b>	<b>Sample Location</b>	<b>Collection Date/Time</b>	<b>Receive Date</b>
L1415003-01	HA14-GP-13(OW)	WATER	Not Specified	06/23/14 08:45	06/23/14

**Project Name:** 25 MORRISSEY BOULEVARD  
**Project Number:** 40414-041

**Lab Number:** L1415003  
**Report Date:** 07/14/14

### 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.

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

Authorized Signature:

 Kelly Stenstrom

Title: Technical Director/Representative

Date: 07/14/14

# **INORGANICS & MISCELLANEOUS**

**Project Name:** 25 MORRISSEY BOULEVARD**Lab Number:** L1415003**Project Number:** 40414-041**Report Date:** 07/14/14**SAMPLE RESULTS**

**Lab ID:** L1415003-01  
**Client ID:** HA14-GP-13(OW)  
**Sample Location:** Not Specified  
**Matrix:** Water

**Date Collected:** 06/23/14 08:45  
**Date Received:** 06/23/14  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
pH (H)	8.2		SU	-	NA	1	-	07/08/14 21:28	30,4500H+-B	JA



## Lab Control Sample Analysis

Batch Quality Control

**Project Name:** 25 MORRISSEY BOULEVARD

**Project Number:** 40414-041

**Lab Number:** L1415003

**Report Date:** 07/14/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG704132-1								
pH	101		-		99-101	-		5

**Lab Duplicate Analysis**  
Batch Quality Control

Project Name: 25 MORRISSEY BOULEVARD

Project Number: 40414-041

Lab Number: L1415003

Report Date: 07/14/14

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG704132-2 QC Sample: L1415003-01 Client ID: HA14-GP-13(OW)						
pH (H)	8.2	8.1	SU	1		5

**Project Name:** 25 MORRISSEY BOULEVARD**Lab Number:** L1415003**Project Number:** 40414-041**Report Date:** 07/14/14**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(*)
L1415003-01A	Plastic 500ml unpreserved	A	7	3.2	Y	Absent	PH-4500(.01)

\*Values in parentheses indicate holding time in days

**Project Name:** 25 MORRISSEY BOULEVARD  
**Project Number:** 40414-041

**Lab Number:** L1415003  
**Report Date:** 07/14/14

## 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

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

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

### Data Qualifiers

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

Report Format: Data Usability Report



**Project Name:** 25 MORRISSEY BOULEVARD  
**Project Number:** 40414-041

**Lab Number:** L1415003  
**Report Date:** 07/14/14

#### **Data Qualifiers**

- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.
- J** - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- ND** - Not detected at the reporting limit (RL) for the sample.

**Project Name:** 25 MORRISSEY BOULEVARD  
**Project Number:** 40414-041

**Lab Number:** L1415003  
**Report Date:** 07/14/14

## REFERENCES

- 30 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WPCF. 18th Edition. 1992.

## 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 April 15, 2014

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**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, NO<sub>2</sub>, NO<sub>3</sub>.

**EPA 9071:** Total Petroleum Hydrocarbons, Oil & Grease.

### Mansfield Facility

**EPA 8270D:** Biphenyl.

**EPA 2540D:** TSS

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

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**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.**

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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 1 of 1

~~21413760~~

H&A FILE NO. 40414-041  
PROJECT NAME 25 MORRISSEY BOULEVARD  
H&A CONTACT CORINNE MCKENZIE

LABORATORY ALPHA ANALYTICAL  
ADDRESS WESTBOROUGH, MA  
CONTACT GINA HALL

DELIVERY DATE 6/23/14  
TURNAROUND TIME 5-DAY  
PROJECT MANAGER KEITH JOHNSON

Sample No.	Date	Time	Depth	Type	Analysis Requested											Number of Containers	Comments (special instructions, precautions, additional method numbers, etc.)			
					1. SVOCs 8270/8270-SIM	2. PCBs 608	3. TSS 160.2	4. EDB 504.1	5. TPH 1664	6. Total Phenol 420.1	7. Total Metals	8. Dissolved Metals	9. TIC 330.1, Cl	10. TCN 335.2	11. Hex Cr SM 3500			pH-4500		
HA14-GP-13(OW)	6/23/14	8:45	-	AQ	X	X	X	X	X	X	X	X	X	X	X	X	X	X	16	Laboratory to use applicable DEP CAM methods, unless otherwise directed.  7. NPDES RGP list of metals: <del>Cd, Cr, Cu, Pb, Ni, Ag, Zn, As, Se, Sb, Hg and Fe</del> 8. Dissolved NPDES RGP list of metals (Field Filtered) <b>**HOLD-FIELD FILTERED SAMPLE</b>

Sampled and Relinquished by  
Sign *Chris Sullivan*  
Print Chris Sullivan  
Firm H&A  
Date 6/23/14 Time 13:00

Received by  
Sign *M. Curtis*  
Print M. Curtis  
Firm ALPHA  
Date 6/23/14 Time 16:30

LIQUID											VOA Vial		
				X									Amber Glass
	X	X			X	X							Plastic Bottle
	A	AH	A	AH	AF	AE	AD	AD	A	AC	A		Preservative
	1000	1000	1000	1000	1000	500	250	250	500	250	500		Volume (mL)

Sampling Comments  
\*Sample submitted for NPDES RGP permit application.  
Please follow appropriate testing methods and minimum detection levels as required by the EPA for the RGP.

Relinquished by  
Sign *M. Curtis*  
Print M. Curtis  
Firm H&A  
Date 6/23/14 Time 16:45

Received by  
Sign *Jim Davis*  
Print Jim Davis  
Firm ALPHA  
Date 6-23-14 Time 16:45

SOLID											VOA Vial		
													Amber Glass
													Clear Glass
													Preservative
													Volume

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

Relinquished by  
Sign *Jim Davis*  
Print Jim Davis  
Firm ALPHA  
Date 6-23-14 Time 18:00

Received by  
Sign *William McLeod*  
Print William McLeod  
Firm ALPHA  
Date 6/23/14 Time 18:00

PRESERVATION KEY											
A	Sample chilled	C	NaOH	E	H <sub>2</sub> SO <sub>4</sub>	G	Methanol				
B	Sample filtered	D	HNO <sub>3</sub>	F	HCL	H	Water (Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> (circle))				

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

If Presumptive Certainty Data Package is needed, initial all sections:  
 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.  
 Matrix Spike (MS) samples for MCP Metals and/or Cyanide are included and identified herein.  
 This Chain of Custody Record (specify) \_\_\_\_\_ includes  does not include samples defined as Drinking Water Samples.  
 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 type="checkbox"/> GW2
<input type="checkbox"/> RC-GW1	<input type="checkbox"/> S3	<input type="checkbox"/> GW3
<input checked="" type="checkbox"/> RC-GW2		