



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 1

**5 Post Office Square, Suite 100
BOSTON, MA 02109-3912**

CERTIFIED MAIL RETURN RECEIPT REQUESTED

APR 30 2013

David Teixeira
Vice President of Operations
Suffolk Construction Company
65 Allerton Street
Boston, MA 02119

Re: Authorization to discharge under the Remediation General Permit (RGP) –
MAG910000. Construction site located at 1282 Boylston Street, Boston, MA 02215
Suffolk County; Authorization # MAG910572

Dear Mr. Teixeira:

Based on the review of a Notice of Intent (NOI) submitted on behalf of Abbey Group the property owner by the consulting firm Haley & Aldrich, 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 this office determined to be necessary due to historic petroleum contaminated at the site.

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. For each parameter the dilution factor 38 for this site is within a dilution range greater than ten to fifty (>10 to 50), established in the RGP. (See the RGP Appendix IV for Massachusetts facilities). Therefore, the limits for arsenic of 100 ug/L,

lead of 13 ug/L, zinc of 666 ug/L and iron of 5,000 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 that this project will terminate on June 1, 2015. If for any reason the discharge terminates sooner you are required to submit a Notice of Termination (NOT) to the attention of the contact person indicated below within 30 days of project completion.

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

Sincerely,



Thelma Murphy, Manager
Storm Water and Construction
Permits Section

Enclosure

cc: Robert Kubit, MassDEP
Paul Canavan, BWSC
Leah Samanta, Haley&Aldrich

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

NPDES Authorization Number:	MAG910572
Authorization Issued:	April, 2013
Facility/Site Name:	Construction Site
Facility/Site Address:	1282 Boylston Street Boston, MA 02215, Suffolk County
	Email address of owner: wkeravuori@theabbeygroup.com
Legal Name of Operator:	Suffolk Construction Company
Operator contact name, title, and Address:	David Teixeira, Vice President of Operations
	Email: dteixeira@suffolkconstruction.com
Estimated date of Project Completion:	June 1, 2015
Category and Sub-Category:	Category I- Petroleum Related Remediation. Sub-category C. Petroleum Sites with Additional Contamination
RGP Termination Date:	September 10, 2015
Receiving Water:	Charles River

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

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

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

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

<u>Metal parameter</u>	<u>Total Recoverable Metal Limit @ H¹⁰ = 50 mg/l CaCO₃ for discharges in Massachusetts (ug/l)</u> <u>11/12</u>	<u>Minimum level=ML</u>
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		Freshwater	Saltwater		
	39. Antimony	5.6/ML 10			
✓	40. Arsenic **	10/ML20	36/ML 20		
	41. Cadmium **	0.2/ML10	8.9/ML 10		
	42. Chromium III (trivalent) **	48.8/ML15	100/ML 15		
	43. Chromium VI (hexavalent) **	11.4/ML10	50.3/ML 10		
	44. Copper **	5.2/ML15	3.7/ML 15		
✓	45. Lead **	1.3/ML20	8.5/ML 20		
	46. Mercury **	0.9/ML0.2	1.1/ML 0.2		
	47. Nickel **	29/ML20	8.2/ML 20		
	48. Selenium **	5/ML20	71/ML 20		
	49. Silver	1.2/ML10	2.2/ML 10		
✓	50. Zinc **	66.6/ML15	85.6/ML 15		
✓	51. Iron	1,000/ML 20			

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

Footnotes:

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

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

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

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

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

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

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

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

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

⁹ 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).

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

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

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

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

¹⁴ Temperature sampling per Method 170.1



8 April 2013
File No. 37820-040

US Environmental Protection Agency
Remediation GP Processing
5 Post Office Square
Mail Code OEP06-4
Boston, Massachusetts 02109-3912

Attention: Mr. Victor Alvarez

Subject: Notice of Intent (NOI) for NPDES Remediation General Permit
Temporary Construction Dewatering
1282 Boylston Street
Boston, Massachusetts 02138

Dear Mr. Alvarez:

On behalf of our client, The Abbey Group, and in accordance with the National Pollutant Discharge Elimination System (NPDES) Remediation General Permit (RGP) in Massachusetts, MAG910000, this letter submits the Notice of Intent (NOI) and applicable documentation as required by the US Environmental Protection Agency (USEPA) and Massachusetts Department of Environmental protection (MassDEP) for construction site dewatering under the Remediation General Permit.

Background Information

The site is located in the area bounded by Boylston Street to the north, buildings and the Fens to the east, an alleyway and Peterborough Street to the south and Jersey Street to the west. Existing site grades are relatively flat, ranging between approximately El. 16 and El. 18 Cambridge City Base (CCB). The site is currently an active parking lot.

In 2005, near surface soil with impacts due to petroleum and petroleum-related compounds was reported to MassDEP and the Site was assigned RTN 3-25708. Petroleum compounds below the applicable reporting limits were detected in shallow groundwater. A Class B-1 Response Action Outcome (RAO) was filed for the Site by Golder Associates in 2009.

Proposed Construction and Management of Dewatering Effluent

The project involves construction of a mixed residential and commercial space building with 14 levels of above ground space and 2 levels of below ground parking. Where on-site recharge is not feasible, the project plans to direct the dewatering effluent to the existing storm drain system which drains to the Charles River (Figures 2 and 3). Site work and associated construction dewatering are currently anticipated to begin 1 June 2013 and are estimated to continue intermittently for up to two years.

The Contractor will design, operate, and maintain dewatering and sedimentation control systems for off-site discharge. The systems will be designed to meet the permit requirements for suspended solids, pH, and other constituents in the effluent stream prior to discharge into the nearby storm drain.

Sampling and testing of the dewatering effluent will be conducted and the results reported as required by the permit. The Contractor's sedimentation system and/or dewatering procedures will be designed as necessary to comply with the Permit Discharge Criteria.

Contact Information

Applicant:

The Abbey Group
575 Boylston St.
Boston, MA 02116
Attention: Mr. William Keravuori
Tel: 617.266.8860

Representative preparing this application:

Haley & Aldrich, Inc.
465 Medford Street, Suite 2200
Boston, Massachusetts 02129-1400
Attention: Bryan Sweeney, P.E., Sr Vice
President
Tel: 617.886.7364

Analytical Testing

On 11 March 2013, Haley & Aldrich collected one groundwater sample from a groundwater observation well A2 (OW) located as shown on Figure 4. The sample was submitted to Alpha Analytical Laboratory of Westborough, Massachusetts, a MassDEP certified laboratory. Groundwater quality data are summarized on Table I.

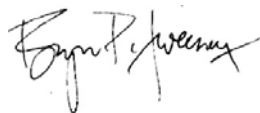
Closing

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.



Leah Samanta
Project Manager



Bryan Sweeney, P.E.
Senior Vice President

Attachments:

- Table I - Summary of Groundwater Quality Data
- Figure 1 - Site Locus
- Figure 2 - Boston Water and Sewer Commission Figure 22H
- Figure 3 - Boston Water and Sewer Commission Figure 23H
- Figure 4 - Existing Conditions
- Figure 5 - Treatment Schematic
- Appendix A - "Suggested Notice of Intent" (NOI) form as provided in Appendix V of the NPDES Remediation General Permit

US Environmental Protection Agency

8 April 2013

Page 3

Appendix B - Boston Water and Sewer Commission Permit to Dewater

Appendix C - Areas of Critical Environmental Concern

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

Appendix E - Endangered Species Act Documentation

Appendix F - Laboratory Data Reports

c: Boston Water and Sewer Commission; Attn: Francis McLaughlin
The Abbey Group; Attn: Mr. William Keravuori, Mr. Jason Epstein

G:\37820\040\NPDES\2013-0408_Emailed Application to EPA_MWRA\2013-0328-1282Boylston_NPDES-RGP_Letter_D.docx

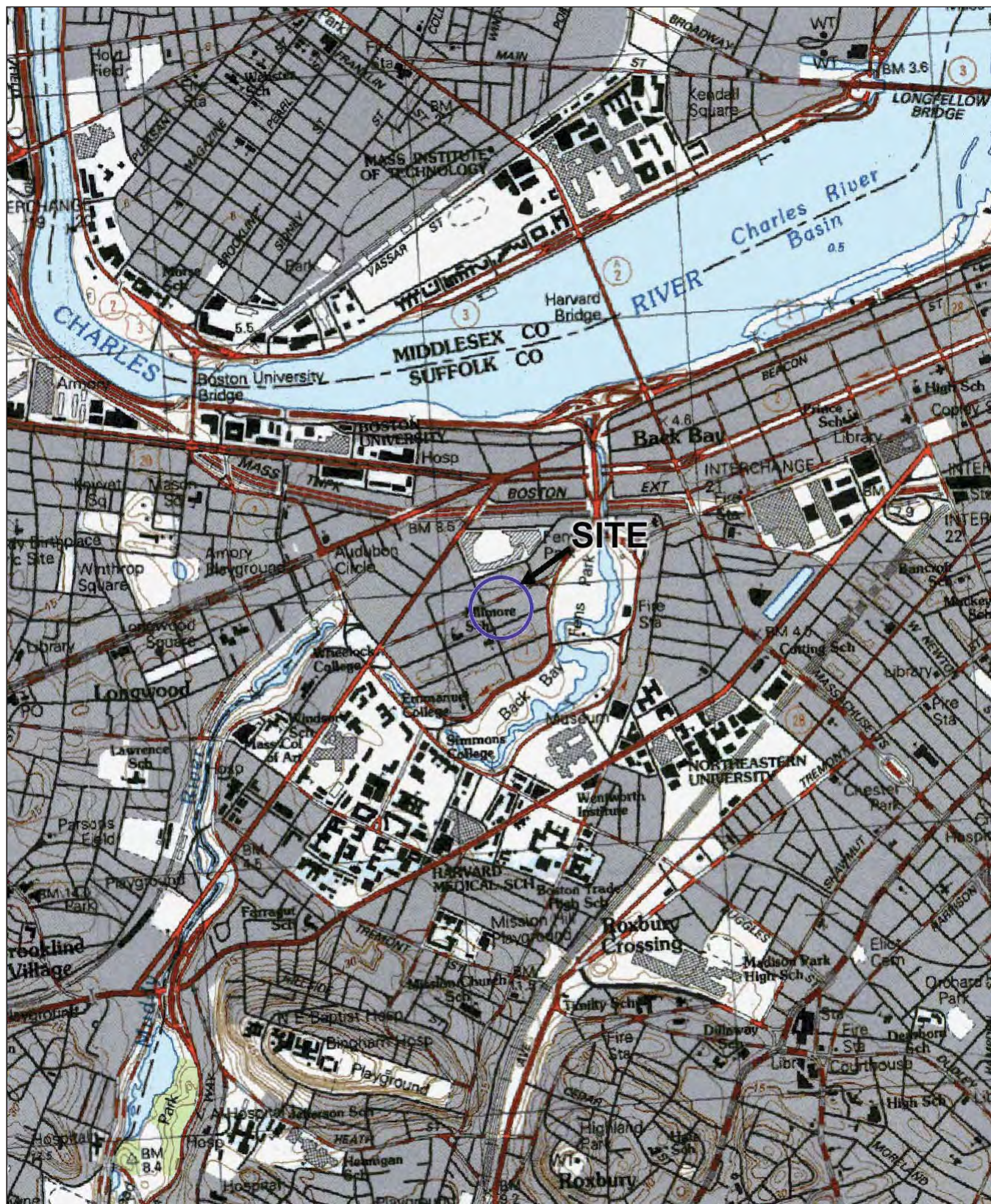
TABLE I
SUMMARY OF GROUNDWATER QUALITY DATA
1282 BOYLSTON STREET
BOSTON, MASSACHUSETTS
FILE NO. 37820-040

SAMPLING DESIGNATION	A2-03112013
SAMPLING DATE	3/11/2013
LAB SAMPLE ID	L1304009-01
Volatile Organics by GC/MS (ug/l)	
Benzene	0.8
2-Butanone	27
n-Butylbenzene	0.82
sec-Butylbenzene	2.8
Isopropylbenzene	4
n-Propylbenzene	5.3
Total BTEX	0.8
Total VOCs	40.72
Semivolatile Organics by GC/MS (ug/l)	
Total SVOCs	ND
Semivolatile Organics by GC/MS-SIM (ug/l)	
Acenaphthene	0.49
Fluoranthene	0.3
Anthracene	0.2
Benzo(ghi)perylene	ND(0.1)
Fluorene	0.37
Phenanthrene	0.32
Pyrene	0.27
1-Methylnaphthalene	0.85
Total Group I PAHs	ND
Total Group II PAHs	1.95
Total SVOCs	2.8
Total Metals (ug/l)	
Iron, Total	18000
Polychlorinated Biphenyls (ug/l)	
Total PCBs	ND
TPH (ug/l)	ND(2200)
Anions by Ion Chromatography (mg/l)	
Chloride	2570
General Chemistry (ug/L)	
Chlorine, Total Residual	ND(10)
Phenolics, Total	ND(15)
Solids, Total Suspended	26000

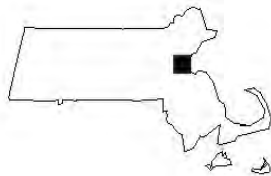
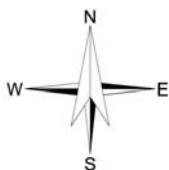
NOTES:

ND(2.5): Not detected. Number in parentheses is one-half the laboratory detection limit.

ug/L: micrograms per liter



SITE COORDINATES: 42°20'40"N 71°54'9"W



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

HALEY & ALDRICH

1282 BOYLSTON STREET
BOSTON, MASSACHUSETTS

PROJECT LOCUS

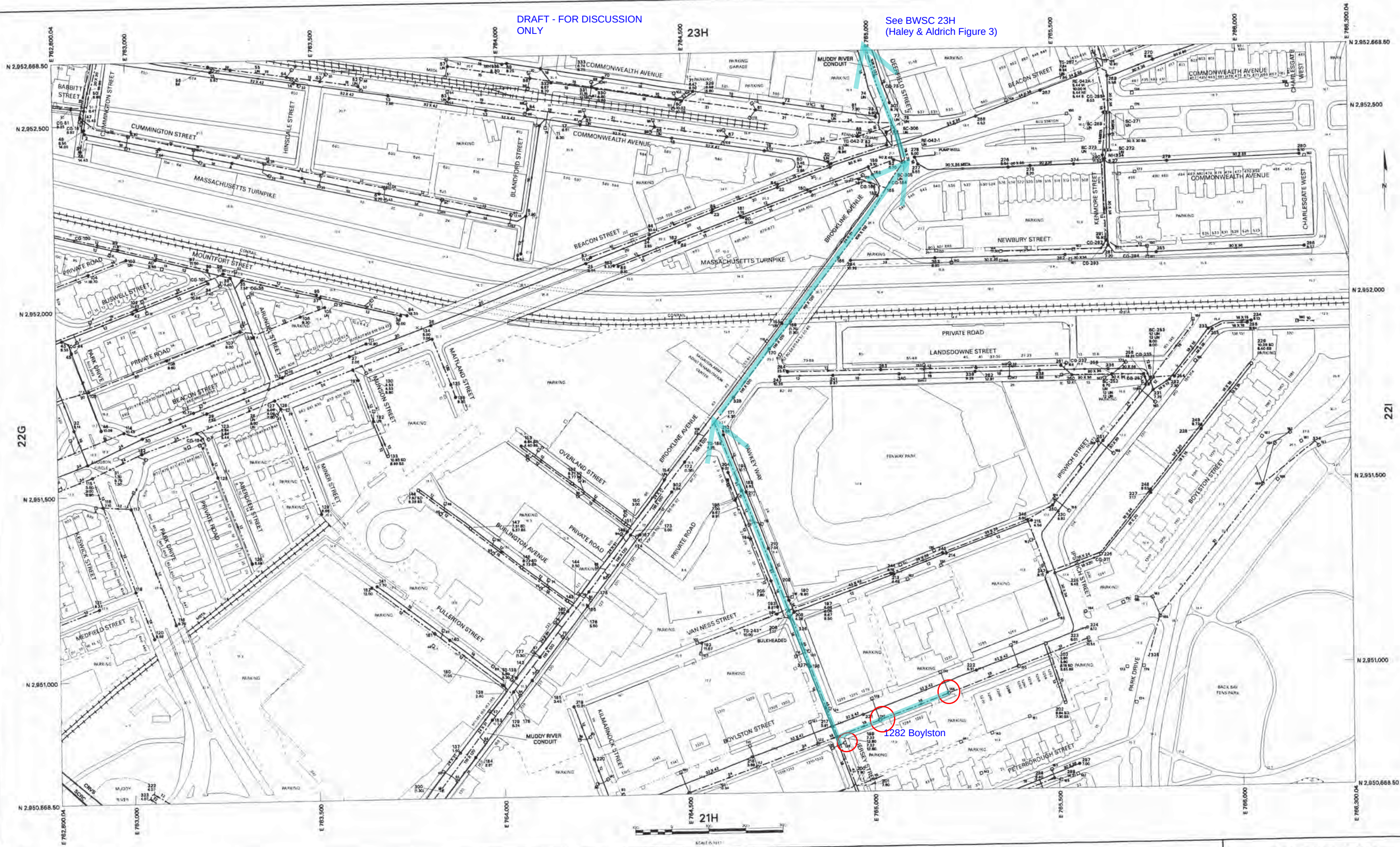
SCALE: 1:24,000
MARCH 2013

FIGURE 1

DRAFT - FOR DISCUSSION
ONLY

23H

See BWSC 23H
(Haley & Aldrich Figure 3)



NOTE: Spot Elevations shown are plotted in Boston City Base

500 FOOT GRID BASED ON MASSACHUSETTS
STATE PLANE COORDINATE SYSTEM, NAD 83
DATE OF PHOTOGRAPHY: MARCH 30, APRIL 1 & 17, 1995
VERTICAL DATUM BASED ON THE BOSTON CITY BASE
THE LANDBASE ON THIS MAP WAS COMPILED TO MEET THE ASPRS
STANDARD FOR CLASS 1 MAP ACCURACY

Date Produced
December 28, 1999



BOSTON WATER AND SEWER COMMISSION

SEWER SYSTEM MAP

FENWAY/KENMORE
BACK BAY/BEACON HILL

SHEET NO.

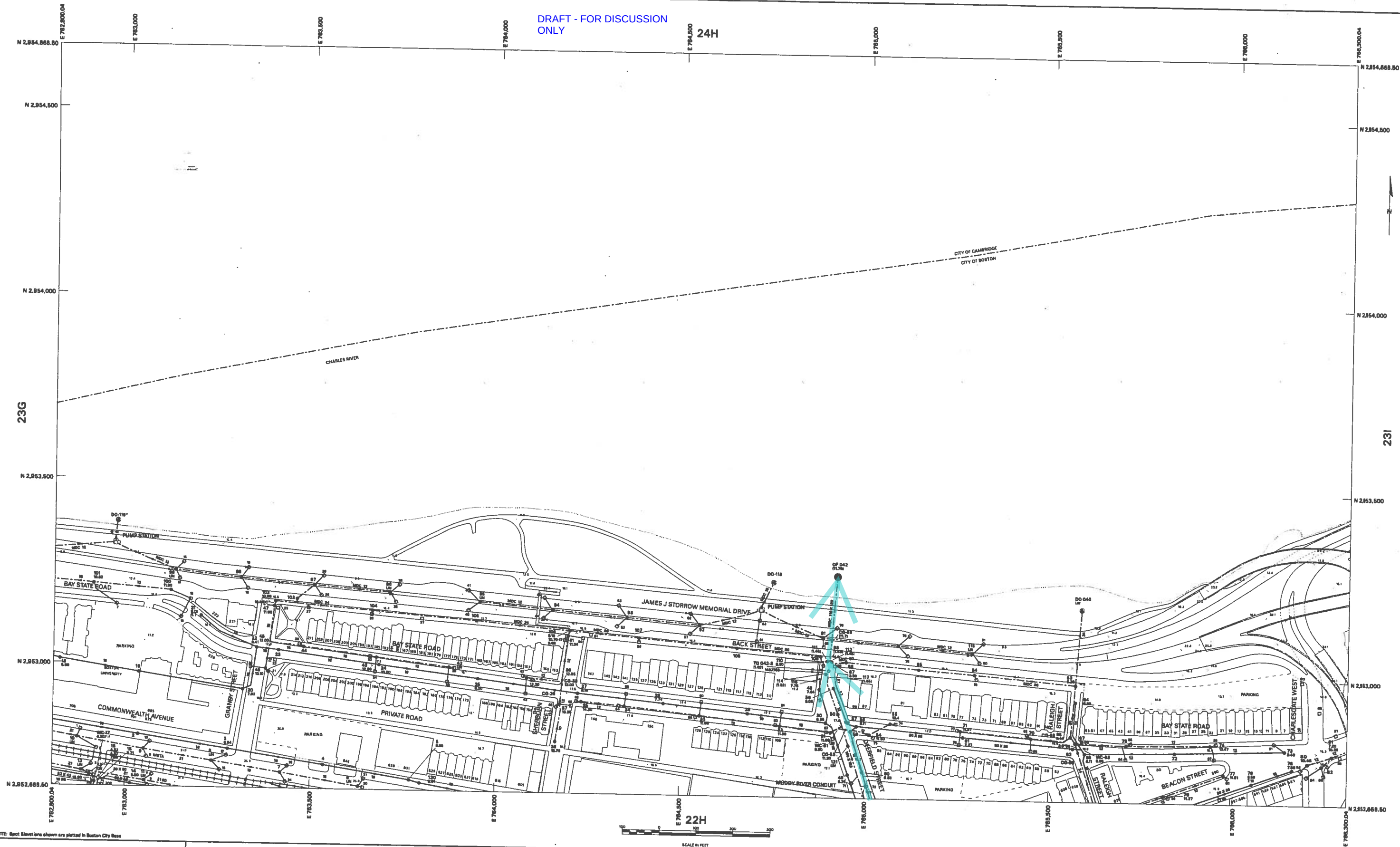
22H

DRAFT - FOR DISCUSSION
ONLY

24H

23G

23I



NOTE: Spot Elevations shown are plotted in Boston City Base

500 FOOT GRID BASED ON MASSACHUSETTS
STATE PLANE COORDINATE SYSTEM, NAD 83
DATE OF PHOTOGRAPHY - MARCH 30, APRIL 1 & 17, 1995
VERTICAL DATUM BASED ON THE BOSTON CITY BASE
THE LANDBASE ON THIS MAP WAS COMPILED TO MEET THE ASPRS
STANDARD FOR CLASS 1 MAP ACCURACY

Date Produced
December 28, 1999



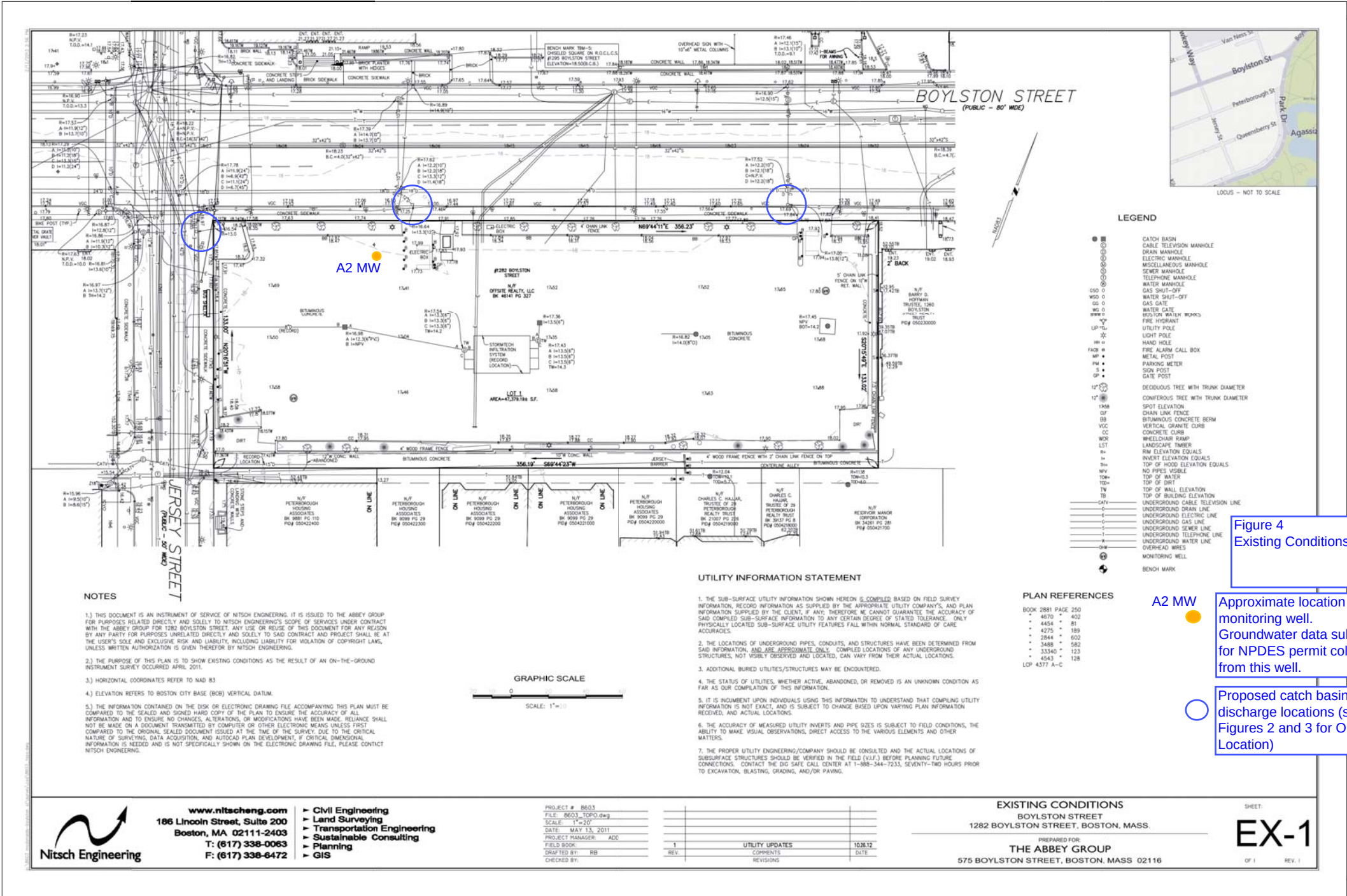
BOSTON WATER AND SEWER COMMISSION

SEWER SYSTEM MAP

FENWAY/KENMORE
BACK BAY/BEACON HILL

SHEET NO.

23H



1/20/2014 4:27:30 PM

THIS SHEET (SHEET) IS A PART OF A SET OF DRAWINGS. IT HAS BEEN REDUCED OR ENLARGED.

Bruner/Cott

Bruner/Cott & Associates, Inc.
190 Prospect Street
Cambridge, Massachusetts 02139
617 492 8400
www.brunercott.com

Architecture/Urban Design
Landscape Architecture
Space Planning/Interior Design

Rev.	Date	Remarks

Construction Documents
REVIEW SET

Date 15 February 2013
Scale 1" = 20'-0"
Project Number 287-00 (Revised 8/03)
Drawn By ADD



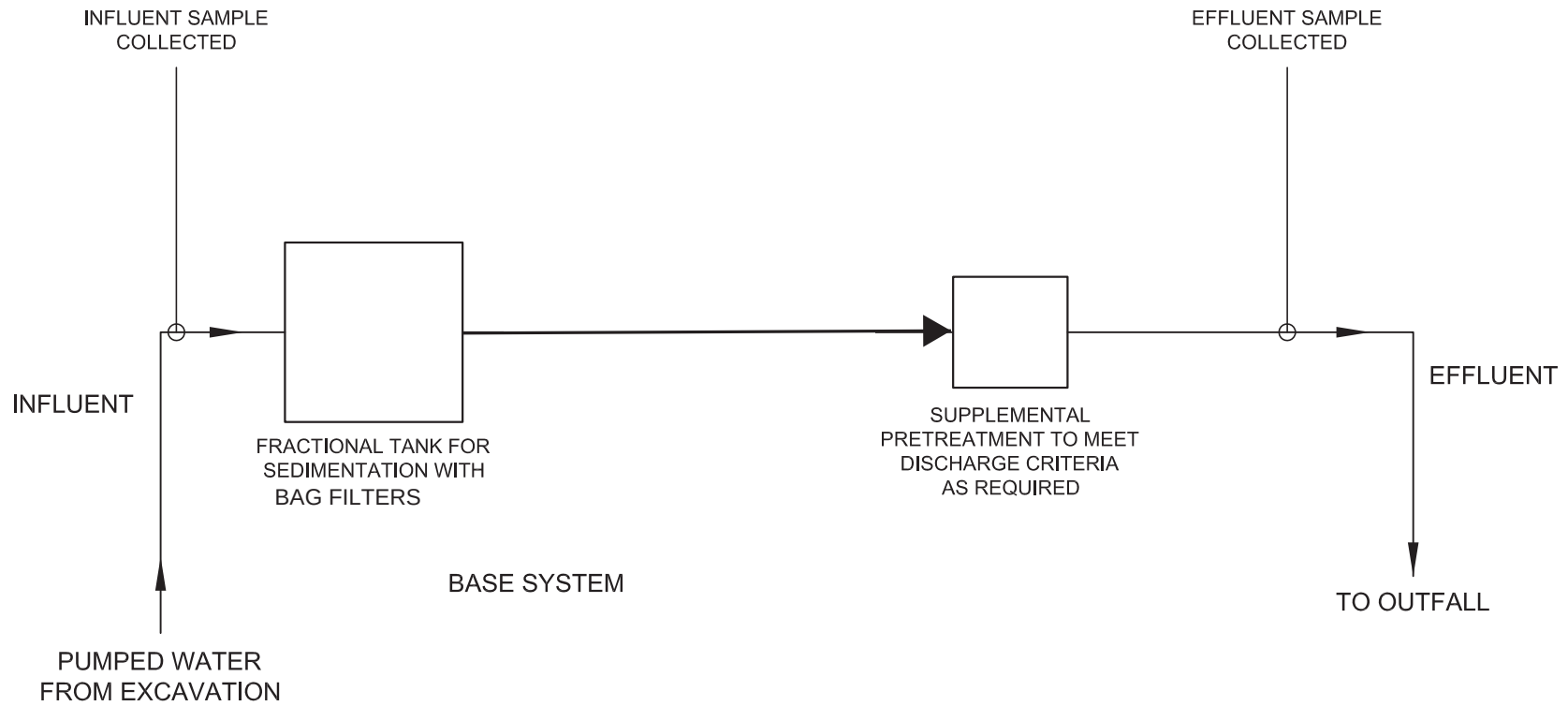
www.nitscheng.com
2 Center Plaza, Suite 430
Boston, MA 02108
T: (617) 338-0063
F: (617) 338-6472

1282 Boylston Street

Existing Conditions

Boston, MA

EX-1



DRAFT - FOR DISCUSSION ONLY

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**

1282 Boylston Street
Boston, Massachusetts

**PROPOSED
TREATMENT SYSTEM
SCHEMATIC**

Scale: None
April 2013

FIGURE 5

Appendix A
“Suggested Notice of Intent” (NOI) form as provided in Appendix V of NPDES
Remediation General Permit

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

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

a) Name of facility/site : 1282 Boylston Street		Facility/site mailing address:	
Location of facility/site : longitude: -71.097127 latitude: 42.344863	Facility SIC code(s): NA	Street: 1282 Boylston Street	
b) Name of facility/site owner : The Abbey Group		Town: Boston	
Email address of facility/site owner: wkeravuori@theabbeygroup.com		State: MA	Zip: 02215
Telephone no. of facility/site owner : 6172668860		County:	
Fax no. of facility/site owner :		Owner is (check one): 1. Federal ☐ 2. State/Tribal ☐	
Address of owner (if different from site):		3. Private ☒ 4. Other ☐ if so, describe:	
Street: 575 Boylston Street			
Town: Boston	State: MA	Zip: 02116	County: Suffolk
c) Legal name of operator : Suffolk Construction Company		Operator telephone no: 617-445-3500	
Operator fax no.: (617) 989-3359		Operator email: dteixeira@suffolkconstruction.c	
Operator contact name and title: David Teixeira			
Address of operator (if different from owner):		Street: 65 Allerton Street	
Town: Boston	State: MA	Zip: 02119	County: Suffolk

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 ☐ B. Fuel Oils and Other Oil Sites (including Residential Non-Business Remediation Discharges) ☐ C. Petroleum Sites with Additional Contamination ☒
II - Non Petroleum Site Remediation	A. Volatile Organic Compound (VOC) Only Sites ☐ B. VOC Sites with Additional Contamination ☐ C. Primarily Heavy Metal Sites ☐
III - Contaminated Construction Dewatering	A. General Urban Fill Sites ☐ B. Known Contaminated Sites ☐

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

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

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

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.

Table and laboratory report attached.

<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)		☐	☒	1	low flow			26,000			
2. Total Residual Chlorine (TRC)		☒	☐	1	low flow						
3. Total Petroleum Hydrocarbons (TPH)		☐	☒	1	low flow						
4. Cyanide (CN)	57125	☒	☐								
5. Benzene (B)	71432	☐	☒	1	low flow			0.8			
6. Toluene (T)	108883	☒	☐								
7. Ethylbenzene (E)	100414	☒	☐								
8. (m,p,o) Xylenes (X)	108883; 106423; 95476; 1330207	☒	☐								
9. Total BTEX ²	n/a	☐	☒	1	low flow			0.8			
10. Ethylene Dibromide (EDB) (1,2-Dibromoethane) ³	106934	☒	☐								
11. Methyl-tert-Butyl Ether (MtBE)	1634044	☒	☐								
12. tert-Butyl Alcohol (TBA) (Tertiary-Butanol)	75650	☒	☐								

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

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

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

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

<u>Parameter *</u>	<u>CAS Number</u>	<u>Believed Absent</u>	<u>Believed Present</u>	<u># of Samples</u>	<u>Sample Type (e.g., grab)</u>	<u>Analytical Method Used (method #)</u>	<u>Minimum Level (ML) of Test Method</u>	<u>Maximum daily value</u>		<u>Average daily value</u>	
								<u>concentration (ug/l)</u>	<u>mass (kg)</u>	<u>concentration (ug/l)</u>	<u>mass (kg)</u>
28. Vinyl Chloride (Chloroethene)	75014	☒	☐								
29. Acetone	67641	☒	☐								
30. 1,4 Dioxane	123911	☒	☐								
31. Total Phenols	108952	☒	☐	1	low flow						
32. Pentachlorophenol (PCP)	87865	☒	☐								
33. Total Phthalates (Phthalate esters) ⁴		☒	☐								
34. Bis (2-Ethylhexyl) Phthalate [Di- (ethylhexyl) Phthalate]	117817	☒	☐								
35. Total Group I Polycyclic Aromatic Hydrocarbons (PAH)		☒	☐	1	low flow						
a. Benzo(a) Anthracene	56553	☒	☐								
b. Benzo(a) Pyrene	50328	☒	☐								
c. Benzo(b)Fluoranthene	205992	☒	☐								
d. Benzo(k)Fluoranthene	207089	☒	☐								
e. Chrysene	21801	☒	☐								
f. Dibenzo(a,h)anthracene	53703	☒	☐								
g. Indeno(1,2,3-cd) Pyrene	193395	☒	☐								
36. Total Group II Polycyclic Aromatic Hydrocarbons (PAH)		☐	☒	1	low flow			1.95			

⁴The sum of individual phthalate compounds.

<u>Parameter *</u>	<u>CAS Number</u>	<u>Believed Absent</u>	<u>Believed Present</u>	<u># of Samples</u>	<u>Sample Type (e.g., grab)</u>	<u>Analytical Method Used (method #)</u>	<u>Minimum Level (ML) of Test Method</u>	<u>Maximum daily value</u>		<u>Average daily value</u>	
								<u>concentration (ug/l)</u>	<u>mass (kg)</u>	<u>concentration (ug/l)</u>	<u>mass (kg)</u>
h. Acenaphthene	83329	☐	☒	1	low flow			.49			
i. Acenaphthylene	208968	☒	☐								
j. Anthracene	120127	☐	☒	1	low flow			.2			
k. Benzo(ghi) Perylene	191242	☒	☐	1	low flow						
l. Fluoranthene	206440	☐	☒	1	low flow			.3			
m. Fluorene	86737	☐	☒	1	low flow			.37			
n. Naphthalene	91203	☒	☐								
o. Phenanthrene	85018	☐	☒	1	low flow			.32			
p. Pyrene	129000	☐	☒	1	low flow			.27			
37. Total Polychlorinated Biphenyls (PCBs)	85687; 84742; 117840; 84662; 131113; 117817.	☒	☐	1	low flow						
38. Chloride	16887006	☐	☒	1	low flow			2570000			
39. Antimony	7440360	☒	☐								
40. Arsenic	7440382	☒	☐								
41. Cadmium	7440439	☒	☐								
42. Chromium III (trivalent)	16065831	☒	☐								
43. Chromium VI (hexavalent)	18540299	☒	☐								
44. Copper	7440508	☒	☐								
45. Lead	7439921	☒	☐								
46. Mercury	7439976	☒	☐								
47. Nickel	7440020	☒	☐								
48. Selenium	7782492	☒	☐								
49. Silver	7440224	☒	☐								
50. Zinc	7440666	☒	☐								
51. Iron	7439896	☐	☒	1	low flow			18000			
Other (describe):		☐	☐								

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

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

<i>Step 1:</i> Do any of the metals in the influent exceed the effluent limits in Appendix III (i.e., the limits set at zero dilution)? Y ☒ N ☐	If yes, which metals? Iron										
<i>Step 2:</i> For any metals which exceed the Appendix III limits, calculate the dilution factor (DF) using the formula in Part I.A.3.c (step 2) of the NOI instructions or as determined by the State prior to the submission of this NOI. What is the dilution factor for applicable metals? <table border="1"> <tr> <td>Metal: Iron</td> <td>DF: 100</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: 100	Metal:	DF:	Metal:	DF:	Metal:	DF:	Etc.		Look up the limit calculated at the corresponding dilution factor in Appendix IV. Do any of the metals in the influent have the potential to exceed the corresponding effluent limits in Appendix IV (i.e., is the influent concentration above the limit set at the calculated dilution factor)? Y ☒ N ☐ If Y, list which metals: Iron
Metal: Iron	DF: 100										
Metal:	DF:										
Metal:	DF:										
Metal:	DF:										
Etc.											

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

a) A description of the treatment system, including a schematic of the proposed or existing treatment system:

The sedimentation system and/or dewatering procedures will be designed as necessary to comply with the Permit Discharge Criteria. See attached Figure 5.

b) Identify each applicable treatment unit (check all that apply):	Frac. tank ☐	Air stripper ☐	Oil/water separator ☐	Equalization tanks ☐	Bag filter ☐	GAC filter ☐
	Chlorination ☐	De-chlorination ☐	Other (please describe):			

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):

NA

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 ☐

Within facility (sewer) ☐

Storm drain ☒

Wetlands ☐

Other (describe):

b) Provide a narrative description of the discharge pathway, including the name(s) of the receiving waters:

2 CBs on Boylston, 1 on Jersey St. Discharge flows N or W on Boylston, NW on Yawkey Way, NE on Brookline Ave., NW on Deerfield, discharge to OF 042, Charles River.

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

B

e) Provide the reported or calculated seven day-ten year low flow (7Q10) of the receiving water

24.5

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.

Analytical data attached in Table I and Appendix G (laboratory report).

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:	Suffolk Construction Company Inc.
Operator signature:	David Teixeira
Printed Name & Title:	David Teixeira, VP, Operations
Date:	4/08/13

Appendix B
Boston Water and Sewer Commission Dewatering Discharge 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: Abbey Group Address: 575 Boylston Street. Boston, MA 02116

Phone number: 617.266.8860 Fax number: _____

Contact person name: William Keravuori Title: _____

Cell number: _____ Email address: _____

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: 1282 Boylston St. Boston, MA 02215 Neighborhood Fenway (BWSC sheets 23H, 22H, 21H)

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

Describe Proposed Pre-Treatment System(s): bag filters, sedimentation

BWSC Outfall No. OF 042 Receiving Waters Charles River

Temporary Discharges (Provide Anticipated Dates of Discharge): From June 2013 To June 2014

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

Permanent Discharges

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

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

Submit Completed Application to: Boston Water and Sewer Commission
Engineering Customer Services
980 Harrison Avenue, Boston, MA 02119
Attn: Francis M. McLaughlin, Manager Engineering Customer Services
E-mail: MclaughlinF@bwsc.org
Phone: 617-989-7208 Fax: 617-989-7716

BWSC Use Only: Date Received _____ Comments: _____

Appendix C
Massachusetts Areas of Critical Environmental Concern

MASSACHUSETTS AREAS OF CRITICAL ENVIRONMENTAL CONCERN

November 2010

Total Approximate Acreage: 268,000 acres

Approximate acreage and designation date follow ACEC names below.

Bourne Back River

(1,850 acres, 1989) Bourne

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

Cedar Swamp

(1,650 acres, 1975) Hopkinton and Westborough

Central Nashua River Valley

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

Cranberry Brook Watershed

(1,050 acres, 1983) Braintree and Holbrook

Ellisville Harbor

(600 acres, 1980) Plymouth

Fowl Meadow and Ponkapoag Bog

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

Golden Hills

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

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

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

Herring River Watershed

(4,450 acres, 1991) Bourne and Plymouth

Hinsdale Flats Watershed

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

Hockomock Swamp

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

Inner Cape Cod Bay

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

Kampoosa Bog Drainage Basin

(1,350 acres, 1995) Lee and Stockbridge

Karner Brook Watershed

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

Miscoe, Warren, and Whitehall Watersheds

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

Neponset River Estuary

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

Petapawag

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

Pleasant Bay

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

Pocasset River

(160 acres, 1980) Bourne

Rumney Marshes

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

Sandy Neck Barrier Beach System

(9,130 acres, 1978) Barnstable and Sandwich

Schenob Brook Drainage Basin

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

Squannassit

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

Three Mile River Watershed

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

Upper Housatonic River

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

Waquoit Bay

(2,580 acres, 1979) Falmouth and Mashpee

Weir River

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

Wellfleet Harbor

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

Weymouth Back River

(800 acres, 1982) Hingham and Weymouth

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

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



New England Field Office

Conserving the Nature of New England

Thursday,
March 07, 2013

ENDANGERED SPECIES

Overview
Consultation
N.E. Listed Species
Species Under Review
Recovery Activities
Habitat Conservation
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PARTNERS FOR FISH & WILDLIFE

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Accomplishments
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Habitat Restoration
Links

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Endangered Species

New England Listed Species

The following federally-listed species are protected in New England. This list includes links to species information on our National Fish and Wildlife Service website including current Federal Register documents, HCPs, Recovery Plans, Life History accounts.

Vertebrates

Mammals

Eastern Cougar - [Puma \(=Felis\) concolor cougar](#)
Gray Wolf - [Canis lupus](#)
Indiana Bat - [Myotis sodalis](#)
Canada Lynx - [Lynx canadensis](#)

Birds

Atlantic Coast Piping Plover - [Charadrius melodus](#)
Birds of North America Species Account [Piping Plover](#)
Atlantic Coast piping plover website [Piping Plover](#)
Roseate Tern - [Sterna dougallii dougallii](#)
Birds of North America Species Account [Roseate Tern](#)

Reptiles

Bog Turtle - [Clemmys muhlenbergii](#)
Northern Redbelly Cooter (Plymouth redbelly turtle) [Pseudemys rubriventris bangsii](#)
[Northern Redbelly Cooter 5-year Review](#); (pdf size 1.6MB*) May 2007

Fish

Atlantic Salmon - [Salmo salar](#) (Maine only)
[Maine Atlantic Salmon Atlas](#)

Invertebrates

Insects

American Burying Beetle - [Nicrophorus americanus](#)
Karner Blue Butterfly - [Lycaeides melissa samuelis](#)
Karner Blue Butterfly Fact sheet
Northeastern Beach Tiger Beetle - [Cicindela dorsalis dorsalis](#)
Puritan Tiger Beetle - [Cicindela puritana](#)
[Draft Puritan Tiger Beetle](#); (pdf size 2.4MB*) 5-year Review

Mussels

Dwarf Wedgemussel - [Alasmidonta heterodon](#)
[Dwarf Wedgemussel 5-Year Status Review 2007](#) (pdf size 1.14MB*)

Plants

Jesup's Milkvetch - [Astragalus robbinsii var. jesupi](#)
Northeastern Bulrush - [Scirpus ancistrochaetus](#)
Sandplain Gerardia - [Agalinis acuta](#)
Small Whorled Pogonia - [Isotria medeoloides](#)
Seabeach Amaranth - [Amaranthus pumilus](#) (historic)
American Chaffseed - [Schwalbea americana](#) (historic)
Eastern Prairie Fringed Orchid - [Platanthera leucophaea](#) (Maine only)
Furbish's Lousewort - [Pedicularis furbishiae](#) (Maine only)

Candidate species and species recently delisted are identified below, including links for additional information regarding their status.

Candidate Species

The Service has recently completed a status assessment for the following species and determined that federal listing is "warranted, but precluded", i.e. the status of the species indicates that it should be listed but the listing is superseded by higher listing actions.

While there is currently no obligation for Federal Agencies to consult with us regarding these species, coordination is encouraged to avoid project delays that may occur as a result of the species becoming federally-listed during the planning or construction phases of a given project. In addition, the Service is interested in promoting conservation actions that may

result in benefits to these species that will prevent the need to list it. Information regarding our [candidate conservation](#) program may help you decide if you would like to become involved.

- [New England Cottontail; Sylvilagus transitionalis](#)
- Red Knot [Calidris canutus rufa](#); [Red Knot Fact Sheet](#)

Delisted Species

Bald Eagle - [Haliaeetus leucocephalus](#)
[Bald Eagle Guidance](#)



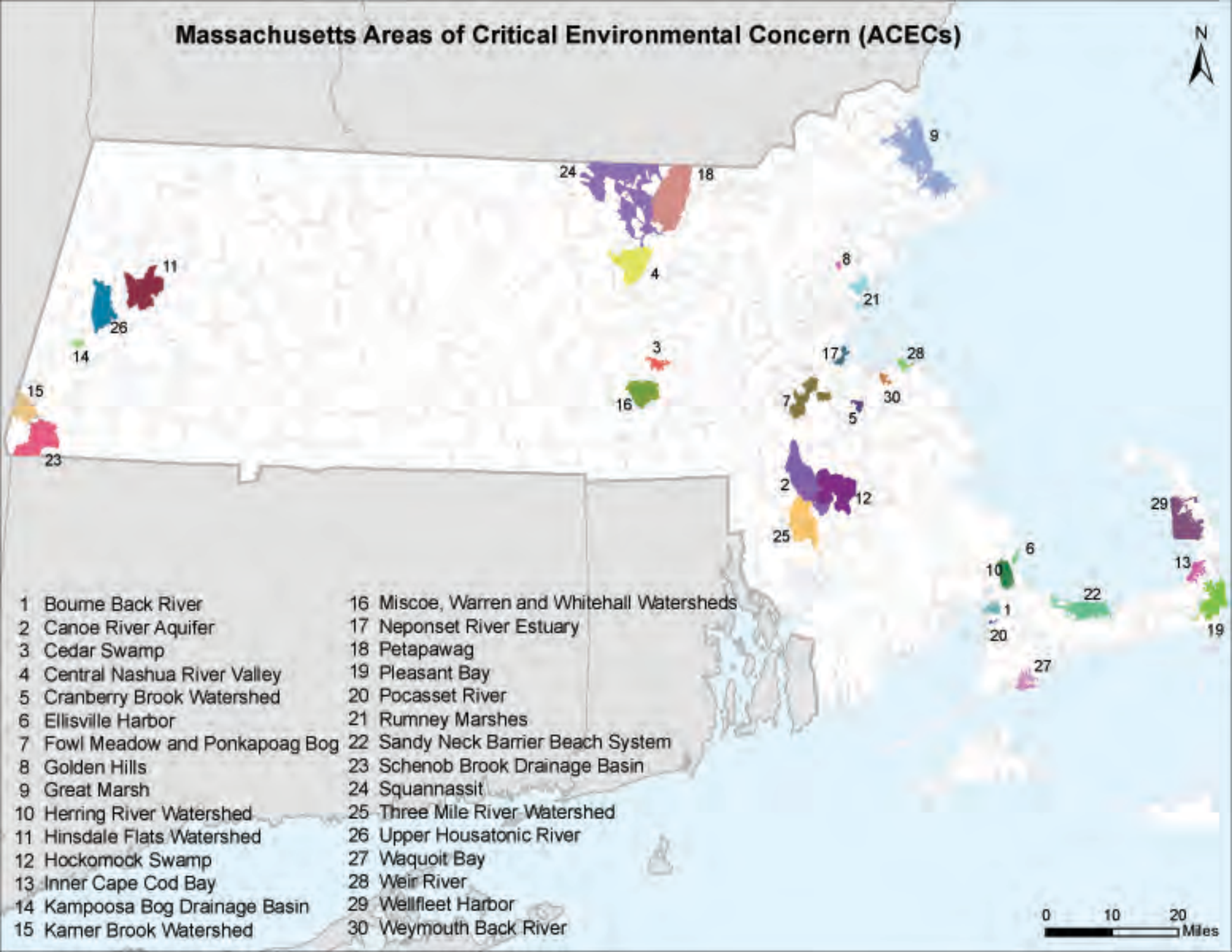
NCTC Eagle Cam

This Bald Eagle image is a link to a Service website that chronicles the activities of the eagle nest located on the grounds of the USFWS National Conservation Training Center near the Potomac River in Shepherdstown, West Virginia. The nest has been active for four seasons, fledging several juvenile bald eagles.

Files in PDF format will require Acrobat Reader to access the content. If you do not have a copy, please select the link [or click the image] to take you to the Adobe website where you can download a free copy. [Get Adobe Acrobat Reader](#)

Last updated: October 28, 2010

Massachusetts Areas of Critical Environmental Concern (ACECs)



- 1 Bourns Back River
- 2 Canoe River Aquifer
- 3 Cedar Swamp
- 4 Central Nashua River Valley
- 5 Cranberry Brook Watershed
- 6 Ellisville Harbor
- 7 Fowl Meadow and Ponkapoag Bog
- 8 Golden Hills
- 9 Great Marsh
- 10 Herring River Watershed
- 11 Hinsdale Flats Watershed
- 12 Hockomock Swamp
- 13 Inner Cape Cod Bay
- 14 Kampoosa Bog Drainage Basin
- 15 Kame Brook Watershed

- 16 Miscoe, Warren and Whitehall Watersheds
- 17 Neponset River Estuary
- 18 Petapawag
- 19 Pleasant Bay
- 20 Pocasset River
- 21 Rumney Marshes
- 22 Sandy Neck Barrier Beach System
- 23 Schenob Brook Drainage Basin
- 24 Squannassit
- 25 Three Mile River Watershed
- 26 Upper Housatonic River
- 27 Waquoit Bay
- 28 Weir River
- 29 Wellfleet Harbor
- 30 Weymouth Back River

0 10 20 Miles

Appendix D
Endangered Species Act Documentation



United States Department of the Interior



FISH AND WILDLIFE SERVICE

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

January 7, 2013

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 Mr. Brett Hillman of this office at 603-223-2541 if we can be of further assistance.

Sincerely yours,

Thomas R. Chapman
Supervisor
New England Field Office

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.

Revised 10/7/2011

MassDEP - Bureau of Waste Site Cleanup

Site Information: MCP Numerical Ranking System Map: 500 feet & 0.5 Mile Radii

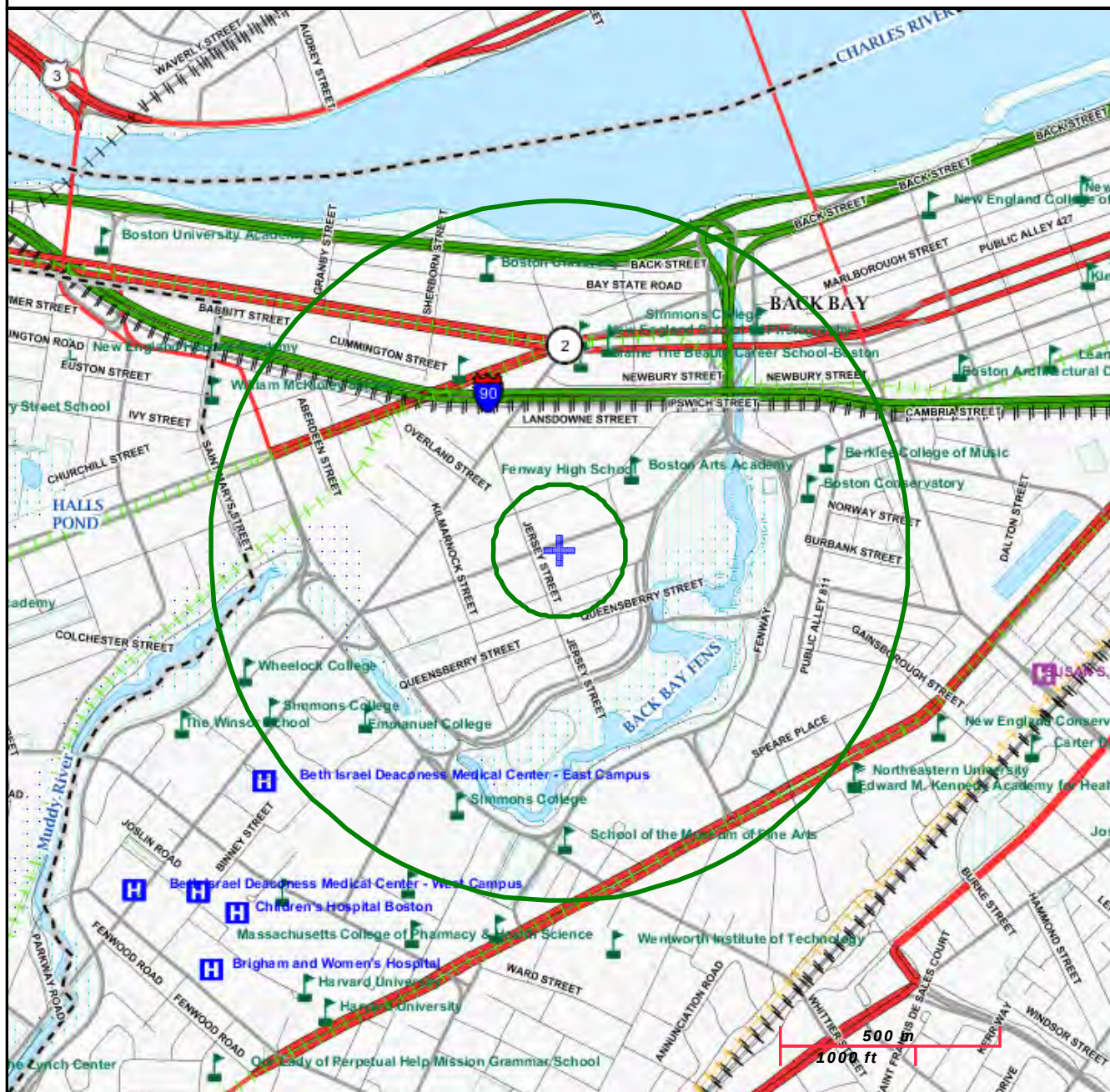
LAZ PARKING
1282 BOYLSTON ST. BOSTON, MA

NAD83 UTM Meters:
4690164mN, 327267mE (Zone: 19)
March 7, 2013

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



MassDEP
Commonwealth of Massachusetts
Department of Environmental Protection



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

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

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

Aquifers: Medium Yield, High Yield, EPA Sole Source.....

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

PWS Protection Areas: Zone II, IWPA, Zone A

Hydrography: Open Water, PWS Reservoir, Tidal Flat

Wetlands: Freshwater, Saltwater, Cranberry Bog

FEMA 100yr Floodplain; Protected Open Space; ACEC

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

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

The Official Website of the Department of Fish and Game (DFG)

Department of Fish and Game

Commissioner Mary B. Griffin

[DFG Home](#) [Mass.Gov Home](#) [State Agencies](#) [State Online Services](#)



MassWildlife
Massachusetts Division of Fisheries & Wildlife
Wayne F. MacCallum, Director



Natural Heritage & Endangered Species

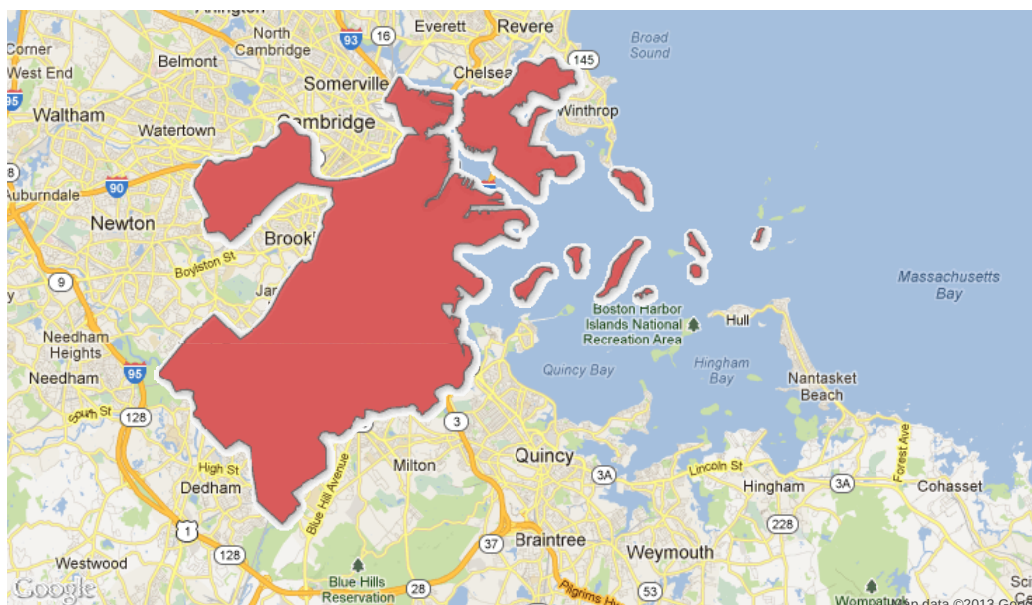
[Home](#) [Recreation](#) [Wildlife](#) [Fisheries](#) [Natural Heritage](#) [Habitat](#) [Education](#)

Rare Species by Town

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

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

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



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

Showing 1 to 46 of 46 entries			Search:		
			First	Previous	1 Next Last
Town	Scientific Name	Common Name	MESA Status	Most Recent Obs	
BOSTON	<i>Bartramia longicauda</i>	Upland Sandpiper	E	1993	
BOSTON	<i>Falco peregrinus</i>	Peregrine Falcon	E	2010	
BOSTON	<i>Vermivora chrysoptera</i>	Golden-winged Warbler	E	Historic	
BOSTON	<i>Apodrepanulatrix liberaria</i>	New Jersey Tea Inchworm	E	Historic	
BOSTON	<i>Metarranthis apiciaria</i>	Barrens Metarranthis	E	1934	
BOSTON	<i>Ageratina aromatica</i>	Lesser Snakeroot	E	1896	
BOSTON	<i>Carex striata</i>	Walter's Sedge	E	Historic	
BOSTON	<i>Houstonia longifolia</i>	Long-leaved Bluet	E	1918	
BOSTON	<i>Lycopus rubellus</i>	Gypsywort	E	1896	

Town	Scientific Name	Common Name	MESA Status	Most Recent Obs
BOSTON	Myriophyllum alterniflorum	Alternate-flowered Water-milfoil	E	Historic
BOSTON	Ranunculus micranthus	Tiny-flowered Buttercup	E	1891
BOSTON	Ambystoma laterale	Blue-spotted Salamander	SC	2011
BOSTON	Cicindela duodecimguttata	Twelve-spotted Tiger Beetle	SC	1910
BOSTON	Cicindela purpurea	Cow Path Tiger Beetle	SC	1928
BOSTON	Accipiter striatus	Sharp-shinned Hawk	SC	1898
BOSTON	Gavia immer	Common Loon	SC	1824
BOSTON	Sterna hirundo	Common Tern	SC	2010
BOSTON	Sternula antillarum	Least Tern	SC	2010
BOSTON	Tyto alba	Barn Owl	SC	1989
BOSTON	Abagrotis nefascia	Coastal Heathland Cutworm	SC	2001
BOSTON	Pyrrhia aurantiago	Orange Sallow Moth	SC	1988
BOSTON	Somatochlora linearis	Mocha Emerald	SC	2009
BOSTON	Ligumia nasuta	Eastern Pondmussel	SC	1841
BOSTON	Terrapene carolina	Eastern Box Turtle	SC	1939
BOSTON	Liatris scariosa var. novae-angliae	New England Blazing Star	SC	1933
BOSTON	Setaria parviflora	Bristly Foxtail	SC	2001
BOSTON	Suaeda calceoliformis	American Sea-blite	SC	1909
BOSTON	Scaphiopus holbrookii	Eastern Spadefoot	T	1932
BOSTON	Cicindela rufiventris hentzii	Eastern Red-bellied Tiger Beetle	T	1927
BOSTON	Ammodramus savannarum	Grasshopper Sparrow	T	1993
BOSTON	Charadrius melodus	Piping Plover	T	2011
BOSTON	Poocetes gramineus	Vesper Sparrow	T	1985
BOSTON	Gasterosteus aculeatus	Threespine Stickleback	T	2000
BOSTON	Aristida purpurascens	Purple Needlegrass	T	1800s
BOSTON	Aristida tuberculosa	Seabeach Needlegrass	T	1877
BOSTON	Asclepias verticillata	Linear-leaved Milkweed	T	1878
BOSTON	Boechera missouriensis	Green Rock-cress	T	1930
BOSTON	Desmodium cuspidatum	Large-bracted Tick-trefoil	T	1896
BOSTON	Eriophorum gracile	Slender Cottongrass	T	1885
BOSTON	Linum medium var. texanum	Rigid Flax	T	1909
BOSTON	Ophioglossum pusillum	Adder's-tongue Fern	T	1884
BOSTON	Platanthera flava var. herbiola	Pale Green Orchis	T	1908
BOSTON	Rumex pallidus	Seabeach Dock	T	1984
BOSTON	Sanicula odorata	Long-styled Sanicle	T	Historic
BOSTON	Scirpus longii	Long's Bulrush	T	1907
BOSTON	Viola brittoniana	Britton's Violet	T	1909

Show 50  entries

Show Additional Info

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Massachusetts Division of Fisheries and Wildlife, 1 Rabbit Hill Rd, Westborough, MA 01581

Tel: (508) 389-6300; Fax: (508) 389-7890

Natural Heritage & Endangered Species Program Tel: (508) 389-6360; Fax: (508) 389-7891

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

nps.gov

National Park Service
U.S. Department of the Interior



National Register
of
Historic Places



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FULL RECORD DISPLAY

Current Record: 12 of 25 in NPS Digital Library

Go back to: [Title List](#) | [Revise Search](#)

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Fenway-Boylston Street District [Image]

URL: <http://pdfhost.focus.nps.gov/docs/NRHP/Text/84002875.pdf>
Link will open in a new browser window

URL: <http://pdfhost.focus.nps.gov/docs/NRHP/Photos/84002875.pdf>
Link will open in a new browser window

Publisher: National Park Service

Published: 09/04/1984

Access: Public access

Restrictions: All Rights Reserved

Format/Size: Physical document with text, photos and map

Language: eng: English

Note: Fenway, Boylston, Westland, and Hemenway Sts.

Item No.: 84002875 *NRIS (National Register Information System)*

Subject: [ARCHITECTURE/ENGINEERING](#)

Subject: [ARCHITECTURE](#)

Subject: [COMMUNITY PLANNING AND DEVELOPMENT](#)

Subject: [LANDSCAPE ARCHITECTURE](#)

Subject: [QUEEN ANNE](#)

Subject: [DISTRICT](#)

Subject: [1900-1924](#)

Subject: [1875-1899](#)

Keywords: 1891;1910

Place: MASSACHUSETTS -- Suffolk County -- Boston

Record Number: 397529

Record Owner: National Register of Historic Places

[Freedom of Information Act](#)

[Privacy Policy](#)

[Disclaimer](#)

[Accessibility](#)

Last updated: 03/07/1373

<http://nrhp.focus.nps.gov/natregsearchresult.do?fullresult=true&recordid=11>

3/7/2013

Massachusetts Cultural Resource Information System

MACRIS

MACRIS Search Results

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

Inv. No.	Property Name	Street	Town	Year
BOS.2241	Seville Restaurant	1-2 Boylston Pl	Boston	1920
BOS.2242	Ancient Landmark Building	3 Boylston Pl	Boston	1888
BOS.2243	Tavern Club	4 Boylston Pl	Boston	1820
BOS.2244	Hilt, Henry - Rayner, Thomas House	5-6 Boylston Pl	Boston	1844
BOS.2623	Trinity Church	Boylston St	Boston	1875
BOS.2625	Boston Public Library Addition	Boylston St	Boston	1969
BOS.2626	Hotel Lenox	Boylston St	Boston	1901
BOS.2639	Museum of Natural History	Boylston St	Boston	1863
BOS.3898	New Old South Church Parsonage	Boylston St	Boston	1872
BOS.9009	Boylston Street Subway Station	Boylston St	Boston	1897
BOS.9014	Arlington Street Subway Station	Boylston St	Boston	1921
BOS.9015	Copley Square Subway Station	Boylston St	Boston	1915
BOS.9016	Copley Station Entrance Canopy	Boylston St	Boston	1925
BOS.9017	Massachusetts Avenue - Auditorium Subway Station	Boylston St	Boston	1914
BOS.9021	Brooks, Phillips Statue	Boylston St	Boston	1910
BOS.9273	Boylston Street Bridge	Boylston St	Boston	1880
BOS.9274	O'Reily, John Boyle Memorial	Boylston St	Boston	1896
BOS.9285	Mother's Rest Children's Playground	Boylston St	Boston	
BOS.9333	Anderson, Larz Bridge	Boylston St	Boston	1915
bos.9644	Boylston Street Subway Tunnel	Boylston St	Boston	1914
BOS.2245	Boylston Building	2-22 Boylston St	Boston	1887
BOS.13028		8 Boylston St	Boston	1897
BOS.13029		10 Boylston St	Boston	1897
BOS.8849	Weber, Anthony Double House	16 Boylston St	Boston	1894
BOS.8850	Boyd, John W. House	18 Boylston St	Boston	1892
BOS.2246	Boston Edison Electric Illuminating Company	25-39 Boylston St	Boston	1906

Inv. No.	Property Name	Street	Town	Year
BOS.8851	McLeod, Robert L. Double House	33 Boylston St	Boston	1904
BOS.15918		36-46 Boylston St	Boston	1941
BOS.2247	Young Men's Christian Union	48 Boylston St	Boston	1875
BOS.8852	Dellit, Charles House	53 Boylston St	Boston	1880
BOS.2248	Hotel Touraine	62 Boylston St	Boston	1897
BOS.2249	Little Building	74-94 Boylston St	Boston	1915
BOS.2250	Colonial Building - Colonial Theatre	96-106 Boylston St	Boston	1899
BOS.2251	Walker, Joseph W. Building	114-116 Boylston St	Boston	1891
BOS.2252	Walker, Joseph W. Building	120-124 Boylston St	Boston	1901
BOS.2253	Tucker, Beza - Ginter Building	130-132 Boylston St	Boston	1885
BOS.2254		134-136 Boylston St	Boston	1890
BOS.2255	White, S. S. White Dental Company Building	138-140 Boylston St	Boston	1897
BOS.2256	Tucker, Beza House	144 Boylston St	Boston	1815
BOS.2257		150 Boylston St	Boston	1890
BOS.2258		154-156 Boylston St	Boston	1925
BOS.2259	Vose and Sons Piano Company Building	158-160 Boylston St	Boston	1899
BOS.2260	Steinert, M. and Sons Musical Company Building	162 Boylston St	Boston	1896
BOS.8853	Graumann, Charles F. House and Cigar Shop	169A&B Boylston St	Boston	1896
BOS.2365	Garden Building	244-250 Boylston St	Boston	1911
BOS.2603	Arlington Building	324-334 Boylston St	Boston	1904
BOS.2604		336-342 Boylston St	Boston	1898
BOS.2605		344-350 Boylston St	Boston	1897
BOS.2630	Arlington Street Church	351-355 Boylston St	Boston	1861
BOS.2606	Mayflower Building	352-360 Boylston St	Boston	1906
BOS.2631		355 Boylston St	Boston	1910
BOS.2632	Universalist Publishing Company Building	359-363 Boylston St	Boston	1909
BOS.2607		364-368 Boylston St	Boston	1926
BOS.2608	Eldredge Building	376 Boylston St	Boston	1894
BOS.2609		380 Boylston St	Boston	1927
BOS.2610	Bigelow - Kennard Building	384-390 Boylston St	Boston	1928
BOS.2611		392 Boylston St	Boston	1861
BOS.2612		396-398 Boylston St	Boston	1861
BOS.2633		399 Boylston St	Boston	1983
BOS.2613		400-402 Boylston St	Boston	1908
BOS.2614		406-410 Boylston St	Boston	1861
BOS.2615	Berkeley Building	414-426 Boylston St	Boston	1905
BOS.2634	Warren Chambers Building	415-421 Boylston St	Boston	1896
BOS.2635		423 Boylston St	Boston	1868

Inv. No.	Property Name	Street	Town	Year
BOS.2636		429 Boylston St	Boston	1868
BOS.2637		431-439 Boylston St	Boston	1868
BOS.9022	Street Clock	439 Boylston St	Boston	
BOS.2638	Woodbury Building	443-445 Boylston St	Boston	1898
BOS.2616	Stuart Building	452-462 Boylston St	Boston	1910
BOS.2617		468-472 Boylston St	Boston	1947
BOS.2618		476 Boylston St	Boston	1910
BOS.2619		480 Boylston St	Boston	1956
BOS.2640	New England Life Insurance Building	485-519 Boylston St	Boston	1938
BOS.2620		500 Boylston St	Boston	1963
BOS.2621		510 Boylston St	Boston	1959
BOS.2622		520-530 Boylston St	Boston	1957
BOS.2641		535-541 Boylston St	Boston	1971
BOS.2642		543-547 Boylston St	Boston	1972
BOS.2643		551 Boylston St	Boston	1915
BOS.2644		553 Boylston St	Boston	1915
BOS.2645		557 Boylston St	Boston	1923
BOS.2646		561 Boylston St	Boston	1915
BOS.2647		567 Boylston St	Boston	1912
BOS.2648		569 Boylston St	Boston	1912
BOS.2649		571-575 Boylston St	Boston	1913
BOS.2650	Wesleyan Building	579-583 Boylston St	Boston	1912
BOS.2651	Chauncy Hall Building	585-591 Boylston St	Boston	1916
BOS.2652	McGraw-Hill Building	601-607 Boylston St	Boston	1959
BOS.2653	New Old South Church	635-645 Boylston St	Boston	1874
BOS.2654		647 Boylston St	Boston	1886
BOS.2655		651-655 Boylston St	Boston	1915
BOS.2656		657 Boylston St	Boston	1915
BOS.2657		661 Boylston St	Boston	1915
BOS.2658		665 Boylston St	Boston	1915
BOS.2659		667-669 Boylston St	Boston	1888
BOS.2660		671-673 Boylston St	Boston	1900
BOS.2661		675-691 Boylston St	Boston	1984
BOS.2624	Boston Public Library	700 Boylston St	Boston	1888
BOS.2662		707-711 Boylston St	Boston	1892
BOS.2663	Driscoll, The	715 Boylston St	Boston	1908
BOS.2664		717-723 Boylston St	Boston	1900
BOS.2665	Hayes, John C. Building	727-731 Boylston St	Boston	1895

Inv. No.	Property Name	Street	Town	Year
BOS.2666	Boylston Chambers	733-739 Boylston St	Boston	1900
BOS.2667		749-751 Boylston St	Boston	1901
BOS.2668		753-757 Boylston St	Boston	1911
BOS.2627		760 Boylston St	Boston	1965
BOS.2669		761 Boylston St	Boston	1908
BOS.2670	Boylston Apartments	777-789 Boylston St	Boston	1901
BOS.2628		780 Boylston St	Boston	1964
BOS.2671		791 Boylston St	Boston	1901
BOS.2672		793 Boylston St	Boston	1902
BOS.2673		799 Boylston St	Boston	1897
BOS.2674	Sunoco Gas Station	801-807 Boylston St	Boston	1960
BOS.2675	Sack Paris Cinema	811 Boylston St	Boston	1910
BOS.2676		815-825 Boylston St	Boston	1906
BOS.2677		827-829 Boylston St	Boston	1890
BOS.2678		839-841 Boylston St	Boston	1963
BOS.2679		843-845 Boylston St	Boston	1893
BOS.2680		851-855 Boylston St	Boston	1909
BOS.2681		859 Boylston St	Boston	1918
BOS.2682		863 Boylston St	Boston	1918
BOS.2683		867 Boylston St	Boston	1910
BOS.2684		885-889 Boylston St	Boston	1907
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BOS.2686		903 Boylston St	Boston	1892
BOS.2687		907-911 Boylston St	Boston	1892
BOS.2688		915-921 Boylston St	Boston	1910
BOS.2689	Tennis and Racquet Club Lodging House	923-925 Boylston St	Boston	1902
BOS.2690	Tennis and Racquet Club	929-939 Boylston St	Boston	1902
BOS.2691	Boston Ladder 15 and Engine 33 Firehouse	943-951 Boylston St	Boston	1885
BOS.2692	Back Bay Police Station	955 Boylston St	Boston	1886
BOS.2693	Boston Division 16 Police Station	957 Boylston St	Boston	1920
BOS.2629	State Street Trust Company Building	1046-1050 Boylston St	Boston	1902
BOS.7353	Church of the Redemption (Universalist)	1103 Boylston St	Boston	1923
BOS.7354	Fenmore Apartments	1109 Boylston St	Boston	1914
BOS.7355	Fenmore Apartments	1111 Boylston St	Boston	1914
BOS.7351	Fritz-Carlton Hotel - Bostonian Hotel	1136-1150 Boylston St	Boston	1901
BOS.7352	Massachusetts Historical Society Building	1154 Boylston St	Boston	1899

Massachusetts Cultural Resource Information System

MACRIS

MACRIS Search Results

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

Inv. No.	Property Name	Street	Town	Year
BOS.2241	Seville Restaurant	1-2 Boylston Pl	Boston	1920
BOS.2242	Ancient Landmark Building	3 Boylston Pl	Boston	1888
BOS.2243	Tavern Club	4 Boylston Pl	Boston	1820
BOS.2244	Hilt, Henry - Rayner, Thomas House	5-6 Boylston Pl	Boston	1844
BOS.2623	Trinity Church	Boylston St	Boston	1875
BOS.2625	Boston Public Library Addition	Boylston St	Boston	1969
BOS.2626	Hotel Lenox	Boylston St	Boston	1901
BOS.2639	Museum of Natural History	Boylston St	Boston	1863
BOS.3898	New Old South Church Parsonage	Boylston St	Boston	1872
BOS.9009	Boylston Street Subway Station	Boylston St	Boston	1897
BOS.9014	Arlington Street Subway Station	Boylston St	Boston	1921
BOS.9015	Copley Square Subway Station	Boylston St	Boston	1915
BOS.9016	Copley Station Entrance Canopy	Boylston St	Boston	1925
BOS.9017	Massachusetts Avenue - Auditorium Subway Station	Boylston St	Boston	1914
BOS.9021	Brooks, Phillips Statue	Boylston St	Boston	1910
BOS.9273	Boylston Street Bridge	Boylston St	Boston	1880
BOS.9274	O'Reily, John Boyle Memorial	Boylston St	Boston	1896
BOS.9285	Mother's Rest Children's Playground	Boylston St	Boston	
BOS.9333	Anderson, Larz Bridge	Boylston St	Boston	1915
bos.9644	Boylston Street Subway Tunnel	Boylston St	Boston	1914
BOS.2245	Boylston Building	2-22 Boylston St	Boston	1887
BOS.13028		8 Boylston St	Boston	1897
BOS.13029		10 Boylston St	Boston	1897
BOS.8849	Weber, Anthony Double House	16 Boylston St	Boston	1894
BOS.8850	Boyd, John W. House	18 Boylston St	Boston	1892
BOS.2246	Boston Edison Electric Illuminating Company	25-39 Boylston St	Boston	1906

Inv. No.	Property Name	Street	Town	Year
BOS.8851	McLeod, Robert L. Double House	33 Boylston St	Boston	1904
BOS.15918		36-46 Boylston St	Boston	1941
BOS.2247	Young Men's Christian Union	48 Boylston St	Boston	1875
BOS.8852	Dellit, Charles House	53 Boylston St	Boston	1880
BOS.2248	Hotel Touraine	62 Boylston St	Boston	1897
BOS.2249	Little Building	74-94 Boylston St	Boston	1915
BOS.2250	Colonial Building - Colonial Theatre	96-106 Boylston St	Boston	1899
BOS.2251	Walker, Joseph W. Building	114-116 Boylston St	Boston	1891
BOS.2252	Walker, Joseph W. Building	120-124 Boylston St	Boston	1901
BOS.2253	Tucker, Beza - Ginter Building	130-132 Boylston St	Boston	1885
BOS.2254		134-136 Boylston St	Boston	1890
BOS.2255	White, S. S. White Dental Company Building	138-140 Boylston St	Boston	1897
BOS.2256	Tucker, Beza House	144 Boylston St	Boston	1815
BOS.2257		150 Boylston St	Boston	1890
BOS.2258		154-156 Boylston St	Boston	1925
BOS.2259	Vose and Sons Piano Company Building	158-160 Boylston St	Boston	1899
BOS.2260	Steinert, M. and Sons Musical Company Building	162 Boylston St	Boston	1896
BOS.8853	Graumann, Charles F. House and Cigar Shop	169A&B Boylston St	Boston	1896
BOS.2365	Garden Building	244-250 Boylston St	Boston	1911
BOS.2603	Arlington Building	324-334 Boylston St	Boston	1904
BOS.2604		336-342 Boylston St	Boston	1898
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BOS.2674	Sunoco Gas Station	801-807 Boylston St	Boston	1960
BOS.2675	Sack Paris Cinema	811 Boylston St	Boston	1910
BOS.2676		815-825 Boylston St	Boston	1906
BOS.2677		827-829 Boylston St	Boston	1890
BOS.2678		839-841 Boylston St	Boston	1963
BOS.2679		843-845 Boylston St	Boston	1893
BOS.2680		851-855 Boylston St	Boston	1909
BOS.2681		859 Boylston St	Boston	1918
BOS.2682		863 Boylston St	Boston	1918
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BOS.2693	Boston Division 16 Police Station	957 Boylston St	Boston	1920
BOS.2629	State Street Trust Company Building	1046-1050 Boylston St	Boston	1902
BOS.7353	Church of the Redemption (Universalist)	1103 Boylston St	Boston	1923
BOS.7354	Fenmore Apartments	1109 Boylston St	Boston	1914
BOS.7355	Fenmore Apartments	1111 Boylston St	Boston	1914
BOS.7351	Fritz-Carlton Hotel - Bostonian Hotel	1136-1150 Boylston St	Boston	1901
BOS.7352	Massachusetts Historical Society Building	1154 Boylston St	Boston	1899

Appendix F
Laboratory Data Reports



ANALYTICAL REPORT

Lab Number:	L1304009
Client:	Haley & Aldrich, Inc. 465 Medford Street, Suite 2200 Charlestown, MA 02129
ATTN:	Leah Samanta
Phone:	(617) 886-7400
Project Name:	1282 BOYLSTON STREET
Project Number:	37820-040
Report Date:	03/15/13

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

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

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



Project Name: 1282 BOYLSTON STREET
Project Number: 37820-040

Lab Number: L1304009
Report Date: 03/15/13

Alpha Sample ID	Client ID	Sample Location	Collection Date/Time
L1304009-01	A2-03112013	Not Specified	03/11/13 14:40
L1304009-02	A2-03112013 (FIELD FILTERED)	Not Specified	03/11/13 00:00
L1304009-03	TRIP BLANK	Not Specified	03/11/13 00:00

Project Name: 1282 BOYLSTON STREET
Project Number: 37820-040

Lab Number: L1304009
Report Date: 03/15/13

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 free of charge for 30 days from the date the project is completed. After 30 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.

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

Project Name: 1282 BOYLSTON STREET
Project Number: 37820-040

Lab Number: L1304009
Report Date: 03/15/13

Case Narrative (continued)

Sample Receipt

The samples were field filtered for Dissolved Metals.

Total Metals

L1304009-01 has elevated detection limits for all analytes, except Iron and Mercury, due to the dilutions required by matrix interferences encountered during analysis.

The WG594802-4 MS recovery, performed on L1304009-01, is above the acceptance criteria for Zinc (122%).

A post digestion spike was performed with an acceptable recovery of 114%.

Dissolved Metals

L1304009-01 has elevated detection limits for all analytes, except Iron and Mercury, due to the dilution required by matrix interferences encountered during analysis.

The WG594724-4 MS recovery for Iron (200%), performed on L1304009-01, does not apply because the sample concentration is greater than four times the spike amount added.

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:



Cynthia McQueen

Title: Technical Director/Representative

Date: 03/15/13

ORGANICS

VOLATILES

Project Name: 1282 BOYLSTON STREET**Lab Number:** L1304009**Project Number:** 37820-040**Report Date:** 03/15/13**SAMPLE RESULTS**

Lab ID: L1304009-01
Client ID: A2-03112013
Sample Location: Not Specified
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 03/14/13 09:01
Analyst: MM

Date Collected: 03/11/13 14:40
Date Received: 03/11/13
Field Prep: See Narrative

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	3.0	--	1
1,1-Dichloroethane	ND		ug/l	0.75	--	1
Chloroform	ND		ug/l	0.75	--	1
Carbon tetrachloride	ND		ug/l	0.50	--	1
1,2-Dichloropropane	ND		ug/l	1.8	--	1
Dibromochloromethane	ND		ug/l	0.50	--	1
1,1,2-Trichloroethane	ND		ug/l	0.75	--	1
Tetrachloroethene	ND		ug/l	0.50	--	1
Chlorobenzene	ND		ug/l	0.50	--	1
Trichlorofluoromethane	ND		ug/l	2.5	--	1
1,2-Dichloroethane	ND		ug/l	0.50	--	1
1,1,1-Trichloroethane	ND		ug/l	0.50	--	1
Bromodichloromethane	ND		ug/l	0.50	--	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	--	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	--	1
1,1-Dichloropropene	ND		ug/l	2.5	--	1
Bromoform	ND		ug/l	2.0	--	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	--	1
Benzene	0.80		ug/l	0.50	--	1
Toluene	ND		ug/l	0.75	--	1
Ethylbenzene	ND		ug/l	0.50	--	1
Chloromethane	ND		ug/l	2.5	--	1
Bromomethane	ND		ug/l	1.0	--	1
Vinyl chloride	ND		ug/l	1.0	--	1
Chloroethane	ND		ug/l	1.0	--	1
1,1-Dichloroethene	ND		ug/l	0.50	--	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	--	1
Trichloroethene	ND		ug/l	0.50	--	1
1,2-Dichlorobenzene	ND		ug/l	2.5	--	1
1,3-Dichlorobenzene	ND		ug/l	2.5	--	1
1,4-Dichlorobenzene	ND		ug/l	2.5	--	1

Project Name: 1282 BOYLSTON STREET**Lab Number:** L1304009**Project Number:** 37820-040**Report Date:** 03/15/13**SAMPLE RESULTS**

Lab ID: L1304009-01

Date Collected: 03/11/13 14:40

Client ID: A2-03112013

Date Received: 03/11/13

Sample Location: Not Specified

Field Prep: See Narrative

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methyl tert butyl ether	ND		ug/l	1.0	--	1
p/m-Xylene	ND		ug/l	1.0	--	1
o-Xylene	ND		ug/l	1.0	--	1
Xylenes, Total	ND		ug/l	1.0	--	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	--	1
Dibromomethane	ND		ug/l	5.0	--	1
1,2,3-Trichloropropane	ND		ug/l	5.0	--	1
Styrene	ND		ug/l	1.0	--	1
Dichlorodifluoromethane	ND		ug/l	5.0	--	1
Acetone	ND		ug/l	5.0	--	1
Carbon disulfide	ND		ug/l	5.0	--	1
2-Butanone	27		ug/l	5.0	--	1
Vinyl acetate	ND		ug/l	5.0	--	1
4-Methyl-2-pentanone	ND		ug/l	5.0	--	1
2-Hexanone	ND		ug/l	5.0	--	1
Ethyl methacrylate	ND		ug/l	5.0	--	1
Acrylonitrile	ND		ug/l	5.0	--	1
Bromochloromethane	ND		ug/l	2.5	--	1
Tetrahydrofuran	ND		ug/l	5.0	--	1
2,2-Dichloropropane	ND		ug/l	2.5	--	1
1,2-Dibromoethane	ND		ug/l	2.0	--	1
1,3-Dichloropropane	ND		ug/l	2.5	--	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	--	1
Bromobenzene	ND		ug/l	2.5	--	1
n-Butylbenzene	0.82		ug/l	0.50	--	1
sec-Butylbenzene	2.8		ug/l	0.50	--	1
tert-Butylbenzene	ND		ug/l	2.5	--	1
o-Chlorotoluene	ND		ug/l	2.5	--	1
p-Chlorotoluene	ND		ug/l	2.5	--	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	--	1
Hexachlorobutadiene	ND		ug/l	0.50	--	1
Isopropylbenzene	4.0		ug/l	0.50	--	1
p-Isopropyltoluene	ND		ug/l	0.50	--	1
Naphthalene	ND		ug/l	2.5	--	1
n-Propylbenzene	5.3		ug/l	0.50	--	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	--	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	--	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	--	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	--	1

Project Name: 1282 BOYLSTON STREET**Lab Number:** L1304009**Project Number:** 37820-040**Report Date:** 03/15/13**SAMPLE RESULTS**

Lab ID: L1304009-01

Date Collected: 03/11/13 14:40

Client ID: A2-03112013

Date Received: 03/11/13

Sample Location: Not Specified

Field Prep: See Narrative

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Volatile Organics by GC/MS - Westborough Lab

trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	--	1
Ethyl ether	ND		ug/l	2.5	--	1
Tert-Butyl Alcohol	ND		ug/l	10	--	1
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	97		70-130
Toluene-d8	111		70-130
4-Bromofluorobenzene	104		70-130
Dibromofluoromethane	98		70-130

Project Name: 1282 BOYLSTON STREET**Lab Number:** L1304009**Project Number:** 37820-040**Report Date:** 03/15/13**SAMPLE RESULTS**

Lab ID: L1304009-01
Client ID: A2-03112013
Sample Location: Not Specified
Matrix: Water
Analytical Method: 1,8260C-SIM(M)
Analytical Date: 03/14/13 09:01
Analyst: MM

Date Collected: 03/11/13 14:40
Date Received: 03/11/13
Field Prep: See Narrative

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

Project Name: 1282 BOYLSTON STREET**Lab Number:** L1304009**Project Number:** 37820-040**Report Date:** 03/15/13**SAMPLE RESULTS**

Lab ID: L1304009-01

Date Collected: 03/11/13 14:40

Client ID: A2-03112013

Date Received: 03/11/13

Sample Location: Not Specified

Field Prep: See Narrative

Matrix: Water

Analytical Method: 14,504.1

Extraction Date: 03/14/13 10:30

Analytical Date: 03/14/13 13:05

Analyst: SH

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

Project Name: 1282 BOYLSTON STREET**Lab Number:** L1304009**Project Number:** 37820-040**Report Date:** 03/15/13**SAMPLE RESULTS**

Lab ID: L1304009-03
Client ID: TRIP BLANK
Sample Location: Not Specified
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 03/12/13 13:11
Analyst: PD

Date Collected: 03/11/13 00:00
Date Received: 03/11/13
Field Prep: Not Specified

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

Project Name: 1282 BOYLSTON STREET**Lab Number:** L1304009**Project Number:** 37820-040**Report Date:** 03/15/13**SAMPLE RESULTS**

Lab ID: L1304009-03

Date Collected: 03/11/13 00:00

Client ID: TRIP BLANK

Date Received: 03/11/13

Sample Location: Not Specified

Field Prep: Not Specified

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

Project Name: 1282 BOYLSTON STREET**Lab Number:** L1304009**Project Number:** 37820-040**Report Date:** 03/15/13**SAMPLE RESULTS**

Lab ID: L1304009-03

Date Collected: 03/11/13 00:00

Client ID: TRIP BLANK

Date Received: 03/11/13

Sample Location: Not Specified

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Volatile Organics by GC/MS - Westborough Lab

trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	--	1
Ethyl ether	ND		ug/l	2.5	--	1
Tert-Butyl Alcohol	ND		ug/l	10	--	1
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	--	1
1,4-Dioxane	ND		ug/l	250	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	98		70-130
Toluene-d8	87		70-130
4-Bromofluorobenzene	100		70-130
Dibromofluoromethane	98		70-130

Project Name: 1282 BOYLSTON STREET**Lab Number:** L1304009**Project Number:** 37820-040**Report Date:** 03/15/13**SAMPLE RESULTS**

Lab ID: L1304009-03
Client ID: TRIP BLANK
Sample Location: Not Specified
Matrix: Water
Analytical Method: 1,8260C-SIM(M)
Analytical Date: 03/12/13 13:11
Analyst: PD

Date Collected: 03/11/13 00:00
Date Received: 03/11/13
Field Prep: Not Specified

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

Project Name: 1282 BOYLSTON STREET**Lab Number:** L1304009**Project Number:** 37820-040**Report Date:** 03/15/13**SAMPLE RESULTS**

Lab ID: L1304009-03

Date Collected: 03/11/13 00:00

Client ID: TRIP BLANK

Date Received: 03/11/13

Sample Location: Not Specified

Field Prep: Not Specified

Matrix: Water

Analytical Method: 14,504.1

Extraction Date: 03/14/13 10:30

Analytical Date: 03/14/13 13:21

Analyst: SH

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

Project Name: 1282 BOYLSTON STREET

Lab Number: L1304009

Project Number: 37820-040

Report Date: 03/15/13

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 03/12/13 12:06
 Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 03 Batch: WG595193-3					
Methylene chloride	ND		ug/l	3.0	--
1,1-Dichloroethane	ND		ug/l	0.75	--
Chloroform	ND		ug/l	0.75	--
Carbon tetrachloride	ND		ug/l	0.50	--
1,2-Dichloropropane	ND		ug/l	1.8	--
Dibromochloromethane	ND		ug/l	0.50	--
1,1,2-Trichloroethane	ND		ug/l	0.75	--
2-Chloroethylvinyl ether	ND		ug/l	10	--
Tetrachloroethene	ND		ug/l	0.50	--
Chlorobenzene	ND		ug/l	0.50	--
Trichlorofluoromethane	ND		ug/l	2.5	--
1,2-Dichloroethane	ND		ug/l	0.50	--
1,1,1-Trichloroethane	ND		ug/l	0.50	--
Bromodichloromethane	ND		ug/l	0.50	--
trans-1,3-Dichloropropene	ND		ug/l	0.50	--
cis-1,3-Dichloropropene	ND		ug/l	0.50	--
1,1-Dichloropropene	ND		ug/l	2.5	--
Bromoform	ND		ug/l	2.0	--
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	--
Benzene	ND		ug/l	0.50	--
Toluene	ND		ug/l	0.75	--
Ethylbenzene	ND		ug/l	0.50	--
Chloromethane	ND		ug/l	2.5	--
Bromomethane	ND		ug/l	1.0	--
Vinyl chloride	ND		ug/l	1.0	--
Chloroethane	ND		ug/l	1.0	--
1,1-Dichloroethene	ND		ug/l	0.50	--
trans-1,2-Dichloroethene	ND		ug/l	0.75	--
Trichloroethene	ND		ug/l	0.50	--
1,2-Dichlorobenzene	ND		ug/l	2.5	--
1,3-Dichlorobenzene	ND		ug/l	2.5	--



Project Name: 1282 BOYLSTON STREET

Lab Number: L1304009

Project Number: 37820-040

Report Date: 03/15/13

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 03/12/13 12:06
 Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 03 Batch: WG595193-3					
1,4-Dichlorobenzene	ND		ug/l	2.5	--
Methyl tert butyl ether	ND		ug/l	1.0	--
p/m-Xylene	ND		ug/l	1.0	--
o-Xylene	ND		ug/l	1.0	--
Xylenes, Total	ND		ug/l	1.0	--
cis-1,2-Dichloroethene	ND		ug/l	0.50	--
Dibromomethane	ND		ug/l	5.0	--
1,2,3-Trichloropropane	ND		ug/l	5.0	--
Styrene	ND		ug/l	1.0	--
Dichlorodifluoromethane	ND		ug/l	5.0	--
Acetone	ND		ug/l	5.0	--
Carbon disulfide	ND		ug/l	5.0	--
2-Butanone	ND		ug/l	5.0	--
Vinyl acetate	ND		ug/l	5.0	--
4-Methyl-2-pentanone	ND		ug/l	5.0	--
2-Hexanone	ND		ug/l	5.0	--
Ethyl methacrylate	ND		ug/l	5.0	--
Acrylonitrile	ND		ug/l	5.0	--
Bromochloromethane	ND		ug/l	2.5	--
Tetrahydrofuran	ND		ug/l	5.0	--
2,2-Dichloropropane	ND		ug/l	2.5	--
1,2-Dibromoethane	ND		ug/l	2.0	--
1,3-Dichloropropane	ND		ug/l	2.5	--
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	--
Bromobenzene	ND		ug/l	2.5	--
n-Butylbenzene	ND		ug/l	0.50	--
sec-Butylbenzene	ND		ug/l	0.50	--
tert-Butylbenzene	ND		ug/l	2.5	--
o-Chlorotoluene	ND		ug/l	2.5	--
p-Chlorotoluene	ND		ug/l	2.5	--
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	--



Project Name: 1282 BOYLSTON STREET

Lab Number: L1304009

Project Number: 37820-040

Report Date: 03/15/13

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 03/12/13 12:06
 Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 03 Batch: WG595193-3					
Hexachlorobutadiene	ND		ug/l	0.50	--
Isopropylbenzene	ND		ug/l	0.50	--
p-Isopropyltoluene	ND		ug/l	0.50	--
Naphthalene	ND		ug/l	2.5	--
n-Propylbenzene	ND		ug/l	0.50	--
1,2,3-Trichlorobenzene	ND		ug/l	2.5	--
1,2,4-Trichlorobenzene	ND		ug/l	2.5	--
1,3,5-Trimethylbenzene	ND		ug/l	2.5	--
1,3,5-Trichlorobenzene	ND		ug/l	2.0	--
1,2,4-Trimethylbenzene	ND		ug/l	2.5	--
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	--
Ethyl ether	ND		ug/l	2.5	--
Methyl Acetate	ND		ug/l	10	--
Ethyl Acetate	ND		ug/l	10	--
Isopropyl Ether	ND		ug/l	2.0	--
Cyclohexane	ND		ug/l	10	--
Tert-Butyl Alcohol	ND		ug/l	10	--
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0	--
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	--
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		ug/l	10	--
Methyl cyclohexane	ND		ug/l	10	--
p-Diethylbenzene	ND		ug/l	2.0	--
4-Ethyltoluene	ND		ug/l	2.0	--
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	--

Project Name: 1282 BOYLSTON STREET**Lab Number:** L1304009**Project Number:** 37820-040**Report Date:** 03/15/13**Method Blank Analysis**
Batch Quality Control

Analytical Method: 1,8260C

Analytical Date: 03/12/13 12:06

Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 03 Batch: WG595193-3					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	92		70-130
Toluene-d8	90		70-130
4-Bromofluorobenzene	100		70-130
Dibromofluoromethane	104		70-130

Project Name: 1282 BOYLSTON STREET**Lab Number:** L1304009**Project Number:** 37820-040**Report Date:** 03/15/13**Method Blank Analysis**
Batch Quality Control

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

Analytical Date: 03/12/13 12:06

Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 03 Batch: WG595194-3					
1,4-Dioxane	ND		ug/l	3.0	--

Project Name: 1282 BOYLSTON STREET**Lab Number:** L1304009**Project Number:** 37820-040**Report Date:** 03/15/13**Method Blank Analysis**
Batch Quality Control**Analytical Method:** 14,504.1**Analytical Date:** 03/14/13 12:19**Analyst:** SH**Extraction Date:** 03/14/13 10:30

Parameter	Result	Qualifier	Units	RL	MDL
Microextractables by GC - Westborough Lab for sample(s): 01,03 Batch: WG595267-1					
1,2-Dibromoethane	ND		ug/l	0.010	--

Project Name: 1282 BOYLSTON STREET**Lab Number:** L1304009**Project Number:** 37820-040**Report Date:** 03/15/13**Method Blank Analysis**
Batch Quality Control

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

Analytical Date: 03/14/13 08:29

Analyst: MM

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01 Batch: WG595315-3					
1,4-Dioxane	ND		ug/l	3.0	--

Project Name: 1282 BOYLSTON STREET

Lab Number: L1304009

Project Number: 37820-040

Report Date: 03/15/13

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 03/14/13 08:29
 Analyst: MM

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG595316-3					
Methylene chloride	ND		ug/l	3.0	--
1,1-Dichloroethane	ND		ug/l	0.75	--
Chloroform	ND		ug/l	0.75	--
Carbon tetrachloride	ND		ug/l	0.50	--
1,2-Dichloropropane	ND		ug/l	1.8	--
Dibromochloromethane	ND		ug/l	0.50	--
1,1,2-Trichloroethane	ND		ug/l	0.75	--
2-Chloroethylvinyl ether	ND		ug/l	10	--
Tetrachloroethene	ND		ug/l	0.50	--
Chlorobenzene	ND		ug/l	0.50	--
Trichlorofluoromethane	ND		ug/l	2.5	--
1,2-Dichloroethane	ND		ug/l	0.50	--
1,1,1-Trichloroethane	ND		ug/l	0.50	--
Bromodichloromethane	ND		ug/l	0.50	--
trans-1,3-Dichloropropene	ND		ug/l	0.50	--
cis-1,3-Dichloropropene	ND		ug/l	0.50	--
1,1-Dichloropropene	ND		ug/l	2.5	--
Bromoform	ND		ug/l	2.0	--
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	--
Benzene	ND		ug/l	0.50	--
Toluene	ND		ug/l	0.75	--
Ethylbenzene	ND		ug/l	0.50	--
Chloromethane	ND		ug/l	2.5	--
Bromomethane	ND		ug/l	1.0	--
Vinyl chloride	ND		ug/l	1.0	--
Chloroethane	ND		ug/l	1.0	--
1,1-Dichloroethene	ND		ug/l	0.50	--
trans-1,2-Dichloroethene	ND		ug/l	0.75	--
Trichloroethene	ND		ug/l	0.50	--
1,2-Dichlorobenzene	ND		ug/l	2.5	--
1,3-Dichlorobenzene	ND		ug/l	2.5	--



Project Name: 1282 BOYLSTON STREET

Lab Number: L1304009

Project Number: 37820-040

Report Date: 03/15/13

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 03/14/13 08:29
 Analyst: MM

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG595316-3					
1,4-Dichlorobenzene	ND		ug/l	2.5	--
Methyl tert butyl ether	ND		ug/l	1.0	--
p/m-Xylene	ND		ug/l	1.0	--
o-Xylene	ND		ug/l	1.0	--
Xylenes, Total	ND		ug/l	1.0	--
cis-1,2-Dichloroethene	ND		ug/l	0.50	--
Dibromomethane	ND		ug/l	5.0	--
1,2,3-Trichloropropane	ND		ug/l	5.0	--
Styrene	ND		ug/l	1.0	--
Dichlorodifluoromethane	ND		ug/l	5.0	--
Acetone	ND		ug/l	5.0	--
Carbon disulfide	ND		ug/l	5.0	--
2-Butanone	ND		ug/l	5.0	--
Vinyl acetate	ND		ug/l	5.0	--
4-Methyl-2-pentanone	ND		ug/l	5.0	--
2-Hexanone	ND		ug/l	5.0	--
Ethyl methacrylate	ND		ug/l	5.0	--
Acrylonitrile	ND		ug/l	5.0	--
Bromochloromethane	ND		ug/l	2.5	--
Tetrahydrofuran	ND		ug/l	5.0	--
2,2-Dichloropropane	ND		ug/l	2.5	--
1,2-Dibromoethane	ND		ug/l	2.0	--
1,3-Dichloropropane	ND		ug/l	2.5	--
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	--
Bromobenzene	ND		ug/l	2.5	--
n-Butylbenzene	ND		ug/l	0.50	--
sec-Butylbenzene	ND		ug/l	0.50	--
tert-Butylbenzene	ND		ug/l	2.5	--
o-Chlorotoluene	ND		ug/l	2.5	--
p-Chlorotoluene	ND		ug/l	2.5	--
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	--



Project Name: 1282 BOYLSTON STREET

Lab Number: L1304009

Project Number: 37820-040

Report Date: 03/15/13

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 03/14/13 08:29
 Analyst: MM

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG595316-3					
Hexachlorobutadiene	ND		ug/l	0.50	--
Isopropylbenzene	ND		ug/l	0.50	--
p-Isopropyltoluene	ND		ug/l	0.50	--
Naphthalene	ND		ug/l	2.5	--
n-Propylbenzene	ND		ug/l	0.50	--
1,2,3-Trichlorobenzene	ND		ug/l	2.5	--
1,2,4-Trichlorobenzene	ND		ug/l	2.5	--
1,3,5-Trimethylbenzene	ND		ug/l	2.5	--
1,3,5-Trichlorobenzene	ND		ug/l	2.0	--
1,2,4-Trimethylbenzene	ND		ug/l	2.5	--
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	--
Ethyl ether	ND		ug/l	2.5	--
Methyl Acetate	ND		ug/l	10	--
Ethyl Acetate	ND		ug/l	10	--
Isopropyl Ether	ND		ug/l	2.0	--
Cyclohexane	ND		ug/l	10	--
Tert-Butyl Alcohol	ND		ug/l	10	--
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0	--
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	--
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		ug/l	10	--
Methyl cyclohexane	ND		ug/l	10	--
p-Diethylbenzene	ND		ug/l	2.0	--
4-Ethyltoluene	ND		ug/l	2.0	--
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	--

Project Name: 1282 BOYLSTON STREET**Lab Number:** L1304009**Project Number:** 37820-040**Report Date:** 03/15/13**Method Blank Analysis**
Batch Quality Control

Analytical Method: 1,8260C

Analytical Date: 03/14/13 08:29

Analyst: MM

Parameter	Result	Qualifier	Units	RL	MDL
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Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG595316-3					
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Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	91		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	97		70-130

Lab Control Sample Analysis **Batch Quality Control**

Project Name: 1282 BOYLSTON STREET

Project Number: 37820-040

Lab Number: L1304009

Report Date: 03/15/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 03 Batch: WG595193-1 WG595193-2								
Methylene chloride	108		110		70-130	2		20
1,1-Dichloroethane	111		115		70-130	4		20
Chloroform	117		116		70-130	1		20
Carbon tetrachloride	115		114		63-132	1		20
1,2-Dichloropropane	115		116		70-130	1		20
Dibromochloromethane	91		95		63-130	4		20
1,1,2-Trichloroethane	97		93		70-130	4		20
2-Chloroethylvinyl ether	90		94		70-130	4		20
Tetrachloroethene	108		109		70-130	1		20
Chlorobenzene	104		103		75-130	1		25
Trichlorofluoromethane	129		130		62-150	1		20
1,2-Dichloroethane	114		118		70-130	3		20
1,1,1-Trichloroethane	116		118		67-130	2		20
Bromodichloromethane	105		102		67-130	3		20
trans-1,3-Dichloropropene	86		87		70-130	1		20
cis-1,3-Dichloropropene	103		105		70-130	2		20
1,1-Dichloropropene	110		113		70-130	3		20
Bromoform	87		90		54-136	3		20
1,1,2,2-Tetrachloroethane	92		98		67-130	6		20
Benzene	112		114		70-130	2		25
Toluene	100		100		70-130	0		25

Lab Control Sample Analysis Batch Quality Control

Project Name: 1282 BOYLSTON STREET

Project Number: 37820-040

Lab Number: L1304009

Report Date: 03/15/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 03 Batch: WG595193-1 WG595193-2								
Ethylbenzene	101		97		70-130	4		20
Chloromethane	98		102		64-130	4		20
Bromomethane	115		116		39-139	1		20
Vinyl chloride	97		98		55-140	1		20
Chloroethane	111		114		55-138	3		20
1,1-Dichloroethene	106		114		61-145	7		25
trans-1,2-Dichloroethene	109		116		70-130	6		20
Trichloroethene	115		115		70-130	0		25
1,2-Dichlorobenzene	104		111		70-130	7		20
1,3-Dichlorobenzene	104		112		70-130	7		20
1,4-Dichlorobenzene	106		109		70-130	3		20
Methyl tert butyl ether	101		103		63-130	2		20
p/m-Xylene	104		106		70-130	2		20
o-Xylene	105		107		70-130	2		20
cis-1,2-Dichloroethene	115		120		70-130	4		20
Dibromomethane	110		118		70-130	7		20
1,2,3-Trichloropropane	97		96		64-130	1		20
Styrene	106		106		70-130	0		20
Dichlorodifluoromethane	79		84		36-147	6		20
Acetone	101		116		58-148	14		20
Carbon disulfide	101		105		51-130	4		20

Lab Control Sample Analysis Batch Quality Control

Project Name: 1282 BOYLSTON STREET

Project Number: 37820-040

Lab Number: L1304009

Report Date: 03/15/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 03 Batch: WG595193-1 WG595193-2								
2-Butanone	108		116		63-138	7		20
Vinyl acetate	108		110		70-130	2		20
4-Methyl-2-pentanone	105		103		59-130	2		20
2-Hexanone	89		90		57-130	1		20
Ethyl methacrylate	88		86		70-130	2		20
Acrylonitrile	105		109		70-130	4		20
Bromochloromethane	122		129		70-130	6		20
Tetrahydrofuran	97		111		58-130	13		20
2,2-Dichloropropane	102		102		63-133	0		20
1,2-Dibromoethane	101		102		70-130	1		20
1,3-Dichloropropane	96		97		70-130	1		20
1,1,1,2-Tetrachloroethane	102		106		64-130	4		20
Bromobenzene	108		109		70-130	1		20
n-Butylbenzene	96		93		53-136	3		20
sec-Butylbenzene	101		101		70-130	0		20
tert-Butylbenzene	100		101		70-130	1		20
o-Chlorotoluene	97		100		70-130	3		20
p-Chlorotoluene	90		94		70-130	4		20
1,2-Dibromo-3-chloropropane	78		79		41-144	1		20
Hexachlorobutadiene	110		104		63-130	6		20
Isopropylbenzene	95		98		70-130	3		20

Lab Control Sample Analysis Batch Quality Control

Project Name: 1282 BOYLSTON STREET

Project Number: 37820-040

Lab Number: L1304009

Report Date: 03/15/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 03 Batch: WG595193-1 WG595193-2								
p-Isopropyltoluene	100		100		70-130	0		20
Naphthalene	83		88		70-130	6		20
n-Propylbenzene	95		96		69-130	1		20
1,2,3-Trichlorobenzene	99		105		70-130	6		20
1,2,4-Trichlorobenzene	104		103		70-130	1		20
1,3,5-Trimethylbenzene	95		99		64-130	4		20
1,3,5-Trichlorobenzene	106		112		70-130	6		20
1,2,4-Trimethylbenzene	97		101		70-130	4		20
trans-1,4-Dichloro-2-butene	86		86		70-130	0		20
Ethyl ether	97		105		59-134	8		20
Methyl Acetate	105		108		70-130	3		20
Ethyl Acetate	102		106		70-130	4		20
Isopropyl Ether	110		112		70-130	2		20
Cyclohexane	109		111		70-130	2		20
tert-Butyl Alcohol	93		88		70-130	6		20
Ethyl-Tert-Butyl-Ether	100		104		70-130	4		20
Tertiary-Amyl Methyl Ether	94		100		66-130	6		20
1,1,2-Trichloro-1,2,2-Trifluoroethane	122		129		70-130	6		20
Methyl cyclohexane	108		111		70-130	3		20
1,4-Diethylbenzene	100		100		70-130	0		20
4-Ethyltoluene	98		100		70-130	2		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: 1282 BOYLSTON STREET

Lab Number: L1304009

Project Number: 37820-040

Report Date: 03/15/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 03 Batch: WG595193-1 WG595193-2								
1,2,4,5-Tetramethylbenzene	97		103		70-130	6		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	94		98		70-130
Toluene-d8	86		84		70-130
4-Bromofluorobenzene	88		87		70-130
Dibromofluoromethane	105		106		70-130

Volatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 03 Batch: WG595194-1 WG595194-2								
1,4-Dioxane	98		94		70-130	4		25

Lab Control Sample Analysis**Batch Quality Control****Project Name:** 1282 BOYLSTON STREET**Project Number:** 37820-040**Lab Number:** L1304009**Report Date:** 03/15/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Microextractables by GC - Westborough Lab Associated sample(s): 01,03 Batch: WG595267-2								
1,2-Dibromoethane	124		-		70-130	-		20

Volatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01 Batch: WG595315-1 WG595315-2								
1,4-Dioxane	116		100		70-130	15		25

Lab Control Sample Analysis

Batch Quality Control

Project Name: 1282 BOYLSTON STREET

Project Number: 37820-040

Lab Number: L1304009

Report Date: 03/15/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG595316-1 WG595316-2								
Methylene chloride	97		106		70-130	9		20
1,1-Dichloroethane	103		103		70-130	0		20
Chloroform	104		105		70-130	1		20
Carbon tetrachloride	98		95		63-132	3		20
1,2-Dichloropropane	97		101		70-130	4		20
Dibromochloromethane	99		88		63-130	12		20
1,1,2-Trichloroethane	105		93		70-130	12		20
2-Chloroethylvinyl ether	74		85		70-130	14		20
Tetrachloroethene	121		110		70-130	10		20
Chlorobenzene	102		98		75-130	4		25
Trichlorofluoromethane	105		107		62-150	2		20
1,2-Dichloroethane	98		102		70-130	4		20
1,1,1-Trichloroethane	98		98		67-130	0		20
Bromodichloromethane	83		90		67-130	8		20
trans-1,3-Dichloropropene	97		86		70-130	12		20
cis-1,3-Dichloropropene	85		93		70-130	9		20
1,1-Dichloropropene	102		101		70-130	1		20
Bromoform	87		99		54-136	13		20
1,1,2,2-Tetrachloroethane	105		102		67-130	3		20
Benzene	104		102		70-130	2		25
Toluene	108		107		70-130	1		25

Lab Control Sample Analysis Batch Quality Control

Project Name: 1282 BOYLSTON STREET

Project Number: 37820-040

Lab Number: L1304009

Report Date: 03/15/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG595316-1 WG595316-2								
Ethylbenzene	98		89		70-130	10		20
Chloromethane	83		84		64-130	1		20
Bromomethane	102		103		39-139	1		20
Vinyl chloride	86		88		55-140	2		20
Chloroethane	96		102		55-138	6		20
1,1-Dichloroethene	95		98		61-145	3		25
trans-1,2-Dichloroethene	103		101		70-130	2		20
Trichloroethene	104		101		70-130	3		25
1,2-Dichlorobenzene	122		112		70-130	9		20
1,3-Dichlorobenzene	114		117		70-130	3		20
1,4-Dichlorobenzene	113		110		70-130	3		20
Methyl tert butyl ether	91		94		63-130	3		20
p/m-Xylene	103		93		70-130	10		20
o-Xylene	104		90		70-130	14		20
cis-1,2-Dichloroethene	103		104		70-130	1		20
Dibromomethane	98		99		70-130	1		20
1,2,3-Trichloropropane	109		96		64-130	13		20
Styrene	103		92		70-130	11		20
Dichlorodifluoromethane	66		66		36-147	0		20
Acetone	111		111		58-148	0		20
Carbon disulfide	88		96		51-130	9		20

Lab Control Sample Analysis Batch Quality Control

Project Name: 1282 BOYLSTON STREET

Project Number: 37820-040

Lab Number: L1304009

Report Date: 03/15/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG595316-1 WG595316-2								
2-Butanone	110		107		63-138	3		20
Vinyl acetate	99		100		70-130	1		20
4-Methyl-2-pentanone	83		96		59-130	15		20
2-Hexanone	96		88		57-130	9		20
Ethyl methacrylate	106		88		70-130	19		20
Acrylonitrile	104		106		70-130	2		20
Bromochloromethane	106		109		70-130	3		20
Tetrahydrofuran	102		94		58-130	8		20
2,2-Dichloropropane	90		89		63-133	1		20
1,2-Dibromoethane	107		102		70-130	5		20
1,3-Dichloropropane	100		96		70-130	4		20
1,1,1,2-Tetrachloroethane	101		94		64-130	7		20
Bromobenzene	115		110		70-130	4		20
n-Butylbenzene	114		97		53-136	16		20
sec-Butylbenzene	110		114		70-130	4		20
tert-Butylbenzene	115		109		70-130	5		20
o-Chlorotoluene	104		100		70-130	4		20
p-Chlorotoluene	104		99		70-130	5		20
1,2-Dibromo-3-chloropropane	83		90		41-144	8		20
Hexachlorobutadiene	125		114		63-130	9		20
Isopropylbenzene	104		103		70-130	1		20

Lab Control Sample Analysis Batch Quality Control

Project Name: 1282 BOYLSTON STREET

Project Number: 37820-040

Lab Number: L1304009

Report Date: 03/15/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG595316-1 WG595316-2								
p-Isopropyltoluene	105		108		70-130	3		20
Naphthalene	102		96		70-130	6		20
n-Propylbenzene	113		97		69-130	15		20
1,2,3-Trichlorobenzene	117		108		70-130	8		20
1,2,4-Trichlorobenzene	126		107		70-130	16		20
1,3,5-Trimethylbenzene	103		100		64-130	3		20
1,3,5-Trichlorobenzene	120		114		70-130	5		20
1,2,4-Trimethylbenzene	113		110		70-130	3		20
trans-1,4-Dichloro-2-butene	87		90		70-130	3		20
Ethyl ether	90		100		59-134	11		20
Methyl Acetate	102		105		70-130	3		20
Ethyl Acetate	98		98		70-130	0		20
Isopropyl Ether	102		101		70-130	1		20
Cyclohexane	100		102		70-130	2		20
tert-Butyl Alcohol	95		86		70-130	10		20
Ethyl-Tert-Butyl-Ether	94		94		70-130	0		20
Tertiary-Amyl Methyl Ether	90		90		66-130	0		20
1,1,2-Trichloro-1,2,2-Trifluoroethane	109		109		70-130	0		20
Methyl cyclohexane	100		99		70-130	1		20
1,4-Diethylbenzene	106		101		70-130	5		20
4-Ethyltoluene	106		99		70-130	7		20

Lab Control Sample Analysis**Batch Quality Control****Project Name:** 1282 BOYLSTON STREET**Lab Number:** L1304009**Project Number:** 37820-040**Report Date:** 03/15/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG595316-1 WG595316-2								
1,2,4,5-Tetramethylbenzene	101		116		70-130	14		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	94		92		70-130
Toluene-d8	100		95		70-130
4-Bromofluorobenzene	102		86		70-130
Dibromofluoromethane	101		104		70-130

Matrix Spike Analysis
Batch Quality Control

Project Name: 1282 BOYLSTON STREET
Project Number: 37820-040

Lab Number: L1304009
Report Date: 03/15/13

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Microextractables by GC - Westborough Lab Associated sample(s): 01,03 QC Batch ID: WG595267-3 QC Sample: L1304009-01 Client ID: A2-03112013												
1,2-Dibromoethane	ND	0.261	0.310	119		-	-		70-130	-		20

SEMIVOLATILES

Project Name: 1282 BOYLSTON STREET**Lab Number:** L1304009**Project Number:** 37820-040**Report Date:** 03/15/13**SAMPLE RESULTS**

Lab ID: L1304009-01
Client ID: A2-03112013
Sample Location: Not Specified
Matrix: Water
Analytical Method: 1,8270D
Analytical Date: 03/13/13 00:55
Analyst: RC

Date Collected: 03/11/13 14:40
Date Received: 03/11/13
Field Prep: See Narrative
Extraction Method: EPA 3510C
Extraction Date: 03/12/13 08:32

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

Project Name: 1282 BOYLSTON STREET**Lab Number:** L1304009**Project Number:** 37820-040**Report Date:** 03/15/13**SAMPLE RESULTS**

Lab ID: L1304009-01

Date Collected: 03/11/13 14:40

Client ID: A2-03112013

Date Received: 03/11/13

Sample Location: Not Specified

Field Prep: See Narrative

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	40		21-120
Phenol-d6	26		10-120
Nitrobenzene-d5	60		23-120
2-Fluorobiphenyl	71		15-120
2,4,6-Tribromophenol	98		10-120
4-Terphenyl-d14	90		41-149

Project Name: 1282 BOYLSTON STREET**Lab Number:** L1304009**Project Number:** 37820-040**Report Date:** 03/15/13**SAMPLE RESULTS**

Lab ID: L1304009-01
Client ID: A2-03112013
Sample Location: Not Specified
Matrix: Water
Analytical Method: 1,8270D-SIM
Analytical Date: 03/14/13 17:59
Analyst: AS

Date Collected: 03/11/13 14:40
Date Received: 03/11/13
Field Prep: See Narrative
Extraction Method: EPA 3510C
Extraction Date: 03/12/13 08:30

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	0.49		ug/l	0.20	--	1
2-Chloronaphthalene	ND		ug/l	0.20	--	1
Fluoranthene	0.30		ug/l	0.20	--	1
Hexachlorobutadiene	ND		ug/l	0.50	--	1
Naphthalene	ND		ug/l	0.20	--	1
Benzo(a)anthracene	ND		ug/l	0.20	--	1
Benzo(a)pyrene	ND		ug/l	0.20	--	1
Benzo(b)fluoranthene	ND		ug/l	0.20	--	1
Benzo(k)fluoranthene	ND		ug/l	0.20	--	1
Chrysene	ND		ug/l	0.20	--	1
Acenaphthylene	ND		ug/l	0.20	--	1
Anthracene	0.20		ug/l	0.20	--	1
Benzo(ghi)perylene	ND		ug/l	0.20	--	1
Fluorene	0.37		ug/l	0.20	--	1
Phenanthrene	0.32		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	0.27		ug/l	0.20	--	1
1-Methylnaphthalene	0.85		ug/l	0.20	--	1
2-Methylnaphthalene	ND		ug/l	0.20	--	1
Pentachlorophenol	ND		ug/l	0.80	--	1
Hexachlorobenzene	ND		ug/l	0.80	--	1
Hexachloroethane	ND		ug/l	0.80	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	43		21-120
Phenol-d6	29		10-120
Nitrobenzene-d5	70		23-120
2-Fluorobiphenyl	69		15-120
2,4,6-Tribromophenol	91		10-120
4-Terphenyl-d14	84		41-149



Project Name: 1282 BOYLSTON STREET

Lab Number: L1304009

Project Number: 37820-040

Report Date: 03/15/13

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270D-SIM
 Analytical Date: 03/13/13 14:55
 Analyst: AS

Extraction Method: EPA 3510C
 Extraction Date: 03/12/13 08:30

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01 Batch: WG594668-1					
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: 1282 BOYLSTON STREET

Lab Number: L1304009

Project Number: 37820-040

Report Date: 03/15/13

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270D-SIM
 Analytical Date: 03/13/13 14:55
 Analyst: AS

Extraction Method: EPA 3510C
 Extraction Date: 03/12/13 08:30

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01 Batch: WG594668-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	44		21-120
Phenol-d6	33		10-120
Nitrobenzene-d5	78		23-120
2-Fluorobiphenyl	68		15-120
2,4,6-Tribromophenol	84		10-120
4-Terphenyl-d14	96		41-149

Project Name: 1282 BOYLSTON STREET

Lab Number: L1304009

Project Number: 37820-040

Report Date: 03/15/13

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270D
 Analytical Date: 03/12/13 23:31
 Analyst: RC

Extraction Method: EPA 3510C
 Extraction Date: 03/12/13 08:32

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG594671-1					
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: 1282 BOYLSTON STREET

Lab Number: L1304009

Project Number: 37820-040

Report Date: 03/15/13

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270D
 Analytical Date: 03/12/13 23:31
 Analyst: RC

Extraction Method: EPA 3510C
 Extraction Date: 03/12/13 08:32

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG594671-1					
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	49		21-120
Phenol-d6	31		10-120
Nitrobenzene-d5	72		23-120
2-Fluorobiphenyl	72		15-120
2,4,6-Tribromophenol	92		10-120
4-Terphenyl-d14	92		41-149

Lab Control Sample Analysis Batch Quality Control

Project Name: 1282 BOYLSTON STREET

Project Number: 37820-040

Lab Number: L1304009

Report Date: 03/15/13

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: WG594668-2 WG594668-3								
Acenaphthene	74		75		37-111	1		40
2-Chloronaphthalene	73		70		40-140	4		40
Fluoranthene	95		88		40-140	8		40
Hexachlorobutadiene	50		52		40-140	4		40
Naphthalene	65		66		40-140	2		40
Benzo(a)anthracene	94		86		40-140	9		40
Benzo(a)pyrene	87		81		40-140	7		40
Benzo(b)fluoranthene	90		82		40-140	9		40
Benzo(k)fluoranthene	94		87		40-140	8		40
Chrysene	86		80		40-140	7		40
Acenaphthylene	82		77		40-140	6		40
Anthracene	95		88		40-140	8		40
Benzo(ghi)perylene	83		81		40-140	2		40
Fluorene	79		77		40-140	3		40
Phenanthrene	82		79		40-140	4		40
Dibenzo(a,h)anthracene	83		79		40-140	5		40
Indeno(1,2,3-cd)Pyrene	86		84		40-140	2		40
Pyrene	90		83		26-127	8		40
1-Methylnaphthalene	68		65		40-140	5		40
2-Methylnaphthalene	69		66		40-140	4		40
Pentachlorophenol	126	Q	113	Q	9-103	11		40

Lab Control Sample Analysis

Batch Quality Control

Project Name: 1282 BOYLSTON STREET

Project Number: 37820-040

Lab Number: L1304009

Report Date: 03/15/13

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: WG594668-2 WG594668-3								
Hexachlorobenzene	72		67		40-140	7		40
Hexachloroethane	58		63		40-140	8		40

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	47		48		21-120
Phenol-d6	34		36		10-120
Nitrobenzene-d5	73		76		23-120
2-Fluorobiphenyl	70		68		15-120
2,4,6-Tribromophenol	87		79		10-120
4-Terphenyl-d14	96		90		41-149

Lab Control Sample Analysis **Batch Quality Control**

Project Name: 1282 BOYLSTON STREET

Project Number: 37820-040

Lab Number: L1304009

Report Date: 03/15/13

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: WG594671-2 WG594671-3								
Benzidine	41		41		10-75	0		30
1,2,4-Trichlorobenzene	52		54		39-98	4		30
Bis(2-chloroethyl)ether	58		63		40-140	8		30
1,2-Dichlorobenzene	48		50		40-140	4		30
1,3-Dichlorobenzene	45		49		40-140	9		30
1,4-Dichlorobenzene	47		49		36-97	4		30
3,3'-Dichlorobenzidine	87		84		40-140	4		30
2,4-Dinitrotoluene	96		92		24-96	4		30
2,6-Dinitrotoluene	93		90		40-140	3		30
Azobenzene	76		74		40-140	3		30
4-Chlorophenyl phenyl ether	83		79		40-140	5		30
4-Bromophenyl phenyl ether	91		89		40-140	2		30
Bis(2-chloroisopropyl)ether	55		59		40-140	7		30
Bis(2-chloroethoxy)methane	62		64		40-140	3		30
Hexachlorocyclopentadiene	52		50		40-140	4		30
Isophorone	65		67		40-140	3		30
Nitrobenzene	62		64		40-140	3		30
NitrosoDiPhenylAmine(NDPA)/DPA	84		81		40-140	4		30
Bis(2-Ethylhexyl)phthalate	86		85		40-140	1		30
Butyl benzyl phthalate	91		86		40-140	6		30
Di-n-butylphthalate	86		84		40-140	2		30

Lab Control Sample Analysis Batch Quality Control

Project Name: 1282 BOYLSTON STREET

Project Number: 37820-040

Lab Number: L1304009

Report Date: 03/15/13

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: WG594671-2 WG594671-3								
Di-n-octylphthalate	93		91		40-140	2		30
Diethyl phthalate	86		83		40-140	4		30
Dimethyl phthalate	84		83		40-140	1		30
Aniline	43		45		40-140	5		30
4-Chloroaniline	61		56		40-140	9		30
2-Nitroaniline	92		89		52-143	3		30
3-Nitroaniline	59		53		25-145	11		30
4-Nitroaniline	90		85		51-143	6		30
Dibenzofuran	79		77		40-140	3		30
n-Nitrosodimethylamine	36		40		22-74	11		30
2,4,6-Trichlorophenol	89		87		30-130	2		30
P-Chloro-M-Cresol	86		85		23-97	1		30
2-Chlorophenol	64		69		27-123	8		30
2,4-Dichlorophenol	78		77		30-130	1		30
2,4-Dimethylphenol	77		79		30-130	3		30
2-Nitrophenol	73		78		30-130	7		30
4-Nitrophenol	52		44		10-80	17		30
2,4-Dinitrophenol	81		77		20-130	5		30
4,6-Dinitro-o-cresol	91		86		20-164	6		30
Phenol	33		35		12-110	6		30
2-Methylphenol	60		63		30-130	5		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: 1282 BOYLSTON STREET

Project Number: 37820-040

Lab Number: L1304009

Report Date: 03/15/13

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: WG594671-2 WG594671-3								
3-Methylphenol/4-Methylphenol	62		65		30-130	5		30
2,4,5-Trichlorophenol	92		91		30-130	1		30
Benzoic Acid	35		34		10-164	3		30
Benzyl Alcohol	52		53		26-116	2		30
Carbazole	84		82		55-144	2		30
Pyridine	19		22		10-66	15		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	43		48		21-120
Phenol-d6	29		31		10-120
Nitrobenzene-d5	61		64		23-120
2-Fluorobiphenyl	73		74		15-120
2,4,6-Tribromophenol	97		96		10-120
4-Terphenyl-d14	87		82		41-149

PCBS

Project Name: 1282 BOYLSTON STREET**Lab Number:** L1304009**Project Number:** 37820-040**Report Date:** 03/15/13**SAMPLE RESULTS**

Lab ID: L1304009-01
Client ID: A2-03112013
Sample Location: Not Specified
Matrix: Water
Analytical Method: 5,608
Analytical Date: 03/13/13 16:08
Analyst: JW

Date Collected: 03/11/13 14:40
Date Received: 03/11/13
Field Prep: See Narrative
Extraction Method: EPA 608
Extraction Date: 03/12/13 16:32
Cleanup Method1: EPA 3665A
Cleanup Date1: 03/13/13
Cleanup Method2: EPA 3660B
Cleanup Date2: 03/13/13

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	81		30-150
Decachlorobiphenyl	56		30-150

Project Name: 1282 BOYLSTON STREET
Project Number: 37820-040

Lab Number: L1304009
Report Date: 03/15/13

Method Blank Analysis
Batch Quality Control

Analytical Method: 5,608
 Analytical Date: 03/13/13 15:19
 Analyst: JW

Extraction Method: EPA 608
 Extraction Date: 03/12/13 16:32
 Cleanup Method1: EPA 3665A
 Cleanup Date1: 03/13/13
 Cleanup Method2: EPA 3660B
 Cleanup Date2: 03/13/13

Parameter	Result	Qualifier	Units	RL	MDL
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 01 Batch: WG594838-1					
Aroclor 1016	ND		ug/l	0.250	--
Aroclor 1221	ND		ug/l	0.250	--
Aroclor 1232	ND		ug/l	0.250	--
Aroclor 1242	ND		ug/l	0.250	--
Aroclor 1248	ND		ug/l	0.250	--
Aroclor 1254	ND		ug/l	0.250	--
Aroclor 1260	ND		ug/l	0.250	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	70		30-150
Decachlorobiphenyl	70		30-150

Matrix Spike Analysis

Batch Quality Control

Project Name: 1282 BOYLSTON STREET

Project Number: 37820-040

Lab Number: L1304009

Report Date: 03/15/13

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01 QC Batch ID: WG594838-3 QC Sample: L1304009-01 Client ID: A2-03112013												
Aroclor 1016	ND	2	1.87	94		-	-		40-140	-		50
Aroclor 1260	ND	2	1.77	88		-	-		40-140	-		50

Surrogate	MS		MSD		Acceptance Criteria
	% Recovery	Qualifier	% Recovery	Qualifier	
2,4,5,6-Tetrachloro-m-xylene	81				30-150
Decachlorobiphenyl	46				30-150

Lab Control Sample Analysis**Batch Quality Control****Project Name:** 1282 BOYLSTON STREET**Project Number:** 37820-040**Lab Number:** L1304009**Report Date:** 03/15/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01 Batch: WG594838-2								
Aroclor 1016	85		-		40-140	-		50
Aroclor 1260	85		-		40-140	-		50

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	70				30-150
Decachlorobiphenyl	78				30-150

Lab Duplicate Analysis

Batch Quality Control

Project Name: 1282 BOYLSTON STREET

Project Number: 37820-040

Lab Number: L1304009

Report Date: 03/15/13

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01 QC Batch ID: WG594838-4 QC Sample: L1304009-01 Client ID: A2-03112013						
Aroclor 1016	ND	ND	ug/l	NC		50
Aroclor 1221	ND	ND	ug/l	NC		50
Aroclor 1232	ND	ND	ug/l	NC		50
Aroclor 1242	ND	ND	ug/l	NC		50
Aroclor 1248	ND	ND	ug/l	NC		50
Aroclor 1254	ND	ND	ug/l	NC		50
Aroclor 1260	ND	ND	ug/l	NC		50

Surrogate	%Recovery	Qualifier	%Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	81		80		30-150
Decachlorobiphenyl	56		52		30-150

METALS

Project Name: 1282 BOYLSTON STREET

Lab Number: L1304009

Project Number: 37820-040

Report Date: 03/15/13

SAMPLE RESULTS

Lab ID: L1304009-01

Date Collected: 03/11/13 14:40

Client ID: A2-03112013

Date Received: 03/11/13

Sample Location: Not Specified

Field Prep: See Narrative

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Westborough Lab											
Iron, Total	18		mg/l	0.05	--	1	03/12/13 14:40	03/13/13 18:09	EPA 3005A	19,200.7	KL
Mercury, Total	ND		mg/l	0.0002	--	1	03/12/13 20:23	03/14/13 09:03	EPA 245.1	3,245.1	KL
Dissolved Metals - Westborough Lab											
Iron, Dissolved	18		mg/l	0.05	--	1	03/12/13 10:45	03/12/13 15:25	NA	19,200.7	KL
Mercury, Dissolved	ND		mg/l	0.0002	--	1	03/12/13 20:23	03/14/13 09:18	EPA 245.1	3,245.1	KL



Project Name: 1282 BOYLSTON STREET

Lab Number: L1304009

Project Number: 37820-040

Report Date: 03/15/13

SAMPLE RESULTS

Lab ID: L1304009-01 D

Date Collected: 03/11/13 14:40

Client ID: A2-03112013

Date Received: 03/11/13

Sample Location: Not Specified

Field Prep: See Narrative

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Westborough Lab											
Antimony, Total	ND		mg/l	0.01000	--	10	03/12/13 14:40	03/13/13 12:14	EPA 3005A	1,6020A	AK
Arsenic, Total	ND		mg/l	0.00500	--	10	03/12/13 14:40	03/13/13 12:14	EPA 3005A	1,6020A	AK
Cadmium, Total	ND		mg/l	0.00200	--	10	03/12/13 14:40	03/13/13 12:14	EPA 3005A	1,6020A	AK
Chromium, Total	ND		mg/l	0.01000	--	10	03/12/13 14:40	03/13/13 12:14	EPA 3005A	1,6020A	AK
Copper, Total	ND		mg/l	0.01000	--	10	03/12/13 14:40	03/13/13 12:14	EPA 3005A	1,6020A	AK
Lead, Total	ND		mg/l	0.00500	--	10	03/12/13 14:40	03/13/13 12:14	EPA 3005A	1,6020A	AK
Nickel, Total	ND		mg/l	0.00500	--	10	03/12/13 14:40	03/13/13 12:14	EPA 3005A	1,6020A	AK
Selenium, Total	ND		mg/l	0.0500	--	10	03/12/13 14:40	03/13/13 12:14	EPA 3005A	1,6020A	AK
Silver, Total	ND		mg/l	0.00400	--	10	03/12/13 14:40	03/13/13 12:14	EPA 3005A	1,6020A	AK
Zinc, Total	ND		mg/l	0.1000	--	10	03/12/13 14:40	03/13/13 12:14	EPA 3005A	1,6020A	AK
Dissolved Metals - Westborough Lab											
Antimony, Dissolved	ND		mg/l	0.01000	--	10	03/12/13 10:45	03/13/13 12:44	NA	1,6020A	AK
Arsenic, Dissolved	ND		mg/l	0.00500	--	10	03/12/13 10:45	03/13/13 12:44	NA	1,6020A	AK
Cadmium, Dissolved	ND		mg/l	0.00500	--	10	03/12/13 10:45	03/13/13 12:44	NA	1,6020A	AK
Chromium, Dissolved	ND		mg/l	0.01000	--	10	03/12/13 10:45	03/13/13 12:44	NA	1,6020A	AK
Copper, Dissolved	ND		mg/l	0.01000	--	10	03/12/13 10:45	03/13/13 12:44	NA	1,6020A	AK
Lead, Dissolved	ND		mg/l	0.00500	--	10	03/12/13 10:45	03/13/13 12:44	NA	1,6020A	AK
Nickel, Dissolved	ND		mg/l	0.00500	--	10	03/12/13 10:45	03/13/13 12:44	NA	1,6020A	AK
Selenium, Dissolved	ND		mg/l	0.0500	--	10	03/12/13 10:45	03/13/13 12:44	NA	1,6020A	AK
Silver, Dissolved	ND		mg/l	0.00400	--	10	03/12/13 10:45	03/13/13 12:44	NA	1,6020A	AK
Zinc, Dissolved	ND		mg/l	0.1000	--	10	03/12/13 10:45	03/13/13 12:44	NA	1,6020A	AK



Project Name: 1282 BOYLSTON STREET

Lab Number: L1304009

Project Number: 37820-040

Report Date: 03/15/13

Method Blank Analysis Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Dissolved Metals - Westborough Lab for sample(s): 01 Batch: WG594723-1										
Antimony, Dissolved	ND		mg/l	0.00100	--	1	03/12/13 10:45	03/13/13 12:28	1,6020A	AK
Arsenic, Dissolved	ND		mg/l	0.00050	--	1	03/12/13 10:45	03/13/13 12:28	1,6020A	AK
Cadmium, Dissolved	ND		mg/l	0.00050	--	1	03/12/13 10:45	03/13/13 12:28	1,6020A	AK
Chromium, Dissolved	ND		mg/l	0.00100	--	1	03/12/13 10:45	03/13/13 12:28	1,6020A	AK
Copper, Dissolved	ND		mg/l	0.00100	--	1	03/12/13 10:45	03/13/13 12:28	1,6020A	AK
Lead, Dissolved	ND		mg/l	0.00050	--	1	03/12/13 10:45	03/13/13 12:28	1,6020A	AK
Nickel, Dissolved	ND		mg/l	0.00050	--	1	03/12/13 10:45	03/13/13 12:28	1,6020A	AK
Selenium, Dissolved	ND		mg/l	0.00500	--	1	03/12/13 10:45	03/13/13 12:28	1,6020A	AK
Silver, Dissolved	ND		mg/l	0.00040	--	1	03/12/13 10:45	03/13/13 12:28	1,6020A	AK
Zinc, Dissolved	ND		mg/l	0.01000	--	1	03/12/13 10:45	03/13/13 12:28	1,6020A	AK

Prep Information

Digestion Method: NA

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Dissolved Metals - Westborough Lab for sample(s): 01 Batch: WG594724-1										
Iron, Dissolved	ND		mg/l	0.05	--	1	03/12/13 10:45	03/12/13 15:19	19,200.7	KL

Prep Information

Digestion Method: NA

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Westborough Lab for sample(s): 01 Batch: WG594802-1										
Antimony, Total	ND		mg/l	0.00100	--	1	03/12/13 14:40	03/13/13 12:04	1,6020A	AK
Arsenic, Total	ND		mg/l	0.00050	--	1	03/12/13 14:40	03/13/13 12:04	1,6020A	AK
Cadmium, Total	ND		mg/l	0.00020	--	1	03/12/13 14:40	03/13/13 12:04	1,6020A	AK
Chromium, Total	ND		mg/l	0.00100	--	1	03/12/13 14:40	03/13/13 12:04	1,6020A	AK
Copper, Total	ND		mg/l	0.00100	--	1	03/12/13 14:40	03/13/13 12:04	1,6020A	AK
Lead, Total	ND		mg/l	0.00050	--	1	03/12/13 14:40	03/13/13 12:04	1,6020A	AK
Nickel, Total	ND		mg/l	0.00050	--	1	03/12/13 14:40	03/13/13 12:04	1,6020A	AK



Project Name: 1282 BOYLSTON STREET

Lab Number: L1304009

Project Number: 37820-040

Report Date: 03/15/13

Method Blank Analysis Batch Quality Control

Selenium, Total	ND	mg/l	0.00500	--	1	03/12/13 14:40	03/13/13 12:04	1,6020A	AK
Silver, Total	ND	mg/l	0.00040	--	1	03/12/13 14:40	03/13/13 12:04	1,6020A	AK
Zinc, Total	ND	mg/l	0.01000	--	1	03/12/13 14:40	03/13/13 12:04	1,6020A	AK

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: WG594803-1										
Iron, Total	ND		mg/l	0.05	--	1	03/12/13 14:40	03/13/13 18:03	19,200.7	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: WG594860-1										
Mercury, Total	ND		mg/l	0.0002	--	1	03/12/13 20:23	03/14/13 08:59	3,245.1	KL

Prep Information

Digestion Method: EPA 245.1

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Dissolved Metals - Westborough Lab for sample(s): 01 Batch: WG594861-1										
Mercury, Dissolved	ND		mg/l	0.0002	--	1	03/12/13 20:23	03/14/13 09:14	3,245.1	KL

Prep Information

Digestion Method: EPA 245.1



Lab Control Sample Analysis

Batch Quality Control

Project Name: 1282 BOYLSTON STREET

Project Number: 37820-040

Lab Number: L1304009

Report Date: 03/15/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Dissolved Metals - Westborough Lab Associated sample(s): 01 Batch: WG594723-2								
Antimony, Dissolved	90		-		80-120	-		
Arsenic, Dissolved	104		-		80-120	-		
Cadmium, Dissolved	108		-		80-120	-		
Chromium, Dissolved	88		-		80-120	-		
Copper, Dissolved	95		-		80-120	-		
Lead, Dissolved	98		-		80-120	-		
Nickel, Dissolved	94		-		80-120	-		
Selenium, Dissolved	107		-		80-120	-		
Silver, Dissolved	93		-		80-120	-		
Zinc, Dissolved	103		-		80-120	-		
Dissolved Metals - Westborough Lab Associated sample(s): 01 Batch: WG594724-2								
Iron, Dissolved	95		-		85-115	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: 1282 BOYLSTON STREET

Project Number: 37820-040

Lab Number: L1304009

Report Date: 03/15/13

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01 Batch: WG594802-2					
Antimony, Total	86	-	80-120	-	
Arsenic, Total	103	-	80-120	-	
Cadmium, Total	112	-	80-120	-	
Chromium, Total	92	-	80-120	-	
Copper, Total	98	-	80-120	-	
Lead, Total	101	-	80-120	-	
Nickel, Total	98	-	80-120	-	
Selenium, Total	112	-	80-120	-	
Silver, Total	96	-	80-120	-	
Zinc, Total	110	-	80-120	-	
Total Metals - Westborough Lab Associated sample(s): 01 Batch: WG594803-2					
Iron, Total	94	-	85-115	-	
Total Metals - Westborough Lab Associated sample(s): 01 Batch: WG594860-2					
Mercury, Total	103	-	85-115	-	
Dissolved Metals - Westborough Lab Associated sample(s): 01 Batch: WG594861-2					
Mercury, Dissolved	98	-	85-115	-	

Matrix Spike Analysis

Batch Quality Control

Project Name: 1282 BOYLSTON STREET

Project Number: 37820-040

Lab Number: L1304009

Report Date: 03/15/13

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Dissolved Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG594723-4 QC Sample: L1304009-01 Client ID: A2-03112013												
Antimony, Dissolved	ND	0.5	0.4882	98		-	-		80-120	-		20
Arsenic, Dissolved	ND	0.12	0.1300	108		-	-		80-120	-		20
Cadmium, Dissolved	ND	0.051	0.05373	105		-	-		80-120	-		20
Chromium, Dissolved	ND	0.2	0.1838	92		-	-		80-120	-		20
Copper, Dissolved	ND	0.25	0.2361	94		-	-		80-120	-		20
Lead, Dissolved	ND	0.51	0.5240	103		-	-		80-120	-		20
Nickel, Dissolved	ND	0.5	0.4607	92		-	-		80-120	-		20
Selenium, Dissolved	ND	0.12	0.126	105		-	-		80-120	-		20
Silver, Dissolved	ND	0.05	0.04626	92		-	-		80-120	-		20
Zinc, Dissolved	ND	0.5	0.5058	101		-	-		80-120	-		20
Dissolved Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG594724-4 QC Sample: L1304009-01 Client ID: A2-03112013												
Iron, Dissolved	18	1	20	200	Q	-	-		75-125	-		20

Matrix Spike Analysis **Batch Quality Control**

Project Name: 1282 BOYLSTON STREET
Project Number: 37820-040

Lab Number: L1304009
Report Date: 03/15/13

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG594802-4 QC Sample: L1304009-01 Client ID: A2-03112013									
Antimony, Total	ND	0.5	0.5019	100	-	-	80-120	-	20
Arsenic, Total	ND	0.12	0.1317	110	-	-	80-120	-	20
Cadmium, Total	ND	0.051	0.05329	104	-	-	80-120	-	20
Chromium, Total	ND	0.2	0.1886	94	-	-	80-120	-	20
Copper, Total	ND	0.25	0.2409	96	-	-	80-120	-	20
Lead, Total	ND	0.51	0.5387	106	-	-	80-120	-	20
Nickel, Total	ND	0.5	0.4748	95	-	-	80-120	-	20
Selenium, Total	ND	0.12	0.124	103	-	-	80-120	-	20
Silver, Total	ND	0.05	0.04692	94	-	-	80-120	-	20
Zinc, Total	ND	0.5	0.6123	122	Q	-	80-120	-	20
Total Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG594803-4 QC Sample: L1304009-01 Client ID: A2-03112013									
Iron, Total	18	1	19	100	-	-	75-125	-	20
Total Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG594860-4 QC Sample: L1304009-01 Client ID: A2-03112013									
Mercury, Total	ND	0.001	0.0012	118	-	-	70-130	-	20
Dissolved Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG594861-4 QC Sample: L1304009-01 Client ID: A2-03112013									
Mercury, Dissolved	ND	0.001	0.0012	118	-	-	70-130	-	20

Lab Duplicate Analysis Batch Quality Control

Project Name: 1282 BOYLSTON STREET

Project Number: 37820-040

Lab Number: L1304009

Report Date: 03/15/13

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Dissolved Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG594723-3 QC Sample: L1304009-01 Client ID: A2-03112013						
Antimony, Dissolved	ND	ND	mg/l	NC		20
Arsenic, Dissolved	ND	ND	mg/l	NC		20
Cadmium, Dissolved	ND	ND	mg/l	NC		20
Chromium, Dissolved	ND	ND	mg/l	NC		20
Copper, Dissolved	ND	ND	mg/l	NC		20
Lead, Dissolved	ND	ND	mg/l	NC		20
Nickel, Dissolved	ND	ND	mg/l	NC		20
Selenium, Dissolved	ND	ND	mg/l	NC		20
Silver, Dissolved	ND	ND	mg/l	NC		20
Zinc, Dissolved	ND	ND	mg/l	NC		20
Dissolved Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG594724-3 QC Sample: L1304009-01 Client ID: A2-03112013						
Iron, Dissolved	18	18	mg/l	0		20

Lab Duplicate Analysis Batch Quality Control

Project Name: 1282 BOYLSTON STREET

Project Number: 37820-040

Lab Number: L1304009

Report Date: 03/15/13

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG594802-3 QC Sample: L1304009-01 Client ID: A2-03112013					
Antimony, Total	ND	ND	mg/l	NC	20
Arsenic, Total	ND	ND	mg/l	NC	20
Cadmium, Total	ND	ND	mg/l	NC	20
Chromium, Total	ND	ND	mg/l	NC	20
Copper, Total	ND	ND	mg/l	NC	20
Lead, Total	ND	ND	mg/l	NC	20
Nickel, Total	ND	ND	mg/l	NC	20
Selenium, Total	ND	ND	mg/l	NC	20
Silver, Total	ND	ND	mg/l	NC	20
Zinc, Total	ND	ND	mg/l	NC	20
Total Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG594803-3 QC Sample: L1304009-01 Client ID: A2-03112013					
Iron, Total	18	18	mg/l	0	20
Total Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG594860-3 QC Sample: L1304009-01 Client ID: A2-03112013					
Mercury, Total	ND	ND	mg/l	NC	20
Dissolved Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG594861-3 QC Sample: L1304009-01 Client ID: A2-03112013					
Mercury, Dissolved	ND	ND	mg/l	NC	20

INORGANICS & MISCELLANEOUS

Project Name: 1282 BOYLSTON STREET
Project Number: 37820-040

Lab Number: L1304009
Report Date: 03/15/13

SAMPLE RESULTS

Lab ID: L1304009-01
Client ID: A2-03112013
Sample Location: Not Specified
Matrix: Water

Date Collected: 03/11/13 14:40
Date Received: 03/11/13
Field Prep: See Narrative

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total Suspended	26.		mg/l	5.0	NA	1	-	03/14/13 07:35	30,2540D	DW
Cyanide, Total	ND		mg/l	0.005	--	1	03/12/13 09:48	03/12/13 14:24	30,4500CN-CE	JO
Cyanide, Physiologically Available	ND		mg/l	0.005	--	1	03/12/13 10:30	03/12/13 15:16	64,9014(M)	JO
Chlorine, Total Residual	ND		mg/l	0.02	--	1	-	03/11/13 19:00	30,4500CL-D	DE
TPH	ND		mg/l	4.40	--	1.1	03/12/13 09:30	03/13/13 10:15	74,1664A	JO
Phenolics, Total	ND		mg/l	0.030	--	1	03/12/13 11:00	03/12/13 13:28	4,420.1	MP
Chromium, Hexavalent	ND		mg/l	0.010	--	1	03/11/13 19:00	03/11/13 18:38	30,3500CR-D	DE
Anions by Ion Chromatography - Westborough Lab										
Chloride	2570		mg/l	50.0	--	100	-	03/11/13 23:01	44,300.0	AU



Project Name: 1282 BOYLSTON STREET
Project Number: 37820-040

Lab Number: L1304009
Report Date: 03/15/13

SAMPLE RESULTS

Lab ID: L1304009-02
Client ID: A2-03112013 (FIELD FILTERED)
Sample Location: Not Specified
Matrix: Water

Date Collected: 03/11/13 00:00
Date Received: 03/11/13
Field Prep: See Narrative

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Cyanide, Physiologically Available	ND		mg/l	0.005	--	1	03/12/13 10:30	03/12/13 15:17	64,9014(M)	JO



Project Name: 1282 BOYLSTON STREET

Lab Number: L1304009

Project Number: 37820-040

Report Date: 03/15/13

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: WG594613-1										
Chlorine, Total Residual	ND		mg/l	0.02	--	1	-	03/11/13 19:00	30,4500CL-D	DE
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG594614-1										
Chromium, Hexavalent	ND		mg/l	0.010	--	1	03/11/13 19:00	03/11/13 18:35	30,3500CR-D	DE
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG594712-1										
TPH	ND		mg/l	4.00	--	1	03/12/13 09:30	03/13/13 10:15	74,1664A	JO
General Chemistry - Westborough Lab for sample(s): 01-02 Batch: WG594728-1										
Cyanide, Physiologically Available	ND		mg/l	0.005	--	1	03/12/13 10:30	03/12/13 15:08	64,9014(M)	JO
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG594731-1										
Cyanide, Total	ND		mg/l	0.005	--	1	03/12/13 09:48	03/12/13 14:13	30,4500CN-CE	JO
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG594742-1										
Phenolics, Total	ND		mg/l	0.030	--	1	03/12/13 11:00	03/12/13 13:27	4,420.1	MP
Anions by Ion Chromatography - Westborough Lab for sample(s): 01 Batch: WG595127-1										
Chloride	ND		mg/l	0.500	--	1	-	03/11/13 17:01	44,300.0	AU
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG595201-1										
Solids, Total Suspended	ND		mg/l	5.0	NA	1	-	03/14/13 07:35	30,2540D	DW

Lab Control Sample Analysis

Batch Quality Control

Project Name: 1282 BOYLSTON STREET

Project Number: 37820-040

Lab Number: L1304009

Report Date: 03/15/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG594613-2								
Chlorine, Total Residual	94		-		90-110	-		
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG594614-2								
Chromium, Hexavalent	100		-		85-115	-		20
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG594712-2								
TPH	85		-		64-132	-		34
General Chemistry - Westborough Lab Associated sample(s): 01-02 Batch: WG594728-2								
Cyanide, Physiologically Available	111		-		80-120	-		
General Chemistry - Westborough Lab NEGATIVE LCS Associated sample(s): 01-02 Batch: WG594728-3								
Cyanide, Physiologically Available	2		-		0-10	-		
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG594731-2								
Cyanide, Total	108		-		90-110	-		
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG594742-2								
Phenolics, Total	92		-		82-111	-		12

Lab Control Sample Analysis**Batch Quality Control****Project Name:** 1282 BOYLSTON STREET**Project Number:** 37820-040**Lab Number:** L1304009**Report Date:** 03/15/13

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Anions by Ion Chromatography - Westborough Lab Associated sample(s): 01 Batch: WG595127-2					
Chloride	107	-	90-110	-	

Matrix Spike Analysis

Batch Quality Control

Project Name: 1282 BOYLSTON STREET

Project Number: 37820-040

Lab Number: L1304009

Report Date: 03/15/13

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG594614-4 QC Sample: L1304009-01 Client ID: A2-03112013												
Chromium, Hexavalent	ND	0.1	0.093	93		-	-		85-115	-		20
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG594712-4 QC Sample: L1304007-02 Client ID: MS Sample												
TPH	ND	20.4	16.3	80		-	-		64-132	-		34
General Chemistry - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG594728-5 QC Sample: L1303948-02 Client ID: MS Sample												
Cyanide, Physiologically Available	ND	0.2	0.178	89		-	-		75-125	-		20
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG594731-4 QC Sample: L1303926-02 Client ID: MS Sample												
Cyanide, Total	ND	0.2	0.185	92		-	-		90-110	-		30
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG594742-4 QC Sample: L1304009-01 Client ID: A2-03112013												
Phenolics, Total	ND	0.8	0.71	89		-	-		77-124	-		12
Anions by Ion Chromatography - Westborough Lab Associated sample(s): 01 QC Batch ID: WG595127-3 QC Sample: L1303903-01 Client ID: MS Sample												
Chloride	6.27	4	10.4	103		-	-		40-151	-		18

Lab Duplicate Analysis Batch Quality Control

Project Name: 1282 BOYLSTON STREET

Project Number: 37820-040

Lab Number: L1304009

Report Date: 03/15/13

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG594613-3 QC Sample: L1304000-01 Client ID: DUP Sample						
Chlorine, Total Residual	ND	ND	mg/l	NC		20
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG594614-3 QC Sample: L1304009-01 Client ID: A2-03112013						
Chromium, Hexavalent	ND	ND	mg/l	NC		20
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG594712-3 QC Sample: L1304007-01 Client ID: DUP Sample						
TPH	ND	ND	mg/l	NC		34
General Chemistry - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG594728-4 QC Sample: L1303948-02 Client ID: DUP Sample						
Cyanide, Physiologically Available	ND	ND	mg/l	NC		20
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG594731-3 QC Sample: L1303926-02 Client ID: DUP Sample						
Cyanide, Total	ND	ND	mg/l	NC		30
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG594742-3 QC Sample: L1304009-01 Client ID: A2-03112013						
Phenolics, Total	ND	ND	mg/l	NC		12
Anions by Ion Chromatography - Westborough Lab Associated sample(s): 01 QC Batch ID: WG595127-4 QC Sample: L1303903-01 Client ID: DUP Sample						
Chloride	6.27	6.31	mg/l	1		18
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG595201-2 QC Sample: L1304005-01 Client ID: DUP Sample						
Solids, Total Suspended	3300	1700	mg/l	64	Q	20

Project Name: 1282 BOYLSTON STREET**Project Number:** 37820-040**Lab Number:** L1304009**Report Date:** 03/15/13**Sample Receipt and Container Information**

Were project specific reporting limits specified? YES

Reagent H2O Preserved Vials Frozen on: NA**Cooler Information Custody Seal****Cooler**

A Absent

B Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1304009-01A	Vial HCl preserved	A	N/A	3	Y	Absent	8260(14)
L1304009-01B	Vial HCl preserved	A	N/A	3	Y	Absent	8260(14)
L1304009-01C	Vial HCl preserved	A	N/A	3	Y	Absent	8260(14)
L1304009-01D	Vial HCl preserved	A	N/A	3	Y	Absent	8260-SIM(14)
L1304009-01E	Vial HCl preserved	A	N/A	3	Y	Absent	8260-SIM(14)
L1304009-01F	Vial HCl preserved	A	N/A	3	Y	Absent	8260-SIM(14)
L1304009-01G	Vial Na2S2O3 preserved	A	N/A	3	Y	Absent	504(14)
L1304009-01H	Vial Na2S2O3 preserved	A	N/A	3	Y	Absent	504(14)
L1304009-01J	Amber 1000ml unpreserved	B	7	4	Y	Absent	8270TCL(7)
L1304009-01K	Amber 1000ml unpreserved	B	7	4	Y	Absent	8270TCL(7)
L1304009-01L	Amber 1000ml unpreserved	B	7	4	Y	Absent	8270TCL-SIM(7)
L1304009-01M	Amber 1000ml unpreserved	B	7	4	Y	Absent	8270TCL-SIM(7)
L1304009-01N	Amber 1000ml Na2S2O3	B	7	4	Y	Absent	PCB-608(7)
L1304009-01O	Amber 1000ml Na2S2O3	B	7	4	Y	Absent	PCB-608(7)
L1304009-01P	Amber 1000ml HCl preserved	B	N/A	4	Y	Absent	TPH-1664(28)
L1304009-01Q	Amber 1000ml HCl preserved	B	N/A	4	Y	Absent	TPH-1664(28)
L1304009-01R	Amber 1000ml H2SO4 preserved	B	<2	4	Y	Absent	TPHENOL-420(28)
L1304009-01S	Plastic 1000ml unpreserved	A	7	3	Y	Absent	TSS-2540(7)
L1304009-01T	Plastic 500ml unpreserved	A	7	3	Y	Absent	HEXCR-3500(1)
L1304009-01U	Plastic 500ml unpreserved	A	7	3	Y	Absent	CL-300(28),TRC-4500(1)
L1304009-01V	Plastic 250ml NaOH preserved	A	>12	3	Y	Absent	TCN-4500(14)
L1304009-01W	Plastic 250ml NaOH preserved	A	>12	3	Y	Absent	TCN-4500(14)
L1304009-01X	Plastic 250ml NaOH preserved	A	>12	3	Y	Absent	TCN-4500(14)
L1304009-01Y	Plastic 250ml NaOH preserved	A	>12	3	Y	Absent	PACN(14)

*Values in parentheses indicate holding time in days



Project Name: 1282 BOYLSTON STREET

Project Number: 37820-040

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Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1304009-01Z	Plastic 250ml HNO3 preserved	A	<2	3	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)
L1304009-01Z1	Plastic 250ml HNO3 preserved	A	<2	3	Y	Absent	CU-6020S(180),FE-RI(180),SE-6020S(180),ZN-6020S(180),CR-6020S(180),NI-6020S(180),PB-6020S(180),AG-6020S(180),AS-6020S(180),HG-R(28),SB-6020S(180),CD-6020S(180)
L1304009-02A	Plastic 250ml NaOH preserved	A	>12	3	Y	Absent	PACN(14)
L1304009-03A	Vial HCl preserved	A	N/A	3	Y	Absent	8260-SIM(14),8260(14)
L1304009-03B	Vial HCl preserved	A	N/A	3	Y	Absent	8260-SIM(14),8260(14)
L1304009-03C	Vial Na2S2O3 preserved	A	N/A	3	Y	Absent	504(14)

*Values in parentheses indicate holding time in days



Project Name: 1282 BOYLSTON STREET
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GLOSSARY

Acronyms

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

Footnotes

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

Terms

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

Data Qualifiers

- A** - Spectra identified as "Aldol Condensation Product".
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than five times (5x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit.
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The RPD between the results for the two columns exceeds the method-specified criteria; however, the lower value has been reported

Report Format: Data Usability Report



Project Name: 1282 BOYLSTON STREET
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Data Qualifiers

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.
- J** - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- ND** - Not detected at the reporting limit (RL) for the sample.

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REFERENCES

- 1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IIIA, 1997.
- 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.
- 64 Quality Assurance and Quality Control Requirements and Performance Standards for SW-846 Methods. MADEP BWSC. WSC-CAM-IIA (Revision 4), WSC-CAM-V C (Revision 2), WSC-CAM-IIIA (Revision 5). August 2004.
- 74 Method 1664, Revision A: N-Hexane Extractable Material (HEM; Oil & Grease) and Silica Gel Treated N-Hexane Extractable Material (SGT-HEM; Non-polar Material) by Extraction and Gravimetry, EPA-821-R-98-002, February 1999.

LIMITATION OF LIABILITIES

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

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



Certificate/Approval Program Summary

Last revised December 19, 2012 - Westboro Facility

The following list includes only those analytes/methods for which certification/approval is currently held.
For a complete listing of analytes for the referenced methods, please contact your Alpha Customer Service Representative.

Connecticut Department of Public Health Certificate/Lab ID: PH-0574. **NELAP Accredited Solid Waste/Soil.**

Drinking Water (Inorganic Parameters: Color, pH, Turbidity, Conductivity, Alkalinity, Chloride, Free Residual Chlorine, Fluoride, Calcium Hardness, Sulfate, Nitrate, Nitrite, Aluminum, Antimony, Arsenic, Barium, Beryllium, Cadmium, Calcium, Chromium, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Nickel, Selenium, Silver, Sodium, Thallium, Zinc, Total Dissolved Solids, Total Organic Carbon, Total Cyanide, Perchlorate. Organic Parameters: Volatile Organics 524.2, Total Trihalomethanes 524.2, 1,2-Dibromo-3-chloropropane (DBCP) 504.1, Ethylene Dibromide (EDB) 504.1, 1,4-Dioxane (Mod 8270). Microbiology Parameters: Total Coliform-MF mEndo (SM9222B), Total Coliform – Colilert (SM9223, Enumeration and P/A), E. Coli. – Colilert (SM9223, Enumeration and P/A), HPC – Pour Plate (SM9215B), Fecal Coliform – MF m-FC (SM9222D), Fecal Coliform-EC Medium (SM 9221E).

Wastewater/Non-Potable Water (Inorganic Parameters: Color, pH, Conductivity, Acidity, Alkalinity, Chloride, Total Residual Chlorine, Fluoride, Total Hardness, Silica, Sulfate, Sulfide, Ammonia, Kjeldahl Nitrogen, Nitrate, Nitrite, O-Phosphate, Total Phosphorus, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Strontium, Thallium, Tin, Titanium, Vanadium, Zinc, Total Residue (Solids), Total Dissolved Solids, Total Suspended Solids (non-filterable), BOD, CBOD, COD, TOC, Total Cyanide, Phenolics, Foaming Agents (MBAS), Bromide, Oil and Grease. Organic Parameters: PCBs, Organochlorine Pesticides, Technical Chlordane, Toxaphene, Acid Extractables (Phenols), Benzidines, Phthalate Esters, Nitrosamines, Nitroaromatics & Isophorone, Polynuclear Aromatic Hydrocarbons, Haloethers, Chlorinated Hydrocarbons, Volatile Organics, TPH (HEM/SGT), CT-Extractable Petroleum Hydrocarbons (ETPH), MA-EPH, MA-VPH. Microbiology Parameters: Total Coliform – MF mEndo (SM9222B), Total Coliform – MTF (SM9221B), E. Coli – Colilert (SM9223 Enumeration), HPC – Pour Plate (SM9215B), Fecal Coliform – MF m-FC (SM9222D), Fecal Coliform – A-1 Broth (SM9221E), Enterococcus - Enterolert.

Solid Waste/Soil (Inorganic Parameters: pH, Sulfide, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Tin, Vanadium, Zinc, Total Cyanide, Ignitability, Phenolics, Corrosivity, TCLP Leach (1311), SPLP Leach (1312 metals only), Reactivity. Organic Parameters: PCBs, PCBs in Oil, Organochlorine Pesticides, Technical Chlordane, Toxaphene, CT-Extractable Petroleum Hydrocarbons (ETPH), MA-EPH, MA-VPH, Dicamba, 2,4-D, 2,4,5-T, 2,4,5-TP (Silvex), Dalapon, Volatile Organics (SW 8260), Acid Extractables (Phenols) (SW 8270), Benzidines (SW 8270), Phthalates (SW 8270), Nitrosamines (SW 8270), Nitroaromatics & Cyclic Ketones (SW 8270), PAHs (SW 8270), Haloethers (SW 8270), Chlorinated Hydrocarbons (SW 8270).)

Maine Department of Human Services Certificate/Lab ID: 2009024.

Drinking Water (Inorganic Parameters: SM9215B, 9222D, 9223B, EPA 180.1, 353.2, SM2130B, 2320B, 2540C, 4500Cl-D, 4500CN-C, 4500CN-E, 4500F-C, 4500H+B, 4500NO3-F, EPA 200.7, EPA 200.8, 245.1, EPA 300.0. Organic Parameters: 504.1, 524.2.)

Wastewater/Non-Potable Water (Inorganic Parameters: EPA 120.1, 1664A, 350.1, 351.1, 353.2, 410.4, 420.1, SM2320B, 2510B, 2540C, 2540D, 426C, 4500Cl-D, 4500Cl-E, 4500CN-C, 4500CN-E, 4500F-B, 4500F-C, 4500H+B, 4500Norg-B, 4500Norg-C, 4500NH3-B, 4500NH3-G, 4500NO3-F, 4500P-B, 4500P-E, 5210B, 5220D, 5310C, 9010B, 9040B, 9030B, 7470A, 7196A, 2340B, EPA 200.7, 6010B, 6010C, 200.8, 6020, 245.1, 1311, 1312, 3005A, Enterolert, 9223B, 9222D. Organic Parameters: 608, 624, 625, 8081A, 8081B, 8082, 8082A, 8330, 8151A, 8260B, 8260C, 8270C, 8270D, 3510C, 3630C, 5030B, ME-DRO, ME-GRO, MA-EPH, MA-VPH.)

Solid Waste/Soil (Inorganic Parameters: 9010B, 9012A, 9014, 9030B, 9040B, 9045C, 6010B, 6010C, 6020, 6020A, 7471A, 7471B, 7196A, 9050A, 1010, 1030, 9065, 1311, 1312, 3005A, 3050B. Organic Parameters: ME-DRO, ME-GRO, MA-EPH, MA-VPH, 8260B, 8270C, 8270D, 8330, 8151A, 8081A, 8081B, 8082, 8082A, 3540C, 3546, 3580A, 3630C, 5030B, 5035.)

Massachusetts Department of Environmental Protection Certificate/Lab ID: M-MA086.

Drinking Water (Inorganic Parameters: (EPA 200.8 for: Sb,As,Ba,Be,Cd,Cr,Cu,Pb,Ni,Se,Tl) (EPA 200.7 for: Ba,Be,Ca,Cd,Cr,Cu,Na,Ni) 245.1, (300.0 for: Nitrate-N, Fluoride, Sulfate); (EPA 353.2 for: Nitrate-N, Nitrite-N); (SM4500NO3-F for: Nitrate-N and Nitrite-N); 4500F-C, 4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, 2320B, SM2540C, SM4500H-B. Organic Parameters: (EPA 524.2 for: Trihalomethanes, Volatile Organics); (504.1 for: 1,2-Dibromoethane, 1,2-Dibromo-3-Chloropropane), EPA 332. Microbiology Parameters: SM9215B; ENZ. SUB. SM9223; Colilert/OT SM9223B; MF-SM9222D.)

Non-Potable Water (Inorganic Parameters:, (EPA 200.8 for: Al,Sb,As,Be,Cd,Cr,Cu,Pb,Mn,Ni,Se,Ag,Tl,Zn); (EPA 200.7 for: Al,Sb,As,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Mo,Ni,K,Se,Ag,Na,Sr,Ti,Tl,V,Zn); 245.1, SM4500H,B, EPA 120.1, SM2510B, 2540C, 2340B, 2320B, 4500CL-E, 4500F-BC, 426C, SM4500NH3-BH, (EPA 350.1 for: Ammonia-N), LACHAT 10-107-06-1-B for Ammonia-N, SM4500NO3-F, 353.2 for Nitrate-N, SM4500NH3-BC-NES, EPA 351.1, SM4500P-E, 4500P-B,E, 5220D, EPA 410.4, SM 5210B, 5310C, 4500CL-D, EPA 1664, SM14 510AC, EPA 420.1, SM4500-CN-CE, SM2540D.

Organic Parameters: (EPA 624 for Volatile Halocarbons, Volatile Aromatics),(608 for: 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-Water), (EPA 625 for SVOC Acid Extractables and SVOC Base/Neutral Extractables), 600/4-81-045-PCB-Oil. *Microbiology Parameters:* (ColilertQT SM9223B; Enterolert-QT: SM9222D-MF.)

New Hampshire Department of Environmental Services Certificate/Lab ID: 200307. NELAP Accredited.

Drinking Water (Inorganic Parameters: SM 9222B, 9223B, 9215B, EPA 200.7, 200.8, 300.0, SM4500CN-E, 4500H+B, 4500NO3-F, 2320B, 2510B, 2540C, 4500F-C, 5310C, 2120B, EPA 332.0. *Organic Parameters:* 504.1, 524.2.)

Non-Potable Water (Inorganic Parameters: SM9222D, 9221B, 9222B, 9221E-EC, EPA 3005A, 200.7, 200.8, 245.1, SW-846 6010C, 6020A, 7196A, 7470A, SM3500-CR-D, EPA 120.1, 300.0, 350.1, 350.2, 351.1, 353.2, 410.4, 420.1, 426C, 1664A, SW-846 9010B, 9010C, 9030, 9040B, 9040C, SM2120B, 2310B, 2320B, 2340B, 2540B, 2540D, 4500H+B, 4500CL-E, 4500CN-E, 4500NH3-H, 4500NO3-F, 4500NO2-B, 4500P-E, 4500-S2-D, 4500SO3-B, 5210B, 5220D, 2510B, 2540C, 4500F-C, 5310C, 5540C, LACHAT 10-204-00-1-A, LACHAT 10-107-06-2-D, 3060A. *Organic Parameters:* SW-846 3510C, 3630C, 5030B, 8260C, 8270D, 8330, EPA 624, 625, 608, SW-846 8082A, 8081B, 8015C, 8151A, 8330, 8270D-SIM.)

Solid & Chemical Materials (Inorganic Parameters: SW-846 6010C, 6020A, 7196A, 7471B, 1010, 1010A, 1030, 9010C, 9012B, 9014, 9030B, 9040C, 9045C, 9045D, 9050, 9065, 9251, 1311, 1312, 3005A, 3050B, 3060A. *Organic Parameters:* SW-846 3540C, 3546, 3050B, 3580A, 3620D, 3630C, 5030B, 5035, 8260C, 8270D, 8270D-SIM, 8330, 8151A, 8015B, 8015C, 8082A, 8081B.)

New Jersey Department of Environmental Protection Certificate/Lab ID: MA935. NELAP Accredited.

Drinking Water (Inorganic Parameters: SM9222B, 9221E, 9223B, 9215B, 4500CN-CE, 4500NO3-F, 4500F-C, EPA 300.0, 200.7, 200.8, 245.1, 2540C, SM2120B, 2320B, 2510B, 5310C, SM4500H-B. *Organic Parameters:* EPA 332, 504.1, 524.2.)

Non-Potable Water (Inorganic Parameters: SM5210B, EPA 410.4, SM5220D, 4500CI-E, EPA 300.0, SM2120B, 2340B, SM4500F-BC, EPA 200.7, 200.8, 351.1, LACHAT 10-107-06-2-D, EPA 353.2, SM4500NO3-F, 4500NO2-B, EPA 1664A, SM5310B, C or D, 4500-PE, EPA 420.1, SM510ABC, SM4500P-B5+E, 2540B, 2540C, 2540D, EPA 120.1, SM2510B, SM2520B, SM15 426C, 9222D, 9221B, 9221C, 9221E, 9222B, 9215B, 2310B, 2320B, 4500NH3-H, 4500-S D, EPA 350.1, 350.2, SW-846 1312, 7470A, 5540C, SM4500H-B, 4500SO3-B, SM3500Cr-D, 4500CN-CE, EPA 245.1, SW-846 9040B, 9040C, 3005A, 3015, EPA 6010B, 6010C, 6020, 6020A, 7196A, 3060A, SW-846 9010C, 9030B. *Organic Parameters:* SW-846 8260B, 8260C, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 3510C, EPA 608, 624, 625, SW-846 3630C, 5030B, 8011, 8015C, 8081A, 8081B, 8082, 8082A, 8151A, 8330, 1,4-Dioxane by NJ Modified 8270, 8015B, NJ EPH.)

Solid & Chemical Materials (Inorganic Parameters: SW-846, 6010B, 6010C, 6020, 6020A, 7196A, 3060A, 9030B, 1010, 1010A, 1030, 1311, 1312, 3005A, 3050B, 7471A, 7471B, 9010C, 9012B, 9014, 9038, 9040B, 9040C, 9045C, 9045D, 9050A, 9065, 9251. *Organic Parameters:* SW-846 8015B, 8015C, 8081A, 8081B, 8082, 8082A, 8151A, 8330, 8260B, 8260C, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 3540C, 3546, 3580A, 3620C, 3630C, 5030B, 5035L, 5035H, NJ EPH.)

New York Department of Health Certificate/Lab ID: 11148. NELAP Accredited.

Drinking Water (Inorganic Parameters: SM9223B, 9222B, 9215B, EPA 200.8, 200.7, 245.2, SM5310C, EPA 332.0, SM2320B, EPA 300.0, SM2120B, 4500CN-E, 4500F-C, 4500NO3-F, 2540C, SM 2510B. *Organic Parameters:* EPA 524.2, 504.1.)

Non-Potable Water (Inorganic Parameters: SM9221E, 9222D, 9221B, 9222B, 9215B, 5210B, 5310C, EPA 410.4, SM5220D, 2310B-4a, 2320B, EPA 200.7, 300.0, SM4500CL-E, 4500F-C, SM15 426C, EPA 350.1, SM4500NH3-BH, EPA 351.1, LACHAT 10-107-06-2, EPA 353.2, SM4500-NO3-F, 4500-NO2-B, 4500P-E, 2540C, 2540B, 2540D, EPA 200.8, EPA 6010B, 6010C, 6020, 6020A, EPA 7196A, SM3500Cr-D, EPA 245.1, 7470A, SM2120B, LACHAT 10-204-00-1-A, 4500CN-CE, EPA 1664A, EPA 420.1, SM14 510C, EPA 120.1, SM2510B, SM4500S-D, SM5540C, EPA 3005A, 3015, 9010C, 9030B. *Organic Parameters:* EPA 624, 8260B, 8260C, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 625, 608, 8081A, 8081B, 8151A, 8330, 8082, 8082A, EPA 3510C, 5030B.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 1010A, 1030, EPA 6010B, 6010C, 7196A, 7471A, 7471B, 9012B, 9014, 9065, 9050A, EPA 1311, 1312, 3005A, 3050B, 9010C, 9030B, 9040C, 9045D. *Organic Parameters:* EPA 8260B, 8260C, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 8015B, 8015C, 8081A, 8081B, 8151A, 8330, 8082 8082A, 3540C,

3546, 3580A, 5030B, 5035A-H, 5035A-L.)

North Carolina Department of the Environment and Natural Resources Certificate/Lab ID : 666. (Inorganic Parameters: SM2310B, 2320B, 4500CI-E, 4500Cn-E, 9014, Lachat 10-204-00-1-X, 1010A, 1030, 4500NO3-F, 353.2, 4500P-E, 4500SO4-E, 300.0, 4500S-D, 5310B, 5310C, 6010C, 6020A, 200.7, 200.8, 3500Cr-B, 7196A, 245.1, 7470A, 7471B, 1311, 1312. Organic Parameters: 608, 8081B, 8082A, 624, 8260B, 625, 8270D, 8151A, 8015C, 504.1, MA-EPH, MA-VPH.)

Drinking Water Program Certificate/Lab ID: 25700. (Inorganic Parameters: Chloride EPA 300.0. Organic Parameters: 524.2)

Pennsylvania Department of Environmental Protection Certificate/Lab ID : 68-03671. **NELAP Accredited.**

Drinking Water (Inorganic Parameters: 200.7, 200.8, 300.0, 332.0, 2120B, 2320B, 2510B, 2540C, 4500-CN-CE, 4500F-C, 4500H+-B, 4500NO3-F, 5310C. Organic Parameters: EPA 524.2, 504.1)

Non-Potable Water (Inorganic Parameters: EPA 120.1, 1312, 3005A, 3015, 3060A, 200.7, 200.8, 410.4, 1664A, SM2540D, 5210B, 5220D, 4500-P, BE, 245.1, 300.0, 350.1, 350.2, 351.1, 353.2, 420.1, 6010C, 6020A, 7196A, 7470A, 9030B, 2120B, 2310B, 2320B, 2510B, 2540B, 2540C, 3500Cr-D, 426C, 4500CN-CE, 4500CI-E, 4500F-B, 4500F-C, 4500H+-B, 4500NH3-H, 4500NO2-B, 4500NO3-F, 4500S-D, 4500SO3-B, 5310BCD, 5540C, 9010C, 9040C. Organic Parameters: EPA 3510C, 3630C, 5030B, 625, 624, 608, 8081B, 8082A, 8151A, 8260C, 8270D, 8270D-SIM, 8330, 8015C, NJ-EPH.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 350.1, 1010, 1030, 1311, 1312, 3005A, 3050B, 3060A, 6010C, 6020A, 7196A, 7471B, 9010C, 9012B, 9014, 9040B, 9045D, 9050A, 9065, SM 4500NH3-BH, 9030B, 9038, 9251. Organic Parameters: 3540C, 3546, 3580A, 3620C, 3630C, 5035, 8015C, 8081B, 8082A, 8151A, 8260C, 8270D, 8270D-SIM, 8330, NJ-EPH.)

Rhode Island Department of Health Certificate/Lab ID: LAO00065. **NELAP Accredited via NJ-DEP.**

Refer to MA-DEP Certificate for Potable and Non-Potable Water.

Refer to NJ-DEP Certificate for Potable and Non-Potable Water.

Texas Commisison on Environmental Quality Certificate/Lab ID: T104704476. **NELAP Accredited.**

Non-Potable Water (Inorganic Parameters: EPA 120.1, 1664, 200.7, 200.8, 245.1, 245.2, 300.0, 350.1, 351.1, 353.2, 410.4, 420.1, 6010, 6020, 7196, 7470, 9040, SM 2120B, 2310B, 2320B, 2510B, 2540B, 2540C, 2540D, 426C, 4500CL-E, 4500CN-E, 4500F-C, 4500H+B, 4500NH3-H, 4500NO2B, 4500P-E, 4500 S²⁻D, 510C, 5210B, 5220D, 5310C, 5540C. Organic Parameters: EPA 608, 624, 625, 8081, 8082, 8151, 8260, 8270, 8330.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 1311, 1312, 9012, 9014, 9040, 9045, 9050, 9065.)

Virginia Division of Consolidated Laboratory Services Certificate/Lab ID: 460195. **NELAP Accredited.**

Drinking Water (Inorganic Parameters: EPA 200.7, 200.8, 300.0, 2510B, 2120B, 2540C, 4500CN-CE, 245.2, 2320B, 4500F-C, 4500NO3-F, 5310C. Organic Parameters: EPA 504.1, 524.2.)

Non-Potable Water (Inorganic Parameters: EPA 120.1, 1664A, 200.7, 200.8, 245.1, 300.0, 3005A, 3015, 1312, 6010B, 6010C, 3060A, 353.2, 420.1, 6020, 6020A, SM4500S-D, SM4500-CN-CE, Lachat 10-204-00-1-X, 7196A, 7470A, 9010B, 9040B, 2310B, 2320B, 2510B, 2540B, 2540C, 3500Cr-D, 426C, 4500CI-E, 4500F-B, 4500F-C, 4500PE, 510AC, 5210B, 5310B 5310C, 5540C. Organic Parameters: EPA 3510C, 3630C, 5030B, 8260B, 608, 624, 625, 8081A, 8081B, 8082, 8082A, 8151A, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 8330,)

Solid & Hazardous Waste (Inorganic Parameters: EPA 1010A, 1030, 3060A, 3050B, 1311, 1312, 6010B, 6010C, 6020, , 7196A, 7471A, 7471B, 6020A, 9030B, 9010B, 9012A, 9014 9040B, 9045C, 9050A, 9065. Organic Parameters: EPA 5030B, 5035, 3540C, 3546, 355B0, 3580A, 3630C, 6020A, 8260B, 8015B, 8015C, 8081A, 8081B, 8082, 8082A, 8151A, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 8330.)

Department of Defense, L-A-B Certificate/Lab ID: L2217.

Drinking Water (Inorganic Parameters: SM 4500H-B. Organic Parameters: EPA 524.2, 504.1.)

Non-Potable Water (Inorganic Parameters: EPA 200.7, 200.8, 6010B, 6010C, 6020, 6020A, 245.1, 245.2, 7470A, 9040B, 9010B, 180.1. 300.0, 332.0, 6860, 353.2, 410.4, 9060, 1664A, SM 4500CN-E, 4500H-B, 4500NO3-F, 4500CL-D, 5220D, 5310C, 2130B, 2320B, 2540C, 3005A, 3015, 9010B, 9056, 7196A, 3500-Cr-D. Organic Parameters: EPA 8260B, 8260C, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 8330A, 8082, 8082A, 8081A, 8081B, 3510C, 5030B, MassDEP EPH, MassDEP VPH.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 200.7, 6010B, 6010C, 7471A, 6860, 1311, 1312, 3050B, 7196A, 9010B, 9012A, 9040B, 9045C, 3500-CR-D, 4500CN-CE, 2540G, Organic Parameters: EPA 8260B, 8260C, 8270C,

8270D, 8270C-SIM, 8270D-SIM, 8330A/B-prep, 8082, 8082A, 8081A, 8081B, 3540C, 3546, 3580A, 5035A, MassDEP EPH, MassDEP VPH.)

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

EPA 8260B: Freon-113, 1,2,4,5-Tetramethylbenzene, 4-Ethyltoluene. **EPA 8330A:** PETN, Picric Acid, Nitroglycerine, 2,6-DANT, 2,4-DANT. **EPA 8270C:** Methyl naphthalene, Dimethyl naphthalene, Total Methyl naphthalenes, Total Dimethyl naphthalenes, 1,4-Diphenylhydrazine (Azobenzene). **EPA 625:** 4-Chloroaniline, 4-Methylphenol. Total Phosphorus in a soil matrix, Chloride in a soil matrix, TKN in a soil matrix, NO₂ in a soil matrix, NO₃ in a soil matrix. **EPA 9071:** Total Petroleum Hydrocarbons, Oil & Grease.

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Suite 2200,
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Page	1 of 2

LABORATORY ALPHA ANALYTICAL	
ADDRESS	WESTBOROUGH, MA
CONTACT	Gina Hall

DELIVERY DATE 03/11/2013
TURNAROUND TIME 5 DAY
PROJECT MANAGER Leah Samanta

[illegible][illegible]**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 X 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		

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2/2

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Page	2 of 2

LABORATORY	ALPHA ANALYTICAL
ADDRESS	WESTBOROUGH, MA
CONTACT	Gina Hall

DELIVERY DATE	
TURNAROUND TIME	5 DAY
PROJECT MANAGER	Leah Samanta

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

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

x 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 X 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		