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

CERTIFIED MAIL RETURN RECEIPT REQUESTED

MAR 04 2015

Mr. Finn O'Sullivan
Project Executive
John Moriarty & Associates
3 Church Street
Winchester, MA 01890

Re: Authorization to discharge under the Remediation General Permit (RGP) – MAG910000. "The Point", construction development site located at 200 Brookline Avenue, Boston, MA 02215, Suffolk County; Authorization # MAG910664

Dear Mr. O'Sullivan:

Based on the review of a Notice of Intent (NOI) submitted by William J. Burns from McPhail Associates, LLC, on behalf of Fenway Ventures Point Properties, LLC, for the site referenced above, the U.S. Environmental Protection Agency (EPA) hereby authorizes you, as the named Operator, to discharge in accordance with the provisions of the RGP at that site. Your authorization number is listed above.

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

Please note the enclosed checklist includes parameters, total petroleum hydrocarbons (TPH) because of historic petroleum contamination. Also, total suspended solids and metals, antimony, arsenic, cadmium, copper, nickel and iron are required to be monitored to guard against fluctuations of contamination not only from the single area tested but from other sections of this large size site, from which no pollutant information was provided. Monitoring of any of these pollutants may be deleted if at the end of six months some or none of these are detected above the RGP concentration established in Appendix III, by using a notice of change (NOC).

Also, please note that the metals included on the checklist are dilution dependent pollutants and subject to limitations based on a dilution factor range (DFR), due to the ample dilution at the point of discharge (247) the DFR applicable for this pollutant is within a dilution range greater than one hundred (>100) established in the RGP. (See the RGP Appendix IV for Massachusetts facilities). Therefore, the limit for antimony of 141 ug/L, arsenic of 540 ug/L, cadmium of 20 ug/L, copper of 520 ug/L, nickel of 2,380 ug/L, and iron of 5,000 ug/L, shall not be exceeded in the discharge.

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 EPA general permit and authorization to discharge will expire on September 9, 2015. You have reported this project will terminate on March 1, 2016. Please be aware you are required to reapply for coverage after the EPA expired permit has been reissued. The reissuance date as well as the reapplication submittal date will be posted on the EPA web site at that time. Also, regardless of your project termination date you are required to submit a Notice of Termination (NOT) to the attention of the contact person indicated below within 30 days of project completion.

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

Sincerely,

Thelma Murphy

Thelma Murphy, Chief
Storm Water and Construction
Permits Section

Enclosure

cc: Robert Kubit, MassDEP
Stephen Shea, BWSC
William J. Burns, McPhail Associates, LLC

2010 Remediation General Permit
Summary of Monitoring Parameters[1]

NPDES Authorization Number:	**MAG910664**
Authorization Issued:	February, 2015
Facility/Site Name:	The Point
Facility/Site Address:	200 Brookline Avenue, Boston, MA 02134
	Email address of owner: crollins@samuelsre.com
Legal Name of Operator:	John Moriarty & Associates
Operator contact name, title, and Address:	Mr. Finn O'Sullivan, Project Executive, 3 Church Street, Winchester, MA 01890
	Email: fosullivan@jm-a.com
Estimated date of the site's Completion:	March 1, 2016
Category and Sub-Category:	Contaminated Construction Dewatering. Sub-category A. General Urban Fill Sites.
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

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

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

	Parameter	Effluent Limit/Method#/ML (All Effluent Limits are shown as Daily Maximum Limit, unless denoted by a **, in that case it will be a Monthly Average Limit)
	Phthalate]	5ug/L
	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/ML5ug/L
	36. Total Group II Polycyclic Aromatic Hydrocarbons (PAH)	100 ug/L
	h. Acenaphthene	X/Me#8270D/ML 5ug/L,Me#610/ML 5ug/L & Me#625/ML 5ug/L
	i. Acenaphthylene	X/Me#8270D/ML 5ug/L,Me#610/ML 5ug/L & Me#625/ML 5ug/L
	j. Anthracene	X/Me#8270D/ML 5ug/L,Me#610/ML 5ug/L & Me#625/ML 5ug/L
	k. Benzo(ghi) Perylene	X/Me#8270D/ML 5ug/L,Me#610/ML 5ug/L & Me#625/ML 5ug/L
	l. Fluoranthene	X/Me#8270D/ML 5ug/L,Me#610/ML 5ug/L & Me#625/ML 5ug/L
	m. Fluorene	X/Me#8270D/ML 5ug/L,Me#610/ML 5ug/L & Me#625/ML 5ug/L
	n. Naphthalene [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/ML5ug/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

	Metal parameter	Total Recoverable MA/Metal Limit H [10] = 50 mg/l CaCO3, Units = ug/l [11/12] Freshwater Limits		Minimum level=ML	
√	39. Antimony	141		ML	10
√	40. Arsenic **	540		ML	20
√	41. Cadmium **	20		ML	10
	42. Chromium III (trivalent) **	48.8		ML	15
	43. Chromium VI (hexavalent) **	11.4		ML	10
√	44. Copper **	5.2		ML	15
	45. Lead **	1.3		ML	20
	46. Mercury **	0.9		ML	02
√	47. Nickel **	2,380		ML	20
	48. Selenium **	5		ML	20
	49. Silver	1.2		ML	10
	50. Zinc **	66.6		ML	15
√	51. Iron	5,000		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 "Aroclor 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 x 1,000ug/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 x 2 =2,000 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

NOTICE OF INTENT FOR DISCHARGE - UNDER MASSACHUSETTS - REMEDIATION GENERAL PERMIT - MAG910000 -

THE POINT -
200 BROOKLINE AVENUE -

BOSTON, MASSACHUSETTS -

FEBRUARY 11, 2015 -

Prepared For: -
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY -
5 POST OFFICE SQUARE, SUITE 100 -
MAIL CODE OEP06-4 -
BOSTON, MA 02109-3912 -

On Behalf Of: -
John Moriarty & Associates
3 Church Street -
Winchester, MA 01890 -

PROJECT NO. 4617 -

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

February 11, 2015

United States Environmental Protection Agency
5 Post Office Square, Suite 100
Mail Code OEP06-4
Boston, MA 02109-3912

Attention: RGO-NOC Processing

Reference: The Point; 200 Brookline Avenue, Boston, Massachusetts
Notice of Intent for Construction Dewatering Discharge Under
Massachusetts Remediation General Permit MAG910000

Ladies and Gentlemen:

The purpose of this letter report is to provide a summary of the site and groundwater quality information in support of an application for approval from the U.S. Environmental Protection Agency (EPA) for the temporary discharge of groundwater into the Charles River via a storm drain system during construction at the above referenced site. Refer to **Figure 1** Project Location Plan for the general site locus.

These services were performed and this permit application was prepared with the authorization of Fenway Ventures Point Properties, LLC. These services are subject to the limitations contained in **Attachment A**.

The required Notice of Intent Form contained in the RGP permit and Boston Water & Sewer Dewatering Discharge Permit Application are included in **Appendix B**.

Applicant/Operator

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

John Moriarty & Associates
3 Church Street
Winchester, MA 01890

Attention: Finn O'Sullivan

Tel: 781-858-8791
Fax: 781-729-8456

Existing Conditions

The subject site fronts onto Boylston Street to the south and Brookline Avenue to the north/northwest, and is bounded by the intersection of Brookline Avenue, Boylston Street and Park Drive to the west, and an alleyway that separates the site from the adjacent Trilogy building at 1375 Boylston Street to the east. The limits of the subject site are shown on **Figure 2**, which is based on a plan entitled Subsurface Investigation Plan.

The approximate 25,191 square-foot triangular-shaped site is currently occupied by a 1-story concrete and brick building which has one 1-level below-grade. Concrete and/or bituminous concrete paved surface walkways and/or parking are located around the perimeter of the existing building. Existing ground surface around the perimeter of the existing building generally varies from about Elevation +16 to Elevation +18. The lowest level slab of the existing structure is understood to be at about Elevation +9.5.

Proposed Scope of Site Development

Following the demolition of the existing building, the proposed development is understood to include the construction of a 32-story concrete-framed tower. The lowest level slab will be approximately coincident with surrounding grades and will vary from about Elevation +16.35 to Elevation +17.3.

In addition, an approximate 2,200 square-foot, 3-level below-grade occupied structure will be constructed on the east side of the proposed building for mechanical space and to provide access into the adjacent 3-level below-grade Trilogy parking garage. The lowest level slab of the below-grade connector will be at about Elevation -15.5.

The project is also planned to include the installation of one stormwater infiltration structure below the southeast corner of the proposed building footprint and two additional stormwater infiltration systems are planned outside the proposed building footprint.

Site Environmental Setting and Surrounding Historical Places

Based upon a review of the Massachusetts DEP on-line waste-site database, updated through February 6, 2015, the subject site is not a DEP-listed MCP site. Further, a review of federal, state and municipal databases does indicate the presence, storage and/or spill of oil or hazardous materials at the subject site.

Based on an on-line edition of the Massachusetts Geographic Information Systems DEP Priority Resources Map, the subject site is not located within the boundaries of a Potentially Productive Aquifer or within a Zone II, Interim Wellhead Protection Area as defined by the DEP. Further, there are no public or private drinking water supply wells, no Areas of Critical Environmental Concern, no fish habitats, no habitats of Species of Special Concern or

Threatened or Endangered Species at the subject site or within specified distances from the subject site. There are no water bodies or wetland areas at the subject site. The nearest water body is the Muddy River, classified by the DEP as a Class B Surface Water Body, which is located approximately 500 feet to the southwest of the subject site. There are no solid waste sites (landfills) noted as being located within 1,000 feet of the subject site. A copy of the DEP Priority Resources Map depicting the location of the subject site is included in **Appendix C**.

A review of the most recent federal listing of threatened and endangered species published by the U.S. Fish and Wildlife Service identified no threatened and/or endangered species at or in the vicinity of the proposed discharge location and/or discharge outfall. In addition, a review of the Massachusetts Division of Fisheries and Wildlife on-line database identified no threatened or endangered species at the point of discharge and/or the discharge outfall. Based upon the above, the site is considered criterion A pursuant to Appendix IV of the RGP. A list of threatened and endangered species from the U.S. Fish and Wildlife Services and Massachusetts Division of Fisheries on-line databases is included in **Appendix C**.

The subject site is not listed on the State and National Register of Historical Places). However, the subject site is located within the immediate vicinity of Fenway Park (BOS.7709) and the Emerald Necklace Parks (Olmstead Park System)(BOS.JE), both of which are listed in the State and National Registers of Historic Places.

As further discussed below, treated construction dewatering effluent will be discharged into dedicated storm drains that eventually flow into the Charles River. The dewatering of groundwater at the site will be temporary and intermittent. Therefore, based on the anticipated duration of construction dewatering and the location of its discharge into the Charles River, construction dewatering activities are not considered to affect the historical elements of the nearby historical listings. Hence, the site meets Permit Eligibility Criteria 2 under the RemediationGeneral Permit.

Site History

In summary, the Fenway area of Boston in which the subject site is located was initially developed in the early 1900's. The subject building which currently occupies the subject site was constructed in 1919. From 1937 through 1978, historical Sanborn Maps and municipal records indicate the subject building was occupied by a number of commercial tenants which include an automotive and tire sales company, an automotive repair shop, a television sales and repair business and a clothing company. More recently, the subject building has been occupied by restaurants, retail stores, a storage area, offices and studios.

Historically, the area surrounding the subject site has primarily consisted of commercial properties which include storage warehouses, automotive repair shops, gasoline stations, restaurants and retail stores. Recently, many of these properties have been redeveloped into multi-story mixed use buildings that include below grade space.

Construction Site Dewatering

Subsurface explorations performed at the subject site encountered the surface of groundwater at depths of about 10 to 14 feet below ground surface. Observation wells located in the vicinity of the site that are maintained by the Boston Groundwater Trust indicate that groundwater levels generally range from about Elevation +4 to Elevation +7.

In connection with the planned redevelopment of the subject site, it is anticipated that excavation for the 3-level below grade occupied structure will extend below the surface of groundwater. In addition, storm water run-off is anticipated to accumulate within localized trenches after periods of heavy precipitation requiring dewatering. Hence, groundwater dewatering will be necessary to facilitate construction of the proposed building.

It is anticipated that dewatering by means of strategically located sumps and trenches should suffice during the foundation construction operations. Intermittent groundwater discharge will be required during excavation at an estimated rate of 20 to 45 gallons per minute (GPM).

Given that the footprint of the proposed building occupies a majority of the subject site, temporary on-site collection and recharge of groundwater is not feasible. As a result, construction dewatering will require the discharge of collected groundwater and stormwater into the storm drain system under the requested Remediation General Permit.

A review of available subgrade utility plans provided by the Boston Water and Sewer Commission indicates the presence of a 116-inch by 120-inch dedicated storm drain located beneath Brookline Avenue. The stormwater drain located beneath Brookline Avenue flows northeast where it eventually discharges into the Charles River. Beneath Boylston Street, the Boston Water and Sewer utility plans indicate the presence of 12-inch diameter dedicated storm drain that flows northeast. As it approaches the intersection of Kilmarnock Street, the storm drain increases to 15-inches in diameter. At the intersection of Kilmarnock Street, the 15-inch diameter storm drain connects into a 42-inch diameter storm drain that runs northwest beneath Kilmarnock Street. The 42-inch diameter storm drain connects with above reference storm drain located beneath Brookline Avenue. The locations of the relevant stormwater drains in relation to the subject site are indicated on **Figure 2**. The flow path of the discharge is shown in plans provided by the Boston Water and Sewer Commission which are included in **Figures 3A** through **3D**.

Summary of Groundwater Analysis

On January 20, 2015, McPhail Associates, LLC obtained a sample of groundwater from monitoring well SH-3 which is located within the northeastern portion of the subject building. The groundwater samples were submitted to a certified laboratory for analysis for the presence of compounds required under the EPA's Remediation General Permit (RGP) application, including total suspended solids (TSS), total residual chlorine, total petroleum

hydrocarbons (TPH), volatile organic compounds (VOCs) including total benzene, toluene, ethylbenzene and xylenes (BTEX), poly-aromatic hydrocarbons (PAHs), total phenols, pesticides and PCBs, and total recoverable metals. The results of the laboratory analysis are summarized in **Table 1**, and laboratory data is included in **Appendix D**.

With the exception of cadmium, the results of the laboratory testing did not detect concentrations of the tested compounds in excess of the applicable EPA discharge limits established in Appendix III of the RGP. The groundwater sample obtained from SH-3 exhibited a concentration of total cadmium at 0.21 micrograms per liter (ug/l) which exceeds the RGP effluent limit for discharge into a fresh water body of 0.2 ug/l.

A Dilution Factor (DF) was calculated for the detected levels of metals pursuant to the procedure contained in the RGP MAG910000, Notice of Intent. The purpose of the DF calculation is to establish Total Recoverable Limits for metals, taking into consideration the anticipated dilution of the detected analyte upon discharge into the Charles River. The calculated DF was then used to find the appropriate Dilution Range Concentrations (DRCs) contained in MAG910000, Appendix IV. The Minimum Flow Rate calculated by the USGS Streamstats GIS database at the location of discharge into the Charles River for 7 consecutive days with a recurrence interval of 10 years (7Q10 flow) is 24.7 thus resulting in a DF of 247.1. A DF in excess of 100 corresponds to a dilution concentration of 20 ug/l for total cadmium. Therefore, based on calculations of the applicable dilution factor, the total cadmium concentration is below the applicable permit limitations.

Although not detected in the groundwater sample obtained from monitoring well SH-3, it is likely that concentrations of total suspended solids (TSS) in the dewatered groundwater during construction will exceed the RGP effluent limit of 30 milligrams per liter (mg/l). Subsurface explorations performed at the subject site indicate that portions of the building are underlain by urban fill material that generally consists of a grayish-brown to black, silty sand and gravel containing varying amounts of clay, brick, concrete, organics, ash and cinders. As a result, the dewatered groundwater will be passed through a treatment system that is discussed below, which includes sedimentation components that will reduce potential concentrations of TSS in the effluent to below the applicable RGP discharge limits.

Groundwater Treatment

Based on the results of the above referenced groundwater analyses, it is our opinion that a 5,000-gallon capacity settling tank and bag filter in series will be required to settle out suspended particulates during construction dewatering to meet the applicable effluent limits established by the US EPA prior to off-site discharge. A schematic of the treatment system is shown on **Figure 4**.

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

Summary and Conclusions

The purpose of this report is to assess site environmental conditions and groundwater data to support an application for a Massachusetts Remediation General Permit for off-site discharge of dewatered groundwater which will be encountered during the redevelopment of The Point parcel located at 200 Brookline Avenue in Boston, Massachusetts. The groundwater testing results reported in this application have been provided to the site owner.

Based on the results of the above referenced groundwater analyses, treatment of construction dewatering will be necessary to meet allowable effluent limits for TSS established by the US EPA prior to off-site discharge. The proposed construction dewatering effluent treatment system will consist of one settling tank 5,000-gallons in capacity and bag filter in series in order to meet the applicable discharge limits for TSS established by the RGP. However, should the effluent monitoring results indicate levels of TSS in excess of the limits established in the Massachusetts Remediation General Permit, additional mitigative measures will be implemented to meet the allowable discharge limits.

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

Sincerely,

McPHAIL ASSOCIATES, LLC

William J. Burns

Joseph G. Lombardo, Jr., L.S.P.

WJB/jgl

F:\WP5\Office\CONVERSION TO WORD\Letter Report.docx

C: Fenway Ventures Point Properties, LLC
John Moriarty and Associates

FIGURE 1

McPHAIL ASSOCIATES, LLC
Geotechnical and Geoenvironmental Engineers
2269 Massachusetts Avenue
Cambridge, MA 02140
617/868-1420
617/868-1423 (Fax)
www.mcphailgeo.com

N

SCALE 1:25,000

PROJECT LOCATION PLAN

THE POINT

BOSTON MASSACHUSETTS

FIGURE 2

NORTH

NORTH

APPROXIMATE LIMITS OF PROPOSED 3-LEVEL BELOW-GRADE TRILOGY GARAGE CONNECTOR. LOWEST LEVEL SLAB EL.-15.5 (HATCHED).

PROPOSED LOCATION OF CONSTRUCTION DEWATERING DISCHARGE

APPROXIMATE LIMITS OF PROPOSED LEVELS 1 AND 2. LOWEST LEVEL SLAB AT EL.+16.35 TO EL.+17.3.

APPROXIMATE LIMITS OF SUBJECT SITE

PROPOSED LOCATION OF CONSTRUCTION DEWATERING DISCHARGE

B-1 B-301 (OW) B-101 B-5 SH-3 SH-2 SH-1 B-102 B-103

BROOKLINE AVENUE (PUBLIC - VARIABLE WIDTH) (L=6103 L=7548 L=8678)

BOYLSTON STREET

LINE THROUGH THE MIDDLE OF A 12" WALL (DEED)

BOOK 43612, PAGE 195 (LOT B) ASSESSORS PARCEL ID 2100055000

BOOK 43612, PAGE 195 (LOT A) ASSESSORS PARCEL ID 2100054000

ONE STORY BRICK & CONC.

LEGEND

— APPROXIMATE LOCATION OF PREVIOUS BORING.

— APPROXIMATE LOCATION OF BORING PERFORMED BY CARR-DEE CORP. IN 2012 OR 2014 FOR McPHAIL ASSOCIATES, LLC

— SANDBORN, HEAD AND ASSOCIATES, INC. BORING LOCATION MONITORING WELL INSTALLED

(OW) — INDICATES OBSERVATION WELL INSTALLED WITHIN COMPLETED BORING

REFERENCE: THIS PLAN WAS PREPARED FROM A 20-SCALE DRAWING ENTITLED, "EXISTING CONDITIONS PLAN, 201 BROOKLINE AVENUE, BOSTON, MASS." DATED MARCH 26, 2014 PREPARED BY HARRY R. FELDMAN, INC.

GRAPHIC SCALE

30 0 30 60

FILE NAME: H:\Cad\JOBS\4617RGP\4617-F02.dwg

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THE POINT

BOSTON MASSACHUSETTS

SUBSURFACE EXPLORATION PLAN

FOR

FENWAY VENTURES POINT PROPERTIES, LLC

BY

McPHAIL ASSOCIATES, LLC

Date: FEBRUARY 2015	Dwn: I.J.M.	Chkd: W.J.B.	Scale: 1" = 30'
Project No: 4617			

FIGURE 3A

APPROXIMATE LOCATION OF CONSTRUCTION DEWATERING DISCHARGE

APPROXIMATE LIMITS OF SUBJECT SITE

APPROXIMATE LOCATION OF CONSTRUCTION DEWATERING DISCHARGE

MATCH LINE

NORTH

GRAPHIC SCALE

100 0 100 200

REFERENCE: THIS PLAN WAS PREPARED FROM A 100-SCALE DRAWING ENTITLED "BOSTON WATER AND SEWER" PRINTED ON FEBRUARY 4, 2015 BY BOSTON WATER AND SEWER COMMISSION.

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THE POINT

BOSTON MASSACHUSETTS

STORM DRAIN DISCHARGE FLOW PATH

FOR

FENWAY VENTURES POINT PROPERTIES, LLC

BY

McPHAIL ASSOCIATES, LLC

Date: FEBRUARY 2015	Dwn: F.G.P.	Chkd: W.J.B.	Scale: 1" = 100'
Project No: 4617			

FILE NAME: H:\Acad\JOBS\4617\RGP\4617-FG3A.dwg

FIGURE 3B

MATCH LINE

PRIVATE RD

LANSDOWNE ST

SALVATION ARMY ADULT REHABILITATION CENTER

PARKING

MAITLAND ST

BROOKLINE AV

OVERLAND ST

YAWKEY WY

FENWAY PARK

NORTH

BURLINGTON AV

PRIVATE RD

PRIVATE RD

FULLERTON ST

VAN NESS ST

MATCH LINE

GRAPHIC SCALE

100 0 100 200

REFERENCE: THIS PLAN WAS PREPARED FROM A 100-SCALE DRAWING ENTITLED "BOSTON WATER AND SEWER" PRINTED ON APRIL 17, 2012 BY BOSTON WATER AND SEWER COMMISSION.

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THE POINT

BOSTON MASSACHUSETTS

STORM DRAIN DISCHARGE FLOW PATH

FOR

FENWAY VENTURES POINT PROPERTIES, LLC

BY

McPHAIL ASSOCIATES, LLC

Date: FEBRUARY 2015	Dwn: I.J.M.	Chkd: W.J.B.	Scale: 1" = 100'
Project No: 4617			

FILE NAME: H:\Acad\DBS\4617\RGP4617-F03BCD.dwg

FIGURE 3C

MATCH LINE

DEERFIELD ST

BEACON ST

RALEIGH ST

BAY ST

COMMONWEALTH AV

KENMORE SQUARE

KENMORE ST

NEWBURY ST

BROOKLINE AV

MASSACHUSETTS TNPK

CONRAIL

LANSDOWNE ST

PARKING

FLOWS IN BOTH DIRECTIONS

BULKHEADED

NORTH

GRAPHIC SCALE

100 0 100 200

REFERENCE: THIS PLAN WAS PREPARED FROM A 100-SCALE DRAWING ENTITLED "BOSTON WATER AND SEWER" PRINTED ON APRIL 17, 2012 BY BOSTON WATER AND SEWER COMMISSION.

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THE POINT

BOSTON MASSACHUSETTS

STORM DRAIN DISCHARGE FLOW PATH

FOR

FENWAY VENTURES POINT PROPERTIES, LLC

BY

McPHAIL ASSOCIATES, LLC

Date: FEBRUARY 2015	Dwn: I.J.M.	Chkd: W.J.B.	Scale: 1" = 100'
Project No: 4617			

FILE NAME: H:\Acad\JOBS\4617\RGP\4617-FG3BCD.dwg

FIGURE 3D

NORTH

OUTFALL
SDO 042
(11.70)

LOCATION OF DISCHARGE
INTO CHARLES RIVER

SDO 118
UN

SDO 040
UN

STORROW MEMO DR

PUMP STATION
PS2

BACK ST

CG 89
(11.70)

CG 66

TG 342-3
(1.02)

TG 287
7.84
10.80
UN 7.84

RE 042A-
5.44
5.44
10.00
5.44

SC 306
(1.43)

DEERFIELD ST

RALEIGH ST

BEACON ST

BAY STATE RD

KENMORE SQUARE

PARKING

MATCH LINE

GRAPHIC SCALE
100 0 100 200

REFERENCE: THIS PLAN WAS PREPARED FROM A 100-SCALE DRAWING ENTITLED "BOSTON WATER AND SEWER" PRINTED ON APRIL 17, 2012 BY BOSTON WATER AND SEWER COMMISSION.

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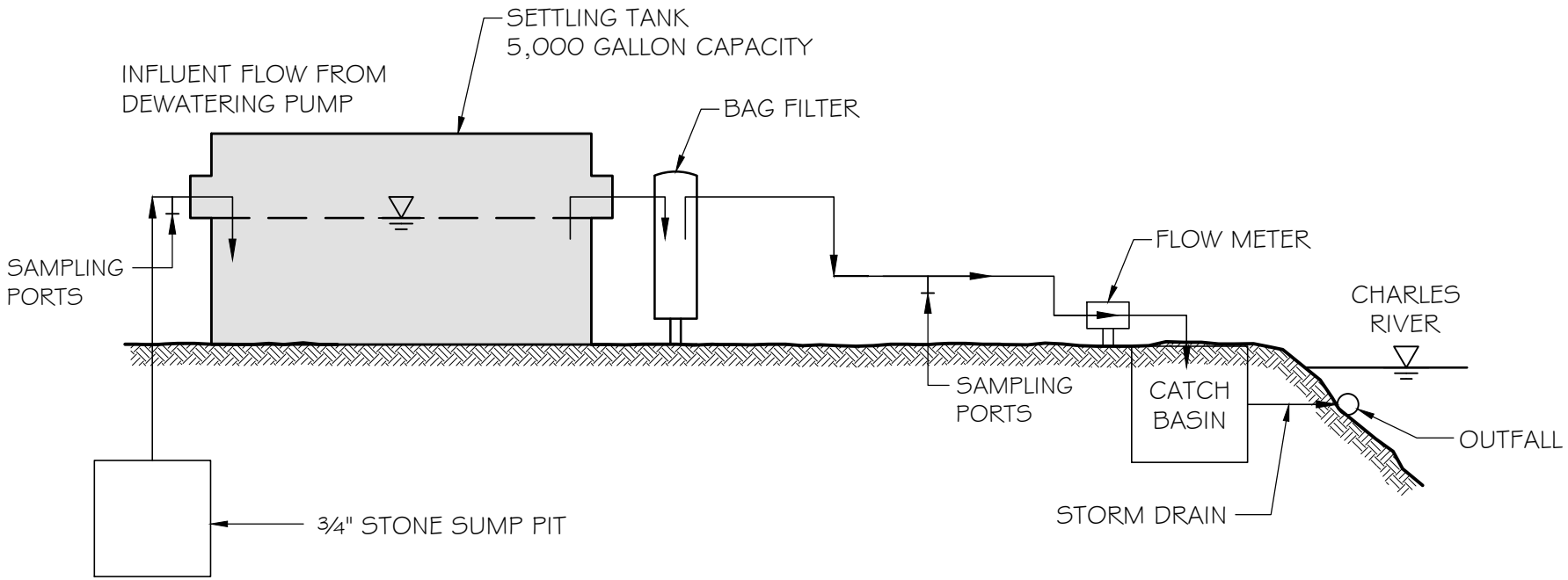
LANDMARK CENTER
BOSTON MASSACHUSETTS
STORM DRAIN DISCHARGE FLOW PATH
FOR
FENWAY VENTURES POINT PROPERTIES, LLC
BY
McPHAIL ASSOCIATES, LLC

Date: FEBRUARY 2015	Dwn: I.J.M.	Chkd: W.J.B.	Scale: 1" = 100'
Project No: 4617			

FILE NAME: H:\Acad\JOBS\4617\RGR\4617-F03BCD.dwg

FILE NAME: H:\Acad\JOBS\4617\RGP\4617-F04.dwg

FIGURE 4



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THE POINT

BOSTON MASSACHUSETTS

SCHEMATIC OF TREATMENT SYSTEM

FOR

FENWAY VENTURES POINT PROPERTIES, LLC

BY

McPHAIL ASSOCIATES, LLC

Date: FEBRUARY 2015	Dwn: I.J.M.	Chkd: W.J.B.	Scale: N.T.S.
Project No: 4617			

TABLE 1
ANAYTICAL RESULTS - GROUNDWATER

The Point
200 Brookline Avenue; Boston, MA
Project No. 4617

LOCATION	RGP Effluent Limit	Dilution Range Concentration	Units	SH-3	TRIP BLANK
SAMPLING DATE				1/20/2015	1/20/2015
LAB SAMPLE ID				L1501272-01	L1501272-02
Solids, Total Suspended	30000		ug/l	ND(5000)	
Chlorine, Total Residual	11		ug/l	ND(20)	
TPH	5000		ug/l	ND(4000)	
Cyanide, Total	5.2		ug/l	ND(5)	
Benzene	Total BTEX		ug/l	0.56	ND(0.5)
Toluene	Total BTEX		ug/l	ND(0.75)	ND(0.75)
Ethylbenzene	Total BTEX		ug/l	ND(0.5)	ND(0.5)
p/m-Xylene	Total BTEX		ug/l	ND(1)	ND(1)
o-Xylene	Total BTEX		ug/l	ND(1)	ND(1)
Total BTEX	100		ug/l	0.56	ND
1,2-Dibromoethane	0.05		ug/l	ND(0.01)	ND(0.01)
Methyl tert butyl ether	70		ug/l	ND(1)	ND(1)
Tert-Butyl Alcohol	Monitor		ug/l	ND(10)	ND(10)
Tertiary-Amyl Methyl Ether	Monitor		ug/l	ND(2)	ND(2)
Naphthalene	20		ug/l	ND(2.5)	ND(2.5)
Carbon tetrachloride	4.4		ug/l	ND(0.5)	ND(0.5)
1,2-Dichlorobenzene	600		ug/l	ND(2.5)	ND(2.5)
1,3-Dichlorobenzene	320		ug/l	ND(2.5)	ND(2.5)
1,4-Dichlorobenzene	5		ug/l	ND(2.5)	ND(2.5)
Total Dichlorobenzene				ND	ND
1,1-Dichloroethane	70		ug/l	ND(0.75)	ND(0.75)
1,2-Dichloroethane	5		ug/l	ND(0.5)	ND(0.5)
1,1-Dichloroethene	3.2		ug/l	ND(0.5)	ND(0.5)
cis-1,2-Dichloroethene	70		ug/l	ND(0.5)	ND(0.5)
Methylene chloride	4.6		ug/l	ND(3)	ND(3)
Tetrachloroethene	5		ug/l	ND(0.5)	ND(0.5)
1,1,1-Trichloroethane	200		ug/l	ND(0.5)	ND(0.5)
1,1,2-Trichloroethane	5		ug/l	ND(0.75)	ND(0.75)
Trichloroethene	5		ug/l	ND(0.5)	ND(0.5)
Vinyl chloride	2		ug/l	ND(1)	ND(1)
Acetone	Monitor		ug/l	ND(5)	ND(5)
1,4-Dioxane	Monitor		ug/l	ND(3)	ND(3)
Phenolics, Total	300		ug/l	ND(30)	
Butyl benzyl phthalate	Total Phthalate		ug/l	ND(5)	
Di-n-butylphthalate	Total Phthalate		ug/l	ND(5)	
Di-n-octylphthalate	Total Phthalate		ug/l	ND(5)	
Diethyl phthalate	Total Phthalate		ug/l	ND(5)	
Dimethyl phthalate	Total Phthalate		ug/l	ND(5)	
Total Phthalates	3		ug/l	ND	
Bis(2-ethylhexyl)phthalate	6		ug/l	ND(3)	
Total Group I PAHs	10		ug/l	ND	
Benzo(a)anthracene	0.0038		ug/l	ND(0.2)	
Benzo(a)pyrene	0.0038		ug/l	ND(0.2)	
Benzo(b)fluoranthene	0.0038		ug/l	ND(0.2)	
Benzo(k)fluoranthene	0.0038		ug/l	ND(0.2)	
Chrysene	0.0038		ug/l	ND(0.2)	
Dibenzo(a,h)anthracene	0.0038		ug/l	ND(0.2)	
Indeno(1,2,3-cd)pyrene	0.0038		ug/l	ND(0.2)	
Total Group II PAHs	100		ug/l	ND	
Acenaphthene	Total Group II		ug/l	ND(0.2)	
Acenaphthylene	Total Group II		ug/l	ND(0.2)	
Anthracene	Total Group II		ug/l	ND(0.2)	
Benzo(ghi)perylene	Total Group II		ug/l	ND(0.2)	
Fluoranthene	Total Group II		ug/l	ND(0.2)	
Fluorene	Total Group II		ug/l	ND(0.2)	
Naphthalene	Total Group II		ug/l	ND(0.2)	
Phenanthrene	Total Group II		ug/l	ND(0.2)	
Pyrene	Total Group II		ug/l	ND(0.2)	
Total PCBs	0.000064		ug/l	ND	
Chloride	Monitor		ug/l	593000	
Antimony, Total	5.6	141	ug/l	1.02	
Arsenic, Total	10	540	ug/l	0.94	
Cadmium, Total	0.2	20	ug/l	**0.21**	
Chromium, Total	48.8	1710	ug/l	ND(1)	
Chromium, Hexavalent	11.4	1140	ug/l	ND(10)	
Copper, Total	5.2	520	ug/l	3.15	
Lead, Total	1.3	132	ug/l	ND(1)	
Mercury, Total	0.9	2.3	ug/l	ND(0.2)	
Nickel, Total	29	2380	ug/l	1.14	
Selenium, Total	5	408	ug/l	ND(5)	
Silver, Total	1.2	115	ug/l	ND(0.4)	
Zinc, Total	66.6	1480	ug/l	ND(10)	
Iron, Total	1000	5000	ug/l	380	

ND - not detected in excess of the laboratory method detection limits in ()
Bold - exceeds RGP effluent limit
Blank-not analyzed

TABLE 2
Calculations of Mass of Compounds

The Point
200 Brookline Avenue; Boston, MA
McPhail Job No. 4617

Avg flow (GPM) = 30 Avg Flow (MGD) = 0.0432			
Compound #	Average Concentration (ug/l)	Average Concentration (mg/l)	**MASS (kg)**
Benzene	0.6	0.00056	**0.00009**
Chloride	593000	593	**97.11399**
antimony	1.02	0.00102	**0.00017**
arsenic	0.92	0.00092	**0.00015**
cadmium	0.21	0.00021	**0.00003**
copper	3.15	0.00315	**0.00052**
nickel	1.14	0.00114	**0.00019**
iron	380	0.38	**0.06223**
Max flow (GPM) = 45 Max Flow (MGD) = 0.0648			
Compound #	Max Concentration (ug/l)	Max Concentration (mg/l)	**MASS (kg)**
Benzene	0.56	0.00056	**0.0001**
Chloride	593000.00	593	**145.6710**
antimony	1.02	0.00102	**0.0003**
arsenic	0.92	0.00092	**0.0002**
Cadmium	0.21	0.00021	**0.0001**
copper	3.15	0.00315	**0.0008**
nickel	1.14	0.00114	**0.0003**
iron	380.00	0.38	**0.0933**

GPM = Gallons Per Minute
MGD = Million Gallons Per Day
ug/l = Micrograms per liter
mg/l = Milligrams per liter
kg = Kilograms

APPENDIX A:

LIMITATIONS

LIMITATIONS

The purpose of this report is to present the results of testing of groundwater samples obtained from monitoring wells located at The Point parcel listed with the address of 200 Brookline Avenue in Boston, Massachusetts, in support of an application for approval of construction site dewatering discharge into surface waters of the Commonwealth of Massachusetts under EPA's Massachusetts Remediation General Permit MAG910000.

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

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

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

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

APPENDIX B:

NOTICE OF INTENT TRANSMITTAL FORM
BOSTON WATER & SEWER DEWATERING DISCHARGE PERMIT APPLICATION

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**: The Point			**Facility/site** mailing address:		
Location of **facility/site**: longitude: -71.1017449 latitude: 42.3438321	Facility SIC code(s):		Street: 200 Brookline Avenue		
b) Name of **facility/site owner:** Fenway Ventures Point Properties, LLC			Town: Boston		
Email address of facility/site owner: crollins@samuelsre.com			State: MA	Zip: 02215	County: Suffolk
Telephone no. of facility/site **owner**: 617-247-3434					
Fax no. of facility/site **owner**: 617-266-8788			**Owner** is (check one): 1. Federal ○ 2. State/Tribal ○ 3. Private ◉ 4. Other ○ if so, describe:		
Address of **owner** (if different from site):					
Street: 333 Newbury Street					
Town: Boston	State: MA	Zip: 02115	County: Suffolk		
c) Legal name of **operator**: John Moriarty & Associates	**Operator** telephone no: 781-858-8791				
	Operator fax no.: 781-729-8456		**Operator** email: fosullivan@jm-a.com		
Operator contact name and title: Mr. Finn O'Sullivan, Project Executive					
Address of **operator** (if different from owner):	Street: 3 Church Street				
Town: Winchester	State: MA	Zip: 01890	County: Middlesex		

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.

Activity Category	**Activity Sub-Category**
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:

Temporary Construction Dewatering

b) Provide the following information about each discharge:

1) Number of discharge points: 2

2) What is the **maximum** and **average flow rate** of discharge (in cubic feet per second, ft^3/s)?
Max. flow 0.10035 Is maximum flow a **design value**? Y ○ N ◉
Average flow (include units) 0.0669 cu.ft/s Is average flow a design value or estimate? estimate

3) Latitude and longitude of each discharge within 100 feet:

pt.1: lat	42.3438708	long	-71.101955	pt.2: lat.	42.3436828	long.	-71.1015576 ;
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): N/A

5) Is the discharge intermittent ◉ or seasonal ○ ?
Is discharge ongoing? Y ○ N ◉

c) Expected dates of discharge (mm/dd/yy): start Mar 2, 2015 end Mar 1, 2016

d) Please attach a line drawing or flow schematic showing water flow through the facility including:
1. sources of intake water, 2. contributing flow from the operation, 3. treatment units, and 4. discharge points and receiving waters(s). Please refer to the attached report

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.

Parameter *	CAS Number	Believed Absent	Believed Present	# of Samples	Sample Type (e.g., grab)	Analytical Method Used (method #)	Minimum Level (ML) of Test Method	Maximum daily value		Average daily value	
								concentration (ug/l)	mass (kg)	concentration (ug/l)	mass (kg)
1. Total Suspended Solids (TSS)		☐	☒	1	grab	302540D	5000	ND	ND		
2. Total Residual Chlorine (TRC)		☒	☐	1	grab		20	ND	ND		
3. Total Petroleum Hydrocarbons (TPH)		☒	☐	1	grab	74,1664A	4000	ND	ND		
4. Cyanide (CN)	57125	☒	☐	1	grab			ND	ND		
5. Benzene (B)	71432	☒	☐	1	grab	1,8260B	0.5	0.56	0.0001		0.00009
6. Toluene (T)	108883	☒	☐	1	grab	1,8260B	0.75	ND	ND		
7. Ethylbenzene (E)	100414	☒	☐	1	grab	1,8260B	0.5	ND	ND		
8. (m,p,o) Xylenes (X)	108883; 106423; 95476; 1330207	☒	☐	1	grab	1,8260B	1	ND	ND		
9. Total BTEX [2]	n/a	☒	☐					ND	ND		
10. Ethylene Dibromide (EDB) (1,2-Dibromoethane) [3]	106934	☒	☐	1	grab	1,8260B	0.01	ND	ND		
11. Methyl-tert-Butyl Ether (MtBE)	1634044	☒	☐	1	grab	1,8260B	2	ND	ND		
12. tert-Butyl Alcohol (TBA) (Tertiary-Butanol)	75650	☒	☐	1	grab	1,8260B	10	ND	ND		

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

[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.

Parameter *	CAS Number	Believed Absent	Believed Present	# of Samples	Sample Type (e.g., grab)	Analytical Method Used (method #)	Minimum Level (ML) of Test Method	Maximum daily value		Average daily value	
								concentration (ug/l)	mass (kg)	concentration (ug/l)	mass (kg)
13. tert-Amyl Methyl Ether (TAME)	9940508	☒	☐	1	grab	1,8260B	2	ND	ND		
14. Naphthalene	91203	☒	☐	1	grab	1,8260B	2.5	ND	ND		
15. Carbon Tetrachloride	56235	☒	☐	1	grab	1,8260B	0.5	ND	ND		
16. 1,2 Dichlorobenzene (o-DCB)	95501	☒	☐	1	grab	1,8260B	2.5	ND	ND		
17. 1,3 Dichlorobenzene (m-DCB)	541731	☒	☐	1	grab	1,8260B	2.5	ND	ND		
18. 1,4 Dichlorobenzene (p-DCB)	106467	☒	☐	1	grab	1,8260B	2.5	ND	ND		
18a. Total dichlorobenzene		☒	☐	1	grab			ND	ND		
19. 1,1 Dichloroethane (DCA)	75343	☒	☐	1	grab	1,8260B	0.75	ND	ND		
20. 1,2 Dichloroethane (DCA)	107062	☒	☐	1	grab	1,8260B	0.5	ND	ND		
21. 1,1 Dichloroethene (DCE)	75354	☒	☐	1	grab	1,8260B	0.5	ND	ND		
22. cis-1,2 Dichloroethene (DCE)	156592	☒	☐	1	grab	1,8260B	0.5	ND	ND		
23. Methylene Chloride	75092	☒	☐	1	grab	1,8260B	3	ND	ND		
24. Tetrachloroethene (PCE)	127184	☒	☐	1	grab	1,8260B	0.5	ND	ND		
25. 1,1,1 Trichloro-ethane (TCA)	71556	☒	☐	1	grab	1,8260B	0.5	ND	ND		
26. 1,1,2 Trichloro-ethane (TCA)	79005	☒	☐	1	grab	1,8260B	0.75	ND	ND		
27. Trichloroethene (TCE)	79016	☒	☐	1	grab	1,8260B	0.5	ND	ND		

Parameter *	CAS Number	Believed Absent	Believed Present	# of Samples	Sample Type (e.g., grab)	Analytical Method Used (method #)	Minimum Level (ML) of Test Method	Maximum daily value		Average daily value	
								concentration (ug/l)	mass (kg)	concentration (ug/l)	mass (kg)
28. Vinyl Chloride (Chloroethene)	75014	☒	☐	1	grab	1,8260B	1	ND	ND		
29. Acetone	67641	☒	☐	1	grab	1,8260B	5	ND	ND		
30. 1,4 Dioxane	123911	☒	☐	1	grab	1,8260B	3	ND	ND		
31. Total Phenols	108952	☒	☐	1	grab	1,827C	30	ND	ND		
32. Pentachlorophenol (PCP)	87865	☒	☐								
33. Total Phthalates (Phthalate esters) [4]		☒	☐	1	grab	1,827C	ND	ND	ND		
34. Bis (2-Ethylhexyl) Phthalate [Di-(ethylhexyl) Phthalate]	117817	☒	☐	1	grab	1,827C	3	ND	ND		
35. Total Group I Polycyclic Aromatic Hydrocarbons (PAH)		☒	☐					ND	ND		
a. Benzo(a) Anthracene	56553	☒	☐	1	grab	1,827C	0.2	ND	ND		
b. Benzo(a) Pyrene	50328	☒	☐	1	grab	1,827C	0.2	ND	ND		
c. Benzo(b)Fluoranthene	205992	☒	☐	1	grab	1,827C	0.2	ND	ND		
d. Benzo(k)Fluoranthene	207089	☒	☐	1	grab	1,827C	0.2	ND	ND		
e. Chrysene	21801	☒	☐	1	grab	1,827C	0.2	ND	ND		
f. Dibenzo(a,h)anthracene	53703	☒	☐	1	grab	1,827C	0.2	ND	ND		
g. Indeno(1,2,3-cd) Pyrene	193395	☒	☐	1	grab	1,827C	0.2	ND	ND		
36. Total Group II Polycyclic Aromatic Hydrocarbons (PAH)		☒	☐					ND	ND		

[4] The sum of individual phthalate compounds.

Parameter *	CAS Number	Believed Absent	Believed Present	# of Samples	Sample Type (e.g., grab)	Analytical Method Used (method #)	Minimum Level (ML) of Test Method	Maximum daily value		Average daily value	
								concentration (ug/l)	mass (kg)	concentration (ug/l)	mass (kg)
h. Acenaphthene	83329	☒	☐	1	grab	1,827C	0.2	ND	ND		
i. Acenaphthylene	208968	☒	☐	1	grab	1,827C	0.2	ND	ND		
j. Anthracene	120127	☒	☐	1	grab	1,827C	0.2	ND	ND		
k. Benzo(ghi) Perylene	191242	☒	☐	1	grab	1,827C	0.2	ND	ND		
l. Fluoranthene	206440	☒	☐	1	grab	1,827C	0.2	ND	ND		
m. Fluorene	86737	☒	☐	1	grab	1,827C	0.2	ND	ND		
n. Naphthalene	91203	☒	☐	1	grab	1,827C	0.2	ND	ND		
o. Phenanthrene	85018	☒	☐	1	grab	1,827C	0.2	ND	ND		
p. Pyrene	129000	☒	☐	1	grab	1,827C	0.2	ND	ND		
37. Total Polychlorinated Biphenyls (PCBs)	85687; 84742; 117840; 84662; 131113; 117817.	☒	☐	1	grab			ND	ND		
38. Chloride	16887006	☒	☐	1	grab	44,300		593000	145.6710		97.11399
39. Antimony	7440360	☒	☐	1	grab	16020		1.02	0.0003		0.000017
40. Arsenic	7440382	☒	☐	1	grab	16020		0.94	0.0002		0.00015
41. Cadmium	7440439	☒	☐	1	grab	16020		0.21	0.0001		0.00003
42. Chromium III (trivalent)	16065831	☒	☐	1	grab	30,3500CR-D	1	ND	ND		
43. Chromium VI (hexavalent)	18540299	☒	☐	1	grab	30,3500CR-D	10	ND	ND		
44. Copper	7440508	☒	☐	1	grab	16020	1	3.15	0.0008		0.00052
45. Lead	7439921	☒	☐	1	grab	16020	1	ND	ND		
46. Mercury	7439976	☒	☐	1	grab	3,245.1	0.2	ND	ND		
47. Nickel	7440020	☒	☐	1	grab	16020		1.14	0.00114		0.00019
48. Selenium	7782492	☒	☐	1	grab	16020	5	ND	ND		
49. Silver	7440224	☒	☐	1	grab	16020	0.4	ND	ND		
50. Zinc	7440666	☒	☐	1	grab	16020	10	ND	ND		
51. Iron	7439896	☒	☐	1	grab	19,200.7		380	0.0933		0.06223
Other (describe):		☐	☐								

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

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

Step 1: 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? Cadmium
Step 2: For any metals which exceed the **Appendix III** limits, calculate the **dilution factor (DF)** using the formula in Part I.A.3.c (step 2) of the NOI instructions or as determined by the State prior to the submission of this NOI. What is the dilution factor for applicable metals? Metal: Cadmium 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:

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:

5,000-gallon settling tank and bag filter in series

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 30 gpm Maximum flow rate of treatment system 45 gpm
Design flow rate of treatment system 75 gpm

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

N/A

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:

Stormdrains that discharge into the Charles River. Please refer to attached report for further details and plan.

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 Class B

e) Provide the reported or calculated seven day-ten year low flow (7Q10) of the receiving water 24.7 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)?
chlorophyll-a, DDT, dissolved oxygen, oil and grease, nutrient/eutrophication, phosphorous, PCBs

Is there a final TMDL? Y ⊙ N ○ If yes, for which pollutant(s)? Nutrients and phosphorus

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.

Please refer to attached 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:	The Point
Operator signature:	
Printed Name &Title:	Finn O'Sullivan Project Executive
Date:	2/11/15.

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

DEWATERING DISCHARGE PERMIT APPLICATION

OWNER / AUTHORIZED APPLICANT PROVIDE INFORMATION HERE:

Company Name: John Moriarty & Associates Address: 3 Church Street; Winchester, MA 01890

Phone Number: 781-858-8791 Fax number: 781-729-8456

Contact person name: Finn O'Sullivan Title: Project Executive

Cell number: 617-719-9813 Email address: fosullivan@jm-a.com

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

Owner's Information (if different from above):

Owner of property being dewatered: Fenway Ventures Point Properties, LLC

Owner's mailing address: 333 Newbury Street, Boston, MA 02115 Phone number: 617-247-3434

Location of Discharge & Proposed Treatment System(s):

Street number and name: 200 Brookline Avenue Neighborhood Fenway

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

Describe Proposed Pre-Treatment System(s): 5,000-gallon capacity settling tank and bag filters in series

BWSC Outfall No. SDO 042 Receiving Waters Charles River

Temporary Discharges (Provide Anticipated Dates of Discharge): From March 2, 2015 To March 1, 2016

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

Permanent Discharges

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

---

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

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

Signature of Authorized Representative for Property Owner: _____ Date: 2/11/15

APPENDIX C:

DEP PRIORITY RESOURCES MAP

U.S. FISH AND WILDLIFE SERVICES - LIST OF THREATENED AND ENDANGERED SPECIES

MASSACHUSETTS DIVISION OF FISHERIES - LIST OF THREATENED AND ENDANGERED SPECIES

USGS STREAMFLOW STATISTICS REPORT

MassDEP - Bureau of Waste Site Cleanup

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

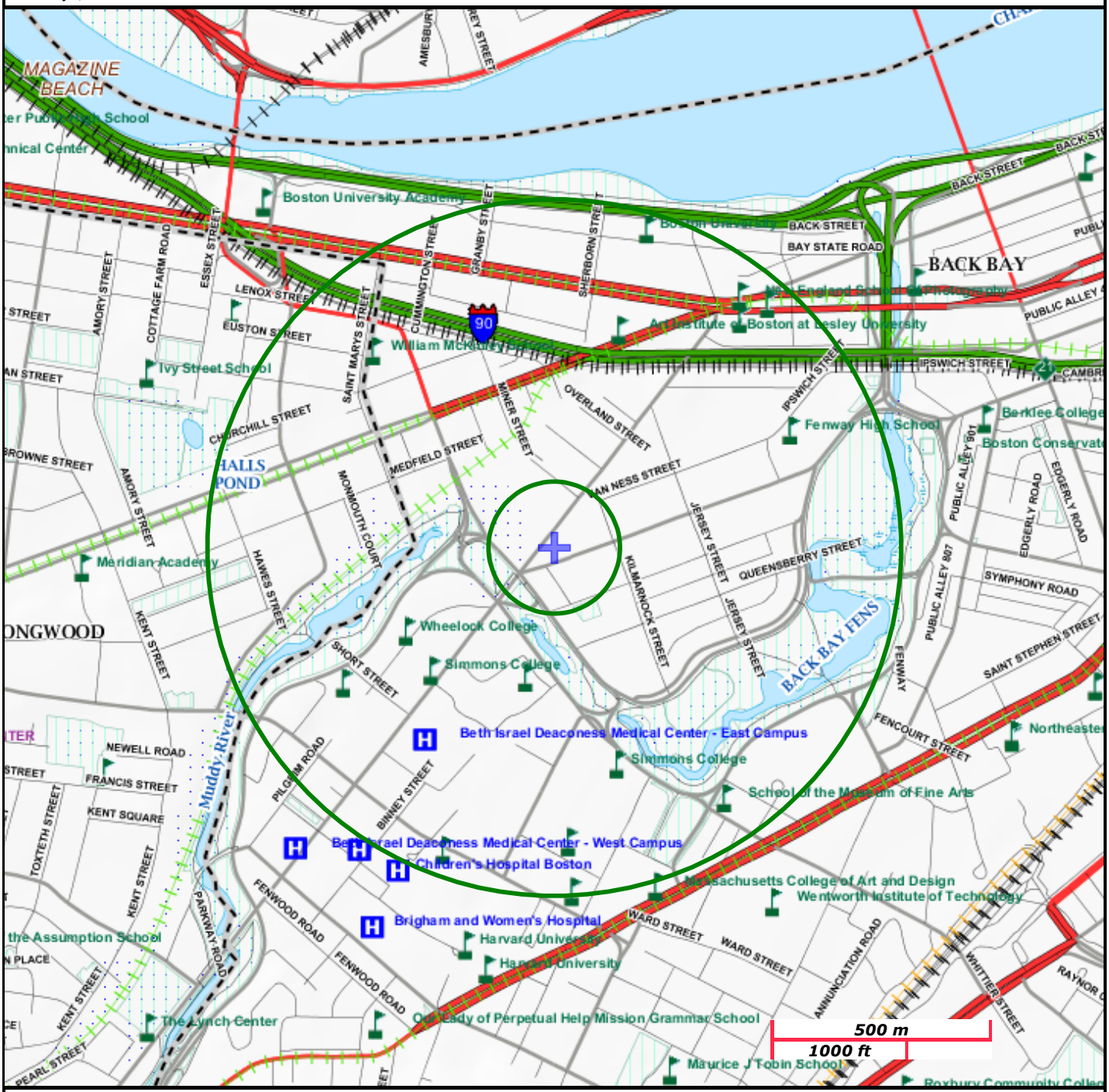
Site Information:

200 BROOKLINE AVENUE BOSTON, MA

NAD83 UTM Meters:
4690093mN , 326882mE (Zone: 19)
February 5, 2015

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.

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	Raynham and 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	Glocester, Essex, Ipswich, Rowley, Revere, Newbury, Newburyport and Salisbury
Franklin	Northeastern bulrush	Endangered	Wetlands	Montague
	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.	Hadley, 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, and Wareham
	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.

7/31/2008

MASSACHUSETTS AREAS OF CRITICAL ENVIRONMENTAL CONCERN
June 2009

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

ACEC acreages above are based on MassGIS calculations and may differ from numbers originally presented in designation documents and other ACEC publications due to improvements in accuracy of GIS data and boundary clarifications. Listed acreages have been rounded to the nearest 50 or 10 depending on whether boundary clarification has occurred. For more information please see, http://www.mass.gov/dcr/stewardship/acec/aboutMaps.htm.

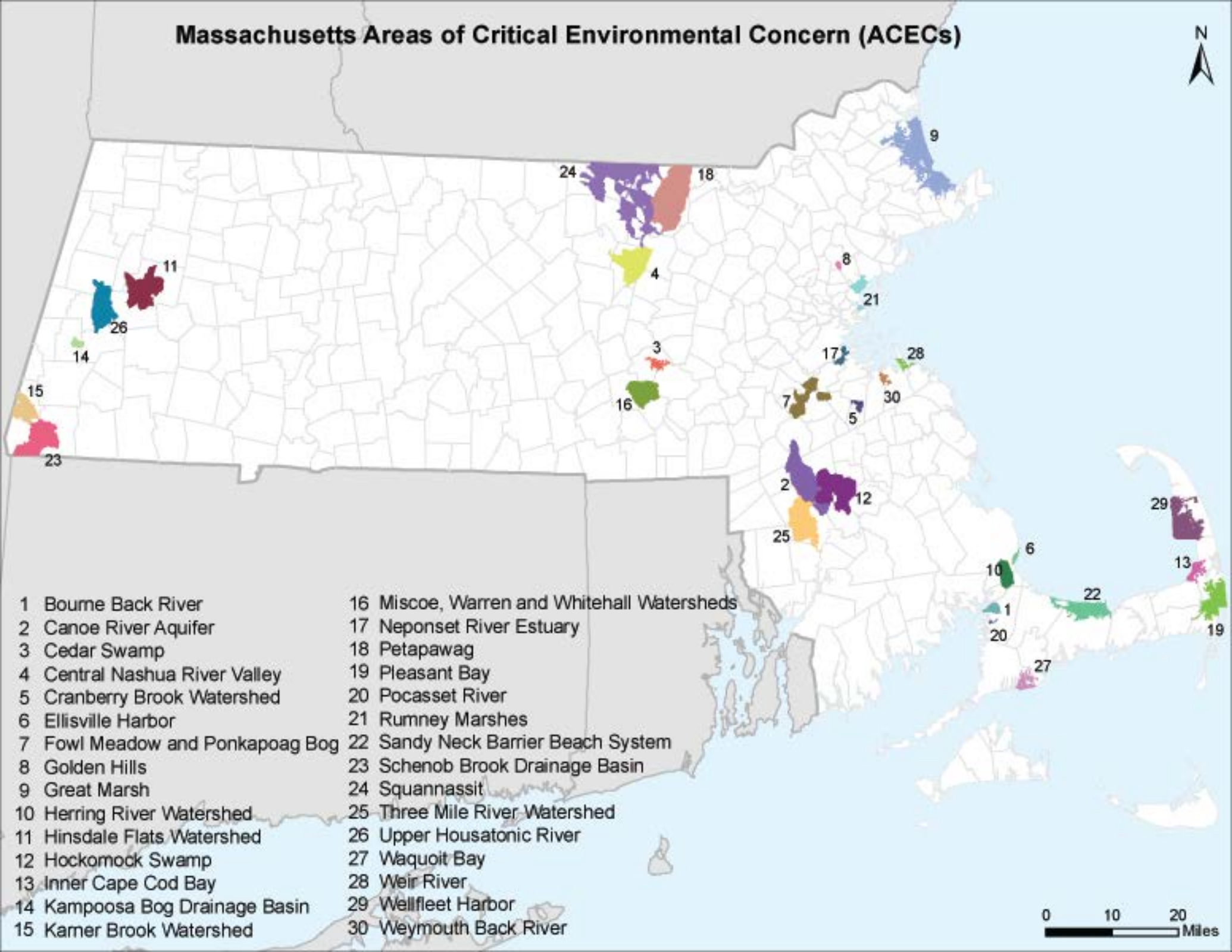
Towns with ACECs within their Boundaries June 2009

TOWN	ACEC
Ashby	Squannassit
Ayer	Petapawag
	Squannassit
Barnstable	Sandy Neck Barrier Beach System
Bolton	Central Nashua River Valley
Boston	Rumney Marshes
	Fowl Meadow and Ponkapoag Bog
	Neponset River Estuary
Bourne	Pocasset River
	Bourne Back River
	Herring River Watershed
Braintree	Cranberry Brook Watershed
Brewster	Pleasant Bay
	Inner Cape Cod Bay
Bridgewater	Hockomock Swamp
Canton	Fowl Meadow and Ponkapoag Bog
Chatham	Pleasant Bay
Cohasset	Weir River
Dalton	Hinsdale Flats Watershed
Dedham	Fowl Meadow and Ponkapoag Bog
Dighton	Three Mile River Watershed
Dunstable	Petapawag
Eastham	Inner Cape Cod Bay
	Wellfleet Harbor
Easton	Canoe River Aquifer
	Hockomock Swamp
Egremont	Karner Brook Watershed
Essex	Great Marsh
Falmouth	Waquoit Bay
Foxborough	Canoe River Aquifer
Gloucester	Great Marsh
Grafton	Miscoe-Warren-Whitehall Watersheds
Groton	Petapawag
	Squannassit
Harvard	Central Nashua River Valley
	Squannassit
Harwich	Pleasant Bay
Hingham	Weir River
	Weymouth Back River
Hinsdale	Hinsdale Flats Watershed
Holbrook	Cranberry Brook Watershed
Hopkinton	Miscoe-Warren-Whitehall Watersheds
	Cedar Swamp
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

TOWN	ACEC
Mt. Washington	Karner Brook Watershed
	Schenob Brook
Newbury	Great Marsh
Norton	Hockomock Swamp
	Canoe River Aquifer
	Three Mile River Watershed
Norwood	Fowl Meadow and Ponkapoag Bog
Orleans	Inner Cape Cod Bay
	Pleasant Bay
Pepperell	Petapawag
	Squannassit
Peru	Hinsdale Flats Watershed
Pittsfield	Upper Housatonic River
Plymouth	Herring River Watershed
	Ellisville Harbor
Quincy	Neponset River Estuary
Randolph	Fowl Meadow and Ponkapoag Bog
Raynham	Hockomock Swamp
Revere	Rumney Marshes
Rowley	Great Marsh
Sandwich	Sandy Neck Barrier Beach System
Saugus	Rumney Marshes
	Golden Hills
Sharon	Canoe River Aquifer
	Fowl Meadow and Ponkapoag Bog
Sheffield	Schenob Brook
Shirley	Squannassit
Stockbridge	Kampoosa Bog Drainage Basin
Taunton	Hockomock Swamp
	Canoe River Aquifer
	Three Mile River Watershed
Truro	Wellfleet Harbor
Townsend	Squannassit
Tyngsborough	Petapawag
Upton	Miscoe-Warren-Whitehall Watersheds
Wakefield	Golden Hills
Washington	Hinsdale Flats Watershed
	Upper Housatonic River
Wellfleet	Wellfleet Harbor
W Bridgewater	Hockomock Swamp
Westborough	Cedar Swamp
Westwood	Fowl Meadow and Ponkapoag Bog
Weymouth	Weymouth Back River
Winthrop	Rumney Marshes

.

Massachusetts Areas of Critical Environmental Concern (ACECs)



1 Bourne 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 Karner 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

USGS Massachusetts StreamStats

Streamstats Ungaged Site Report

Date: Thu Feb 5 2015 09:56:22 Mountain Standard Time
Site Location: Massachusetts
NAD27 Latitude: 42.3533 (42 21 12)
NAD27 Longitude: -71.0964 (-71 05 47)
NAD83 Latitude: 42.3534 (42 21 12)
NAD83 Longitude: -71.0959 (-71 05 45)
ReachCode: 01090001000111
Measure: 19.66
Drainage Area: 283 mi2
Percent Urban: 43.7 %
Percent Impervious: 17 %

Low Flows Basin Characteristics

100% Statewide Low Flow (283 mi2)

Parameter	Value	Regression Equation Valid Range	
		Min	Max
Drainage Area (square miles)	283 (above max value 149)	1.61	149
Mean Basin Slope from 250K DEM (percent)	2.33	0.32	24.6
Stratified Drift per Stream Length (square mile per mile)	0.23	0	1.29
Massachusetts Region (dimensionless)	0	0	1

Warning: Some parameters are outside the suggested range. Estimates will be extrapolations with unknown errors.

Probability of Perennial Flow Basin Characteristics

100% Perennial Flow Probability (283 mi2)

Parameter	Value	Regression Equation Valid Range	
		Min	Max
Drainage Area (square miles)	283 (above max value 1.99)	0.01	1.99
Percent Underlain By Sand And Gravel (percent)	47.89	0	100
Percent Forest (percent)	42.01	0	100
Massachusetts Region (dimensionless)	0	0	1

Warning: Some parameters are outside the suggested range. Estimates will be extrapolations with unknown errors.

Low Flows Streamflow Statistics

Statistic	Flow (ft^3/s)	Prediction Error (percent)	Equivalent years of record	90-Percent Prediction Interval	
				Minimum	Maximum
D50	303				
D60	250				
D70	172				
D75	140				
D80	110				
D85	88				
D90	68.6				
D95	46.3				
D98	30.9				
D99	25.7				
M7D2Y	49.6				
AUGD50	94.3				
M7D10Y	24.7				

The equation for estimating the probability of perennial flow is applicable for most areas of Massachusetts except eastern Buzzards Bay, Cape Cod, and the Island regions. The estimate obtained from the equation assumes natural flow conditions at the site. The equation also is best used for sites with drainage areas between 0.01 to 1.99 mi2, as errors beyond for basins beyond these bounds are unknown.

Probability of Perennial Flow Statistics

Statistic	Value	Standard Error (percent)

PROBPEREN	1	

APPENDIX D:

LABORATORY ANALYTICAL DATA – GROUNDWATER

ANALYTICAL REPORT

Lab Number:	L1501272
Client:	McPhail Associates 2269 Massachusetts Avenue Cambridge, MA 02140
ATTN:	Ambrose Donovan
Phone:	(617) 868-1420
Project Name:	THE POINT
Project Number:	4617.9.06
Report Date:	01/26/15

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: THE POINT
Project Number: 4617.9.06

Lab Number: L1501272
Report Date: 01/26/15

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1501272-01	SH-3	WATER	BOSTON, MA	01/20/15 12:00	01/20/15
L1501272-02	TRIP BLANK	WATER	BOSTON, MA	01/20/15 12:00	01/20/15

Project Name: THE POINT
Project Number: 4617.9.06

Lab Number: L1501272
Report Date: 01/26/15

Case Narrative

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

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet all of the requirements of NELAC, for all NELAC accredited parameters. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. All specific QC information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

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

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

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

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

Project Name:	THE POINT	**Lab Number:**	L1501272
Project Number:	4617.9.06	**Report Date:**	01/26/15

Case Narrative (continued)

PCBs

WG758275: An LCS/LCSD was performed in lieu of a Matrix Spike and Laboratory Duplicate due to insufficient sample volume available for analysis.

Metals

The WG757459-2 LCS recovery, associated with L1501272-01, is above the acceptance criteria for mercury (120%); however, the associated sample is non-detect for this target compound. The results of the original analysis are reported.

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: Bryan Vangel

Title: Technical Director/Representative Date: 01/26/15

ORGANICS

VOLATILES

Project Name: THE POINT
Project Number: 4617.9.06
Lab Number: L1501272
Report Date: 01/26/15

SAMPLE RESULTS

Lab ID: L1501272-01
Client ID: SH-3
Sample Location: BOSTON, MA
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 01/23/15 15:43
Analyst: MM

Date Collected: 01/20/15 12:00
Date Received: 01/20/15
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
Carbon tetrachloride	ND		ug/l	0.50	--	1
1,1,2-Trichloroethane	ND		ug/l	0.75	--	1
Tetrachloroethene	ND		ug/l	0.50	--	1
1,2-Dichloroethane	ND		ug/l	0.50	--	1
1,1,1-Trichloroethane	ND		ug/l	0.50	--	1
Benzene	0.56		ug/l	0.50	--	1
Toluene	ND		ug/l	0.75	--	1
Ethylbenzene	ND		ug/l	0.50	--	1
Vinyl chloride	ND		ug/l	1.0	--	1
1,1-Dichloroethene	ND		ug/l	0.50	--	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
Methyl tert butyl ether	ND		ug/l	1.0	--	1
p/m-Xylene	ND		ug/l	1.0	--	1
o-Xylene	ND		ug/l	1.0	--	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	--	1
Acetone	ND		ug/l	5.0	--	1
Naphthalene	ND		ug/l	2.5	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	106		70-130
Toluene-d8	93		70-130
4-Bromofluorobenzene	104		70-130
Dibromofluoromethane	101		70-130

Project Name: THE POINT
Lab Number: L1501272
Project Number: 4617.9.06
Report Date: 01/26/15

SAMPLE RESULTS

Lab ID: L1501272-01
Client ID: SH-3
Sample Location: BOSTON, MA
Matrix: Water
Analytical Method: 1,8260C-SIM(M)
Analytical Date: 01/23/15 15:43
Analyst: MM

Date Collected: 01/20/15 12:00
Date Received: 01/20/15
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: THE POINT
Lab Number: L1501272
Project Number: 4617.9.06
Report Date: 01/26/15

SAMPLE RESULTS

Lab ID: L1501272-01
Client ID: SH-3
Sample Location: BOSTON, MA
Matrix: Water
Analytical Method: 14,504.1
Analytical Date: 01/23/15 15:02
Analyst: NS

Date Collected: 01/20/15 12:00
Date Received: 01/20/15
Field Prep: Not Specified

Extraction Date: 01/23/15 12:00

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

Project Name: THE POINT
Project Number: 4617.9.06
Lab Number: L1501272
Report Date: 01/26/15

SAMPLE RESULTS

Lab ID: L1501272-02
Client ID: TRIP BLANK
Sample Location: BOSTON, MA
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 01/23/15 08:11
Analyst: MM

Date Collected: 01/20/15 12:00
Date Received: 01/20/15
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
Carbon tetrachloride	ND		ug/l	0.50	--	1
1,1,2-Trichloroethane	ND		ug/l	0.75	--	1
Tetrachloroethene	ND		ug/l	0.50	--	1
1,2-Dichloroethane	ND		ug/l	0.50	--	1
1,1,1-Trichloroethane	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
Vinyl chloride	ND		ug/l	1.0	--	1
1,1-Dichloroethene	ND		ug/l	0.50	--	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
Methyl tert butyl ether	ND		ug/l	1.0	--	1
p/m-Xylene	ND		ug/l	1.0	--	1
o-Xylene	ND		ug/l	1.0	--	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	--	1
Acetone	ND		ug/l	5.0	--	1
Naphthalene	ND		ug/l	2.5	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	103		70-130
Toluene-d8	94		70-130
4-Bromofluorobenzene	110		70-130
Dibromofluoromethane	95		70-130

Project Name: THE POINT
Lab Number: L1501272
Project Number: 4617.9.06
Report Date: 01/26/15

SAMPLE RESULTS

Lab ID: L1501272-02
Client ID: TRIP BLANK
Sample Location: BOSTON, MA
Matrix: Water
Analytical Method: 1,8260C-SIM(M)
Analytical Date: 01/23/15 08:11
Analyst: MM

Date Collected: 01/20/15 12:00
Date Received: 01/20/15
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: THE POINT
Lab Number: L1501272
Project Number: 4617.9.06
Report Date: 01/26/15

SAMPLE RESULTS

Lab ID: L1501272-02
Client ID: TRIP BLANK
Sample Location: BOSTON, MA
Matrix: Water
Analytical Method: 14,504.1
Analytical Date: 01/23/15 15:20
Analyst: NS

Date Collected: 01/20/15 12:00
Date Received: 01/20/15
Field Prep: Not Specified

Extraction Date: 01/23/15 12:00

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

Project Name: THE POINT
Project Number: 4617.9.06

Lab Number: L1501272
Report Date: 01/26/15

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C-SIM(M)
Analytical Date: 01/23/15 07:38
Analyst: MM

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01-02 Batch: WG757989-3					
1,4-Dioxane	ND		ug/l	3.0	--

Project Name: THE POINT
Project Number: 4617.9.06

Lab Number: L1501272
Report Date: 01/26/15

Method Blank Analysis
Batch Quality Control

Analytical Method: 14,504.1
Analytical Date: 01/23/15 14:09
Analyst: NS

Extraction Date: 01/23/15 12:00

Parameter	Result	Qualifier	Units	RL	MDL	
Microextractables by GC - Westborough Lab for sample(s): 01-02 Batch: WG758031-1						
1,2-Dibromoethane	ND		ug/l	0.010	--	A

Project Name: THE POINT
Project Number: 4617.9.06

Lab Number: L1501272
Report Date: 01/26/15

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 01/23/15 07:38
Analyst: MM

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-02 Batch: WG758195-3					
Methylene chloride	ND		ug/l	3.0	--
1,1-Dichloroethane	ND		ug/l	0.75	--
Carbon tetrachloride	ND		ug/l	0.50	--
1,1,2-Trichloroethane	ND		ug/l	0.75	--
Tetrachloroethene	ND		ug/l	0.50	--
1,2-Dichloroethane	ND		ug/l	0.50	--
1,1,1-Trichloroethane	ND		ug/l	0.50	--
Benzene	ND		ug/l	0.50	--
Toluene	ND		ug/l	0.75	--
Ethylbenzene	ND		ug/l	0.50	--
Vinyl chloride	ND		ug/l	1.0	--
1,1-Dichloroethene	ND		ug/l	0.50	--
Trichloroethene	ND		ug/l	0.50	--
1,2-Dichlorobenzene	ND		ug/l	2.5	--
1,3-Dichlorobenzene	ND		ug/l	2.5	--
1,4-Dichlorobenzene	ND		ug/l	2.5	--
Methyl tert butyl ether	ND		ug/l	1.0	--
p/m-Xylene	ND		ug/l	1.0	--
o-Xylene	ND		ug/l	1.0	--
cis-1,2-Dichloroethene	ND		ug/l	0.50	--
Acetone	ND		ug/l	5.0	--
Naphthalene	ND		ug/l	2.5	--
Tentatively Identified Compounds					
No Tentatively Identified Compounds	ND		ug/l		

Project Name: THE POINT
Project Number: 4617.9.06

Lab Number: L1501272
Report Date: 01/26/15

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 01/23/15 07:38
Analyst: MM

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-02 Batch: WG758195-3					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	99		70-130
Toluene-d8	93		70-130
4-Bromofluorobenzene	110		70-130
Dibromofluoromethane	93		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: THE POINT

Project Number: 4617.9.06

Lab Number: L1501272

Report Date: 01/26/15

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01-02 Batch: WG757989-1 WG757989-2								
1,4-Dioxane	86		100		70-130	15		25

Lab Control Sample Analysis

Batch Quality Control

Project Name: THE POINT

Project Number: 4617.9.06

Lab Number: L1501272

Report Date: 01/26/15

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Microextractables by GC - Westborough Lab	Associated sample(s): 01-02 Batch: WG758031-2								
1,2-Dibromoethane	100		-		70-130	-		20	A

Lab Control Sample Analysis
Batch Quality Control

Project Name: THE POINT
Project Number: 4617.9.06

Lab Number: L1501272
Report Date: 01/26/15

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02 Batch: WG758195-1 WG758195-2								
Methylene chloride	84		85		70-130	1		20
1,1-Dichloroethane	86		85		70-130	1		20
Chloroform	101		99		70-130	2		20
Carbon tetrachloride	104		102		63-132	2		20
1,2-Dichloropropane	89		88		70-130	1		20
Dibromochloromethane	99		98		63-130	1		20
1,1,2-Trichloroethane	92		93		70-130	1		20
Tetrachloroethene	89		89		70-130	0		20
Chlorobenzene	94		93		75-130	1		25
Trichlorofluoromethane	94		95		62-150	1		20
1,2-Dichloroethane	115		113		70-130	2		20
1,1,1-Trichloroethane	105		104		67-130	1		20
Bromodichloromethane	100		100		67-130	0		20
trans-1,3-Dichloropropene	99		99		70-130	0		20
cis-1,3-Dichloropropene	102		102		70-130	0		20
1,1-Dichloropropene	100		98		70-130	2		20
Bromoform	86		93		54-136	8		20
1,1,2,2-Tetrachloroethane	91		93		67-130	2		20
Benzene	96		95		70-130	1		25
Toluene	89		90		70-130	1		25
Ethylbenzene	92		93		70-130	1		20

Lab Control Sample Analysis
Batch Quality Control

Project Name: THE POINT
Project Number: 4617.9.06

Lab Number: L1501272
Report Date: 01/26/15

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02 Batch: WG758195-1 WG758195-2								
Chloromethane	79		82		64-130	4		20
Bromomethane	64		66		39-139	3		20
Vinyl chloride	88		90		55-140	2		20
Chloroethane	71		71		55-138	0		20
1,1-Dichloroethene	89		88		61-145	1		25
trans-1,2-Dichloroethene	89		90		70-130	1		20
Trichloroethene	101		104		70-130	3		25
1,2-Dichlorobenzene	88		94		70-130	7		20
1,3-Dichlorobenzene	86		93		70-130	8		20
1,4-Dichlorobenzene	88		93		70-130	6		20
Methyl tert butyl ether	103		101		63-130	2		20
p/m-Xylene	89		89		70-130	0		20
o-Xylene	88		89		70-130	1		20
cis-1,2-Dichloroethene	100		98		70-130	2		20
Dibromomethane	102		101		70-130	1		20
1,4-Dichlorobutane	83		88		70-130	6		20
1,2,3-Trichloropropane	94		100		64-130	6		20
Styrene	90		90		70-130	0		20
Dichlorodifluoromethane	**155**	Q	**156**	Q	36-147	1		20
Acetone	105		113		58-148	7		20
Carbon disulfide	77		77		51-130	0		20

Lab Control Sample Analysis
Batch Quality Control

Project Name: THE POINT
Project Number: 4617.9.06

Lab Number: L1501272
Report Date: 01/26/15

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02 Batch: WG758195-1 WG758195-2								
2-Butanone	96		102		63-138	6		20
Vinyl acetate	83		83		70-130	0		20
4-Methyl-2-pentanone	108		106		59-130	2		20
2-Hexanone	96		95		57-130	1		20
Ethyl methacrylate	102		104		70-130	2		20
Acrylonitrile	87		86		70-130	1		20
Bromochloromethane	105		106		70-130	1		20
Tetrahydrofuran	93		99		58-130	6		20
2,2-Dichloropropane	113		110		63-133	3		20
1,2-Dibromoethane	95		95		70-130	0		20
1,3-Dichloropropane	94		95		70-130	1		20
1,1,1,2-Tetrachloroethane	98		101		64-130	3		20
Bromobenzene	84		90		70-130	7		20
n-Butylbenzene	89		96		53-136	8		20
sec-Butylbenzene	85		92		70-130	8		20
tert-Butylbenzene	88		95		70-130	8		20
o-Chlorotoluene	81		87		70-130	7		20
p-Chlorotoluene	87		94		70-130	8		20
1,2-Dibromo-3-chloropropane	86		89		41-144	3		20
Hexachlorobutadiene	76		94		63-130	**21**	Q	20
Isopropylbenzene	88		96		70-130	9		20

Lab Control Sample Analysis
Batch Quality Control

Project Name: THE POINT
Project Number: 4617.9.06

Lab Number: L1501272
Report Date: 01/26/15

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02 Batch: WG758195-1 WG758195-2								
p-Isopropyltoluene	88		94		70-130	7		20
Naphthalene	86		93		70-130	8		20
n-Propylbenzene	83		89		69-130	7		20
1,2,3-Trichlorobenzene	73		82		70-130	12		20
1,2,4-Trichlorobenzene	77		87		70-130	12		20
1,3,5-Trimethylbenzene	89		95		64-130	7		20
1,2,4-Trimethylbenzene	87		95		70-130	9		20
trans-1,4-Dichloro-2-butene	94		108		70-130	14		20
Ethyl ether	94		95		59-134	1		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	111		103		70-130
Toluene-d8	92		90		70-130
4-Bromofluorobenzene	92		95		70-130
Dibromofluoromethane	102		96		70-130

Matrix Spike Analysis
Batch Quality Control

Project Name: THE POINT
Project Number: 4617.9.06

Lab Number: L1501272
Report Date: 01/26/15

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits	Column
Microextractables by GC - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG758031-3 QC Sample: L1501272-01 Client ID: SH-3													
1,2-Dibromoethane	ND	0.249	0.244	98		-	-		70-130	-		20	A

SEMIVOLATILES

Project Name: THE POINT
Lab Number: L1501272
Project Number: 4617.9.06
Report Date: 01/26/15

SAMPLE RESULTS

Lab ID: L1501272-01
Client ID: SH-3
Sample Location: BOSTON, MA
Matrix: Water
Analytical Method: 1,8270D
Analytical Date: 01/23/15 16:54
Analyst: KR

Date Collected: 01/20/15 12:00
Date Received: 01/20/15
Field Prep: Not Specified
Extraction Method: EPA 3510C
Extraction Date: 01/22/15 16:22

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	49		21-120
Phenol-d6	33		10-120
Nitrobenzene-d5	78		23-120
2-Fluorobiphenyl	76		15-120
2,4,6-Tribromophenol	91		10-120
4-Terphenyl-d14	86		41-149

Project Name: THE POINT
Project Number: 4617.9.06
Lab Number: L1501272
Report Date: 01/26/15

SAMPLE RESULTS

Lab ID: L1501272-01
Client ID: SH-3
Sample Location: BOSTON, MA
Matrix: Water
Analytical Method: 1,8270D-SIM
Analytical Date: 01/23/15 19:09
Analyst: AS

Date Collected: 01/20/15 12:00
Date Received: 01/20/15
Field Prep: Not Specified
Extraction Method: EPA 3510C
Extraction Date: 01/22/15 16:19

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	45		21-120
Phenol-d6	32		10-120
Nitrobenzene-d5	97		23-120
2-Fluorobiphenyl	78		15-120
2,4,6-Tribromophenol	92		10-120
4-Terphenyl-d14	91		41-149

Project Name: THE POINT
Project Number: 4617.9.06

Lab Number: L1501272
Report Date: 01/26/15

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D-SIM
Analytical Date: 01/23/15 18:58
Analyst: AS

Extraction Method: EPA 3510C
Extraction Date: 01/22/15 16:19

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01 Batch: WG757814-1					
Acenaphthene	ND		ug/l	0.20	--
Fluoranthene	ND		ug/l	0.20	--
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	--
Pentachlorophenol	ND		ug/l	0.80	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	45		21-120
Phenol-d6	32		10-120
Nitrobenzene-d5	77		23-120
2-Fluorobiphenyl	71		15-120
2,4,6-Tribromophenol	86		10-120
4-Terphenyl-d14	83		41-149

Project Name: THE POINT
Project Number: 4617.9.06

Lab Number: L1501272
Report Date: 01/26/15

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 01/23/15 15:37
Analyst: KR

Extraction Method: EPA 3510C
Extraction Date: 01/22/15 16:22

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG757819-1					
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	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	49		21-120
Phenol-d6	33		10-120
Nitrobenzene-d5	77		23-120
2-Fluorobiphenyl	68		15-120
2,4,6-Tribromophenol	86		10-120
4-Terphenyl-d14	78		41-149

Lab Control Sample Analysis

Batch Quality Control

Project Name: THE POINT

Project Number: 4617.9.06

Lab Number: L1501272

Report Date: 01/26/15

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: WG757814-2 WG757814-3								
Acenaphthene	76		94		37-111	21		40
2-Chloronaphthalene	74		88		40-140	17		40
Fluoranthene	82		106		40-140	26		40
Hexachlorobutadiene	61		65		40-140	6		40
Naphthalene	73		81		40-140	10		40
Benzo(a)anthracene	85		112		40-140	27		40
Benzo(a)pyrene	89		116		40-140	26		40
Benzo(b)fluoranthene	92		120		40-140	26		40
Benzo(k)fluoranthene	89		115		40-140	25		40
Chrysene	85		111		40-140	27		40
Acenaphthylene	79		95		40-140	18		40
Anthracene	83		106		40-140	24		40
Benzo(ghi)perylene	91		119		40-140	27		40
Fluorene	80		100		40-140	22		40
Phenanthrene	78		101		40-140	26		40
Dibenzo(a,h)anthracene	92		120		40-140	26		40
Indeno(1,2,3-cd)pyrene	90		118		40-140	27		40
Pyrene	82		106		26-127	26		40
1-Methylnaphthalene	71		83		40-140	16		40
2-Methylnaphthalene	73		85		40-140	15		40
Pentachlorophenol	74		94		9-103	24		40

Lab Control Sample Analysis

Batch Quality Control

Project Name: THE POINT

Project Number: 4617.9.06

Lab Number: L1501272

Report Date: 01/26/15

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: WG757814-2 WG757814-3								
Hexachlorobenzene	79		101		40-140	24		40
Hexachloroethane	67		67		40-140	0		40

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	46		48		21-120
Phenol-d6	34		37		10-120
Nitrobenzene-d5	72		79		23-120
2-Fluorobiphenyl	71		84		15-120
2,4,6-Tribromophenol	76		99		10-120
4-Terphenyl-d14	74		95		41-149

Lab Control Sample Analysis
Batch Quality Control

Project Name: THE POINT
Project Number: 4617.9.06

Lab Number: L1501272
Report Date: 01/26/15

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: WG757819-2 WG757819-3								
Acenaphthene	58		58		37-111	0		30
Benzidine	30		27		10-75	11		30
1,2,4-Trichlorobenzene	42		43		39-98	2		30
Hexachlorobenzene	66		61		40-140	8		30
Bis(2-chloroethyl)ether	62		65		40-140	5		30
2-Chloronaphthalene	49		52		40-140	6		30
1,2-Dichlorobenzene	44		45		40-140	2		30
1,3-Dichlorobenzene	43		44		40-140	2		30
1,4-Dichlorobenzene	42		46		36-97	9		30
3,3'-Dichlorobenzidine	94		89		40-140	5		30
2,4-Dinitrotoluene	72		66		24-96	9		30
2,6-Dinitrotoluene	67		64		40-140	5		30
Azobenzene	79		75		40-140	5		30
Fluoranthene	75		69		40-140	8		30
4-Chlorophenyl phenyl ether	62		60		40-140	3		30
4-Bromophenyl phenyl ether	66		63		40-140	5		30
Bis(2-chloroisopropyl)ether	60		61		40-140	2		30
Bis(2-chloroethoxy)methane	68		66		40-140	3		30
Hexachlorobutadiene	**39**	Q	**39**	Q	40-140	0		30
Hexachlorocyclopentadiene	**35**	Q	**37**	Q	40-140	6		30
Hexachloroethane	**35**	Q	**38**	Q	40-140	8		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: THE POINT

Project Number: 4617.9.06

Lab Number: L1501272

Report Date: 01/26/15

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: WG757819-2 WG757819-3								
Isophorone	73		72		40-140	1		30
Naphthalene	45		48		40-140	6		30
Nitrobenzene	65		66		40-140	2		30
NitrosoDiPhenylAmine(NDPA)/DPA	73		69		40-140	6		30
n-Nitrosodi-n-propylamine	75		74		29-132	1		30
Bis(2-ethylhexyl)phthalate	83		78		40-140	6		30
Butyl benzyl phthalate	80		78		40-140	3		30
Di-n-butylphthalate	77		76		40-140	1		30
Di-n-octylphthalate	86		84		40-140	2		30
Diethyl phthalate	75		71		40-140	5		30
Dimethyl phthalate	74		68		40-140	8		30
Benzo(a)anthracene	72		69		40-140	4		30
Benzo(a)pyrene	70		67		40-140	4		30
Benzo(b)fluoranthene	70		69		40-140	1		30
Benzo(k)fluoranthene	66		68		40-140	3		30
Chrysene	69		65		40-140	6		30
Acenaphthylene	58		61		45-123	5		30
Anthracene	72		70		40-140	3		30
Benzo(ghi)perylene	71		65		40-140	9		30
Fluorene	65		64		40-140	2		30
Phenanthrene	69		65		40-140	6		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: THE POINT
Project Number: 4617.9.06

Lab Number: L1501272
Report Date: 01/26/15

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: WG757819-2 WG757819-3								
Dibenzo(a,h)anthracene	74		68		40-140	8		30
Indeno(1,2,3-cd)Pyrene	76		70		40-140	8		30
Pyrene	75		66		26-127	13		30
Biphenyl	56		58		40-140	4		30
Aniline	**24**	Q	**27**	Q	40-140	12		30
4-Chloroaniline	50		50		40-140	0		30
1-Methylnaphthalene	53		58		41-103	9		30
2-Nitroaniline	81		77		52-143	5		30
3-Nitroaniline	74		70		25-145	6		30
4-Nitroaniline	82		75		51-143	9		30
Dibenzofuran	64		63		40-140	2		30
2-Methylnaphthalene	49		52		40-140	6		30
n-Nitrosodimethylamine	33		38		22-74	14		30
2,4,6-Trichlorophenol	74		72		30-130	3		30
P-Chloro-M-Cresol	81		80		23-97	1		30
2-Chlorophenol	67		66		27-123	2		30
2,4-Dichlorophenol	71		74		30-130	4		30
2,4-Dimethylphenol	75		69		30-130	8		30
2-Nitrophenol	67		69		30-130	3		30
4-Nitrophenol	63		57		10-80	10		30
2,4-Dinitrophenol	29		29		20-130	0		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: THE POINT
Project Number: 4617.9.06

Lab Number: L1501272
Report Date: 01/26/15

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: WG757819-2 WG757819-3								
4,6-Dinitro-o-cresol	22		22		20-164	0		30
Pentachlorophenol	65		64		9-103	2		30
Phenol	33		35		12-110	6		30
2-Methylphenol	64		65		30-130	2		30
3-Methylphenol/4-Methylphenol	60		60		30-130	0		30
2,4,5-Trichlorophenol	75		73		30-130	3		30
Benzoic Acid	19		16		10-164	17		30
Benzyl Alcohol	65		66		26-116	2		30
Carbazole	77		72		55-144	7		30
Pyridine	14		17		10-66	19		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	45		48		21-120
Phenol-d6	32		32		10-120
Nitrobenzene-d5	72		71		23-120
2-Fluorobiphenyl	61		63		15-120
2,4,6-Tribromophenol	80		75		10-120
4-Terphenyl-d14	79		70		41-149

PCBS

Project Name: THE POINT
Project Number: 4617.9.06
Lab Number: L1501272
Report Date: 01/26/15

SAMPLE RESULTS

Lab ID: L1501272-01
Client ID: SH-3
Sample Location: BOSTON, MA
Matrix: Water
Analytical Method: 5,608
Analytical Date: 01/25/15 17:10
Analyst: JT

Date Collected: 01/20/15 12:00
Date Received: 01/20/15
Field Prep: Not Specified
Extraction Method: EPA 608
Extraction Date: 01/24/15 03:08
Cleanup Method: EPA 3665A
Cleanup Date: 01/25/15
Cleanup Method: EPA 3660B
Cleanup Date: 01/25/15

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	75		30-150	A
Decachlorobiphenyl	61		30-150	A

Project Name: THE POINT
Project Number: 4617.9.06

Lab Number: L1501272
Report Date: 01/26/15

Method Blank Analysis
Batch Quality Control

Analytical Method: 5,608
Analytical Date: 01/25/15 17:23
Analyst: JT

Extraction Method: EPA 608
Extraction Date: 01/24/15 03:08
Cleanup Method: EPA 3665A
Cleanup Date: 01/25/15
Cleanup Method: EPA 3660B
Cleanup Date: 01/25/15

Parameter	Result	Qualifier	Units	RL	MDL	Column
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 01 Batch: WG758275-1						
Aroclor 1016	ND		ug/l	0.250	--	A
Aroclor 1221	ND		ug/l	0.250	--	A
Aroclor 1232	ND		ug/l	0.250	--	A
Aroclor 1242	ND		ug/l	0.250	--	A
Aroclor 1248	ND		ug/l	0.250	--	A
Aroclor 1254	ND		ug/l	0.250	--	A
Aroclor 1260	ND		ug/l	0.200	--	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	77		30-150	A
Decachlorobiphenyl	79		30-150	A

Lab Control Sample Analysis

Batch Quality Control

Project Name: THE POINT

Project Number: 4617.9.06

Lab Number: L1501272

Report Date: 01/26/15

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01 Batch: WG758275-2 WG758275-3									
Aroclor 1016	78		80		40-140	3		50	A
Aroclor 1260	77		87		40-140	12		50	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	72		74		30-150	A
Decachlorobiphenyl	33		91		30-150	A

METALS

Project Name: THE POINT
Lab Number: L1501272
Project Number: 4617.9.06
Report Date: 01/26/15

SAMPLE RESULTS

Lab ID: L1501272-01
Client ID: SH-3
Sample Location: BOSTON, MA
Matrix: Water

Date Collected: 01/20/15 12:00
Date Received: 01/20/15
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Westborough Lab											
Antimony, Total	0.00102		mg/l	0.00050	--	1	01/25/15 13:24	01/26/15 15:01	EPA 3005A	1,6020A	KL
Arsenic, Total	0.00094		mg/l	0.00050	--	1	01/25/15 13:24	01/26/15 15:01	EPA 3005A	1,6020A	KL
Cadmium, Total	0.00021		mg/l	0.00020	--	1	01/25/15 13:24	01/26/15 15:01	EPA 3005A	1,6020A	KL
Chromium, Total	ND		mg/l	0.00100	--	1	01/25/15 13:24	01/26/15 15:01	EPA 3005A	1,6020A	KL
Copper, Total	0.00315		mg/l	0.00100	--	1	01/25/15 13:24	01/26/15 15:01	EPA 3005A	1,6020A	KL
Iron, Total	0.38		mg/l	0.05	--	1	01/25/15 13:22	01/26/15 14:33	EPA 3005A	19,200.7	JH
Lead, Total	ND		mg/l	0.00100	--	1	01/25/15 13:24	01/26/15 15:01	EPA 3005A	1,6020A	KL
Mercury, Total	ND		mg/l	0.00020	--	1	01/21/15 15:39	01/22/15 12:02	EPA 245.1	3,245.1	AB
Nickel, Total	0.00114		mg/l	0.00050	--	1	01/25/15 13:24	01/26/15 15:01	EPA 3005A	1,6020A	KL
Selenium, Total	ND		mg/l	0.00500	--	1	01/25/15 13:24	01/26/15 15:01	EPA 3005A	1,6020A	KL
Silver, Total	ND		mg/l	0.00040	--	1	01/25/15 13:24	01/26/15 15:01	EPA 3005A	1,6020A	KL
Zinc, Total	ND		mg/l	0.01000	--	1	01/25/15 13:24	01/26/15 15:01	EPA 3005A	1,6020A	KL

Project Name: THE POINT
Project Number: 4617.9.06

Lab Number: L1501272
Report Date: 01/26/15

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Westborough Lab for sample(s): 01 Batch: WG757459-1										
Mercury, Total	ND		mg/l	0.00020	--	1	01/21/15 15:39	01/22/15 11:46	3,245.1	AB

Prep Information

Digestion Method: EPA 245.1

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Westborough Lab for sample(s): 01 Batch: WG758419-1										
Antimony, Total	ND		mg/l	0.00200	--	1	01/25/15 13:24	01/26/15 14:40	1,6020A	KL
Arsenic, Total	ND		mg/l	0.00050	--	1	01/25/15 13:24	01/26/15 14:40	1,6020A	KL
Cadmium, Total	ND		mg/l	0.00020	--	1	01/25/15 13:24	01/26/15 14:40	1,6020A	KL
Chromium, Total	ND		mg/l	0.00100	--	1	01/25/15 13:24	01/26/15 14:40	1,6020A	KL
Copper, Total	ND		mg/l	0.00200	--	1	01/25/15 13:24	01/26/15 14:40	1,6020A	KL
Lead, Total	ND		mg/l	0.00050	--	1	01/25/15 13:24	01/26/15 14:40	1,6020A	KL
Nickel, Total	ND		mg/l	0.00050	--	1	01/25/15 13:24	01/26/15 14:40	1,6020A	KL
Selenium, Total	ND		mg/l	0.00500	--	1	01/25/15 13:24	01/26/15 14:40	1,6020A	KL
Silver, Total	ND		mg/l	0.00050	--	1	01/25/15 13:24	01/26/15 14:40	1,6020A	KL
Zinc, Total	ND		mg/l	0.01000	--	1	01/25/15 13:24	01/26/15 14:40	1,6020A	KL

Prep Information

Digestion Method: EPA 3005A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Westborough Lab for sample(s): 01 Batch: WG758421-1										
Iron, Total	ND		mg/l	0.05	--	1	01/25/15 13:22	01/26/15 12:48	19,200.7	JH

Prep Information

Digestion Method: EPA 3005A

Lab Control Sample Analysis

Batch Quality Control

Project Name: THE POINT

Project Number: 4617.9.06

Lab Number: L1501272

Report Date: 01/26/15

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01 Batch: WG757459-2								
Mercury, Total	**120**	Q	-		85-115	-		
Total Metals - Westborough Lab Associated sample(s): 01 Batch: WG758419-2								
Antimony, Total	88		-		80-120	-		
Arsenic, Total	98		-		80-120	-		
Cadmium, Total	108		-		80-120	-		
Chromium, Total	94		-		80-120	-		
Copper, Total	95		-		80-120	-		
Lead, Total	102		-		80-120	-		
Nickel, Total	94		-		80-120	-		
Selenium, Total	96		-		80-120	-		
Silver, Total	92		-		80-120	-		
Zinc, Total	100		-		80-120	-		
Total Metals - Westborough Lab Associated sample(s): 01 Batch: WG758421-2								
Iron, Total	97		-		85-115	-		

Matrix Spike Analysis
Batch Quality Control

Project Name: THE POINT
Project Number: 4617.9.06

Lab Number: L1501272
Report Date: 01/26/15

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG757459-4 QC Sample: L1500507-01 Client ID: MS Sample												
Mercury, Total	ND	0.005	0.00531	106		-	-		70-130	-		20
Total Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG758419-4 QC Sample: L1501418-01 Client ID: MS Sample												
Antimony, Total	0.0025	0.5	0.4946	98		-	-		75-125	-		20
Arsenic, Total	0.02815	0.12	0.1531	104		-	-		75-125	-		20
Cadmium, Total	ND	0.051	0.05310	104		-	-		75-125	-		20
Chromium, Total	0.0014	0.2	0.1852	92		-	-		75-125	-		20
Copper, Total	0.0639	0.25	0.3099	98		-	-		75-125	-		20
Lead, Total	0.00443	0.51	0.5169	100		-	-		75-125	-		20
Nickel, Total	0.0087	0.5	0.5048	99		-	-		75-125	-		20
Selenium, Total	ND	0.12	0.124	103		-	-		75-125	-		20
Silver, Total	ND	0.05	0.04622	92		-	-		75-125	-		20
Zinc, Total	0.0272	0.5	0.5166	98		-	-		75-125	-		20
Total Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG758421-4 QC Sample: L1501418-01 Client ID: MS Sample												
Iron, Total	9.8	1	10	**20**	Q	-	-		75-125	-		20

Lab Duplicate Analysis
Batch Quality Control

Project Name: THE POINT
Project Number: 4617.9.06

Lab Number: L1501272
Report Date: 01/26/15

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG757459-3 QC Sample: L1500507-01 Client ID: DUP Sample						
Mercury, Total	ND	ND	mg/l	NC		20
Total Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG758419-3 QC Sample: L1501418-01 Client ID: DUP Sample						
Arsenic, Total	0.02815	0.02876	mg/l	2		20
Lead, Total	0.00443	0.00453	mg/l	2		20
Total Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG758421-3 QC Sample: L1501418-01 Client ID: DUP Sample						
Iron, Total	9.8	9.9	mg/l	1		20

INORGANICS
&
MISCELLANEOUS

Project Name: THE POINT
Project Number: 4617.9.06

Lab Number: L1501272
Report Date: 01/26/15

SAMPLE RESULTS

Lab ID: L1501272-01
Client ID: SH-3
Sample Location: BOSTON, MA
Matrix: Water

Date Collected: 01/20/15 12:00
Date Received: 01/20/15
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total Suspended	ND		mg/l	5.0	NA	1	-	01/21/15 13:30	30,2540D	DW
Cyanide, Total	ND		mg/l	0.005	--	1	01/20/15 20:15	01/21/15 14:29	30,4500CN-CE	JO
Chlorine, Total Residual	ND		mg/l	0.02	--	1	-	01/20/15 21:55	30,4500CL-D	MR
TPH	ND		mg/l	4.00	--	1	01/22/15 17:00	01/23/15 14:00	74,1664A	ML
Phenolics, Total	ND		mg/l	0.030	--	1	01/23/15 10:30	01/23/15 15:33	4,420.1	MP
Chromium, Hexavalent	ND		mg/l	0.010	--	1	01/20/15 19:40	01/20/15 19:53	30,3500CR-B	MR
Anions by Ion Chromatography - Westborough Lab										
Chloride	593.		mg/l	12.5	--	25	-	01/22/15 18:43	44,300.0	AU

Project Name: THE POINT
Project Number: 4617.9.06

Lab Number: L1501272
Report Date: 01/26/15

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: WG757117-1										
Chromium, Hexavalent	ND		mg/l	0.010	--	1	01/20/15 19:40	01/20/15 19:52	30,3500CR-B	MR
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG757145-1										
Chlorine, Total Residual	ND		mg/l	0.02	--	1	-	01/20/15 21:55	30,4500CL-D	MR
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG757149-1										
Cyanide, Total	ND		mg/l	0.005	--	1	01/20/15 20:15	01/21/15 14:23	30,4500CN-CE	JO
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG757260-1										
Solids, Total Suspended	ND		mg/l	5.0	NA	1	-	01/21/15 13:30	30,2540D	DW
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG757834-1										
TPH	ND		mg/l	4.00	--	1	01/22/15 17:00	01/23/15 14:00	74,1664A	ML
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG758048-1										
Phenolics, Total	ND		mg/l	0.030	--	1	01/23/15 10:30	01/23/15 15:31	4,420.1	MP
Anions by Ion Chromatography - Westborough Lab for sample(s): 01 Batch: WG758205-1										
Chloride	ND		mg/l	0.500	--	1	-	01/22/15 18:07	44,300.0	AU

Lab Control Sample Analysis

Batch Quality Control

Project Name: THE POINT
Project Number: 4617.9.06

Lab Number: L1501272
Report Date: 01/26/15

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG757117-2								
Chromium, Hexavalent	98		-		85-115	-		20
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG757145-2								
Chlorine, Total Residual	97		-		90-110	-		
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG757149-2								
Cyanide, Total	90		-		90-110	-		
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG757834-2								
TPH	85		-		64-132	-		34
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG758048-2								
Phenolics, Total	94		-		70-130	-		
Anions by Ion Chromatography - Westborough Lab Associated sample(s): 01 Batch: WG758205-2								
Chloride	98		-		90-110	-		

Matrix Spike Analysis
Batch Quality Control

Project Name: THE POINT
Project Number: 4617.9.06

Lab Number: L1501272
Report Date: 01/26/15

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: WG757117-4 QC Sample: L1501272-01 Client ID: SH-3												
Chromium, Hexavalent	ND	0.1	0.091	91		-	-		85-115	-		20
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG757149-4 QC Sample: L1501272-01 Client ID: SH-3												
Cyanide, Total	ND	0.2	0.197	98		-	-		90-110	-		30
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG757834-4 QC Sample: L1501417-01 Client ID: MS Sample												
TPH	20.4	20.4	36.7	80		-	-		64-132	-		34
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG758048-4 QC Sample: L1501272-01 Client ID: SH-3												
Phenolics, Total	ND	0.4	0.38	96		-	-		70-130	-		20
Anions by Ion Chromatography - Westborough Lab Associated sample(s): 01 QC Batch ID: WG758205-3 QC Sample: L1501374-02 Client ID: MS Sample												
Chloride	138	100	243	105		-	-		40-151	-		18

Lab Duplicate Analysis
Batch Quality Control

Project Name: THE POINT
Project Number: 4617.9.06

Lab Number: L1501272
Report Date: 01/26/15

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG757117-3 QC Sample: L1501272-01 Client ID: SH-3						
Chromium, Hexavalent	ND	ND	mg/l	NC		20
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG757145-3 QC Sample: L1501272-01 Client ID: SH-3						
Chlorine, Total Residual	ND	ND	mg/l	NC		20
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG757149-3 QC Sample: L1501254-01 Client ID: DUP Sample						
Cyanide, Total	0.032	0.033	mg/l	3		30
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG757260-3 QC Sample: L1501257-01 Client ID: DUP Sample						
Solids, Total Suspended	110	130	mg/l	17		29
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG757834-3 QC Sample: L1501272-01 Client ID: SH-3						
TPH	ND	ND	mg/l	NC		34
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG758048-3 QC Sample: L1501272-01 Client ID: SH-3						
Phenolics, Total	ND	ND	mg/l	NC		20
Anions by Ion Chromatography - Westborough Lab Associated sample(s): 01 QC Batch ID: WG758205-4 QC Sample: L1501374-02 Client ID: DUP Sample						
Chloride	138	133	mg/l	4		18

Project Name: THE POINT
Project Number: 4617.9.06

Lab Number: L1501272
Report Date: 01/26/15

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Reagent H2O Preserved Vials Frozen on: NA

Cooler Information Custody Seal

Cooler	
A	Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1501272-01A	Vial HCl preserved	A	N/A	3.4	Y	Absent	8260(14)
L1501272-01B	Vial HCl preserved	A	N/A	3.4	Y	Absent	8260(14)
L1501272-01C	Vial HCl preserved	A	N/A	3.4	Y	Absent	8260(14)
L1501272-01D	Vial HCl preserved	A	N/A	3.4	Y	Absent	8260-SIM(14)
L1501272-01E	Vial HCl preserved	A	N/A	3.4	Y	Absent	8260-SIM(14)
L1501272-01F	Vial HCl preserved	A	N/A	3.4	Y	Absent	8260-SIM(14)
L1501272-01G	Vial Na2S2O3 preserved	A	N/A	3.4	Y	Absent	504(14)
L1501272-01H	Vial Na2S2O3 preserved	A	N/A	3.4	Y	Absent	504(14)
L1501272-01I	Plastic 250ml NaOH preserved	A	>12	3.4	Y	Absent	TCN-4500(14)
L1501272-01J	Plastic 250ml HNO3 preserved	A	<2	3.4	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)
L1501272-01K	Plastic 500ml unpreserved	A	7	3.4	Y	Absent	CL-300(28),TRC-4500(1)
L1501272-01L	Plastic 500ml unpreserved	A	7	3.4	Y	Absent	HEXCR-3500(1)
L1501272-01M	Plastic 950ml unpreserved	A	7	3.4	Y	Absent	TSS-2540(7)
L1501272-01N	Amber 1000ml H2SO4 preserved	A	<2	3.4	Y	Absent	TPHENOL-420(28)
L1501272-01O	Amber 1000ml Na2S2O3	A	7	3.4	Y	Absent	PCB-608(7)
L1501272-01P	Amber 1000ml Na2S2O3	A	7	3.4	Y	Absent	PCB-608(7)
L1501272-01Q	Amber 1000ml HCl preserved	A	N/A	3.4	Y	Absent	TPH-1664(28)
L1501272-01R	Amber 1000ml HCl preserved	A	N/A	3.4	Y	Absent	TPH-1664(28)
L1501272-01S	Amber 1000ml unpreserved	A	7	3.4	Y	Absent	8270TCL(7)
L1501272-01T	Amber 1000ml unpreserved	A	7	3.4	Y	Absent	8270TCL(7)
L1501272-01U	Amber 1000ml unpreserved	A	7	3.4	Y	Absent	8270TCL-SIM(7)
L1501272-01V	Amber 1000ml unpreserved	A	7	3.4	Y	Absent	8270TCL-SIM(7)
L1501272-02A	Vial HCl preserved	A	N/A	3.4	Y	Absent	8260-SIM(14),8260(14)

*Values in parentheses indicate holding time in days

Project Name: THE POINT
Project Number: 4617.9.06

Lab Number: L1501272
Report Date: 01/26/15

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1501272-02B	Vial Na2S2O3 preserved	A	N/A	3.4	Y	Absent	504(14)
L1501272-02C	Vial Na2S2O3 preserved	A	N/A	3.4	Y	Absent	504(14)

*Values in parentheses indicate holding time in days

Project Name:	THE POINT	**Lab Number:**	L1501272
Project Number:	4617.9.06	**Report Date:**	01/26/15

GLOSSARY

Acronyms

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

EPA - Environmental Protection Agency.

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

LCSD - Laboratory Control Sample Duplicate: Refer to LCS.

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

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

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

MSD - Matrix Spike Sample Duplicate: Refer to MS.

NA - Not Applicable.

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

NI - Not Ignitable.

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

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

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

Footnotes

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

Terms

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

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

Data Qualifiers

A - Spectra identified as "Aldol Condensation Product".

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

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

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

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

Report Format: Data Usability Report

Project Name:	THE POINT	**Lab Number:**	L1501272
Project Number:	4617.9.06	**Report Date:**	01/26/15

Data Qualifiers

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

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

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

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

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

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

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

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

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

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

Report Format: Data Usability Report

Project Name: THE POINT
Project Number: 4617.9.06
Lab Number: L1501272
Report Date: 01/26/15

REFERENCES

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

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

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

5 Methods for the Organic Chemical Analysis of Municipal and Industrial Wastewater. Appendix A, Part 136, 40 CFR (Code of Federal Regulations).

14 Methods for the Determination of Organic Compounds in Finished Drinking Water and Raw Source Water. EPA/600/4-88/039, Revised July 1991.

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

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

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

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

LIMITATION OF LIABILITIES

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

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

Certification Information

Last revised December 16, 2014

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

Westborough Facility
EPA 524.2: Acetone, 2-Butanone (Methyl ethyl ketone (MEK)), Tert-butyl alcohol, 2-Hexanone, Tetrahydrofuran, 1,3,5-Trichlorobenzene, 4-Methyl-2-pentanone (MIBK), Carbon disulfide, Diethyl ether.
EPA 8260C: 1,2,4,5-Tetramethylbenzene, 4-Ethyltoluene, Iodomethane (methyl iodide), Methyl methacrylate, Azobenzene.
EPA 8270D: 1-Methylnaphthalene, Dimethylnaphthalene,1,4-Diphenylhydrazine.
EPA 625: 4-Chloroaniline, 4-Methylphenol.
SM4500: Soil: Total Phosphorus, TKN, NO2, NO3.
EPA 9071: Total Petroleum Hydrocarbons, Oil & Grease.

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

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

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

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

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

ALPHA ANALYTICAL — World Class Chemistry

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

CHAIN OF CUSTODY

PAGE 1 OF 1

Date Rec'd in Lab: 1/20/15

ALPHA Job #: L1501272

Client Information

Client: McPhail Associates, LLC
Address: 2269 Massachusetts Ave. Cambridge, MA 02140
Phone: 617-868-1420
Email: kjordan@mcphailgeo.com JGL

Additional Project Information:
★ Tripblank - 8260 sim

Project Information

Project Name: The Point
Project Location: Boston, MA
Project #: 4617.9.06
Project Manager: KDJ / JGL
ALPHA Quote #:

Turn-Around Time

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

Date Due: 1/26/15

Report Information - Data Deliverables

☒ ADEx ☐ EMAIL

Billing Information

☒ Same as Client info PO #:

Regulatory Requirements & Project Information Requirements

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

Analysis

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler Initials	VOC: ☒ 8260 + 8260 SIM ☐ 624 ☐ 524.2	SVOC: ☐ ABN ☐ PAH 8270/TCL + 8270 TCL SIM	METALS: ☐ MCP 13 ☐ MCP 14 ☐ RCP 15	METALS: ☐ RCRA5 ☐ RCRA8 ☐ PP13	EPH: ☐ Ranges & Targets ☐ Ranges Only	VPH: ☐ Ranges & Targets ☐ Ranges Only	☒ PCB (608) ☐ PEST	TPH: ☒ Quant Only (1664) ☐ Fingerprint	TSS (2540)	HexCr-3500; TRC(4500)	TPhenol-420	TCN-4500	SO4 (EDB only)	Total Hg, Fe, Ag, As, Cd, Cr, Cu, Ni, Pb, Sb, Se, Zn	Sample Comments	Total # Bottles
01272-01	SH-3	1/20/15	12:00	GW	JPK	X	X					X	X	X	X	X	X	X	X		22
-02	Tripblank		12:00			*X												X			3
Container Type						V	A					A	A	P	P	A	P	V	P		
Preservative						B	A					H	B	A	A	D	E	H	C		

Sample Info — Filtration: ☐ Field ☐ Lab to do; Preservation: ☐ Lab to do

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

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

Relinquished By:	Date/Time	Received By:	Date/Time
[signature]	1/20/15 15:00	[signature]	1/20/15 1559
	1/20/15 1735	[signature]	1/20/15 1735

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

APPENDIX E:

BEST MANAGEMENT PRACTICE PLAN

A Notice of Intent for a Remediation General Permit (RGP) under the National Pollutant Discharge Elimination System (NPDES) has been submitted to the US Environmental Protection Agency (EPA) in anticipation of temporary construction dewatering that will occur during redevelopment of The Point parcel located at 200 Brookline Avenue in Boston, Massachusetts. This Best Management Practices Plan (BMPP) has been prepared as an Appendix to the RGP and will be posted at the site during the time period that temporary construction dewatering is occurring at the site.

Water Treatment and Management

During construction of the proposed building foundation, dewatering effluent is anticipated to be pumped from localized sumps and trenches within the excavation directly into a settling tank. The effluent will then flow through any necessary treatment systems and discharge through hoses or piping connected into the storm water drains located beneath Brookline Avenue and Boylston Street and the southern portion of the subject site. Based upon a review of the City of Boston stormwater drainage plan, the above referenced stormwater drain ultimately discharges into the Charles River. Dewatering effluent treatment will consist of a settling tank and bag filters to remove suspended soil particulates prior to off-site discharge.

Discharge Monitoring and Compliance

Regular sampling and testing will be conducted at the influent to the system and the treated effluent as required by the RGP. This includes laboratory testing required within days 1 and 3 of initial discharge and the monthly testing to be conducted through the end of the scheduled discharge.

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

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

System Maintenance

A number of methods will be used to minimize the potential for violations during the term of this permit discharge. Scheduled regular maintenance of the treatment system will be conducted to verify proper operation. Regular maintenance will include checking the condition of the treatment system equipment such as the settling tanks, bag filters, hoses, pumps, and flow meters. Equipment will be monitored daily for potential issues or unscheduled maintenance requirements.

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

Miscellaneous Items

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

No adverse effects on designated uses of surrounding surface water bodies is anticipated. The nearest surface water body is the Muddy River which is located approximately 250 feet to the southeast of the subject site. Dewatering effluent will be pumped into a settling tank. Water within the settling tank will pumped through bag filters prior to discharge into the storm drains.

Management of Treatment System Materials

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

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