



**NOTICE OF INTENT FOR DISCHARGE
UNDER MASSACHUSETTS
DEWATERING GENERAL PERMIT
MAG070000**

**20 SUMMER STREET
WATERTOWN MASSACHUSETTS**

to

U.S. Environmental Protection Agency,
Massachusetts Department of
Environmental Protection

February 14, 2013

Project No. 5308



February 14, 2013

U.S. Environmental Protection Agency
Office of Ecosystem Protection (OEP06-3)
5 Post Office Square
Boston, MA 02109-3912

Attention: Dewatering GP Processing

Massachusetts Department of Environmental Protection
Division of Watershed Management
627 Main Street
Worcester, MA 01608

Attention: Mr. Robert D. Kubit

Reference: 20 Summer Street; Watertown, Massachusetts
Notice of Intent for Construction Dewatering Discharge Under U.S. Environmental
Protection Agency General Discharge Permit MAG070000

Ladies and Gentlemen:

On behalf of LCB Senior Living, LLC, McPhail Associates, LLC has prepared the attached Notice of Intent for coverage under the U.S. Environmental Protection Agency Dewatering General Permit MAG070000 (DGP) for the temporary discharge of groundwater into the Charles River via a storm drain system during foundation construction activities at the above referenced site. Refer to **Figure 1** entitled Project Location Plan for the general site locus.

These services were performed and this permit application was prepared in accordance with our proposal dated December 14, 2012, and the subsequent authorization of CWC Builders, Inc. who represents LCB Senior Living, LLC. These services are subject to the limitations contained in **Attachment A**.

Fronting onto Summer Street to the northeast, the subject site is bounded by Spring Street to the northwest, and residential and commercial properties to the southeast and southwest. Consisting of approximately 0.686-acres, the subject site is currently occupied by a 1 to 2-story brick building with two partial basements. Remaining portions of the subject site are covered with asphalt pavement and a landscaped margin along the northwestern portion of the subject site. The subject site is currently utilized by the New England Fuel Institute for training purposes. The limits of the subject site are shown on **Figure 2**, which was prepared from a 20-scale drawing entitled "Existing Conditions Plan" dated October 1, 2011 and prepared by McKenzie Engineering Group, Inc.

It is understood that the proposed construction will consist of the demolition of the existing building, followed by construction of an assisted living facility. The proposed building is planned to be 5-stories in height with a footprint of about 25,000 square feet. It is understood that the proposed assisted living facility will include 1-level of below-grade parking.

Based on a report entitled "Geotechnical Summary Report, Proposed Assisted Living, 20 Summer Street @ Spring Street, Watertown, Massachusetts" dated April 13, 2012 and prepared by KMM Geotechnical Consultants, Inc., seven (7) borings identified as B-1 through B-7 were performed at the subject site during April 2012. The boring logs included in the geotechnical report indicate the site is covered by a miscellaneous granular fill material extending to depths of approximately 3 to 9 feet below existing ground surface.



US EPA
Massachusetts DEP
February 14, 2013
Page 2

Beneath the fill deposit, a discontinuous organic deposit was encountered in boring B-5 within a depth range of 5 to 7 feet below ground surface. The fill and organic deposits are indicated to be underlain by a natural deposit of compact glacial outwash sand extending to depths of at least 27 feet below existing ground surface. The geotechnical report indicates that groundwater levels were observed to vary between 7 to 9 feet below the existing ground surface, with Elevations ranging from +14 to +17.

The proposed depth of excavation for construction of the one-level below grade parking garage is approximately 12 feet below existing ground surface, corresponding to about Elevation +12. Therefore, excavation within the proposed building footprint will extend to depths of approximately 2 to 5 feet below the observed groundwater level. In order to permit construction of the below grade parking garage and provide an effective groundwater cut-off during construction, a temporary earth support system will be installed just beyond the perimeter foundation walls of the structure. Hence, construction dewatering will be required within the groundwater cut-off area to facilitate excavation for the below-grade portion of the concrete slab and foundations. We anticipate that the majority of the anticipated dewatering will occur during excavation following the installation of the groundwater cut-off. Additional minor dewatering may occur during installation of the lowest elevation concrete slab and footings.

A review of the Massachusetts Department of Environmental Protection (DEP) online database, current as of January 28, 2013 indicates that the 20 Summer Street site is not an MCP listed disposal site.

On December 27, 2012, a groundwater sample was obtained from monitoring well B-2(OW) and tested for the presence of compounds required under the EPA DGP application, including pH, total chloride, and total recoverable metals (antimony, arsenic, cadmium, chromium, hexavalent chromium, copper, iron, mercury, nickel, silver, and zinc). The results of the analysis are summarized in **Attachment B and on Table 1**. Concentrations of the tested compounds are below the minimum levels included in Appendix VIII of the DGP and effluent limits included in the Remedial General Permit (RGP) for fresh water. TSS reduction measures to the groundwater will be implemented prior to discharge to reduce the concentration TSS in the effluent.

Given the proposed scope of construction, a 20,000-gallon sedimentation tank will be incorporated into the discharge system in order to meet allowable discharge limits for total suspended solids (TSS) established by the DGP. It is estimated that continuous and intermittent groundwater discharge required during the excavation and foundation construction will be on the order of 30 to 50 gallons per minute (gpm). This estimated rate of discharge does not include surface runoff which will be removed from the excavation during the limited duration of a rain storm and shortly thereafter. A schematic of the treatment system is shown on **Figure 3**.

Since the footprint of the proposed construction will occupy the majority of the subject site's area and the groundwater cut-off wall will be installed at the perimeter of the site, temporary on-site collection and recharge of groundwater is not feasible. A review of available plans acquired from the Town of Watertown Department of Public Works indicates that construction related dewatering of groundwater will be discharged directly into a dedicated storm drain that is located adjacent to the subject site along Summer Street. Specifically, a 15-inch diameter dedicated storm drain located beneath Summer Street flows northwest connecting to a 72-inch storm drain located beneath the intersection of Summer Street and Spring Street. The 72-inch diameter storm drain flows southwest below Spring Street. The drain line then flows south across Main and Galen Streets and discharges into the Charles River, a Class B water body. The flow path of the discharge is shown in plans provided by the Town of Watertown Department of Public Works which are included as **Figure 4**.



US EPA
Massachusetts DEP
February 14, 2013
Page 3

To document the effectiveness of the above treatment system, samples of the discharge water will be obtained and tested for the presence of TSS prior to the start of discharge into the storm drain system. Should the pre-start up testing indicate that the levels of TSS in the effluent from the settling tank exceed the limits established under the DGP, additional filtration of the effluent will be implemented prior to discharge.

In conclusion, it is our opinion that groundwater at the site is acceptable for discharge into the storm drain system to the Charles River under a Dewatering General Permit. Sampling and analysis of the effluent will be carried out in accordance with the terms of Dewatering General Permit.

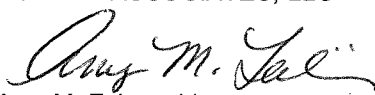
Supplemental information attached to this letter in support of the DGP includes the following;

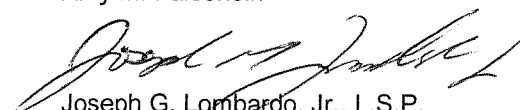
- Notice of Intent
Transmittal Form for Permit Application and Payment
- A summary of groundwater analysis (**Attachment B, Table 1**);
- A review of adjacent and nearby DEP-listed disposal sites (**Attachment C**);
- A review of Areas of Critical Concern and Endangered and Threatened Species (**Attachment D**);
and
- A review of National Historic Places (**Attachment E**).

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.

Very truly yours,

McPHAIL ASSOCIATES, LLC


Amy M. Falconeiri


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

Enclosures
F:\WP5\REPORTS\5308-DGP.wpd
AMF/jgl

cc: Town of Watertown Department of Public Works - Utilities Division

II. Suggested Notice of Intent (NOI) Form

1. General facility information. Please provide the following information about the facility.

a) Name of facility: 20 Summer Street		Mailing Address for the Facility: 20 Summer Street, Watertown, MA 02472	
b) Location Address of the Facility (if different from mailing address):	Facility Location	Type of Business: Former School/Construction Site	
	longitude: 71.10 latitude: 42.22	Facility SIC codes:	
c) Name of facility owner: LCB Senior Living, LLC Owner's email: esanclemente@lcbseiorliving.com Owner's Tel #: 781-619-9320 Owner's Fax #: _____ Address of owner (if different from facility address) 100 River Ridge Drive, Suite 105 LCB Senior Living, LLC Norwood, MA 02062 + Owner is (check one): 1. Federal ____ 2. State ____ 3. Tribal ____ 4. Private ☒ 4. Other ____ (Describe)			
Legal name of Operator, if not owner: CWC Builders, Inc. Operator Contact Name: Dan Moore Operator Tel Number: (617) 965-2800 Fax Number: (617) 965-2880 Operator's email: dmoore@cwcbuilder.com Operator Address (if different from owner) 7 Wells Avenue, Newton, MA 02459			
d) Attach a topographic map indicating the location of the facility and the outfall(s) to the receiving water. Map attached? ☒			
e) Check Yes or No for the following: 1. Has a prior NPDES permit been granted for the discharge? Yes ____ No ☒ If Yes, Permit Number: _____ 2. Is the discharge a "new discharge" as defined by 40 CFR Section 122.22? Yes ____ No ☒ 3. Is the facility covered by an individual NPDES permit? Yes ____ No ☒ If Yes, Permit Number _____ 4. Is there a pending application on file with EPA for this discharge? Yes ____ No ☒ If Yes, date of submittal: _____			

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

a) Name of receiving water into which discharge will occur: Charles River
State Water Quality Classification: B Freshwater: X Marine Water: _____

- b) Describe the discharge activities for which the owner/applicant is seeking coverage:
1. Construction dewatering of groundwater intrusion and/or storm water accumulation. See Attached Report
 2. Short-term or long-term dewatering of foundation sumps.
 3. Other.

c) Number of outfalls 1

For each outfall:

d) Estimate the maximum daily and average monthly flow of the discharge (in gallons per day – GPD). Max Daily Flow 24,000 GPD
Average Monthly Flow 480,000 GPD

e) What is the maximum and minimum monthly pH of the discharge (in s.u.)? Max pH 8.3 Min pH 6.5

f) Identify the source of the discharge (i.e. potable water, surface water, or groundwater). If groundwater, the facility shall submit effluent test results, as required in Section 4.4.5 of the General Permit. Groundwater, See attached Report

g) What treatment does the wastewater receive prior to discharge? Sedimentation settling tank, see attached report.

h) Is the discharge continuous? Yes _____ No ✓ If no, is the discharge periodic (P) (occurs regularly, i.e., monthly or seasonally, but is not continuous all year) or intermittent (I) (occurs sometimes but not regularly) or both (B) B
If (P), number of days or months per year of the discharge _____ and the specific months of discharge _____;
If (I), number of days/year there is a discharge _____
Is the discharge temporary? Yes ✓ No _____
If yes, approximate start date of dewatering March 1, 2013 approximate end date of dewatering December 31, 2013

i) Latitude and longitude of each discharge within 100 feet (See http://www.epa.gov/tri/report/siting_tool): Outfall 1: long. 71.11 lat. 42.21 ;
Outfall 2: long. _____ lat. _____; Outfall 3: long. _____ lat. _____.

j) If the source of the discharge is potable water, please provide the reported or calculated seven day-ten year low flow (7Q10) of the receiving water and attach any calculation sheets used to support stream flow and dilution calculations _____ cfs
(See Appendix VII for equations and additional information)

MASSACHUSETTS FACILITIES: See Section 3.4 and Appendix 1 of the General Permit for more information on Areas of Critical Environmental Concern (ACEC):

- k) Does the discharge occur in an ACEC? Yes _____ No ☒
 If yes, provide the name of the ACEC: _____

3. Contaminant Information

- a) Are any pH neutralization and/or dechlorination chemicals used in the discharge? If so, include the chemical name and manufacturer; maximum and average daily quantity used as well as the maximum and average daily expected concentrations (mg/l) in the discharge, and the vendor's reported aquatic toxicity (NOAEL and/or LC₅₀ in percent for aquatic organism(s)). See attached report
b) Please report any known remediation activities or water-quality issues in the vicinity of the discharge. See attached report

4. Determination of Endangered Species Act Eligibility: Provide documentation of ESA eligibility as required at Part 3.4 and Appendices III and IV. In addition, respond to the following questions.

- a) Are any listed threatened or endangered species, or designated critical habitat, in proximity to the discharge? Yes _____ No ☒
b) Has any consultation with the federal services been completed? Yes _____ No ☒
c) Is consultation underway? Yes _____ No ☒
d) What were the results of the consultation with the U.S. Fish and Wildlife Service and/or NOAA Fisheries Service (check one): a "no jeopardy" opinion _____ or written concurrence _____ on a finding that the discharges are not likely to adversely affect any endangered species or critical habitat.
e) Which of the five eligibility criteria listed in Appendix 2, Section B (A,B,C,D,or E) have you met? A
f) Please attach a copy of the most current federal listing of endangered and threatened species, found at USF&W website.

5. Documentation of National Historic Preservation Act requirements: Please respond to the following questions:

- a) Are any historic properties listed or eligible for listing on the National Register of Historic Places located on the facility site or in proximity to the discharge? Yes _____ No ☒
b) Have any State or Tribal historic preservation officers been consulted in this determination? Yes _____ or No ☒ If yes, attach the results of the consultation(s).
c) Which of the three National Historic Preservation Act requirements listed in Appendix 3, Section C (1,2 or 3) have you met? 1

6. 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

7. Signature Requirements: The Notice of Intent must be signed by the operator in accordance with the signatory requirements of 40 CFR Section 122.22 (see below) including the following certification:

I certify under penalty of law that (1) no biocides or other chemical additives except for those used for pH adjustment and/or dechlorination are used in the dewatering system; (2) the discharge consists solely of dewatering and authorized pH adjustment and/or

dechlorination chemicals; (3) the discharge does not come in contact with any raw materials, intermediate product, water product or finished product; (4) if the discharge of dewatering subsequently mixes with other permitted wastewater (i.e. stormwater) prior to discharging to the receiving water, any monitoring provided under this permit will be only for dewatering discharge; (5) where applicable, the facility has complied with the requirements of this permit specific to the Endangered Species Act and National Historic Preservation Act; and (6) 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 Name: 20 Summer Street

Operator signature:

Dan Moore

Title:

Project Manager

Date:

2/14/13

Federal regulations require this application to be signed as follows:

1. For a corporation, by a principal executive officer of at least the level of vice president;
2. For partnership or sole proprietorship, by a general partner or the proprietor, respectively, or,
3. For a municipality, State, Federal or other public facility, by either a principal executive officer or ranking elected official.



Enter your transmittal number

X254478

Transmittal Number

Your unique Transmittal Number can be accessed online: <http://mass.gov/dep/service/online/trasmfrm.shtml>

Massachusetts Department of Environmental Protection

Transmittal Form for Permit Application and Payment

1. Please type or print. A separate Transmittal Form must be completed for each permit application.

2. Make your check payable to the Commonwealth of Massachusetts and mail it with a copy of this form to: DEP, P.O. Box 4062, Boston, MA 02211.

3. Three copies of this form will be needed.

Copy 1 - the original must accompany your permit application. **Copy 2** must accompany your fee payment. **Copy 3** should be retained for your records

4. Both fee-paying and exempt applicants must mail a copy of this transmittal form to:

MassDEP
P.O. Box 4062
Boston, MA
02211

*** Note:**
For BWSC Permits, enter the LSP.

A. Permit Information

BRPWM-10

Dewatering General Permit

1. Permit Code: 7 or 8 character code from permit instructions
Temporary Construction Dewatering

2. Name of Permit Category

3. Type of Project or Activity

B. Applicant Information – Firm or Individual

CWC Builders, Inc.

1. Name of Firm - Or, if party needing this approval is an individual enter name below:

2. **Last Name** of Individual
7 Wells Avenue

3. **First Name** of Individual

4. MI

5. Street Address
Newton

MA

02459

617-965-2800

6. City/Town
Dan Moore

7. State

8. Zip Code

9. Telephone #

10. Ext. #

DMoore@CWCBuilders.com

11. Contact Person

12. e-mail address (optional)

C. Facility, Site or Individual Requiring Approval

LCB Senior Living, LLC

1. Name of Facility, Site Or Individual
100 River Ridge Drive, Suite 105

2. Street Address
Norwood

MA

02062

781-619-9320

3. City/Town

4. State

5. Zip Code

6. Telephone #

7. Ext. #

8. DEP Facility Number (if Known)

9. Federal I.D. Number (if Known)

10. BWSC Tracking # (if Known)

D. Application Prepared by (if different from Section B)*

McPhail Associates, LLC

1. Name of Firm Or Individual
2269 Massachusetts Avenue

2. Address

Cambridge

MA

02140

617-868-1420

3. City/Town
Amy Falconeiri

4. State

5. Zip Code

6. Telephone #

7. Ext. #

8. Contact Person

9. LSP Number (BWSC Permits only)

E. Permit - Project Coordination

1. Is this project subject to MEPA review? ☐ yes ☒ no
If yes, enter the project's EOE file number - assigned when an Environmental Notification Form is submitted to the MEPA unit:

EOEA File Number

F. Amount Due

Special Provisions:

1. ☐ **Fee Exempt** (city, town or municipal housing authority)(state agency if fee is \$100 or less).
There are no fee exemptions for BWSC permits, regardless of applicant status.
2. ☐ **Hardship Request** - payment extensions according to 310 CMR 4.04(3)(c).
3. ☐ **Alternative Schedule Project** (according to 310 CMR 4.05 and 4.10).
4. ☐ **Homeowner** (according to 310 CMR 4.02).

DEP Use Only

Permit No:

Rec'd Date:

Reviewer:

31329

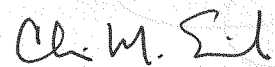
385.00

2/12/2013

Check Number

Dollar Amount

Date

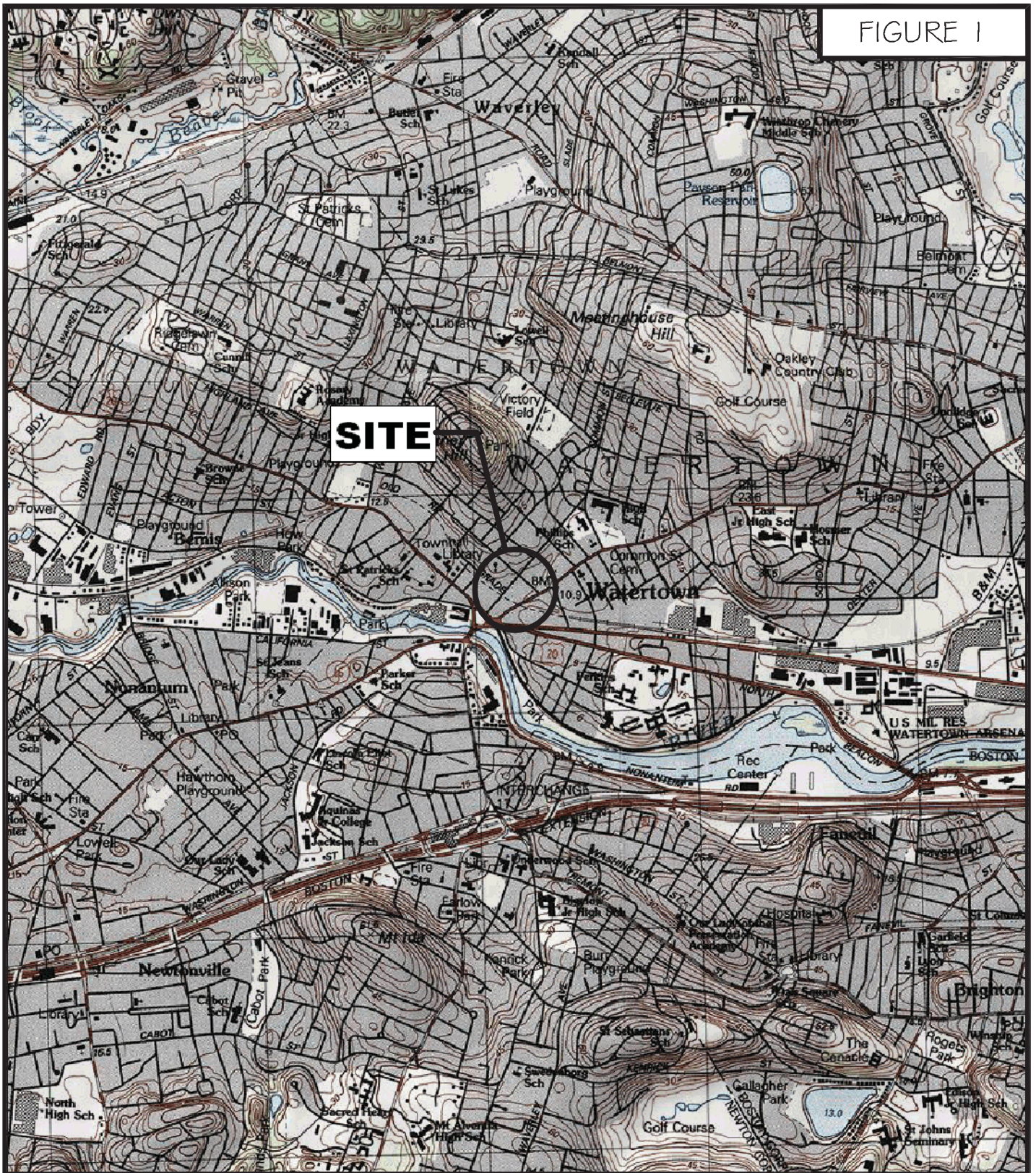
MCPHAIL ASSOCIATES, LLC 2269 MASSACHUSETTS AVENUE CAMBRIDGE, MA 02140		Cambridge Trust Company CAMBRIDGE, MASS. 53-59-113	01 EZShield SM Check Fraud Protection for Business	31329
			2/12/2013	
PAY TO THE ORDER OF	Commonwealth of Mass.		\$ **385.00	
Three Hundred Eighty-Five and 00/100*****				DOLLARS
Commonwealth of Mass.				
MEMO	DGP Permit - 5308.9.02	 AUTHORIZED SIGNATURE		

⑈031329⑈ ⑆011300595⑆ ⑈50552801⑈

MCPHAIL ASSOCIATES, LLC			31329
Commonwealth of Mass.		2/12/2013	
	DGP Permit - 5308.9.02		385.00

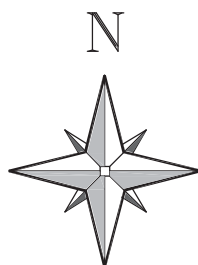
McPhail LLC	DGP Permit - 5308.9.02	385.00
-------------	------------------------	--------

FIGURE 1



Geotechnical Engineers

2269 Massachusetts Avenue
Cambridge, MA 02140
617/868-1420
617/868-1423 (Fax)



SCALE 1:25,000

PROJECT LOCATION PLAN

20 SUMMER STREET

WATERTOWN

MASSACHUSETTS

FIGURE 2

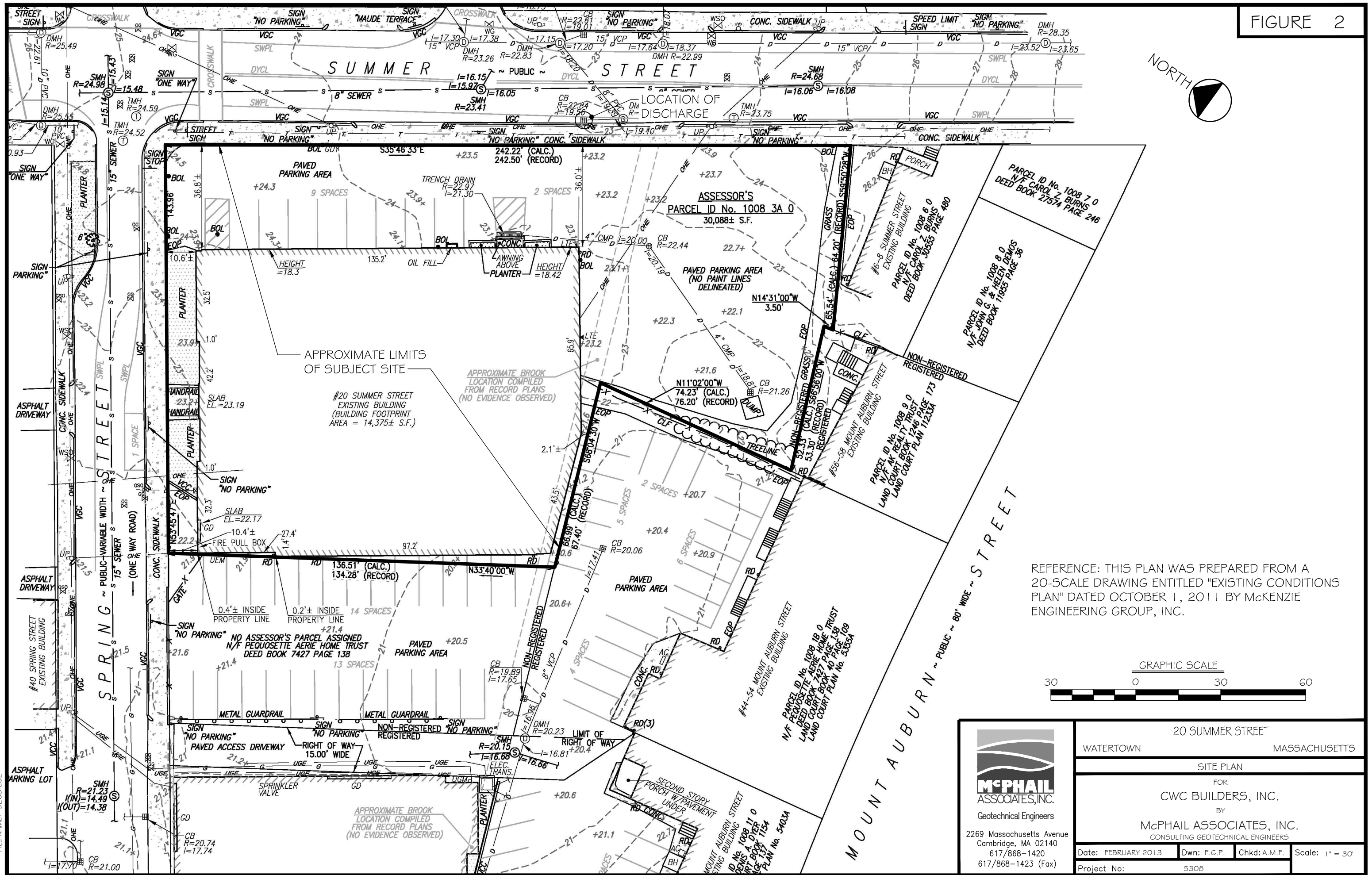
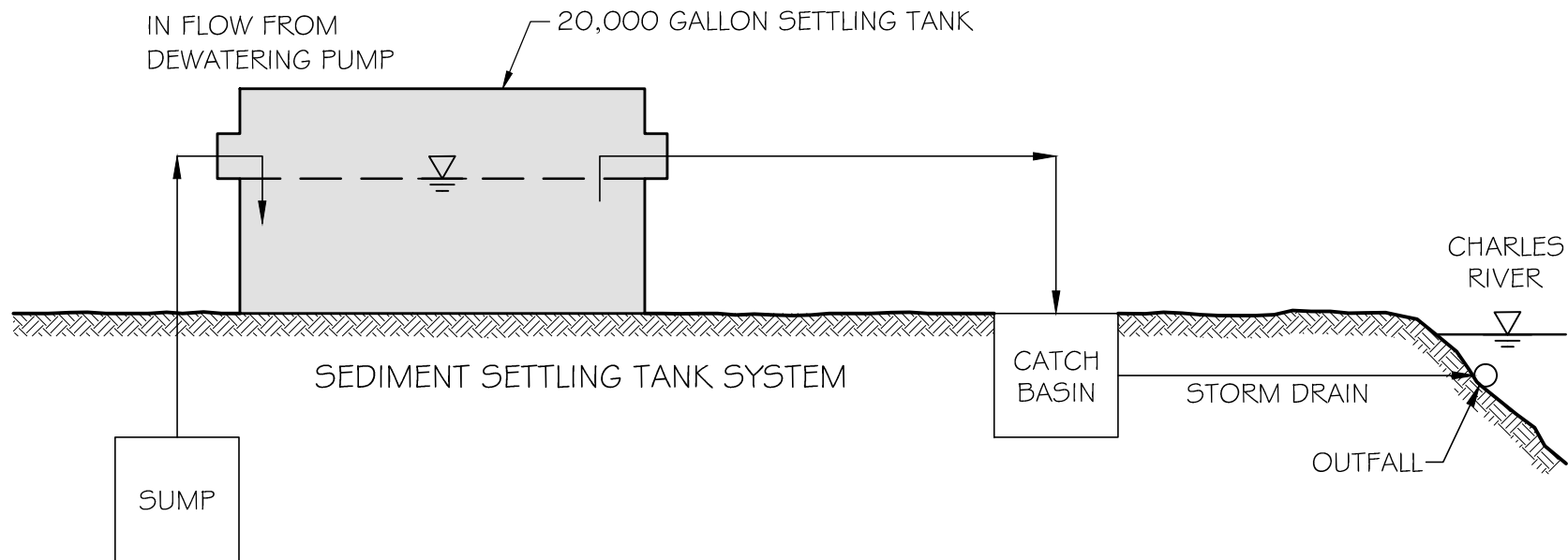


FIGURE 3



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

20 SUMMER STREET

WATERTOWN

MASSACHUSETTS

SCHEMATIC OF WATER FLOW

FOR

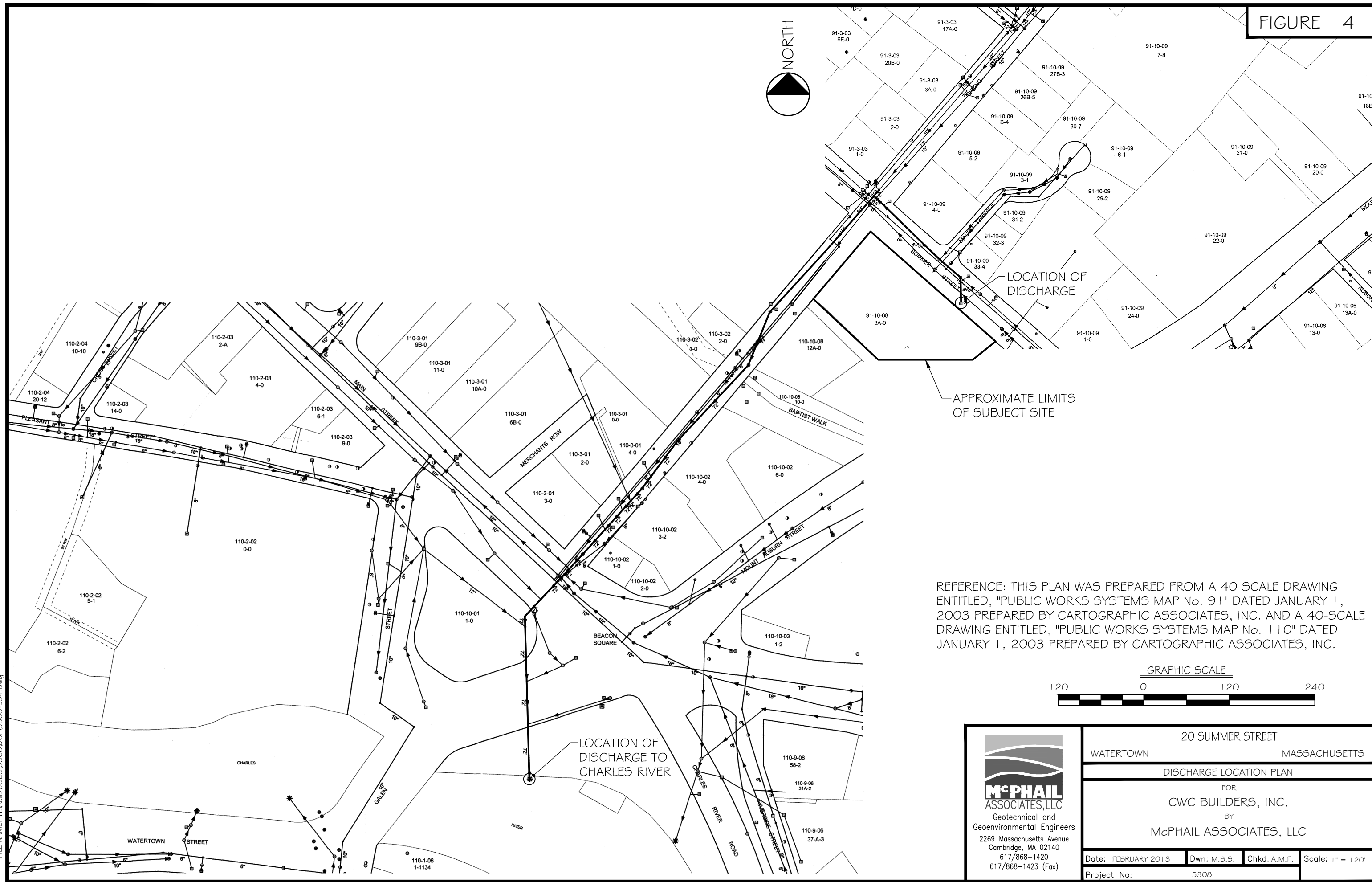
CWC BUILDERS, INC.

BY

McPHAIL ASSOCIATES, LLC
 CONSULTING GEOTECHNICAL ENGINEERS

Date: FEBRUARY 2013	Dwn: M.B.S.	Chkd: A.M.F.	Scale: N.T.S.
Project No: 5308			

FIGURE 4





ATTACHMENT A

LIMITATIONS

The purpose of this report is to present the results of testing of groundwater samples obtained from a monitoring well on the property located at 20 Summer Street in Watertown, 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 Dewatering General Permit MAG070000.

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 widely 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 chemical 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.

Chemical analyses have been performed for specific constituents during the course of this site assessment, as described in the text. However, it should be noted that additional chemical 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 CWC Builders, Inc. This report and the findings contained herein shall not, in whole or in part, be disseminated or conveyed to any other party nor used in whole or in part by any other party without prior written consent of McPhail Associates, LLC.



ATTACHMENT B

RESULTS OF GROUNDWATER ANALYSIS

On December 27, 2012, a groundwater sample was obtained from monitoring well B-2(OW) and tested for the presence of compounds required under the EPA Dewatering General Permit (DGP) application, including pH, total chloride, and total recoverable metals (antimony, arsenic, cadmium, chromium, hexavalent chromium, copper, iron, mercury, nickel, silver, and zinc). The results of the analysis are summarized in **Table 1**.

The tested sample exhibited a pH level of 6.5 Standard Units (S.U.) which is within the DGP effluent parameters for discharge into a freshwater body. The results of the analysis indicated the presence of chloride at a concentration of 322 milligrams per liter (mg/l). In addition, antimony, chromium, nickel and zinc at concentrations of 0.001 milligrams per liter (mg/l), 0.0061 mg/l, 0.0047 mg/l and 0.0156 mg/l, respectively. The remaining metals were not detected at concentrations above the laboratory method detection limits which are set below the DGP discharge limits. Concentrations of the tested compounds are below the minimum levels included in Appendix VIII of the DGP and effluent limits included in the Remedial General Permit (RGP) for fresh water.

As indicated in the report, TSS reduction measures to the groundwater will be implemented prior to discharge to reduce the concentration TSS in the effluent.

Table 1

20 Summer Street, Watertown, MA
 Job #5308
 Summary of Chemical Test Results for DGP

LOCATION	EPA Effluent Limits - Fresh Water	RCGW-2	B-2 (OW)
SAMPLING DATE			12/27/2012
LAB SAMPLE ID			L1223409-01 L1223409-02 L1223409-03
Chloride (mg/l)			322
Total Suspended Solids (mg/l)	30		ND
Total Cyanide (mg/l)	5.2	0.3	ND
Total Residual Chlorine (mg/l)	11		ND
pH (H) (SU)	6.5-8.5		6.5
TPH (mg/l)	5	5	ND
Total Phenolics (mg/l)			0.05
Hexavalent Chromium (mg/l)	11.4	0.3	ND
Total Metals (mg/l)			
Antimony, Total	5.6	8	0.001
Arsenic, Total	10	0.9	ND
Cadmium, Total	0.2	0.004	ND
Chromium, Total	48.8	0.3	0.0061
Copper, Total	5.2	100	ND
Iron, Total	1000		ND
Lead, Total	1.3	0.01	ND
Mercury, Total	0.9	0.02	ND
Nickel, Total	29	0.2	0.0047
Selenium, Total	5	0.1	ND
Silver, Total	1.2	0.007	ND
Zinc, Total	66.6	0.9	0.0156
Microextractables (mg/l)			
1,2-Dibromoethane			ND
1,2-Dibromo-3-chloropropane			ND
Polychlorinated Biphenyls (mg/l)			ND
Semivolatile Organic Compounds (mg/l)			ND
Volatile Organic Compounds (mg/l)			
Tetrachloroethene	5	0.05	0.00059



ANALYTICAL REPORT

Lab Number:	L1223409
Client:	McPhail Associates 2269 Massachusetts Avenue Cambridge, MA 02140
ATTN:	Ambrose Donovan
Phone:	(617) 868-1420
Project Name:	20 SUMMER STREET
Project Number:	5308.9.01
Report Date:	01/08/13

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

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

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



Project Name: 20 SUMMER STREET
Project Number: 5308.9.01

Lab Number: L1223409
Report Date: 01/08/13

Alpha Sample ID	Client ID	Sample Location	Collection Date/Time
L1223409-01	B-2 (OW)	WATERTOWN, MA	12/27/12 13:00
L1223409-02	B-2 (OW)	WATERTOWN, MA	12/31/12 11:10
L1223409-03	B-2 (OW)	WATERTOWN, MA	01/04/13 11:00

Project Name: 20 SUMMER STREET
Project Number: 5308.9.01

Lab Number: L1223409
Report Date: 01/08/13

Case Narrative

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

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet all of the requirements of NELAC, for all NELAC accredited parameters. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. Performance criteria for CAM and RCP methods allow for some LCS compound failures to occur and still be within method compliance. In these instances, the specific failures are not narrated but are noted in the associated QC table. This information is also incorporated in the Data Usability format for our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

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

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

HOLD POLICY

For samples submitted on hold, Alpha's policy is to hold samples free of charge for 30 days from the date the project is completed. After 30 days, we will dispose of all samples submitted including those put on hold unless you have contacted your Client Service Representative and made arrangements for Alpha to continue to hold the samples.

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

Project Name: 20 SUMMER STREET
Project Number: 5308.9.01

Lab Number: L1223409
Report Date: 01/08/13

Case Narrative (continued)

Sample Receipt

The analysis of Dissolved Metals was canceled at the client's request.

L1223409-01 was received below the appropriate pH for the Cyanide analysis. The laboratory added additional NaOH to a pH >12.

Semivolatile Organics by SIM

L1223409-01 has elevated detection limits due to limited sample volume available for analysis.

Semivolatile Organics

The WG581702-2/-3 LCS/LCSD recoveries, associated with L1223409-01, are below the acceptance criteria for Benzidine (0%/0%) and Pyridine (LCS at 8%); however, they have been identified as "difficult" analytes. The results of the associated sample are reported.

Cyanide, Total

The WG582085-4 MS recovery (80%), performed on L1223409-01, is below the acceptance criteria; however, the associated LCS recovery was within criteria. No further action was taken.

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

Authorized Signature:

 Kelly Stenstrom

Title: Technical Director/Representative

Date: 01/08/13

ORGANICS

VOLATILES

Project Name: 20 SUMMER STREET**Lab Number:** L1223409**Project Number:** 5308.9.01**Report Date:** 01/08/13**SAMPLE RESULTS**

Lab ID: L1223409-01
Client ID: B-2 (OW)
Sample Location: WATERTOWN, MA
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 12/29/12 18:10
Analyst: MM

Date Collected: 12/27/12 13:00
Date Received: 12/27/12
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	3.0	--	1
1,1-Dichloroethane	ND		ug/l	0.75	--	1
Chloroform	ND		ug/l	0.75	--	1
Carbon tetrachloride	ND		ug/l	0.50	--	1
1,2-Dichloropropane	ND		ug/l	1.8	--	1
Dibromochloromethane	ND		ug/l	0.50	--	1
1,1,2-Trichloroethane	ND		ug/l	0.75	--	1
Tetrachloroethene	0.59		ug/l	0.50	--	1
Chlorobenzene	ND		ug/l	0.50	--	1
Trichlorofluoromethane	ND		ug/l	2.5	--	1
1,2-Dichloroethane	ND		ug/l	0.50	--	1
1,1,1-Trichloroethane	ND		ug/l	0.50	--	1
Bromodichloromethane	ND		ug/l	0.50	--	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	--	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	--	1
1,1-Dichloropropene	ND		ug/l	2.5	--	1
Bromoform	ND		ug/l	2.0	--	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	--	1
Benzene	ND		ug/l	0.50	--	1
Toluene	ND		ug/l	0.75	--	1
Ethylbenzene	ND		ug/l	0.50	--	1
Chloromethane	ND		ug/l	2.5	--	1
Bromomethane	ND		ug/l	1.0	--	1
Vinyl chloride	ND		ug/l	1.0	--	1
Chloroethane	ND		ug/l	1.0	--	1
1,1-Dichloroethene	ND		ug/l	0.50	--	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	--	1
Trichloroethene	ND		ug/l	0.50	--	1
1,2-Dichlorobenzene	ND		ug/l	2.5	--	1
1,3-Dichlorobenzene	ND		ug/l	2.5	--	1
1,4-Dichlorobenzene	ND		ug/l	2.5	--	1

Project Name: 20 SUMMER STREET**Lab Number:** L1223409**Project Number:** 5308.9.01**Report Date:** 01/08/13**SAMPLE RESULTS**

Lab ID: L1223409-01
 Client ID: B-2 (OW)
 Sample Location: WATERTOWN, MA

Date Collected: 12/27/12 13:00
 Date Received: 12/27/12
 Field Prep: Not Specified

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

Project Name: 20 SUMMER STREET**Lab Number:** L1223409**Project Number:** 5308.9.01**Report Date:** 01/08/13**SAMPLE RESULTS**

Lab ID: L1223409-01
 Client ID: B-2 (OW)
 Sample Location: WATERTOWN, MA

Date Collected: 12/27/12 13:00
 Date Received: 12/27/12
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
-----------	--------	-----------	-------	----	-----	-----------------

Volatile Organics by GC/MS - Westborough Lab

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	117		70-130
Toluene-d8	114		70-130
4-Bromofluorobenzene	111		70-130
Dibromofluoromethane	103		70-130

Project Name: 20 SUMMER STREET**Lab Number:** L1223409**Project Number:** 5308.9.01**Report Date:** 01/08/13**SAMPLE RESULTS**

Lab ID: L1223409-02
Client ID: B-2 (OW)
Sample Location: WATERTOWN, MA
Matrix: Water
Analytical Method: 1,8260C-SIM(M)
Analytical Date: 01/04/13 13:33
Analyst: MM

Date Collected: 12/31/12 11:10
Date Received: 01/02/13
Field Prep: Not Specified

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

Project Name: 20 SUMMER STREET**Lab Number:** L1223409**Project Number:** 5308.9.01**Report Date:** 01/08/13**SAMPLE RESULTS**

Lab ID: L1223409-02
Client ID: B-2 (OW)
Sample Location: WATERTOWN, MA
Matrix: Water
Analytical Method: 14,504.1
Analytical Date: 01/07/13 16:28
Analyst: SH

Date Collected: 12/31/12 11:10
Date Received: 01/02/13
Field Prep: Not Specified
Extraction Date: 01/07/13 13:00

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

Project Name: 20 SUMMER STREET

Lab Number: L1223409

Project Number: 5308.9.01

Report Date: 01/08/13

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 12/29/12 17:37
 Analyst: MM

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG582141-3					
Methylene chloride	ND		ug/l	3.0	--
1,1-Dichloroethane	ND		ug/l	0.75	--
Chloroform	ND		ug/l	0.75	--
Carbon tetrachloride	ND		ug/l	0.50	--
1,2-Dichloropropane	ND		ug/l	1.8	--
Dibromochloromethane	ND		ug/l	0.50	--
1,1,2-Trichloroethane	ND		ug/l	0.75	--
Tetrachloroethene	ND		ug/l	0.50	--
Chlorobenzene	ND		ug/l	0.50	--
Trichlorofluoromethane	ND		ug/l	2.5	--
1,2-Dichloroethane	ND		ug/l	0.50	--
1,1,1-Trichloroethane	ND		ug/l	0.50	--
Bromodichloromethane	ND		ug/l	0.50	--
trans-1,3-Dichloropropene	ND		ug/l	0.50	--
cis-1,3-Dichloropropene	ND		ug/l	0.50	--
1,1-Dichloropropene	ND		ug/l	2.5	--
Bromoform	ND		ug/l	2.0	--
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	--
Benzene	ND		ug/l	0.50	--
Toluene	ND		ug/l	0.75	--
Ethylbenzene	ND		ug/l	0.50	--
Chloromethane	ND		ug/l	2.5	--
Bromomethane	ND		ug/l	1.0	--
Vinyl chloride	ND		ug/l	1.0	--
Chloroethane	ND		ug/l	1.0	--
1,1-Dichloroethene	ND		ug/l	0.50	--
trans-1,2-Dichloroethene	ND		ug/l	0.75	--
Trichloroethene	ND		ug/l	0.50	--
1,2-Dichlorobenzene	ND		ug/l	2.5	--
1,3-Dichlorobenzene	ND		ug/l	2.5	--
1,4-Dichlorobenzene	ND		ug/l	2.5	--

Project Name: 20 SUMMER STREET

Lab Number: L1223409

Project Number: 5308.9.01

Report Date: 01/08/13

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 12/29/12 17:37
 Analyst: MM

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG582141-3					
Methyl tert butyl ether	ND		ug/l	1.0	--
p/m-Xylene	ND		ug/l	1.0	--
o-Xylene	ND		ug/l	1.0	--
Xylenes, Total	ND		ug/l	1.0	--
cis-1,2-Dichloroethene	ND		ug/l	0.50	--
Dibromomethane	ND		ug/l	5.0	--
1,2,3-Trichloropropane	ND		ug/l	5.0	--
Styrene	ND		ug/l	1.0	--
Dichlorodifluoromethane	ND		ug/l	5.0	--
Acetone	ND		ug/l	5.0	--
Carbon disulfide	ND		ug/l	5.0	--
2-Butanone	ND		ug/l	5.0	--
Vinyl acetate	ND		ug/l	5.0	--
4-Methyl-2-pentanone	ND		ug/l	5.0	--
2-Hexanone	ND		ug/l	5.0	--
Ethyl methacrylate	ND		ug/l	5.0	--
Acrylonitrile	ND		ug/l	5.0	--
Bromochloromethane	ND		ug/l	2.5	--
Tetrahydrofuran	ND		ug/l	5.0	--
2,2-Dichloropropane	ND		ug/l	2.5	--
1,2-Dibromoethane	ND		ug/l	2.0	--
1,3-Dichloropropane	ND		ug/l	2.5	--
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	--
Bromobenzene	ND		ug/l	2.5	--
n-Butylbenzene	ND		ug/l	0.50	--
sec-Butylbenzene	ND		ug/l	0.50	--
tert-Butylbenzene	ND		ug/l	2.5	--
o-Chlorotoluene	ND		ug/l	2.5	--
p-Chlorotoluene	ND		ug/l	2.5	--
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	--
Hexachlorobutadiene	ND		ug/l	0.50	--

Project Name: 20 SUMMER STREET

Lab Number: L1223409

Project Number: 5308.9.01

Report Date: 01/08/13

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 12/29/12 17:37
 Analyst: MM

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG582141-3					
Isopropylbenzene	ND		ug/l	0.50	--
p-Isopropyltoluene	ND		ug/l	0.50	--
Naphthalene	ND		ug/l	2.5	--
n-Propylbenzene	ND		ug/l	0.50	--
1,2,3-Trichlorobenzene	ND		ug/l	2.5	--
1,2,4-Trichlorobenzene	ND		ug/l	2.5	--
1,3,5-Trimethylbenzene	ND		ug/l	2.5	--
1,2,4-Trimethylbenzene	ND		ug/l	2.5	--
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	--
Ethyl ether	ND		ug/l	2.5	--
Isopropyl Ether	ND		ug/l	2.0	--
Tert-Butyl Alcohol	ND		ug/l	10	--
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0	--
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	117		70-130
Toluene-d8	112		70-130
4-Bromofluorobenzene	108		70-130
Dibromofluoromethane	102		70-130

Project Name: 20 SUMMER STREET**Lab Number:** L1223409**Project Number:** 5308.9.01**Report Date:** 01/08/13**Method Blank Analysis**
Batch Quality Control**Analytical Method:** 14,504.1**Analytical Date:** 01/07/13 15:41**Analyst:** SH**Extraction Date:** 01/07/13 13:00

Parameter	Result	Qualifier	Units	RL	MDL
Microextractables by GC - Westborough Lab for sample(s): 02 Batch: WG583045-1					
1,2-Dibromoethane	ND		ug/l	0.010	--
1,2-Dibromo-3-chloropropane	ND		ug/l	0.010	--

Lab Control Sample Analysis

Batch Quality Control

Project Name: 20 SUMMER STREET

Project Number: 5308.9.01

Lab Number: L1223409

Report Date: 01/08/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG582141-1 WG582141-2								
Methylene chloride	82		91		70-130	10		20
1,1-Dichloroethane	82		96		70-130	16		20
Chloroform	83		94		70-130	12		20
Carbon tetrachloride	86		100		63-132	15		20
1,2-Dichloropropane	83		91		70-130	9		20
Dibromochloromethane	102		116		63-130	13		20
1,1,2-Trichloroethane	103		118		70-130	14		20
Tetrachloroethene	93		112		70-130	19		20
Chlorobenzene	95		109		75-130	14		25
Trichlorofluoromethane	92		107		62-150	15		20
1,2-Dichloroethane	91		100		70-130	9		20
1,1,1-Trichloroethane	85		98		67-130	14		20
Bromodichloromethane	82		92		67-130	11		20
trans-1,3-Dichloropropene	100		119		70-130	17		20
cis-1,3-Dichloropropene	85		97		70-130	13		20
1,1-Dichloropropene	84		98		70-130	15		20
Bromoform	106		121		54-136	13		20
1,1,2,2-Tetrachloroethane	115		126		67-130	9		20
Benzene	82		93		70-130	13		25
Toluene	94		108		70-130	14		25
Ethylbenzene	99		114		70-130	14		20

Lab Control Sample Analysis Batch Quality Control

Project Name: 20 SUMMER STREET

Project Number: 5308.9.01

Lab Number: L1223409

Report Date: 01/08/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG582141-1 WG582141-2								
Chloromethane	83		86		64-130	4		20
Bromomethane	42		48		39-139	13		20
Vinyl chloride	84		91		55-140	8		20
Chloroethane	95		112		55-138	16		20
1,1-Dichloroethene	81		93		61-145	14		25
trans-1,2-Dichloroethene	81		94		70-130	15		20
Trichloroethene	85		104		70-130	20		25
1,2-Dichlorobenzene	106		117		70-130	10		20
1,3-Dichlorobenzene	106		119		70-130	12		20
1,4-Dichlorobenzene	102		115		70-130	12		20
Methyl tert butyl ether	91		102		63-130	11		20
p/m-Xylene	97		111		70-130	13		20
o-Xylene	96		111		70-130	14		20
cis-1,2-Dichloroethene	77		87		70-130	12		20
Dibromomethane	84		92		70-130	9		20
1,2,3-Trichloropropane	112		129		64-130	14		20
Styrene	99		111		70-130	11		20
Dichlorodifluoromethane	108		113		36-147	5		20
Acetone	79		82		58-148	4		20
Carbon disulfide	82		92		51-130	11		20
2-Butanone	94		100		63-138	6		20

Lab Control Sample Analysis Batch Quality Control

Project Name: 20 SUMMER STREET

Project Number: 5308.9.01

Lab Number: L1223409

Report Date: 01/08/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG582141-1 WG582141-2								
Vinyl acetate	98		114		70-130	15		20
4-Methyl-2-pentanone	92		100		59-130	8		20
2-Hexanone	113		119		57-130	5		20
Ethyl methacrylate	104		116		70-130	11		20
Acrylonitrile	90		99		70-130	10		20
Bromochloromethane	84		93		70-130	10		20
Tetrahydrofuran	95		103		58-130	8		20
2,2-Dichloropropane	88		103		63-133	16		20
1,2-Dibromoethane	100		112		70-130	11		20
1,3-Dichloropropane	101		116		70-130	14		20
1,1,1,2-Tetrachloroethane	97		111		64-130	13		20
Bromobenzene	100		114		70-130	13		20
n-Butylbenzene	110		124		53-136	12		20
sec-Butylbenzene	107		122		70-130	13		20
tert-Butylbenzene	107		120		70-130	11		20
o-Chlorotoluene	108		123		70-130	13		20
p-Chlorotoluene	109		122		70-130	11		20
1,2-Dibromo-3-chloropropane	110		121		41-144	10		20
Hexachlorobutadiene	99		117		63-130	17		20
Isopropylbenzene	108		123		70-130	13		20
p-Isopropyltoluene	107		126		70-130	16		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: 20 SUMMER STREET

Project Number: 5308.9.01

Lab Number: L1223409

Report Date: 01/08/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG582141-1 WG582141-2								
Naphthalene	104		118		70-130	13		20
n-Propylbenzene	108		124		69-130	14		20
1,2,3-Trichlorobenzene	97		109		70-130	12		20
1,2,4-Trichlorobenzene	98		108		70-130	10		20
1,3,5-Trimethylbenzene	108		119		64-130	10		20
1,2,4-Trimethylbenzene	105		118		70-130	12		20
trans-1,4-Dichloro-2-butene	125		136	Q	70-130	8		20
Ethyl ether	88		101		59-134	14		20
Isopropyl Ether	90		98		70-130	9		20
tert-Butyl Alcohol	99		108		70-130	9		20
Ethyl-Tert-Butyl-Ether	91		102		70-130	11		20
Tertiary-Amyl Methyl Ether	88		99		66-130	12		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	114		115		70-130
Toluene-d8	113		111		70-130
4-Bromofluorobenzene	110		110		70-130
Dibromofluoromethane	98		99		70-130

Lab Control Sample Analysis
Batch Quality Control**Project Name:** 20 SUMMER STREET**Project Number:** 5308.9.01**Lab Number:** L1223409**Report Date:** 01/08/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Microextractables by GC - Westborough Lab Associated sample(s): 02 Batch: WG583045-2								
1,2-Dibromoethane	82		-		70-130	-		20
1,2-Dibromo-3-chloropropane	73		-		70-130	-		20

Matrix Spike Analysis

Batch Quality Control

Project Name: 20 SUMMER STREET

Project Number: 5308.9.01

Lab Number: L1223409

Report Date: 01/08/13

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Microextractables by GC - Westborough Lab Associated sample(s): 02 QC Batch ID: WG583045-3 QC Sample: L1223409-02 Client ID: B-2 (OW)												
1,2-Dibromoethane	ND	0.255	0.190	74		-	-		70-130	-		20
1,2-Dibromo-3-chloropropane	ND	0.255	0.189	74		-	-		70-130	-		20

SEMIVOLATILES

Project Name: 20 SUMMER STREET**Lab Number:** L1223409**Project Number:** 5308.9.01**Report Date:** 01/08/13**SAMPLE RESULTS**

Lab ID: L1223409-01
Client ID: B-2 (OW)
Sample Location: WATERTOWN, MA
Matrix: Water
Analytical Method: 1,8270D
Analytical Date: 12/31/12 12:36
Analyst: RC

Date Collected: 12/27/12 13:00
Date Received: 12/27/12
Field Prep: Not Specified
Extraction Method: EPA 3510C
Extraction Date: 12/28/12 01:20

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

Project Name: 20 SUMMER STREET**Lab Number:** L1223409**Project Number:** 5308.9.01**Report Date:** 01/08/13**SAMPLE RESULTS**

Lab ID: L1223409-01
 Client ID: B-2 (OW)
 Sample Location: WATERTOWN, MA

Date Collected: 12/27/12 13:00
 Date Received: 12/27/12
 Field Prep: Not Specified

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	39		21-120
Phenol-d6	28		10-120
Nitrobenzene-d5	63		23-120
2-Fluorobiphenyl	62		15-120
2,4,6-Tribromophenol	56		10-120
4-Terphenyl-d14	79		41-149

Project Name: 20 SUMMER STREET**Lab Number:** L1223409**Project Number:** 5308.9.01**Report Date:** 01/08/13**SAMPLE RESULTS**

Lab ID: L1223409-01
Client ID: B-2 (OW)
Sample Location: WATERTOWN, MA
Matrix: Water
Analytical Method: 1,8270D-SIM
Analytical Date: 01/02/13 20:35
Analyst: AS

Date Collected: 12/27/12 13:00
Date Received: 12/27/12
Field Prep: Not Specified
Extraction Method: EPA 3510C
Extraction Date: 12/28/12 01:16

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	ND		ug/l	0.31	--	1
2-Chloronaphthalene	ND		ug/l	0.31	--	1
Fluoranthene	ND		ug/l	0.31	--	1
Hexachlorobutadiene	ND		ug/l	0.77	--	1
Naphthalene	ND		ug/l	0.31	--	1
Benzo(a)anthracene	ND		ug/l	0.31	--	1
Benzo(a)pyrene	ND		ug/l	0.31	--	1
Benzo(b)fluoranthene	ND		ug/l	0.31	--	1
Benzo(k)fluoranthene	ND		ug/l	0.31	--	1
Chrysene	ND		ug/l	0.31	--	1
Acenaphthylene	ND		ug/l	0.31	--	1
Anthracene	ND		ug/l	0.31	--	1
Benzo(ghi)perylene	ND		ug/l	0.31	--	1
Fluorene	ND		ug/l	0.31	--	1
Phenanthrene	ND		ug/l	0.31	--	1
Dibenzo(a,h)anthracene	ND		ug/l	0.31	--	1
Indeno(1,2,3-cd)Pyrene	ND		ug/l	0.31	--	1
Pyrene	ND		ug/l	0.31	--	1
1-Methylnaphthalene	ND		ug/l	0.31	--	1
2-Methylnaphthalene	ND		ug/l	0.31	--	1
Pentachlorophenol	ND		ug/l	1.2	--	1
Hexachlorobenzene	ND		ug/l	1.2	--	1
Hexachloroethane	ND		ug/l	1.2	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	39		21-120
Phenol-d6	26		10-120
Nitrobenzene-d5	65		23-120
2-Fluorobiphenyl	65		15-120
2,4,6-Tribromophenol	82		10-120
4-Terphenyl-d14	84		41-149

Project Name: 20 SUMMER STREET

Lab Number: L1223409

Project Number: 5308.9.01

Report Date: 01/08/13

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270D-SIM
 Analytical Date: 12/31/12 16:00
 Analyst: AS

Extraction Method: EPA 3510C
 Extraction Date: 12/28/12 01:16

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01 Batch: WG581701-1					
Acenaphthene	ND		ug/l	0.20	--
2-Chloronaphthalene	ND		ug/l	0.20	--
Fluoranthene	ND		ug/l	0.20	--
Hexachlorobutadiene	ND		ug/l	0.50	--
Naphthalene	ND		ug/l	0.20	--
Benzo(a)anthracene	ND		ug/l	0.20	--
Benzo(a)pyrene	ND		ug/l	0.20	--
Benzo(b)fluoranthene	ND		ug/l	0.20	--
Benzo(k)fluoranthene	ND		ug/l	0.20	--
Chrysene	ND		ug/l	0.20	--
Acenaphthylene	ND		ug/l	0.20	--
Anthracene	ND		ug/l	0.20	--
Benzo(ghi)perylene	ND		ug/l	0.20	--
Fluorene	ND		ug/l	0.20	--
Phenanthrene	ND		ug/l	0.20	--
Dibenzo(a,h)anthracene	ND		ug/l	0.20	--
Indeno(1,2,3-cd)Pyrene	ND		ug/l	0.20	--
Pyrene	ND		ug/l	0.20	--
1-Methylnaphthalene	ND		ug/l	0.20	--
2-Methylnaphthalene	ND		ug/l	0.20	--
Pentachlorophenol	ND		ug/l	0.80	--
Hexachlorobenzene	ND		ug/l	0.80	--
Hexachloroethane	ND		ug/l	0.80	--

Project Name: 20 SUMMER STREET

Lab Number: L1223409

Project Number: 5308.9.01

Report Date: 01/08/13

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270D-SIM
 Analytical Date: 12/31/12 16:00
 Analyst: AS

Extraction Method: EPA 3510C
 Extraction Date: 12/28/12 01:16

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01 Batch: WG581701-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	42		21-120
Phenol-d6	28		10-120
Nitrobenzene-d5	68		23-120
2-Fluorobiphenyl	64		15-120
2,4,6-Tribromophenol	73		10-120
4-Terphenyl-d14	85		41-149

Project Name: 20 SUMMER STREET

Lab Number: L1223409

Project Number: 5308.9.01

Report Date: 01/08/13

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270D
 Analytical Date: 12/31/12 10:29
 Analyst: RC

Extraction Method: EPA 3510C
 Extraction Date: 12/28/12 01:20

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG581702-1					
Acenaphthene	ND		ug/l	2.0	--
Benzidine	ND		ug/l	20	--
1,2,4-Trichlorobenzene	ND		ug/l	5.0	--
Hexachlorobenzene	ND		ug/l	2.0	--
Bis(2-chloroethyl)ether	ND		ug/l	2.0	--
2-Chloronaphthalene	ND		ug/l	2.0	--
1,2-Dichlorobenzene	ND		ug/l	2.0	--
1,3-Dichlorobenzene	ND		ug/l	2.0	--
1,4-Dichlorobenzene	ND		ug/l	2.0	--
3,3'-Dichlorobenzidine	ND		ug/l	5.0	--
2,4-Dinitrotoluene	ND		ug/l	5.0	--
2,6-Dinitrotoluene	ND		ug/l	5.0	--
Azobenzene	ND		ug/l	2.0	--
Fluoranthene	ND		ug/l	2.0	--
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	--
4-Bromophenyl phenyl ether	ND		ug/l	2.0	--
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	--
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	--
Hexachlorobutadiene	ND		ug/l	2.0	--
Hexachlorocyclopentadiene	ND		ug/l	20	--
Hexachloroethane	ND		ug/l	2.0	--
Isophorone	ND		ug/l	5.0	--
Naphthalene	ND		ug/l	2.0	--
Nitrobenzene	ND		ug/l	2.0	--
NDPA/DPA	ND		ug/l	2.0	--
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	--
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	--
Butyl benzyl phthalate	ND		ug/l	5.0	--
Di-n-butylphthalate	ND		ug/l	5.0	--
Di-n-octylphthalate	ND		ug/l	5.0	--
Diethyl phthalate	ND		ug/l	5.0	--

Project Name: 20 SUMMER STREET

Lab Number: L1223409

Project Number: 5308.9.01

Report Date: 01/08/13

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270D
 Analytical Date: 12/31/12 10:29
 Analyst: RC

Extraction Method: EPA 3510C
 Extraction Date: 12/28/12 01:20

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG581702-1					
Dimethyl phthalate	ND		ug/l	5.0	--
Benzo(a)anthracene	ND		ug/l	2.0	--
Benzo(a)pyrene	ND		ug/l	2.0	--
Benzo(b)fluoranthene	ND		ug/l	2.0	--
Benzo(k)fluoranthene	ND		ug/l	2.0	--
Chrysene	ND		ug/l	2.0	--
Acenaphthylene	ND		ug/l	2.0	--
Anthracene	ND		ug/l	2.0	--
Benzo(ghi)perylene	ND		ug/l	2.0	--
Fluorene	ND		ug/l	2.0	--
Phenanthrene	ND		ug/l	2.0	--
Dibenzo(a,h)anthracene	ND		ug/l	2.0	--
Indeno(1,2,3-cd)pyrene	ND		ug/l	2.0	--
Pyrene	ND		ug/l	2.0	--
Biphenyl	ND		ug/l	2.0	--
Aniline	ND		ug/l	2.0	--
4-Chloroaniline	ND		ug/l	5.0	--
1-Methylnaphthalene	ND		ug/l	2.0	--
2-Nitroaniline	ND		ug/l	5.0	--
3-Nitroaniline	ND		ug/l	5.0	--
4-Nitroaniline	ND		ug/l	5.0	--
Dibenzofuran	ND		ug/l	2.0	--
2-Methylnaphthalene	ND		ug/l	2.0	--
n-Nitrosodimethylamine	ND		ug/l	2.0	--
2,4,6-Trichlorophenol	ND		ug/l	5.0	--
p-Chloro-m-cresol	ND		ug/l	2.0	--
2-Chlorophenol	ND		ug/l	2.0	--
2,4-Dichlorophenol	ND		ug/l	5.0	--
2,4-Dimethylphenol	ND		ug/l	5.0	--
2-Nitrophenol	ND		ug/l	10	--
4-Nitrophenol	ND		ug/l	10	--

Project Name: 20 SUMMER STREET

Lab Number: L1223409

Project Number: 5308.9.01

Report Date: 01/08/13

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270D
 Analytical Date: 12/31/12 10:29
 Analyst: RC

Extraction Method: EPA 3510C
 Extraction Date: 12/28/12 01:20

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG581702-1					
2,4-Dinitrophenol	ND		ug/l	20	--
4,6-Dinitro-o-cresol	ND		ug/l	10	--
Pentachlorophenol	ND		ug/l	10	--
Phenol	ND		ug/l	5.0	--
2-Methylphenol	ND		ug/l	5.0	--
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	--
2,4,5-Trichlorophenol	ND		ug/l	5.0	--
Benzoic Acid	ND		ug/l	50	--
Benzyl Alcohol	ND		ug/l	2.0	--
Carbazole	ND		ug/l	2.0	--
Pyridine	ND		ug/l	5.0	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	41		21-120
Phenol-d6	28		10-120
Nitrobenzene-d5	61		23-120
2-Fluorobiphenyl	63		15-120
2,4,6-Tribromophenol	51		10-120
4-Terphenyl-d14	79		41-149

Lab Control Sample Analysis Batch Quality Control

Project Name: 20 SUMMER STREET

Project Number: 5308.9.01

Lab Number: L1223409

Report Date: 01/08/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01 Batch: WG581701-2 WG581701-3								
Acenaphthene	58		62		37-111	7		40
2-Chloronaphthalene	53		57		40-140	7		40
Fluoranthene	78		83		40-140	6		40
Hexachlorobutadiene	43		47		40-140	9		40
Naphthalene	54		57		40-140	5		40
Benzo(a)anthracene	76		82		40-140	8		40
Benzo(a)pyrene	73		78		40-140	7		40
Benzo(b)fluoranthene	77		82		40-140	6		40
Benzo(k)fluoranthene	80		87		40-140	8		40
Chrysene	72		78		40-140	8		40
Acenaphthylene	58		63		40-140	8		40
Anthracene	66		71		40-140	7		40
Benzo(ghi)perylene	77		79		40-140	3		40
Fluorene	66		69		40-140	4		40
Phenanthrene	73		76		40-140	4		40
Dibenzo(a,h)anthracene	78		82		40-140	5		40
Indeno(1,2,3-cd)Pyrene	79		82		40-140	4		40
Pyrene	74		78		26-127	5		40
1-Methylnaphthalene	54		58		40-140	7		40
2-Methylnaphthalene	53		58		40-140	9		40
Pentachlorophenol	76		80		9-103	5		40

Lab Control Sample Analysis

Batch Quality Control

Project Name: 20 SUMMER STREET

Project Number: 5308.9.01

Lab Number: L1223409

Report Date: 01/08/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01 Batch: WG581701-2 WG581701-3								
Hexachlorobenzene	68		71		40-140	4		40
Hexachloroethane	46		50		40-140	8		40

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	37		40		21-120
Phenol-d6	25		27		10-120
Nitrobenzene-d5	56		62		23-120
2-Fluorobiphenyl	53		58		15-120
2,4,6-Tribromophenol	84		91		10-120
4-Terphenyl-d14	70		76		41-149

Lab Control Sample Analysis Batch Quality Control

Project Name: 20 SUMMER STREET

Project Number: 5308.9.01

Lab Number: L1223409

Report Date: 01/08/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG581702-2 WG581702-3								
Acenaphthene	72		66		37-111	9		30
Benzidine	0	Q	0	Q	10-75	NC		30
1,2,4-Trichlorobenzene	59		50		39-98	17		30
Hexachlorobenzene	81		76		40-140	6		30
Bis(2-chloroethyl)ether	67		60		40-140	11		30
2-Chloronaphthalene	75		67		40-140	11		30
1,2-Dichlorobenzene	52		50		40-140	4		30
1,3-Dichlorobenzene	50		48		40-140	4		30
1,4-Dichlorobenzene	48		48		36-97	0		30
3,3'-Dichlorobenzidine	64		66		40-140	3		30
2,4-Dinitrotoluene	99	Q	94		24-96	5		30
2,6-Dinitrotoluene	99		96		40-140	3		30
Azobenzene	81		78		40-140	4		30
Fluoranthene	91		88		40-140	3		30
4-Chlorophenyl phenyl ether	80		75		40-140	6		30
4-Bromophenyl phenyl ether	90		83		40-140	8		30
Bis(2-chloroisopropyl)ether	62		56		40-140	10		30
Bis(2-chloroethoxy)methane	73		65		40-140	12		30
Hexachlorobutadiene	51		47		40-140	8		30
Hexachlorocyclopentadiene	32	Q	25	Q	40-140	25		30
Hexachloroethane	46		45		40-140	2		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: 20 SUMMER STREET

Project Number: 5308.9.01

Lab Number: L1223409

Report Date: 01/08/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG581702-2 WG581702-3								
Isophorone	79		73		40-140	8		30
Naphthalene	60		56		40-140	7		30
Nitrobenzene	66		62		40-140	6		30
NitrosoDiPhenylAmine(NDPA)/DPA	86		85		40-140	1		30
n-Nitrosodi-n-propylamine	74		66		29-132	11		30
Bis(2-Ethylhexyl)phthalate	94		90		40-140	4		30
Butyl benzyl phthalate	101		96		40-140	5		30
Di-n-butylphthalate	98		95		40-140	3		30
Di-n-octylphthalate	89		84		40-140	6		30
Diethyl phthalate	89		85		40-140	5		30
Dimethyl phthalate	84		80		40-140	5		30
Benzo(a)anthracene	86		82		40-140	5		30
Benzo(a)pyrene	90		86		40-140	5		30
Benzo(b)fluoranthene	83		78		40-140	6		30
Benzo(k)fluoranthene	90		86		40-140	5		30
Chrysene	81		77		40-140	5		30
Acenaphthylene	82		77		45-123	6		30
Anthracene	87		83		40-140	5		30
Benzo(ghi)perylene	84		80		40-140	5		30
Fluorene	81		78		40-140	4		30
Phenanthrene	82		79		40-140	4		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: 20 SUMMER STREET

Project Number: 5308.9.01

Lab Number: L1223409

Report Date: 01/08/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG581702-2 WG581702-3								
Dibenzo(a,h)anthracene	89		84		40-140	6		30
Indeno(1,2,3-cd)Pyrene	89		83		40-140	7		30
Pyrene	88		85		26-127	3		30
Biphenyl	72		62		40-140	15		30
Aniline	26	Q	23	Q	40-140	12		30
4-Chloroaniline	50		46		40-140	8		30
1-Methylnaphthalene	68		60		41-103	13		30
2-Nitroaniline	94		90		52-143	4		30
3-Nitroaniline	61		64		25-145	5		30
4-Nitroaniline	93		94		51-143	1		30
Dibenzofuran	76		72		40-140	5		30
2-Methylnaphthalene	69		63		40-140	9		30
n-Nitrosodimethylamine	42		37		22-74	13		30
2,4,6-Trichlorophenol	93		88		30-130	6		30
P-Chloro-M-Cresol	92		90		23-97	2		30
2-Chlorophenol	74		66		27-123	11		30
2,4-Dichlorophenol	84		78		30-130	7		30
2,4-Dimethylphenol	83		71		30-130	16		30
2-Nitrophenol	83		77		30-130	8		30
4-Nitrophenol	28		24		10-80	15		30
2,4-Dinitrophenol	64		65		20-130	2		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: 20 SUMMER STREET

Project Number: 5308.9.01

Lab Number: L1223409

Report Date: 01/08/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG581702-2 WG581702-3								
4,6-Dinitro-o-cresol	88		85		20-164	3		30
Pentachlorophenol	75		68		9-103	10		30
Phenol	36		31		12-110	15		30
2-Methylphenol	73		65		30-130	12		30
3-Methylphenol/4-Methylphenol	69		62		30-130	11		30
2,4,5-Trichlorophenol	99		95		30-130	4		30
Benzoic Acid	40		40		10-164	0		30
Benzyl Alcohol	63		56		26-116	12		30
Carbazole	90		86		55-144	5		30
Pyridine	8	Q	11		10-66	32	Q	30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	51		46		21-120
Phenol-d6	38		35		10-120
Nitrobenzene-d5	73		66		23-120
2-Fluorobiphenyl	71		66		15-120
2,4,6-Tribromophenol	79		75		10-120
4-Terphenyl-d14	86		83		41-149

PCBS

Project Name: 20 SUMMER STREET**Lab Number:** L1223409**Project Number:** 5308.9.01**Report Date:** 01/08/13**SAMPLE RESULTS**

Lab ID: L1223409-01
Client ID: B-2 (OW)
Sample Location: WATERTOWN, MA
Matrix: Water
Analytical Method: 5,608
Analytical Date: 12/31/12 14:22
Analyst: SS

Date Collected: 12/27/12 13:00
Date Received: 12/27/12
Field Prep: Not Specified
Extraction Method: EPA 608
Extraction Date: 12/28/12 01:31
Cleanup Method1: EPA 3665A
Cleanup Date1: 12/28/12
Cleanup Method2: EPA 3660B
Cleanup Date2: 12/28/12

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	82		30-150
Decachlorobiphenyl	103		30-150

Project Name: 20 SUMMER STREET**Lab Number:** L1223409**Project Number:** 5308.9.01**Report Date:** 01/08/13

Method Blank Analysis
Batch Quality Control

Analytical Method: 5,608
 Analytical Date: 12/31/12 13:14
 Analyst: SS

Extraction Method: EPA 608
 Extraction Date: 12/28/12 01:31
 Cleanup Method1: EPA 3665A
 Cleanup Date1: 12/28/12
 Cleanup Method2: EPA 3660B
 Cleanup Date2: 12/28/12

Parameter	Result	Qualifier	Units	RL	MDL
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 01 Batch: WG581703-1					
Aroclor 1016	ND		ug/l	0.250	--
Aroclor 1221	ND		ug/l	0.250	--
Aroclor 1232	ND		ug/l	0.250	--
Aroclor 1242	ND		ug/l	0.250	--
Aroclor 1248	ND		ug/l	0.250	--
Aroclor 1254	ND		ug/l	0.250	--
Aroclor 1260	ND		ug/l	0.250	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	81		30-150
Decachlorobiphenyl	105		30-150

Matrix Spike Analysis

Batch Quality Control

Project Name: 20 SUMMER STREET

Project Number: 5308.9.01

Lab Number: L1223409

Report Date: 01/08/13

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01 QC Batch ID: WG581703-3 QC Sample: L1223393-01 Client ID: MS Sample												
Aroclor 1016	ND	1.03	0.692	67		-	-		40-140	-		50
Aroclor 1260	ND	1.03	0.771	75		-	-		40-140	-		50

Surrogate	MS % Recovery	MS Qualifier	MSD % Recovery	MSD Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	62				30-150
Decachlorobiphenyl	99				30-150

Lab Control Sample Analysis**Batch Quality Control****Project Name:** 20 SUMMER STREET**Project Number:** 5308.9.01**Lab Number:** L1223409**Report Date:** 01/08/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01 Batch: WG581703-2								
Aroclor 1016	76		-		40-140	-		50
Aroclor 1260	76		-		40-140	-		50

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	84				30-150
Decachlorobiphenyl	104				30-150

Lab Duplicate Analysis Batch Quality Control

Project Name: 20 SUMMER STREET

Project Number: 5308.9.01

Lab Number: L1223409

Report Date: 01/08/13

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01 QC Batch ID: WG581703-4 QC Sample: L1223409-01 Client ID: B-2 (OW)						
Aroclor 1016	ND	ND	ug/l	NC		50
Aroclor 1221	ND	ND	ug/l	NC		50
Aroclor 1232	ND	ND	ug/l	NC		50
Aroclor 1242	ND	ND	ug/l	NC		50
Aroclor 1248	ND	ND	ug/l	NC		50
Aroclor 1254	ND	ND	ug/l	NC		50
Aroclor 1260	ND	ND	ug/l	NC		50

Surrogate	%Recovery	Qualifier	%Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	82		85		30-150
Decachlorobiphenyl	103		104		30-150

METALS

Project Name: 20 SUMMER STREET

Lab Number: L1223409

Project Number: 5308.9.01

Report Date: 01/08/13

SAMPLE RESULTS

Lab ID: L1223409-01

Date Collected: 12/27/12 13:00

Client ID: B-2 (OW)

Date Received: 12/27/12

Sample Location: WATERTOWN, MA

Field Prep: Not Specified

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Westborough Lab											
Antimony, Total	0.0010		mg/l	0.0005	--	1	12/28/12 10:51	12/29/12 12:04	EPA 3005A	1,6020A	AK
Arsenic, Total	ND		mg/l	0.0005	--	1	12/28/12 10:51	12/29/12 12:04	EPA 3005A	1,6020A	AK
Cadmium, Total	ND		mg/l	0.0002	--	1	12/28/12 10:51	12/29/12 12:04	EPA 3005A	1,6020A	AK
Chromium, Total	0.0061		mg/l	0.0030	--	1	12/28/12 10:51	12/29/12 12:04	EPA 3005A	1,6020A	AK
Copper, Total	ND		mg/l	0.0015	--	1	12/28/12 10:51	12/29/12 12:04	EPA 3005A	1,6020A	AK
Iron, Total	ND		mg/l	0.05	--	1	12/28/12 10:51	12/28/12 18:12	EPA 3005A	19,200.7	TT
Lead, Total	ND		mg/l	0.0005	--	1	12/28/12 10:51	12/29/12 12:04	EPA 3005A	1,6020A	AK
Mercury, Total	ND		mg/l	0.0002	--	1	12/30/12 15:23	12/31/12 10:00	EPA 245.1	3,245.1	TT
Nickel, Total	0.0047		mg/l	0.0025	--	1	12/28/12 10:51	12/29/12 12:04	EPA 3005A	1,6020A	AK
Selenium, Total	ND		mg/l	0.005	--	1	12/28/12 10:51	12/29/12 12:04	EPA 3005A	1,6020A	AK
Silver, Total	ND		mg/l	0.0004	--	1	12/28/12 10:51	12/29/12 12:04	EPA 3005A	1,6020A	AK
Zinc, Total	0.0156		mg/l	0.0100	--	1	12/28/12 10:51	12/29/12 12:04	EPA 3005A	1,6020A	AK



Project Name: 20 SUMMER STREET

Lab Number: L1223409

Project Number: 5308.9.01

Report Date: 01/08/13

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: WG581783-1									
Antimony, Total	ND	mg/l	0.0005	--	1	12/28/12 10:51	12/29/12 13:33	1,6020A	AK
Arsenic, Total	ND	mg/l	0.0005	--	1	12/28/12 10:51	12/29/12 13:33	1,6020A	AK
Cadmium, Total	ND	mg/l	0.0002	--	1	12/28/12 10:51	12/29/12 13:33	1,6020A	AK
Chromium, Total	ND	mg/l	0.0030	--	1	12/28/12 10:51	12/29/12 13:33	1,6020A	AK
Copper, Total	ND	mg/l	0.0015	--	1	12/28/12 10:51	12/29/12 13:33	1,6020A	AK
Lead, Total	ND	mg/l	0.0005	--	1	12/28/12 10:51	12/29/12 13:33	1,6020A	AK
Nickel, Total	ND	mg/l	0.0025	--	1	12/28/12 10:51	12/29/12 13:33	1,6020A	AK
Selenium, Total	ND	mg/l	0.005	--	1	12/28/12 10:51	12/29/12 13:33	1,6020A	AK
Silver, Total	ND	mg/l	0.0004	--	1	12/28/12 10:51	12/29/12 13:33	1,6020A	AK
Zinc, Total	ND	mg/l	0.0100	--	1	12/28/12 10:51	12/29/12 13:33	1,6020A	AK

Prep Information

Digestion Method: EPA 3005A

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Westborough Lab for sample(s): 01 Batch: WG581839-1									
Iron, Total	ND	mg/l	0.05	--	1	12/28/12 10:51	12/28/12 17:45	19,200.7	TT

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: WG582017-1									
Mercury, Total	ND	mg/l	0.0002	--	1	12/30/12 15:23	12/31/12 09:43	3,245.1	TT

Prep Information

Digestion Method: EPA 245.1

Lab Control Sample Analysis Batch Quality Control

Project Name: 20 SUMMER STREET

Project Number: 5308.9.01

Lab Number: L1223409

Report Date: 01/08/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01 Batch: WG581783-2								
Antimony, Total	94		-		80-120	-		
Arsenic, Total	110		-		80-120	-		
Cadmium, Total	108		-		80-120	-		
Chromium, Total	89		-		80-120	-		
Copper, Total	99		-		80-120	-		
Lead, Total	95		-		80-120	-		
Nickel, Total	94		-		80-120	-		
Selenium, Total	117		-		80-120	-		
Silver, Total	102		-		80-120	-		
Zinc, Total	109		-		80-120	-		
Total Metals - Westborough Lab Associated sample(s): 01 Batch: WG581839-2								
Iron, Total	100		-		85-115	-		
Total Metals - Westborough Lab Associated sample(s): 01 Batch: WG582017-2								
Mercury, Total	100		-		85-115	-		

Matrix Spike Analysis **Batch Quality Control**

Project Name: 20 SUMMER STREET

Lab Number: L1223409

Project Number: 5308.9.01

Report Date: 01/08/13

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: WG581783-4 QC Sample: L1223372-02 Client ID: MS Sample												
Antimony, Total	0.0010	0.5	0.4569	91		-	-		80-120	-		20
Arsenic, Total	ND	0.12	0.1309	109		-	-		80-120	-		20
Cadmium, Total	ND	0.051	0.0537	105		-	-		80-120	-		20
Chromium, Total	ND	0.2	0.1681	84		-	-		80-120	-		20
Copper, Total	ND	0.25	0.2598	104		-	-		80-120	-		20
Lead, Total	ND	0.51	0.4785	94		-	-		80-120	-		20
Nickel, Total	ND	0.5	0.4418	88		-	-		80-120	-		20
Selenium, Total	ND	0.12	0.132	110		-	-		80-120	-		20
Silver, Total	ND	0.05	0.0497	99		-	-		80-120	-		20
Zinc, Total	ND	0.5	0.5196	104		-	-		80-120	-		20
Total Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG581839-4 QC Sample: L1221829-83 Client ID: MS Sample												
Iron, Total	3.3	1	4.5	120		-	-		75-125	-		20
Total Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG582017-4 QC Sample: L1223383-02 Client ID: MS Sample												
Mercury, Total	ND	0.001	0.0012	123		-	-		70-130	-		20

Project Name: 20 SUMMER STREET
Project Number: 5308.9.01

Lab Duplicate Analysis

Batch Quality Control

Lab Number: L1223409
Report Date: 01/08/13

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG581783-3 QC Sample: L1223372-02 Client ID: DUP Sample						
Nickel, Total	ND	ND	mg/l	NC		20
Zinc, Total	ND	ND	mg/l	NC		20
Total Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG581839-3 QC Sample: L1221829-83 Client ID: DUP Sample						
Iron, Total	3.3	3.6	mg/l	9		20
Total Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG582017-3 QC Sample: L1223383-02 Client ID: DUP Sample						
Mercury, Total	ND	ND	mg/l	NC		20

INORGANICS & MISCELLANEOUS

Project Name: 20 SUMMER STREET
Project Number: 5308.9.01

Lab Number: L1223409
Report Date: 01/08/13

SAMPLE RESULTS

Lab ID: L1223409-01
Client ID: B-2 (OW)
Sample Location: WATERTOWN, MA
Matrix: Water

Date Collected: 12/27/12 13:00
Date Received: 12/27/12
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	-	12/28/12 12:25	30,2540D	DW
Cyanide, Total	ND		mg/l	0.005	--	1	12/31/12 10:17	01/02/13 14:58	30,4500CN-CE	JO
Chlorine, Total Residual	ND		mg/l	0.02	--	1	-	12/27/12 22:26	30,4500CL-D	EL
pH (H)	6.5		SU	-	NA	1	-	12/27/12 21:46	30,4500H+-B	EL
TPH	ND		mg/l	4.00	--	1	12/28/12 08:00	12/28/12 14:00	74,1664A	JO



Project Name: 20 SUMMER STREET
Project Number: 5308.9.01

Lab Number: L1223409
Report Date: 01/08/13

SAMPLE RESULTS

Lab ID: L1223409-02
Client ID: B-2 (OW)
Sample Location: WATERTOWN, MA
Matrix: Water

Date Collected: 12/31/12 11:10
Date Received: 01/02/13
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Phenolics, Total	0.05		mg/l	0.03	--	1	01/03/13 10:00	01/03/13 12:08	4,420.1	MP
Anions by Ion Chromatography - Westborough Lab										
Chloride	322.		mg/l	5.00	--	10	-	01/02/13 19:49	44,300.0	AU



Project Name: 20 SUMMER STREET
Project Number: 5308.9.01

Lab Number: L1223409
Report Date: 01/08/13

SAMPLE RESULTS

Lab ID: L1223409-03
Client ID: B-2 (OW)
Sample Location: WATERTOWN, MA
Matrix: Water

Date Collected: 01/04/13 11:00
Date Received: 01/04/13
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Chromium, Hexavalent	ND		mg/l	0.010	--	1	01/04/13 22:30	01/04/13 23:14	30,3500CR-D	DE



Project Name: 20 SUMMER STREET

Lab Number: L1223409

Project Number: 5308.9.01

Report Date: 01/08/13

Method Blank Analysis Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG581685-1										
Chlorine, Total Residual	ND		mg/l	0.02	--	1	-	12/27/12 22:26	30,4500CL-D	EL
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG581739-1										
Solids, Total Suspended	ND		mg/l	5.0	NA	1	-	12/28/12 12:25	30,2540D	DW
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG581768-1										
TPH	ND		mg/l	4.00	--	1	12/28/12 08:00	12/28/12 14:00	74,1664A	JO
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG582085-1										
Cyanide, Total	ND		mg/l	0.005	--	1	12/31/12 10:17	01/02/13 14:52	30,4500CN-CE	JO
Anions by Ion Chromatography - Westborough Lab for sample(s): 02 Batch: WG582428-1										
Chloride	ND		mg/l	0.500	--	1	-	01/02/13 17:25	44,300.0	AU
General Chemistry - Westborough Lab for sample(s): 02 Batch: WG582482-1										
Phenolics, Total	ND		mg/l	0.03	--	1	01/03/13 10:00	01/03/13 12:06	4,420.1	MP
General Chemistry - Westborough Lab for sample(s): 03 Batch: WG582870-1										
Chromium, Hexavalent	ND		mg/l	0.010	--	1	01/04/13 22:30	01/04/13 23:13	30,3500CR-D	DE

Lab Control Sample Analysis

Batch Quality Control

Project Name: 20 SUMMER STREET

Project Number: 5308.9.01

Lab Number: L1223409

Report Date: 01/08/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG581674-1								
pH	100		-		99-101	-		5
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG581685-2								
Chlorine, Total Residual	93		-		90-110	-		
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG581768-2								
TPH	85		-		64-132	-		34
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG582085-2								
Cyanide, Total	96		-		90-110	-		
Anions by Ion Chromatography - Westborough Lab Associated sample(s): 02 Batch: WG582428-2								
Chloride	99		-		90-110	-		
General Chemistry - Westborough Lab Associated sample(s): 02 Batch: WG582482-2								
Phenolics, Total	101		-		82-111	-		12
General Chemistry - Westborough Lab Associated sample(s): 03 Batch: WG582870-2								
Chromium, Hexavalent	95		-		85-115	-		20

Matrix Spike Analysis

Batch Quality Control

Project Name: 20 SUMMER STREET

Project Number: 5308.9.01

Lab Number: L1223409

Report Date: 01/08/13

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG581768-4 QC Sample: L1223361-01 Client ID: MS Sample												
TPH	ND	20.4	16.2	79		-	-		64-132	-		34
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG582085-4 QC Sample: L1223409-01 Client ID: B-2 (OW)												
Cyanide, Total	ND	0.2	0.161	80	Q	-	-		90-110	-		30
Anions by Ion Chromatography - Westborough Lab Associated sample(s): 02 QC Batch ID: WG582428-3 QC Sample: L1223513-02 Client ID: MS Sample												
Chloride	73.2	100	176	103		-	-		40-151	-		18
General Chemistry - Westborough Lab Associated sample(s): 02 QC Batch ID: WG582482-4 QC Sample: L1300030-02 Client ID: MS Sample												
Phenolics, Total	ND	0.8	0.83	104		-	-		77-124	-		12
General Chemistry - Westborough Lab Associated sample(s): 03 QC Batch ID: WG582870-4 QC Sample: L1223409-03 Client ID: B-2 (OW)												
Chromium, Hexavalent	ND	0.1	0.098	98		-	-		85-115	-		20

Lab Duplicate Analysis Batch Quality Control

Project Name: 20 SUMMER STREET

Project Number: 5308.9.01

Lab Number: L1223409

Report Date: 01/08/13

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG581674-2 QC Sample: L1223382-01 Client ID: DUP Sample						
pH	7.0	7.1	SU	1		5
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG581685-3 QC Sample: L1223409-01 Client ID: B-2 (OW)						
Chlorine, Total Residual	ND	ND	mg/l	NC		20
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG581739-2 QC Sample: L1223383-02 Client ID: DUP Sample						
Solids, Total Suspended	44	45	mg/l	2		20
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG581768-3 QC Sample: L1223364-02 Client ID: DUP Sample						
TPH	ND	ND	mg/l	NC		34
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG582085-3 QC Sample: L1223406-02 Client ID: DUP Sample						
Cyanide, Total	0.007	0.006	mg/l	12		30
Anions by Ion Chromatography - Westborough Lab Associated sample(s): 02 QC Batch ID: WG582428-4 QC Sample: L1223513-02 Client ID: DUP Sample						
Chloride	73.2	73.5	mg/l	0		18
General Chemistry - Westborough Lab Associated sample(s): 02 QC Batch ID: WG582482-3 QC Sample: L1300030-01 Client ID: DUP Sample						
Phenolics, Total	0.03	ND	mg/l	NC		12
General Chemistry - Westborough Lab Associated sample(s): 03 QC Batch ID: WG582870-3 QC Sample: L1223409-03 Client ID: B-2 (OW)						
Chromium, Hexavalent	ND	ND	mg/l	NC		20

Project Name: 20 SUMMER STREET

Project Number: 5308.9.01

Lab Number: L1223409

Report Date: 01/08/13

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Reagent H2O Preserved Vials Frozen on: NA

Cooler Information Custody Seal

Cooler

A Absent

C Absent

B Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1223409-01A	Vial HCl preserved	A	N/A	2.3	Y	Absent	8260(14)
L1223409-01B	Vial HCl preserved	A	N/A	2.3	Y	Absent	8260(14)
L1223409-01D	Amber 1000ml Na2S2O3	A	6	2.3	Y	Absent	PCB-608(7)
L1223409-01E	Amber 1000ml Na2S2O3	A	6	2.3	Y	Absent	PCB-608(7)
L1223409-01F	Plastic 250ml NaOH preserved	A	>12	2.3	Y	Absent	TCN-4500(14)
L1223409-01G	Amber 1000ml HCl preserved	A	N/A	2.3	Y	Absent	TPH-1664(28)
L1223409-01H	Amber 1000ml HCl preserved	A	N/A	2.3	Y	Absent	TPH-1664(28)
L1223409-01I	Plastic 500ml unpreserved	A	6	2.3	Y	Absent	TRC-4500(1)
L1223409-01J	Plastic 1000ml unpreserved	A	6	2.3	Y	Absent	TSS-2540(7)
L1223409-01K	Amber 250ml unpreserved	A	6	2.3	Y	Absent	8270TCL(7),8270TCL-SIM(7)
L1223409-01L	Amber 250ml unpreserved	A	6	2.3	Y	Absent	8270TCL(7),8270TCL-SIM(7)
L1223409-01M	Plastic 500ml HNO3 preserved	A	<2	2.3	Y	Absent	SE-6020T(180),CR-6020T(180),NI-6020T(180),CU-6020T(180),ZN-6020T(180),FE-UI(180),PB-6020T(180),HG-U(28),AS-6020T(180),SB-6020T(180),AG-6020T(180),CD-6020T(180)
L1223409-01N	Plastic 500ml unpreserved	A	6	2.3	Y	Absent	-
L1223409-01O	Plastic 250ml unpreserved	A	6	2.3	Y	Absent	PH-4500(.01)
L1223409-01P	Plastic 500ml HNO3 preserved	A	<2	2.3	Y	Absent	SE-6020T(180),CR-6020T(180),NI-6020T(180),CU-6020T(180),ZN-6020T(180),FE-UI(180),PB-6020T(180),HG-U(28),AS-6020T(180),SB-6020T(180),AG-6020T(180),CD-6020T(180)
L1223409-01Q	Plastic 1000ml unpreserved	A	6	2.3	Y	Absent	TSS-2540(7)
L1223409-01X	Plastic 250ml HNO3 preserved spl	A	<2	2.3	Y	Absent	-
L1223409-02A	Vial HCl preserved	B	N/A	3.0	Y	Absent	8260-SIM(14)

*Values in parentheses indicate holding time in days

Project Name: 20 SUMMER STREET**Project Number:** 5308.9.01**Lab Number:** L1223409**Report Date:** 01/08/13**Container Information**

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1223409-02B	Vial HCl preserved	B	N/A	3.0	Y	Absent	8260-SIM(14)
L1223409-02C	Vial HCl preserved	B	N/A	3.0	Y	Absent	8260-SIM(14)
L1223409-02D	Vial Na2S2O3 preserved	B	N/A	3.0	Y	Absent	504(14)
L1223409-02E	Vial Na2S2O3 preserved	B	N/A	3.0	Y	Absent	504(14)
L1223409-02F	Plastic 500ml unpreserved	B	7	3.0	Y	Absent	CL-300(28)
L1223409-02G	Amber 1000ml H2SO4 preserved	B	<2	3.0	Y	Absent	TPHENOL-420(28)
L1223409-03A	Plastic 500ml unpreserved	C	7	2.8	Y	Absent	HEXCR-3500(1)

*Values in parentheses indicate holding time in days

Project Name: 20 SUMMER STREET
Project Number: 5308.9.01

Lab Number: L1223409
Report Date: 01/08/13

GLOSSARY

Acronyms

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

Footnotes

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

Terms

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

Data Qualifiers

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

Report Format: Data Usability Report



Project Name: 20 SUMMER STREET
Project Number: 5308.9.01

Lab Number: L1223409
Report Date: 01/08/13

Data Qualifiers

due to obvious interference.

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

Project Name: 20 SUMMER STREET
Project Number: 5308.9.01

Lab Number: L1223409
Report Date: 01/08/13

REFERENCES

- 1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IIIA, 1997.
- 3 Methods for the Determination of Metals in Environmental Samples, Supplement I. EPA/600/R-94/111. May 1994.
- 4 Methods for Chemical Analysis of Water and Wastes. EPA 600/4-79-020. Revised March 1983.
- 5 Methods for the Organic Chemical Analysis of Municipal and Industrial Wastewater. Appendix A, Part 136, 40 CFR (Code of Federal Regulations).
- 14 Methods for the Determination of Organic Compounds in Finished Drinking Water and Raw Source Water. EPA/600/4-88/039, Revised July 1991.
- 19 Inductively Coupled Plasma Atomic Emission Spectrometric Method for Trace Element Analysis of Water and Wastes. Appendix C, Part 136, 40 CFR (Code of Federal Regulations). July 1, 1999 edition.
- 30 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WPCF. 18th Edition. 1992.
- 44 Methods for the Determination of Inorganic Substances in Environmental Samples, EPA/600/R-93/100, August 1993.
- 74 Method 1664, Revision A: N-Hexane Extractable Material (HEM; Oil & Grease) and Silica Gel Treated N-Hexane Extractable Material (SGT-HEM; Non-polar Material) by Extraction and Gravimetry, EPA-821-R-98-002, February 1999.

LIMITATION OF LIABILITIES

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

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



Certificate/Approval Program Summary

Last revised December 19, 2012 - Westboro Facility

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

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

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

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

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

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

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

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

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

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

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

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

Organic Parameters: (EPA 624 for Volatile Halocarbons, Volatile Aromatics),(608 for: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT,Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs-Water), (EPA 625 for SVOC Acid Extractables and SVOC Base/Neutral Extractables), 600/4-81-045-PCB-Oil. *Microbiology Parameters:* (ColilertQT SM9223B; Enterolert-QT: SM9222D-MF.)

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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



3/3 CHAIN OF CUSTODY

PAGE 1 OF 1

WESTBORO, MA
TEL: 508-898-9220
FAX: 508-898-9193

MANSFIELD, MA
TEL: 508-822-9300
FAX: 508-822-3288

Client Information

Client: McPhail Assoc.
Address: 2269 Mass Ave.
Cambridge, MA 02140
Phone: 617-868-1420
Fax: 617-868-1423
Email:

☐ These samples have been previously analyzed by Alpha

Other Project Specific Requirements/Comments/Detection Limits:

If MS is required, indicate in Sample Specific Comments which samples and what tests MS to be performed.
(Note: All CAM methods for inorganic analyses require MS every 20 soil samples)

NPDES RGP Package

Project Information

Project Name: 20 Summer Street
Project Location: Watertown, MA
Project #: 5308.9.01
Project Manager: Amy Falconeiri
ALPHA Quote #:

Turn-Around Time

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

Date Due: 11/3/13 Time:

Date Rec'd in Lab: 12/27/12

ALPHA Job #: L1223409

Report Information - Data Deliverables

☐ FAX ☐ EMAIL
☐ ADEx ☐ Add'l Deliverables

Billing Information

☐ Same as Client info PO #:

Regulatory Requirements/Report Limits

State / Fed Program Criteria

MA MCP PRESUMPTIVE CERTAINTY --- CT REASONABLE CONFIDENCE PROTO

☐ Yes ☒ No Are MCP Analytical Methods Required?
☐ Yes ☒ No Is Matrix Spike (MS) Required on this SDG? (If yes see note in Comments)
☐ Yes ☒ No Are CT RCP (Reasonable Confidence Protocols) Required?

ANALYSIS											SAMPLE HANDLING						
	TSS	TRC	TPH	Cyanide	VOCs	SVOCs	Total PP-13 metals	dissolved PP-13 metals	PH	PCBs	Filtration _____	☐ Done	☐ Not needed	☐ Lab to do	Preservation	☐ Lab to do	(Please specify below)
Sample Specific Comments																	
X	X	X	X	X	X	X	X	X	X		TSS - 1,000 ml Plastic / NP	1					
											TRC - 500 ml plastic / NP	1					
											TPH - (2) 1,000 ml Amber / HCl	2					
											Cyanide - 250 ml plastic / NaOH	1					
											VOCs - (2) vials / Na ₂ S ₂ O ₃	2					
											SVOCs - (2) Amber / NA	2					
											Total PP-13 - 500 ml plastic / H ₂ O ₂	1					
											dissolved PP-13 - 500 ml plastic / NP	1					
											PH - 250 ml plastic / NP	1					
											PCB - (2) 1,000 ml Amber / Na ₂ S ₂ O ₃	2					

PLEASE ANSWER QUESTIONS ABOVE!

IS YOUR PROJECT
MA MCP or CT RCP?

Container Type ⁽¹⁾P ⁽¹⁾P ⁽²⁾A ⁽¹⁾P ⁽²⁾A ⁽¹⁾P ⁽¹⁾P ⁽¹⁾P ⁽²⁾A

Preservative A A B E H A A A A H

Relinquished By:

Date/Time:

Received By:

Date/Time:

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.



PAGE 1 OF 1

1072

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

Client Information

Client: McPhail Associates LLC

Address: 2269 Mass Avenue

Cambridge

Phone:

Email:

Additional Project Information:

Project Information

Project Name: 20 Summer St

Project Location: Watertown

Project #: 5308.9.01

Project Manager: Amy Falconery

ALPHA Quote #:

Turn-Around Time

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

Date Due: 1/7/12

Date Rec'd in Lab: 1-2-13

ALPHA Job #: 4300040

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 _____

Add to Job L1223409

[illegible]**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= HNO₃
D= H₂SO₄
E= NaOH
F= MeOH
G= NaHSO₄
H = Na₂S₂O₃
I= Ascorbic Acid
J = NH₄Cl
K= Zn Acetate
O= Other

Container Type

Preservative

Relinquished By:

Date/Time

Received By:

Date/Time

All samples submitted are subject to Alpha's Terms and Conditions
See reverse side
FORM NO. 01-01 (rev. 12-Mar-2012)



ATTACHMENT C

ASSESSMENT OF DEP-LISTED SITES

The DEP on-line waste site database indicates that there is one (1) DEP listed release site located within 500 feet of the subject site. Specifically, the release site is listed under Release Tracking Numbers (RTNs) 3-3293, 3-18308, 3-26637 and is identified as Watertown Square Plaza with an address of 49 to 59 Mount Auburn Street. This release site is located approximately 300 feet to the southeast and downgradient of the subject site. The DEP on-line database indicates that Release Abatement Measure (RAM) plans were submitted to the DEP on December 7, 2004 and May 2, 2007, Phase II and III reports were submitted on August 28, 2008, a Phase IV report was submitted October 24, 2008, a Tier Classification Submittal was submitted February 5, 2010 and a Phase V report was submitted May 5, 2011. According to a report entitled "Phase V Remedy Operation Status Inspection and Monitoring/Remedial Monitoring Report No. 5, 49-59 Mount Auburn Street, Watertown, RTN 3-3293" dated May 4, 2011 and prepared by Web Engineering Associates, Inc., the site was reported to the DEP in the early 1990s but was classified as a Non-Priority Disposal site with a valid Waiver. However, upon expiration of the Waiver in 1999 the disposal site was assigned RTN 3-3293 and classified as a Tier II site. A second release was reported to the DEP on May 17, 1999 concerning a release of fuel oil to soils. The release of fuel oil was assigned RTN 3-18308. On February 28, 2007, a release of tetrachloroethene (PCE) and trichloroethylene (TCE) to soil were reported to the DEP and assigned RTN 3-26637. RTNs 3-18308 and 3-26637 were reportedly linked to RTN 3-3293. According to the Phase V report, volatile organic compounds (VOCs) were identified in indoor air, and vinyl chloride was identified in groundwater. The report indicates regional groundwater flow is to the north based on local groundwater elevation contours. Further, the figures included in the report indicate that the limits of groundwater contamination have been defined within the site. Response actions at this disposal site have included excavation of fuel oil contaminated soils, and the installation of an HDPE liner and array of perforated pipes under the floor of a portion of the existing site building and injection wells for bioremediation activities, as well as the operation of a sub-slab depressurization system. The report indicates that a Phase IV Completion Statement and Phase V Remedy Operation Status Submittal were received by MassDEP in October 2008. Ongoing activities were reported to include efforts to seal exposure pathways, periodic maintenance inspections of the depressurization system, screening within the building for volatile organic compounds, and groundwater monitoring. Based on the location of the release site, the status of response actions, this release site is not considered to pose a threat of impact to the groundwater dewatering activities at the subject site.

However, it should be noted that the DEP on-line database indicates that a release site listed under RTNs 3-17672, 3-19698 is located at 76 Arsenal Street, which is located approximately 900 feet to the southeast and downgradient of the subject site. A report entitled "Post-Class C Response Action Outcome (RAO) Statement Status Report No. 8, November 2010 through May 2011, Petroleum Release, 76 Arsenal Street, Watertown, Massachusetts, MA DEP Release Tracking No. 3-17672," dated May 26, 2011, and prepared by Ransom Environmental Consultants, Inc. (Ransom) was reviewed. According to the Post-Class C Status report, Ransom identified elevated concentrations of organic vapors in soil during the removal of USTs in December 1998. The DEP was notified and RTN 3-17672 was assigned to the release



ATTACHMENT C - Continued

condition. An Immediate Response Action (IRA) plan was approved for the removal of USTs and petroleum impacted soils. Reportedly 800 cubic yards of impacted soils were removed.

Subsequently, in July 2000, Ransom reported the presence of LNAPL in a groundwater monitoring well in a thickness greater than 0.5-inches. The presence of LNAPL was reported to the DEP on July 7, 2000.

This release condition was assigned RTN 3-19698. In July 2001, RTNs 3-17672 and 3-19698 were linked. Response actions have reportedly included well gauging and recovery of LNAPL, removal of oily water, and excavation of impacted soils. Further remedial actions including well monitoring and LNAPL recovery are ongoing. Ransom did not indicate the direction of groundwater flow at this release site.

A Class C-2 RAO has been submitted to the DEP for RTNs associated with RTN 3-17672. A Class C-2 RAO indicates that a Temporary Solution has been achieved and response actions are being conducted to work towards a Permanent Solution. Based on the location of this release site with respect to the subject site, the nature of the release, and status of response actions, this release site is not considered to pose a threat of impact to the groundwater dewatering activities at the subject site.



ATTACHMENT D

AREAS OF CRITICAL CONCERN, ENDANGERED AND THREATENED SPECIES

Based on a review of the DEP Priority Resources Map dated January 24, 2013, the site is not located within a Zone II of a public water supply, an Interim Wellhead Protection Area, or a Zone A of a Class A surface water supply reservoir. The site is not located within a Non-Potential Drinking Water Source Area of medium yield. There are no surface water bodies located within the site boundaries. The site is not located within an Area of Critical Environmental Concern (ACEC) nor are ACECs located within 1-mile of the subject site. In addition, the point of discharge in the Charles River is not an ACEC.

A review of the most recent federal listing of threatened and endangered species published by the U.S. Fish and Wildlife Service did not identify the presence of threatened and/or endangered species at or in the vicinity of the discharge location and/or discharge outfall. In addition, a review of the Massachusetts Division of Fisheries and Wildlife on-line database did not report the presence of threatened or endangered species at the point of discharge and/or the discharge outfall.

MassDEP - Bureau of Waste Site Cleanup

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

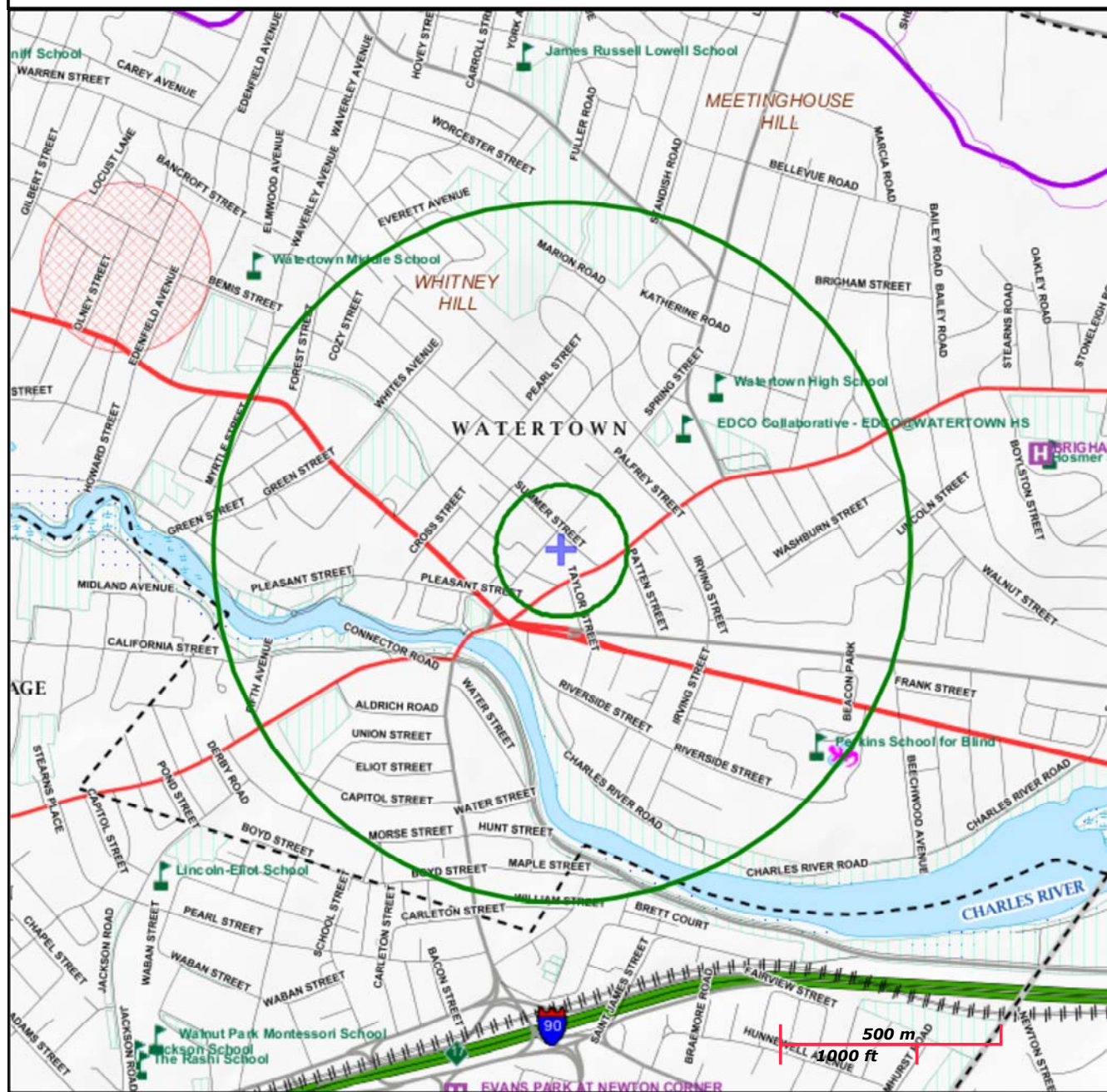
20 SUMMER STREET
20 SUMMER STREET WATERTOWN, MA
NAD83 UTM Meters:
5216069mN, -7924036mE (Zone: 18)

January 24, 2013

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



MassDEP
Commonwealth of Massachusetts
Department of Environmental Protection



Roads: Limited Access, Divided, Other Hwy, Major Road, Minor Road, Track, Trail
Boundaries: Town, County, DEP Region; Train; Powerline; Pipeline; Aqueduct
Basins: Major, PWS; Streams: Perennial, Intermittent, Man Made Shore, Dam
Aquifers: Medium Yield, High Yield, EPA Sole Source
Non Potential Drinking Water Source Area: Medium, High (Yield)

PWS Protection Areas: Zone II, IWPA, Zone A
Hydrography: Open Water, PWS Reservoir, Tidal Flat
Wetlands: Freshwater, Saltwater, Cranberry Bog
FEMA 100yr Floodplain; Protected Open Space; ACEC
Est. Rare Wetland Wildlife Hab; Vernal Pool: Cert., Potential
Solid Waste Landfill; PWS: Com. GW, SW, Emerg., Non-Com.

MASSACHUSETTS AREAS OF CRITICAL ENVIRONMENTAL CONCERN

November 2010

Total Approximate Acreage: 268,000 acres

Approximate acreage and designation date follow ACEC names below.

Bourne Back River

(1,850 acres, 1989) Bourne

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

Cedar Swamp

(1,650 acres, 1975) Hopkinton and Westborough

Central Nashua River Valley

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

Cranberry Brook Watershed

(1,050 acres, 1983) Braintree and Holbrook

Ellisville Harbor

(600 acres, 1980) Plymouth

Fowl Meadow and Ponkapoag Bog

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

Golden Hills

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

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

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

Herring River Watershed

(4,450 acres, 1991) Bourne and Plymouth

Hinsdale Flats Watershed

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

Hockomock Swamp

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

Inner Cape Cod Bay

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

Kampoosa Bog Drainage Basin

(1,350 acres, 1995) Lee and Stockbridge

Karner Brook Watershed

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

Miscoe, Warren, and Whitehall Watersheds

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

Neponset River Estuary

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

Petapawag

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

Pleasant Bay

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

Pocasset River

(160 acres, 1980) Bourne

Rumney Marshes

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

Sandy Neck Barrier Beach System

(9,130 acres, 1978) Barnstable and Sandwich

Schenob Brook Drainage Basin

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

Squannassit

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

Three Mile River Watershed

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

Upper Housatonic River

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

Waquoit Bay

(2,580 acres, 1979) Falmouth and Mashpee

Weir River

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

Wellfleet Harbor

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

Weymouth Back River

(800 acres, 1982) Hingham and Weymouth

Towns with ACECs within their Boundaries

November 2010

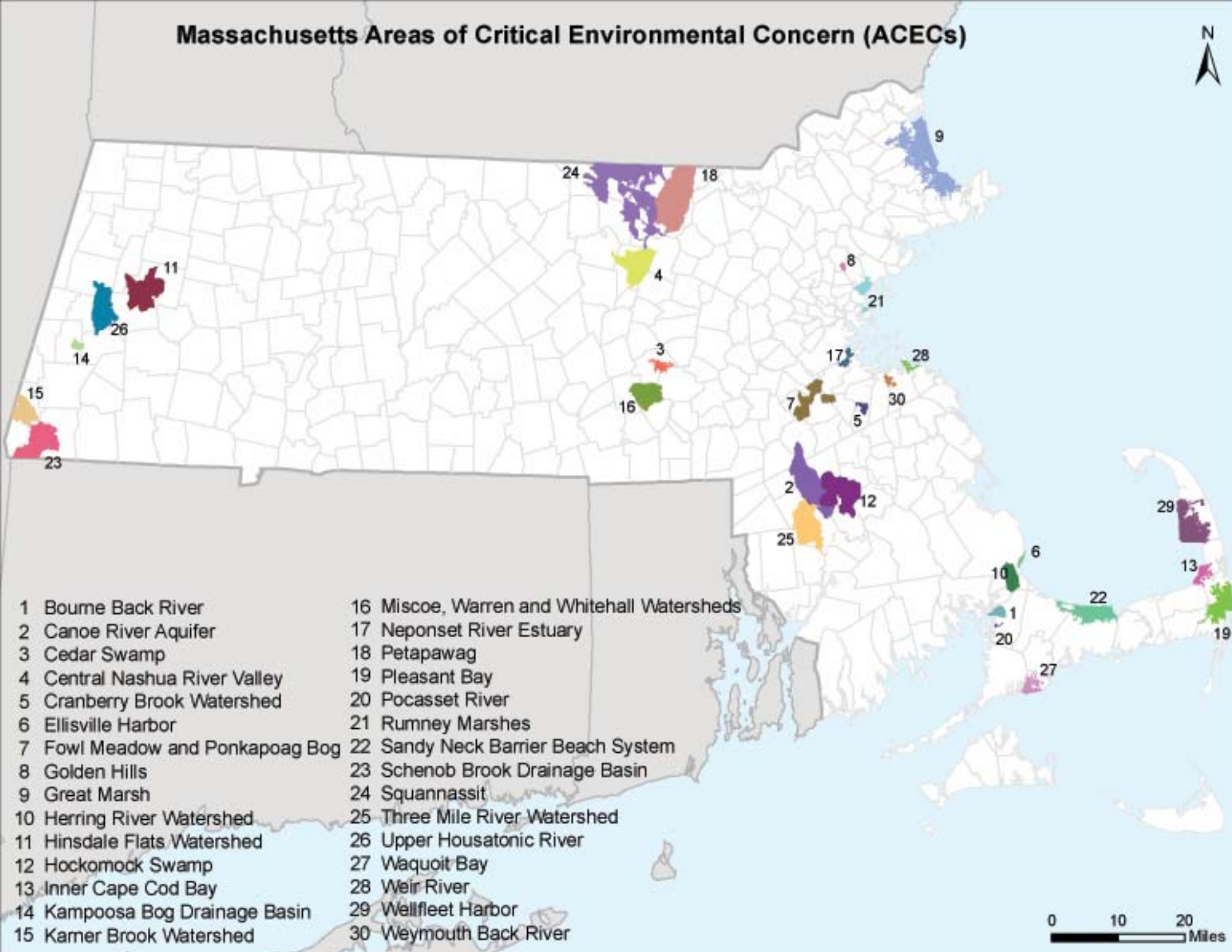
TOWN	ACEC	TOWN	ACEC
Ashby	Squannassit	Mt. Washington	Karner Brook Watershed
Ayer	Petapawag		Schenob Brook
	Squannassit	Newbury	Great Marsh
Barnstable	Sandy Neck Barrier Beach System	Norton	Hockomock Swamp
Bolton	Central Nashua River Valley		Canoe River Aquifer
Boston	Rumney Marshes		Three Mile River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

FEDERALLY LISTED ENDANGERED AND THREATENED SPECIES IN MASSACHUSETTS

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

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

Massachusetts Areas of Critical Environmental Concern (ACECs)



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

0 10 20 Miles



ATTACHMENT E

NATIONAL REGISTER OF HISTORIC PLACES

The National Register of Historic Places on-line database was reviewed for listings located within the immediate vicinity of the subject site in Watertown, Massachusetts. A review of the most recent National Register of Historical Places for Middlesex County, Massachusetts did not identify records or addresses of Historic Places that exist in the immediate vicinity of the subject site and/or outfall location. The nearest National Historic Place to the subject site is the Miles Pratt House, which is located approximately 750 feet to the northeast of the subject site. It is not anticipated that dewatering activities at the subject site will affect the Miles Pratt House National Historic Place.

nps.gov

National Park Service
U.S. Department of the Interior



National Register
of
Historic Places



HOME

EUR Z VH

DG YDQ FHG #VHDUFK

GR Z QOR DG #HQWHU

DER XW

VWDWXV

KHOS

Contact Us

Find A Park

History & Culture

Nature & Science

Education & Interpretation

TITLE LIST DISPLAY

From: NPS Digital Library

Term(s) Searched: Massachusetts and watertown

Records Displayed: 1 to 8 of 8

Go back to: [Revise Search](#)

Sort By: [Title](#) | [Relevancy](#) | [Modified](#)

[Browne, Abraham, House](#) [\[Image\]](#)

7%

[Commanding Officer's Quarters, Watertown Arsenal](#) [\[Image\]](#)

7%

[Coolidge School](#) [\[Image\]](#)

7%

[Fowle, Edmund, House](#) [\[Image\]](#)

7%

[Pratt, Miles, House](#) [\[Image\]](#)

7%

[Town Diner](#) [\[Image\]](#)

7%

[Watertown Arsenal Historic District](#) [\[Image\]](#)

7%

[Watertown High School, Old](#) [\[Image\]](#)

7%

Prev

#1

#

Next

Freedom of Information Act

Privacy Policy

Disclaimer

Accessibility

#Ddvw#ksgdwhg=#B5247246#

: 6 #

http://nrhp.focus.nps.gov/natregadvancedsearch.do;jsessionid=5D779B1DC8A59CC26D0... 2/14/2013