

FILE COPY



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 1

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

CERTIFIED MAIL RETURN RECEIPT REQUESTED

DEC 13 2012

Joseph G. Penney
Director of Development
Stop and Shop Supermarket Company, LLC
1385 Hancock Street
Quincy, MA 02169

Re: Authorization to discharge under the Remediation General Permit (RGP) –
MAG910000. Proposed Fuel Facility site located at 149 Charlton Road, Sturbridge,
Massachusetts 01566, Middlesex County; Authorization # MAG910563

Dear Mr. Penney:

Based on the review of a Notice of Intent (NOI) submitted on behalf of Stop & Shop Supermarket Company, LLC by the firm Vanasse Hangen Brustlin, Inc., for the site referenced above, the U.S. Environmental Protection Agency (EPA) hereby authorizes you, as the named Owner and Operator, to discharge in accordance with the provisions of the RGP at that site. Your authorization number is listed above.

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

Please note the enclosed checklist includes parameters that exceeded Appendix III limits. Also, please note that the metals included on the checklist are dilution dependent pollutants and subject to limitations based on a dilution factor range (DFR). With the absence of dilution to wetlands, EPA determined that the DFR for each parameter is in the one and five (1-5) range. (See the RGP Appendix IV for Massachusetts facilities) Therefore, the limits for arsenic of 10 ug/L, nickel of 29 ug/L, zinc of 66.6 ug/L and iron of 1,000 ug/L, are required to achieve permit compliance at your site.

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

This general permit and authorization to discharge will expire on September 9, 2015. You have reported that this project will terminate on January 25, 2013. If for any reason the discharge terminates sooner you are required to submit a Notice of Termination (NOT) to the attention of the contact person indicated below within 30 days of project completion.

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

Sincerely,



Thelma Murphy, Manager
Storm Water and Construction
Permits Section

Enclosure

cc: Robert Kubit, MassDEP
Greg Morse, Sturbridge PWD
William S. Taber, VHB, Inc.

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

NPDES Authorization Number:	MAG910563
Authorization Issued:	December, 2012
Facility/Site Name:	Proposed Fuel Facility
Facility/Site Address:	149 Charlton Road, Sturbridge, MA 01566, Middlesex County
	Email address of owner: jpenney@ahold.com
Legal Name of Operator:	Stop & Shop Supermarket Company, LLC
Operator contact name, title, and Address:	Joseph G. Penney, Director Of Development, 1385 Hancock Street, Quincy MA 02169
	Email: Same as Owner
Estimated date of Completion:	January 25, 2013
Category and Sub-Category:	Category III- Contaminated Construction Dewatering. Sub-category B. Known Contaminated Sites
RGP Termination Date:	September 10, 2015
Receiving Water:	Wetland

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

	<u>Parameter</u>	<u>Effluent Limit/Method#/ML</u> (All Effluent Limits are shown as Daily Maximum Limit, unless denoted by a **, in that case it will be a Monthly Average Limit)
	1. Total Suspended Solids (TSS)	30 milligrams/liter (mg/L) **, 50 mg/L for hydrostatic testing ** Me#160.2/ML5ug/L
	2. Total Residual Chlorine (TRC) ¹	Freshwater = 11 ug/L ** Saltwater = 7.5 ug/L **/ Me#330.5/ML 20ug/L
	3. Total Petroleum Hydrocarbons (TPH)	5.0 mg/L/ Me# 1664A/ML 5.0mg/L
✓	4. Cyanide (CN) ^{2,3}	Freshwater = 5.2 ug/l ** Saltwater = 1.0 ug/L **/ Me#335.4/ML 10ug/L
	5. Benzene (B)	5ug/L /50.0 ug/L for hydrostatic testing only/ Me#8260C/ML 2 ug/L
	6. Toluene (T)	(limited as ug/L total BTEX)/ Me#8260C/ ML 2ug/L
	7. Ethylbenzene (E)	(limited as ug/L total BTEX) Me#8260C/ ML 2ug/L
	8. (m,p,o) Xylenes (X)	(limited as ug/L total BTEX) Me#8260C/ ML 2ug/L
	9. Total Benzene, Toluene, Ethyl Benzene, and Xylenes (BTEX) ⁴	100 ug/L/ Me#8260C/ ML 2ug/L

	<u>Parameter</u>	<u>Effluent Limit/Method#/ML</u> (All Effluent Limits are shown as Daily Maximum Limit, unless denoted by a **, in that case it will be a Monthly Average Limit)
	10. Ethylene Dibromide (EDB) (1,2- Dibromoethane)	0.05 ug/l/ Me#8260C/ ML 10ug/L
	11. Methyl-tert-Butyl Ether (MtBE)	70.0 ug/l/Me#8260C/ML 10ug/L
	12.tert-Butyl Alcohol (TBA) (TertiaryButanol)	Monitor Only(ug/L)/Me#8260C/ML 10ug/L
	13. tert-Amyl Methyl Ether (TAME)	Monitor Only(ug/L)/Me#8260C/ML 10ug/L
	14. Naphthalene ⁵	20 ug/L /Me#8260C/ML 2ug/L
	15. Carbon Tetrachloride	4.4 ug/L /Me#8260C/ ML 5ug/L
	16. 1,2 Dichlorobenzene (o-DCB)	600 ug/L /Me#8260C/ ML 5ug/L
	17. 1,3 Dichlorobenzene (m-DCB)	320 ug/L /Me#8260C/ ML 5ug/L
	18. 1,4 Dichlorobenzene (p-DCB)	5.0 ug/L /Me#8260C/ ML 5ug/L
	18a. Total dichlorobenzene	763 ug/L - NH only /Me#8260C/ ML 5ug/L
	19. 1,1 Dichloroethane (DCA)	70 ug/L /Me#8260C/ ML 5ug/L
	20. 1,2 Dichloroethane (DCA)	5.0 ug/L /Me#8260C/ ML 5ug/L
	21. 1,1 Dichloroethene (DCE)	3.2 ug/L/Me#8260C/ ML 5ug/L
	22. cis-1,2 Dichloroethene (DCE)	70 ug/L/Me#8260C/ ML 5ug/L
	23. Methylene Chloride	4.6 ug/L/Me#8260C/ ML 5ug/L
	24. Tetrachloroethene (PCE)	5.0 ug/L/Me#8260C/ ML 5ug/L
	25. 1,1,1 Trichloro-ethane (TCA)	200 ug/L/Me#8260C/ ML 5ug/L
	26. 1,1,2 Trichloro-ethane (TCA)	5.0 ug/L /Me#8260C/ ML 5ug/L
	27. Trichloroethene (TCE)	5.0 ug/L /Me#8260C/ ML 5ug/L
	28. Vinyl Chloride (Chloroethene)	2.0 ug/L /Me#8260C/ ML 5ug/L
	29. Acetone	Monitor Only(ug/L)/Me#8260C/ML 50ug/L
	30. 1,4 Dioxane	Monitor Only /Me#1624C/ML 50ug/L
	31. Total Phenols	300 ug/L Me#420.1&420.2/ML 2 ug/L/ Me# 420.4 /ML 50ug/L
	32. Pentachlorophenol (PCP)	1.0 ug/L /Me#8270D/ML 5ug/L,Me#604 &625/ML 10ug/L
	33. Total Phthalates (Phthalate esters) ⁶	3.0 ug/L ** /Me#8270D/ML 5ug/L, Me#606/ML 10ug/L& Me#625/ML 5ug/L
	34. Bis (2-Ethylhexyl) Phthalate [Di- (ethylhexyl) Phthalate]	6.0 ug/L /Me#8270D/ML 5ug/L,Me#606/ML 10ug/L & Me#625/ML 5ug/L
	35. Total Group I Polycyclic Aromatic Hydrocarbons (PAH)	10.0 ug/L
	a. Benzo(a) Anthracene ⁷	0.0038 ug/L /Me#8270D/ ML 5ug/L, Me#610/ML 5ug/L& Me#625/ML 5ug/L

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

	Metal parameter	Total Recoverable Metal Limit @ H ¹⁰ = 50 mg/l CaCO₃ for discharges in Massachusetts (ug/l) 11/12		Minimum level=ML
		Freshwater	Saltwater	
	39. Antimony	5.6/ML 10		
✓	40. Arsenic **	10/ML 20	36/ML 20	

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

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

Footnotes:

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

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

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

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

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

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

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

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

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

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

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

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

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

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

¹⁴ Temperature sampling per Method 170.1



Enter your transmittal number

X253702

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

BRP WM10

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

UST Tank Installation

3. Type of Project or Activity

EPA General Permit: Construction Dewatering

2. Name of Permit Category

B. Applicant Information - Firm or Individual

Stop & Shop Supermarket Company, LLC

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

Penney

Joseph

G.

2. Last Name of Individual

3. First Name of Individual

4. MI

1385 Hancock Street

5. Street Address

Quincy

MA

02169

(617) 770-6914

6. City/Town

7. State

8. Zip Code

9. Telephone #

10. Ext. #

Joseph Penney

jpenney@ahold.com

11. Contact Person

12. e-mail address (optional)

C. Facility, Site or Individual Requiring Approval

Proposed Fuel Facility

1. Name of Facility, Site Or Individual

149 Charlton Road

2. Street Address

Sturbridge

MA

01566

3. City/Town

4. State

5. Zip Code

6. Telephone #

7. Ext. #

#17752 (UST Data Base)

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)*

Vanasse Hangen Brustlin, Inc.

1. Name of Firm Or Individual

101 Walnut Street

2. Address

Watertown

MA

02471

(617) 924-1770

1318

3. City/Town

4. State

5. Zip Code

6. Telephone #

7. Ext. #

William Taber

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

DEP Use Only

Permit No:

Rec'd Date:

Reviewer:

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).

Check Number

Dollar Amount

Date



November 21, 2012

Vanasse Hangen Brustlin, Inc.

Ref: 11421.00

Remediation General Permit Program
Environmental Protection Agency-Region 1
5 Post Office Square, OEP06-4
Boston, MA 02109-3912

Re: Remediation General Permit
149 Charlton Road
Sturbridge, MA 01566

To Whom It May Concern,

On behalf of the Stop & Shop Supermarket Company, LLC, Vanasse Hangen Brustlin, Inc. has prepared the attached Remediation General Permit Notice of Intent (NOI) for the purposes of dewatering during the construction of a fuel facility in Sturbridge, Massachusetts. The proposed discharge is to a nearby storm drain that flows to a brook then into a wetland.

A copy of the NOI was submitted to the Massachusetts Department of Environmental Protection Central Region. If you have any questions or require any additional information regarding this submission, please feel free to call me at (617) 924-1770 ext. 1318 or email at WTaber@VHB.com. Thank you for your time and attention to this matter.

Very truly yours,

VANASSE HANGEN BRUSTLIN, INC.

William S. Taber, PE
Senior Project Manager

Cc: MassDEP-Central Region
Stop & Shop

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

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

a) Name of facility/site : Proposed Fuel Facility		Facility/site mailing address:	
Location of facility/site :	Facility SIC code(s):	Street:	
longitude: 72° 03' 35"	5541	149 Charlton Road	
latitude: 42° 07' 14"			
b) Name of facility/site owner:		Town: Sturbridge	
Email address of facility/site owner:		State:	Zip:
jpenney@ahold.com		Massachusetts	01566
Telephone no. of facility/site owner: (617) 770-6914		County: USA	
Fax no. of facility/site owner: N/A		Owner is (check one): 1. Federal ☐ 2. State/Tribal ☐ 3. Private ☒ 4. Other ☐ if so, describe:	
Address of owner (if different from site):			
Street: 1385 Hancock Street			
Town: Quincy	State: MA	Zip: 02169	County: USA
c) Legal name of operator :		Operator telephone no: (617) 770-6914	
Stop & Shop Supermarket Company, LLC		Operator fax no.: N/A	Operator email: jpenney@ahold.com
Operator contact name and title: Joseph G. Penney, Director of Development			
Address of operator (if different from owner):		Street: 1385 Hancock Street	
Town: Quincy	State: MA	Zip: 02169	County: USA

d) Check Y for "yes" or N for "no" for the following:

1. Has a prior NPDES permit exclusion been granted for the discharge? Y ☐ N ☒, if Y, number:

2. Has a prior NPDES application (Form 1 & 2C) ever been filed for the discharge?
Y ☐ N ☒, if Y, date and tracking #:

3. Is the discharge a "new discharge" as defined by 40 CFR 122.2? Y ☒ N ☐

4. For sites in Massachusetts, is the discharge covered under the Massachusetts Contingency Plan (MCP) and exempt from state permitting? Y ☒ N ☐

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

f) Is the site/facility covered by any other EPA permit, including:

1. Multi-Sector General Permit? Y ☐ N ☒,
if Y, number:

2. Final Dewatering General Permit? Y ☐ N ☒,
if Y, number:

3. EPA Construction General Permit? Y ☐ N ☒,
if Y, number:

4. Individual NPDES permit? Y ☐ N ☒,
if Y, number:

5. any other water quality related individual or general permit? Y ☐ N ☒, if Y, number:

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

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

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

IV - Miscellaneous Related Discharges	A. Aquifer Pump Testing to Evaluate Formerly Contaminated Sites ☐ B. Well Development/Rehabilitation at Contaminated/Formely Contaminated Sites ☐ C. Hydrostatic Testing of Pipelines and Tanks ☐ D. Long-Term Remediation of Contaminated Sumps and Dikes ☐ E. Short-term Contaminated Dredging Drain Back Waters (if not covered by 401/404 permit) ☐
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2. Discharge information. Please provide information about the discharge, (attaching additional sheets as necessary) including:

a) Describe the discharge activities for which the owner/applicant is seeking coverage:			
Discharge of groundwater encountered during construction/excavation activities			
b) Provide the following information about each discharge:			
1) Number of discharge points:	2) What is the maximum and average flow rate of discharge (in cubic feet per second, ft ³ /s)?		
1	Max. flow <u>0.58 cfs</u> Is maximum flow a design value ? Y ☐ N ☒ Average flow (include units) <u>0.22 cfs</u> Is average flow a design value or estimate? <u>estimate</u>		
3) Latitude and longitude of each discharge within 100 feet:			
pt.1: lat.	<u>-72° 03' 36.45"</u>	long	<u>42° 07' 12.75"</u>
pt.2: lat.		long	
pt.3: lat.		long	
pt.4: lat.		long	
pt.5: lat.		long	
pt.6: lat.		long	
pt.7: lat.		long	
pt.8: lat.		long	
etc.			
4) If hydrostatic testing, total volume of the discharge (gals):		5) Is the discharge intermittent ☒ or seasonal ☐ ?	
<u>None</u>		Is discharge ongoing? Y ☒ N ☐	
c) Expected dates of discharge (mm/dd/yy): start <u>12/3/2012</u> end <u>1/25/2013</u>			
d) Please attach a line drawing or flow schematic showing water flow through the facility including:			
1. sources of intake water. 2. contributing flow from the operation. 3. treatment units. and 4. discharge points and receiving waters(s).			

3. Contaminant information.

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

<u>Parameter *</u>	<u>CAS Number</u>	<u>Believed Absent</u>	<u>Believed Present</u>	<u># of Samples</u>	<u>Sample Type (e.g., grab)</u>	<u>Analytical Method Used (method #)</u>	<u>Minimum Level (ML) of Test Method</u>	<u>Maximum daily value</u>		<u>Average daily value</u>	
								<u>concentration (ug/l)</u>	<u>mass (kg)</u>	<u>concentration (ug/l)</u>	<u>mass (kg)</u>
1. Total Suspended Solids (TSS)		☒	☐	1	grab						
2. Total Residual Chlorine (TRC)		☒	☐	1	grab						
3. Total Petroleum Hydrocarbons (TPH)		☒	☐	1	grab						
4. Cyanide (CN)	57125	☐	☒	1	grab	4500CN-CE	5 ug/l	6 ug/l	0.06	6 ug/l	0.03
5. Benzene (B)	71432	☒	☐	1	grab						
6. Toluene (T)	108883	☒	☐	1	grab						
7. Ethylbenzene (E)	100414	☒	☐	1	grab						
8. (m,p,o) Xylenes (X)	108883; 106423; 95476; 1330207	☒	☐	1	grab						
9. Total BTEX ²	n/a	☒	☐	1	grab						
10. Ethylene Dibromide (EDB) (1,2-Dibromoethane) ³	106934	☒	☐	1	grab						
11. Methyl-tert-Butyl Ether (MtBE)	1634044	☒	☐	1	grab						
12. tert-Butyl Alcohol (TBA) (Tertiary-Butanol)	75650	☒	☐	1	grab						

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

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

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

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

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

⁴ The sum of individual phthalate compounds.

<u>Parameter *</u>	<u>CAS Number</u>	<u>Believed Absent</u>	<u>Believed Present</u>	<u># of Samples</u>	<u>Sample Type (e.g., grab)</u>	<u>Analytical Method Used (method #)</u>	<u>Minimum Level (ML) of Test Method</u>	<u>Maximum daily value</u>		<u>Average daily value</u>	
								<u>concentration (ug/l)</u>	<u>mass (kg)</u>	<u>concentration (ug/l)</u>	<u>mass (kg)</u>
h. Acenaphthene	83329	☒	☐	1	Grab						
i. Acenaphthylene	208968	☒	☐	1	Grab						
j. Anthracene	120127	☒	☐	1	Grab						
k. Benzo(ghi) Perylene	191242	☒	☐	1	Grab						
l. Fluoranthene	206440	☒	☐	1	Grab						
m. Fluorene	86737	☒	☐	1	Grab						
n. Naphthalene	91203	☒	☐	1	Grab						
o. Phenanthrene	85018	☒	☐	1	Grab						
p. Pyrene	129000	☒	☐	1	Grab						
37. Total Polychlorinated Biphenyls (PCBs)	85687; 84742; 117840; 84662; 131113; 117817.	☒	☐								
38. Chloride	16887006	☒	☐	1	Grab						
39. Antimony	7440360	☒	☐	1	Grab						
40. Arsenic	7440382	☐	☒	1	Grab	1,6020A	0.5 ug/l	1.0 ug/l	0.01	1.0 ug/l	0.005
41. Cadmium	7440439	☒	☐	1	Grab						
42. Chromium III (trivalent)	16065831	☒	☐	1	Grab						
43. Chromium VI (hexavalent)	18540299	☒	☐	1	Grab						
44. Copper	7440508	☒	☐	1	Grab						
45. Lead	7439921	☒	☐	1	Grab						
46. Mercury	7439976	☒	☐	1	Grab						
47. Nickel	7440020	☐	☒	1	Grab	1, 6020A	0.5 ug/l	1.4 ug/l	0.014	1.4 ug/l	0.009
48. Selenium	7782492	☒	☐	1	Grab						
49. Silver	7440224	☒	☐	1	Grab						
50. Zinc	7440666	☐	☒	1	Grab	1,6020A	10.0 ug/l	22.2 ug/l	0.21	22.2 ug/l	0.11
51. Iron	7439896	☐	☒	1	Grab	19, 200.7	50.0 ug/l	3,700 ug/l	35.07	3,700 ug/l	19.08
Other (describe):		☐	☐								

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

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

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

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

a) A description of the treatment system, including a schematic of the proposed or existing treatment system: Treated Water will be discharged into an existing stormwater drainage system, which outlets to a brook then into a wetland.						
b) Identify each applicable treatment unit (check all that apply):	Frac. tank ☒	Air stripper ☐	Oil/water separator ☐	Equalization tanks ☐	Bag filter ☒	GAC filter ☒
	Chlorination ☐	De-chlorination ☐	Other (please describe):			

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

Average flow rate of discharge gpm Maximum flow rate of treatment system gpm
Design flow rate of treatment system gpm

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

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

a) Identify the discharge pathway:	Direct to receiving water ☐	Within facility (sewer) ☐	Storm drain ☒	Wetlands ☐	Other (describe):
------------------------------------	--	--	---	-----------------------------------	---

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

c) Attach a detailed map(s) indicating the site location and location of the outfall to the receiving water:

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

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

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

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

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

6. ESA and NHPA Eligibility.

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

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

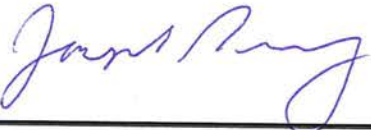
7. Supplemental information.

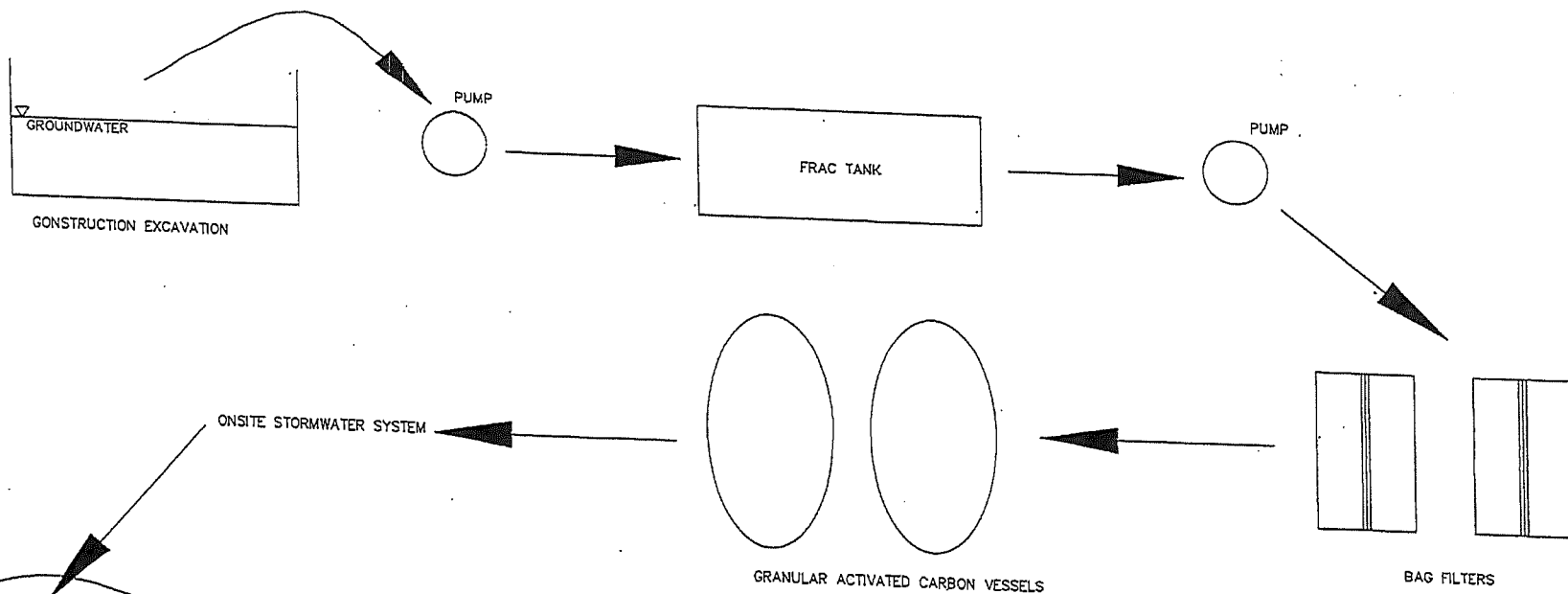
Please provide any supplemental information. Attach any analytical data used to support the application. Attach any certification(s) required by the general permit.

This RGP application is being submitted as a conservative measure given the presence of contaminants in proximity to the area where dewatering will be occurring.

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

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, I certify that the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I certify that I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Facility/Site Name:	Stop & Shop Fuel Facility #481
Operator signature:	
Printed Name & Title:	Joseph G. Penney, Director of Development
Date:	November 21, 2012

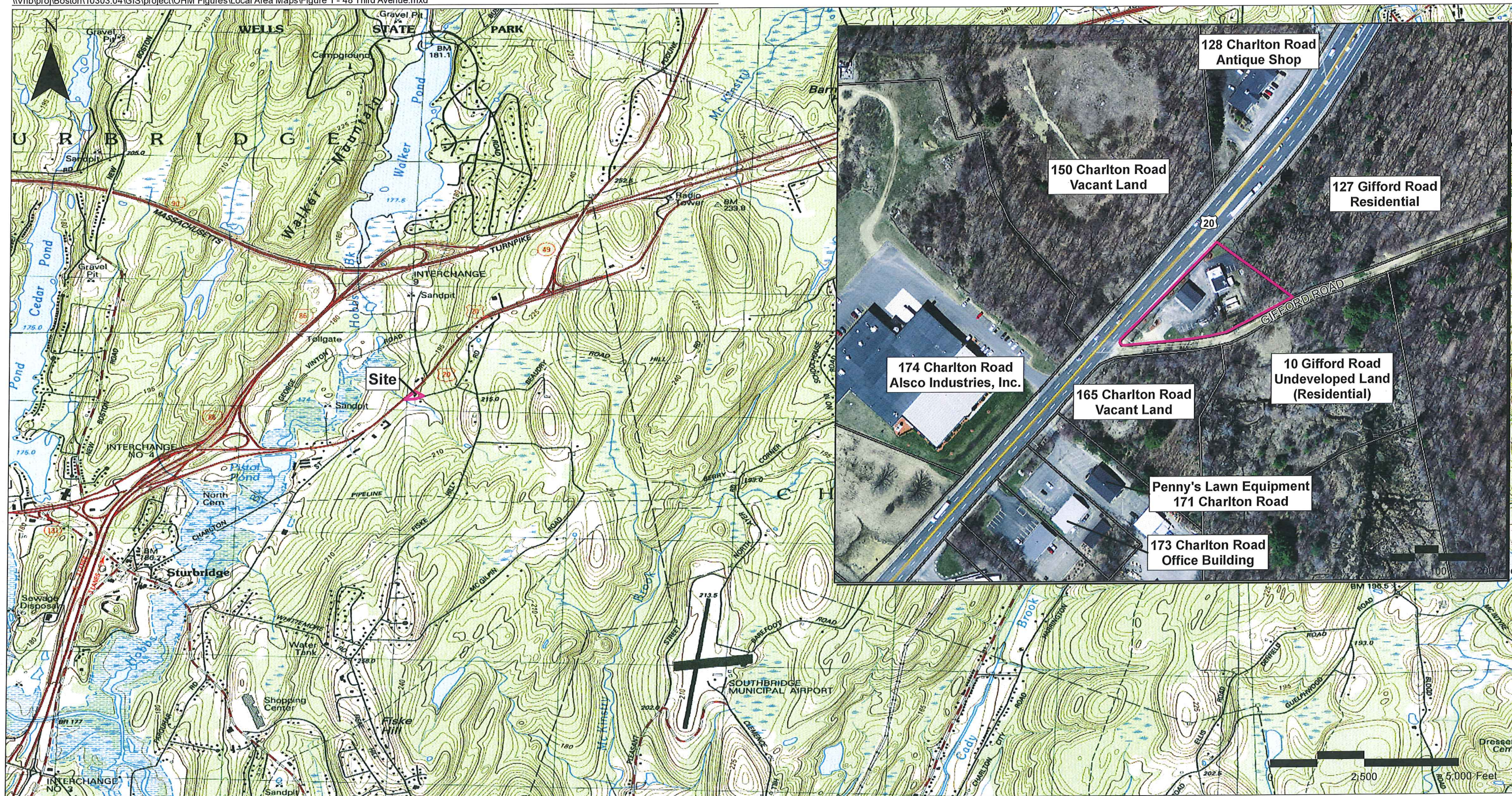


Unnamed Brook

Brook Flows Through Culvert Under Charlton Road
(Rt. 20) Then Discharges to Unnamed Wetland

PROPOSED TREATMENT SYSTEM SCHEMATIC

NOTE: SCHEMATIC IS MOST LIKELY TREATMENT
SYSTEM. FINAL TREATMENT TO BE
DETERMINED BY OPERATOR/CONTRACTOR AND
RCP EFFLUENT LIMITS.



Source: USGS Hyannis Quadrangle/Bing Maps Aerial Imagery

Legend

- Site
- Assessor's Parcels

Vanasse Hangen Brustlin, Inc.

FIGURE 1

Site Location and Local Area Map
Proposed Stop & Shop Fuel Facility
149 Charlton Road
Sturbridge, Massachusetts



Source: Consultant Name

Legend

-  Site
-  Monitoring Well Location
-  Soil Boring Location

Notes: All locations are approximate; Soil boring/monitoring well locations were advanced by VHB in September 2010.



Vanasse Hangen Brustlin, Inc.

FIGURE 2
Site Plan
Proposed Stop & Shop Fuel Facility
149 Charlton Road
Sturbridge, Massachusetts

Table 1
Summary of Groundwater Analytical Results
149 Charlton Road
Sturbridge, Massachusetts



LOCATION	Limit Type	EPA RGP Effluent Limits	Units	SB-2/VHB-2	
SAMPLING DATE				11/7/2012	
LAB SAMPLE ID				L1220111-01	
Anions by Ion Chromatography					
Chloride	Monitor Only	NE	ug/l	120000	
General Chemistry					
Solids, Total Suspended	Monthly Average	30000	ug/l	5000	U
Cyanide, Total	Monthly Average	5.2	ug/l	6	
Chlorine, Total Residual	Monthly Average	11	ug/l	20	U
TPH	Daily Maximum	5000	ug/l	4000	U
Phenolics, Total	Daily Maximum	300	ug/l	60	
Chromium, Hexavalent	Monthly Average	11.4	ug/l	10	U
Microextractables by GC					
1,2-Dibromoethane	Daily Maximum	0.05	ug/l	0.01	U
Polychlorinated Biphenyls by GC					
Aroclor 1016	NA	NE	ug/l	0.25	U
Aroclor 1221	NA	NE	ug/l	0.25	U
Aroclor 1232	NA	NE	ug/l	0.25	U
Aroclor 1242	NA	NE	ug/l	0.25	U
Aroclor 1248	NA	NE	ug/l	0.25	U
Aroclor 1254	NA	NE	ug/l	0.25	U
Aroclor 1260	NA	NE	ug/l	0.25	U
Total PCBs	Daily Maximum	0.000064	ug/L	-	
Semivolatile Organics by GC/MS					
Benzidine	NA	NE	ug/l	20	U
1,2,4-Trichlorobenzene	NA	NE	ug/l	5	U
Bis(2-chloroethyl)ether	NA	NE	ug/l	2	U
1,2-Dichlorobenzene	NA	NE	ug/l	2	U
1,3-Dichlorobenzene	Daily Maximum	320	ug/l	2	U
1,4-Dichlorobenzene	NA	NE	ug/l	2	U
3,3'-Dichlorobenzidine	NA	NE	ug/l	5	U
2,4-Dinitrotoluene	NA	NE	ug/l	5	U
2,6-Dinitrotoluene	NA	NE	ug/l	5	U
Azobenzene	NA	NE	ug/l	2	U
4-Chlorophenyl phenyl ether	NA	NE	ug/l	2	U
4-Bromophenyl phenyl ether	NA	NE	ug/l	2	U
Bis(2-chloroisopropyl)ether	NA	NE	ug/l	2	U
Bis(2-chloroethoxy)methane	NA	NE	ug/l	5	U
Hexachlorocyclopentadiene	NA	NE	ug/l	20	U
Isophorone	NA	NE	ug/l	5	U
Nitrobenzene	NA	NE	ug/l	2	U
NDPA/DPA	NA	NE	ug/l	2	U
Bis(2-ethylhexyl)phthalate	Daily Maximum	6.0	ug/l	3	U
Butyl benzyl phthalate	N/A	NE	ug/l	5	U
Di-n-butylphthalate	N/A	NE	ug/l	5	U
Di-n-octylphthalate	N/A	NE	ug/l	5	U
Diethyl phthalate	N/A	NE	ug/l	5	U
Dimethyl phthalate	N/A	NE	ug/l	5	U
Total Phthalates	Monthly Average	3.0	ug/l	-	
Aniline	NA	NE	ug/l	2	U
4-Chloroaniline	NA	NE	ug/l	5	U
2-Nitroaniline	NA	NE	ug/l	5	U
3-Nitroaniline	NA	NE	ug/l	5	U
4-Nitroaniline	NA	NE	ug/l	5	U
Dibenzofuran	NA	NE	ug/l	2	U
n-Nitrosodimethylamine	NA	NE	ug/l	2	U
2,4,6-Trichlorophenol	NA	NE	ug/l	5	U
p-Chloro-m-cresol	NA	NE	ug/l	2	U
2-Chlorophenol	NA	NE	ug/l	2	U
2,4-Dichlorophenol	NA	NE	ug/l	5	U
2,4-Dimethylphenol	NA	NE	ug/l	5	U
2-Nitrophenol	NA	NE	ug/l	10	U
4-Nitrophenol	NA	NE	ug/l	10	U
2,4-Dinitrophenol	NA	NE	ug/l	20	U
4,6-Dinitro-o-cresol	NA	NE	ug/l	10	U
Phenol	NA	NE	ug/l	5	U
2-Methylphenol	NA	NE	ug/l	5	U
3-Methylphenol/4-Methylphenol	NA	NE	ug/l	5	U
2,4,5-Trichlorophenol	NA	NE	ug/l	5	U
Benzoic Acid	NA	NE	ug/l	50	U
Benzyl Alcohol	NA	NE	ug/l	2	U
Carbazole	NA	NE	ug/l	2	U
Pyridine	NA	NE	ug/l	5	U

Table 1
Summary of Groundwater Analytical Results
149 Charlton Road
Sturbridge, Massachusetts



LOCATION	Limit Type	EPA RGP Effluent Limits	Units	SB-2/VHB-2	
SAMPLING DATE				11/7/2012	
LAB SAMPLE ID				L1220111-01	
Semivolatile Organics by GC/MS-SIM					
Benzo(a)anthracene	Daily Maximum	0.0038	ug/l	0.2	U
Benzo(a)pyrene	Daily Maximum	0.0038	ug/l	0.2	U
Benzo(b)fluoranthene	Daily Maximum	0.0038	ug/l	0.2	U
Benzo(k)fluoranthene	Daily Maximum	0.0038	ug/l	0.2	U
Chrysene	Daily Maximum	0.0038	ug/l	0.2	U
Dibenzo(a,h)anthracene	Daily Maximum	0.0038	ug/l	0.2	U
Indeno(1,2,3-cd)Pyrene	Daily Maximum	0.0038	ug/l	0.2	U
Total Group I PAHs	Daily Maximum	10.0	ug/l	-	
Acenaphthene	NA	NE	ug/l	0.2	U
Acenaphthylene	NA	NE	ug/l	0.2	U
Anthracene	NA	NE	ug/l	0.2	U
Benzo(ghi)perylene	NA	NE	ug/l	0.2	U
Fluoranthene	NA	NE	ug/l	0.2	U
Fluorene	NA	NE	ug/l	0.2	U
Naphthalene	Daily Maximum	20	ug/l	0.2	U
Phenanthrene	NA	NE	ug/l	0.2	U
Pyrene	NA	NE	ug/l	0.2	U
Total Group II PAHs	Daily Maximum	100	ug/l	-	
2-Chloronaphthalene	NA	NE	ug/l	0.2	U
Hexachlorobutadiene	NA	NE	ug/l	0.5	U
1-Methylnaphthalene	NA	NE	ug/l	0.2	U
2-Methylnaphthalene	NA	NE	ug/l	0.2	U
Pentachlorophenol	NA	NE	ug/l	0.8	U
Hexachlorobenzene	NA	NE	ug/l	0.8	U
Hexachloroethane	NA	NE	ug/l	0.8	U
Total Metals					
Antimony, Total	Daily Maximum	5.6	ug/l	0.5	U
Arsenic, Total	Monthly Average	10	ug/l	1	
Cadmium, Total	Monthly Average	0.2	ug/l	0.2	U
Chromium, Total	Monthly Average	48.8	ug/l	1	U
Copper, Total	Monthly Average	5.2	ug/l	1	U
Iron, Total	Daily Maximum	1,000	ug/l	3700	
Lead, Total	Monthly Average	1.3	ug/l	1	U
Mercury, Total	Monthly Average	0.9	ug/l	0.2	U
Nickel, Total	Monthly Average	29	ug/l	1.4	
Selenium, Total	Monthly Average	5	ug/l	5	U
Silver, Total	Daily Maximum	1.2	ug/l	0.3	U
Zinc, Total	Monthly Average	66.6	ug/l	22.2	
Volatile Organics by GC/MS					
Benzene	NA	NE	ug/l	0.5	U
Toluene	NA	NE	ug/l	0.75	U
Ethylbenzene	NA	NE	ug/l	0.5	U
p/m-Xylene	NA	NE	ug/l	1	U
o-Xylene	NA	NE	ug/l	1	U
Xylenes, Total	NA	NE	ug/l	1	U
Total BTEX	Daily Maximum	100	ug/L	-	
Methylene chloride	Daily Maximum	4.6	ug/l	3	U
1,1-Dichloroethane	Daily Maximum	70	ug/l	0.75	U
Chloroform	NA	NE	ug/l	0.75	U
Carbon tetrachloride	Daily Maximum	4.4	ug/l	0.5	U
1,2-Dichloropropane	NA	NE	ug/l	1.8	U
Dibromochloromethane	NA	NE	ug/l	0.5	U
1,1,2-Trichloroethane	Daily Maximum	5.0	ug/l	0.75	U
Tetrachloroethene	Daily Maximum	5.0	ug/l	0.5	U
Chlorobenzene	NA	NE	ug/l	0.5	U
Trichlorofluoromethane	NA	NE	ug/l	2.5	U
1,2-Dichloroethane	Daily Maximum	5.0	ug/l	0.5	U
1,1,1-Trichloroethane	Daily Maximum	200	ug/l	0.5	U
Bromodichloromethane	NA	NE	ug/l	0.5	U
trans-1,3-Dichloropropene	NA	NE	ug/l	0.5	U
cis-1,3-Dichloropropene	NA	NE	ug/l	0.5	U
1,1-Dichloropropene	NA	NE	ug/l	2.5	U
Bromoform	NA	NE	ug/l	2	U
1,1,2,2-Tetrachloroethane	NA	NE	ug/l	0.5	U
Chloromethane	NA	NE	ug/l	2.5	U

Table 1
Summary of Groundwater Analytical Results
149 Charlton Road
Sturbridge, Massachusetts



LOCATION	Limit Type	EPA RGP Effluent Limits	Units	SB-2/VHB-2	
SAMPLING DATE				11/7/2012	
LAB SAMPLE ID				L1220111-01	
Bromomethane	NA	NE	ug/l	1	U
Vinyl chloride	Daily Maximum	2.0	ug/l	1	U
Chloroethane	NA	NE	ug/l	1	U
1,1-Dichloroethene	Daily Maximum	3.2	ug/l	0.5	U
trans-1,2-Dichloroethene	NA	NE	ug/l	0.75	U
Trichloroethene	Daily Maximum	5.0	ug/l	0.5	U
1,2-Dichlorobenzene	Daily Maximum	600	ug/l	2.5	U
1,3-Dichlorobenzene	NA	NE	ug/l	2.5	U
1,4-Dichlorobenzene	Daily Maximum	5.0	ug/l	2.5	U
Methyl tert butyl ether	Daily Maximum	70	ug/l	1	U
cis-1,2-Dichloroethene	Daily Maximum	70	ug/l	0.5	U
Dibromomethane	NA	NE	ug/l	5	U
1,4-Dichlorobutane	NA	NE	ug/l	5	U
1,2,3-Trichloropropane	NA	NE	ug/l	5	U
Styrene	NA	NE	ug/l	1	U
Dichlorodifluoromethane	NA	NE	ug/l	5	U
Acetone	Monitor Only	NE	ug/l	5	U
Carbon disulfide	NA	NE	ug/l	5	U
2-Butanone	NA	NE	ug/l	5	U
Vinyl acetate	NA	NE	ug/l	5	U
4-Methyl-2-pentanone	NA	NE	ug/l	5	U
2-Hexanone	NA	NE	ug/l	5	U
Ethyl methacrylate	NA	NE	ug/l	5	U
Acrylonitrile	NA	NE	ug/l	5	U
Bromochloromethane	NA	NE	ug/l	2.5	U
Tetrahydrofuran	NA	NE	ug/l	5	U
2,2-Dichloropropane	NA	NE	ug/l	2.5	U
1,2-Dibromoethane	Daily Maximum	0.05	ug/l	2	U
1,3-Dichloropropane	NA	NE	ug/l	2.5	U
1,1,1,2-Tetrachloroethane	NA	NE	ug/l	0.5	U
Bromobenzene	NA	NE	ug/l	2.5	U
n-Butylbenzene	NA	NE	ug/l	0.5	U
sec-Butylbenzene	NA	NE	ug/l	0.5	U
tert-Butylbenzene	NA	NE	ug/l	2.5	U
o-Chlorotoluene	NA	NE	ug/l	2.5	U
p-Chlorotoluene	NA	NE	ug/l	2.5	U
1,2-Dibromo-3-chloropropane	NA	NE	ug/l	2.5	U
Hexachlorobutadiene	NA	NE	ug/l	0.5	U
Isopropylbenzene	NA	NE	ug/l	0.5	U
p-Isopropyltoluene	NA	NE	ug/l	0.5	U
Naphthalene	Daily Maximum	20	ug/l	2.5	U
n-Propylbenzene	NA	NE	ug/l	0.5	U
1,2,3-Trichlorobenzene	NA	NE	ug/l	2.5	U
1,2,4-Trichlorobenzene	NA	NE	ug/l	2.5	U
1,3,5-Trimethylbenzene	NA	NE	ug/l	2.5	U
1,2,4-Trimethylbenzene	NA	NE	ug/l	2.5	U
trans-1,4-Dichloro-2-butene	NA	NE	ug/l	2.5	U
Ethyl ether	NA	NE	ug/l	2.5	U
Tert-Butyl Alcohol	Monitor Only	NE	ug/l	10	U
Tertiary-Amyl Methyl Ether	Monitor Only	NE	ug/l	2	U
Volatile Organics by GC/MS-SIM					
1,4-Dioxane	Monitor Only	NE	ug/l	3	U

Notes:

All bolded results are laboratory detection limits that exceeded regulatory standards
 "U"= analyte was not detected above indicated laboratory reporting limit
 "NE"= Standard has not been established.
 "ug/L" = Micrograms per liter or parts per billion (ppb)
 NA = Not Applicable



ANALYTICAL REPORT

Lab Number:	L1220111
Client:	VHB Environmental Engineering 101 Walnut Street PO Box 9151 Watertown, MA 02471
ATTN:	Paul McKinlay
Phone:	(617) 924-1770
Project Name:	149 CHARLTON ROAD
Project Number:	11421.00
Report Date:	11/14/12

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

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



Project Name: 149 CHARLTON ROAD
Project Number: 11421.00

Lab Number: L1220111
Report Date: 11/14/12

Alpha Sample ID	Client ID	Sample Location	Collection Date/Time
L1220111-01	SB-2/VHB-2	STURBRIDGE, MA	11/07/12 09:30

Project Name: 149 CHARLTON ROAD
Project Number: 11421.00

Lab Number: L1220111
Report Date: 11/14/12

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: 149 CHARLTON ROAD
Project Number: 11421.00

Lab Number: L1220111
Report Date: 11/14/12

Case Narrative (continued)

Semivolatile Organics

The WG573201-2/-3 LCS/LCSD recoveries, associated with L1220111-01, are below the acceptance criteria for Benzidine (8%/2%); however, they have been identified as "difficult" analytes. The results of the associated sample are reported.

Solids, Total Suspended

WG573053: A Laboratory Duplicate could not be performed due to insufficient sample volume available for analysis.

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

Authorized Signature:



Michelle M. Morris

Title: Technical Director/Representative

Date: 11/14/12

ORGANICS

VOLATILES

Project Name: 149 CHARLTON ROAD**Lab Number:** L1220111**Project Number:** 11421.00**Report Date:** 11/14/12**SAMPLE RESULTS**

Lab ID: L1220111-01
Client ID: SB-2/VHB-2
Sample Location: STURBRIDGE, MA
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 11/12/12 16:12
Analyst: MM

Date Collected: 11/07/12 09:30
Date Received: 11/07/12
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	ND		ug/l	0.50	--	1
Chlorobenzene	ND		ug/l	0.50	--	1
Trichlorofluoromethane	ND		ug/l	2.5	--	1
1,2-Dichloroethane	ND		ug/l	0.50	--	1
1,1,1-Trichloroethane	ND		ug/l	0.50	--	1
Bromodichloromethane	ND		ug/l	0.50	--	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	--	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	--	1
1,1-Dichloropropene	ND		ug/l	2.5	--	1
Bromoform	ND		ug/l	2.0	--	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	--	1
Benzene	ND		ug/l	0.50	--	1
Toluene	ND		ug/l	0.75	--	1
Ethylbenzene	ND		ug/l	0.50	--	1
Chloromethane	ND		ug/l	2.5	--	1
Bromomethane	ND		ug/l	1.0	--	1
Vinyl chloride	ND		ug/l	1.0	--	1
Chloroethane	ND		ug/l	1.0	--	1
1,1-Dichloroethene	ND		ug/l	0.50	--	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	--	1
Trichloroethene	ND		ug/l	0.50	--	1
1,2-Dichlorobenzene	ND		ug/l	2.5	--	1
1,3-Dichlorobenzene	ND		ug/l	2.5	--	1
1,4-Dichlorobenzene	ND		ug/l	2.5	--	1

Project Name: 149 CHARLTON ROAD**Lab Number:** L1220111**Project Number:** 11421.00**Report Date:** 11/14/12**SAMPLE RESULTS**

Lab ID: L1220111-01

Date Collected: 11/07/12 09:30

Client ID: SB-2/VHB-2

Date Received: 11/07/12

Sample Location: STURBRIDGE, MA

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
1,4-Dichlorobutane	ND		ug/l	5.0	--	1
1,2,3-Trichloropropane	ND		ug/l	5.0	--	1
Styrene	ND		ug/l	1.0	--	1
Dichlorodifluoromethane	ND		ug/l	5.0	--	1
Acetone	ND		ug/l	5.0	--	1
Carbon disulfide	ND		ug/l	5.0	--	1
2-Butanone	ND		ug/l	5.0	--	1
Vinyl acetate	ND		ug/l	5.0	--	1
4-Methyl-2-pentanone	ND		ug/l	5.0	--	1
2-Hexanone	ND		ug/l	5.0	--	1
Ethyl methacrylate	ND		ug/l	5.0	--	1
Acrylonitrile	ND		ug/l	5.0	--	1
Bromochloromethane	ND		ug/l	2.5	--	1
Tetrahydrofuran	ND		ug/l	5.0	--	1
2,2-Dichloropropane	ND		ug/l	2.5	--	1
1,2-Dibromoethane	ND		ug/l	2.0	--	1
1,3-Dichloropropane	ND		ug/l	2.5	--	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	--	1
Bromobenzene	ND		ug/l	2.5	--	1
n-Butylbenzene	ND		ug/l	0.50	--	1
sec-Butylbenzene	ND		ug/l	0.50	--	1
tert-Butylbenzene	ND		ug/l	2.5	--	1
o-Chlorotoluene	ND		ug/l	2.5	--	1
p-Chlorotoluene	ND		ug/l	2.5	--	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	--	1
Hexachlorobutadiene	ND		ug/l	0.50	--	1
Isopropylbenzene	ND		ug/l	0.50	--	1
p-Isopropyltoluene	ND		ug/l	0.50	--	1
Naphthalene	ND		ug/l	2.5	--	1
n-Propylbenzene	ND		ug/l	0.50	--	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	--	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	--	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	--	1

Project Name: 149 CHARLTON ROAD**Lab Number:** L1220111**Project Number:** 11421.00**Report Date:** 11/14/12**SAMPLE RESULTS**

Lab ID: L1220111-01

Date Collected: 11/07/12 09:30

Client ID: SB-2/VHB-2

Date Received: 11/07/12

Sample Location: STURBRIDGE, MA

Field Prep: Not Specified

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

1,2,4-Trimethylbenzene	ND		ug/l	2.5	--	1
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	92		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	110		70-130
Dibromofluoromethane	99		70-130

Project Name: 149 CHARLTON ROAD
Project Number: 11421.00

Lab Number: L1220111
Report Date: 11/14/12

SAMPLE RESULTS

Lab ID: L1220111-01
Client ID: SB-2/VHB-2
Sample Location: STURBRIDGE, MA
Matrix: Water
Analytical Method: 1,8260C-SIM(M)
Analytical Date: 11/13/12 12:48
Analyst: MM

Date Collected: 11/07/12 09:30
Date Received: 11/07/12
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: 149 CHARLTON ROAD**Lab Number:** L1220111**Project Number:** 11421.00**Report Date:** 11/14/12**SAMPLE RESULTS**

Lab ID: L1220111-01
Client ID: SB-2/VHB-2
Sample Location: STURBRIDGE, MA
Matrix: Water
Analytical Method: 14,504.1
Analytical Date: 11/12/12 16:10
Analyst: SH

Date Collected: 11/07/12 09:30
Date Received: 11/07/12
Field Prep: Not Specified
Extraction Date: 11/12/12 10:30

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

Project Name: 149 CHARLTON ROAD**Lab Number:** L1220111**Project Number:** 11421.00**Report Date:** 11/14/12**Method Blank Analysis**
Batch Quality Control

Analytical Method: 14,504.1

Analytical Date: 11/12/12 12:50

Analyst: SH

Extraction Date: 11/12/12 10:30

Parameter	Result	Qualifier	Units	RL	MDL
Microextractables by GC - Westborough Lab for sample(s): 01 Batch: WG573047-1					
1,2-Dibromoethane	ND		ug/l	0.010	--
1,2-Dibromo-3-chloropropane	ND		ug/l	0.010	--

Project Name: 149 CHARLTON ROAD

Lab Number: L1220111

Project Number: 11421.00

Report Date: 11/14/12

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C

Analytical Date: 11/12/12 13:30

Analyst: MM

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG573367-3					
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: 149 CHARLTON ROAD

Lab Number: L1220111

Project Number: 11421.00

Report Date: 11/14/12

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C

Analytical Date: 11/12/12 13:30

Analyst: MM

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG573367-3					
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	--
1,4-Dichlorobutane	ND		ug/l	5.0	--
1,2,3-Trichloropropane	ND		ug/l	5.0	--
Styrene	ND		ug/l	1.0	--
Dichlorodifluoromethane	ND		ug/l	5.0	--
Acetone	ND		ug/l	5.0	--
Carbon disulfide	ND		ug/l	5.0	--
2-Butanone	ND		ug/l	5.0	--
Vinyl acetate	ND		ug/l	5.0	--
4-Methyl-2-pentanone	ND		ug/l	5.0	--
2-Hexanone	ND		ug/l	5.0	--
Ethyl methacrylate	ND		ug/l	5.0	--
Acrylonitrile	ND		ug/l	5.0	--
Bromochloromethane	ND		ug/l	2.5	--
Tetrahydrofuran	ND		ug/l	5.0	--
2,2-Dichloropropane	ND		ug/l	2.5	--
1,2-Dibromoethane	ND		ug/l	2.0	--
1,3-Dichloropropane	ND		ug/l	2.5	--
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	--
Bromobenzene	ND		ug/l	2.5	--
n-Butylbenzene	ND		ug/l	0.50	--
sec-Butylbenzene	ND		ug/l	0.50	--
tert-Butylbenzene	ND		ug/l	2.5	--
o-Chlorotoluene	ND		ug/l	2.5	--
p-Chlorotoluene	ND		ug/l	2.5	--
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	--



Project Name: 149 CHARLTON ROAD

Lab Number: L1220111

Project Number: 11421.00

Report Date: 11/14/12

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C

Analytical Date: 11/12/12 13:30

Analyst: MM

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG573367-3					
Hexachlorobutadiene	ND		ug/l	0.50	--
Isopropylbenzene	ND		ug/l	0.50	--
p-Isopropyltoluene	ND		ug/l	0.50	--
Naphthalene	ND		ug/l	2.5	--
n-Propylbenzene	ND		ug/l	0.50	--
1,2,3-Trichlorobenzene	ND		ug/l	2.5	--
1,2,4-Trichlorobenzene	ND		ug/l	2.5	--
1,3,5-Trimethylbenzene	ND		ug/l	2.5	--
1,2,4-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	91		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	116		70-130
Dibromofluoromethane	101		70-130

Project Name: 149 CHARLTON ROAD**Lab Number:** L1220111**Project Number:** 11421.00**Report Date:** 11/14/12**Method Blank Analysis**
Batch Quality Control

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

Analytical Date: 11/13/12 12:16

Analyst: MM

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01 Batch: WG573425-3					
1,4-Dioxane	ND		ug/l	3.0	--

Lab Control Sample Analysis

Batch Quality Control

Project Name: 149 CHARLTON ROAD

Lab Number: L1220111

Project Number: 11421.00

Report Date: 11/14/12

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Microextractables by GC - Westborough Lab Associated sample(s): 01 Batch: WG573047-2								
1,2-Dibromoethane	107		-		70-130	-		20
1,2-Dibromo-3-chloropropane	95		-		70-130	-		20

Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG573367-1 WG573367-2								
Methylene chloride	96		98		70-130	2		20
1,1-Dichloroethane	91		92		70-130	1		20
Chloroform	93		94		70-130	1		20
Carbon tetrachloride	93		89		63-132	4		20
1,2-Dichloropropane	92		89		70-130	3		20
Dibromochloromethane	89		88		63-130	1		20
1,1,2-Trichloroethane	91		85		70-130	7		20
Tetrachloroethene	91		87		70-130	4		20
Chlorobenzene	89		90		75-130	1		25

Lab Control Sample Analysis

Batch Quality Control

Project Name: 149 CHARLTON ROAD

Project Number: 11421.00

Lab Number: L1220111

Report Date: 11/14/12

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: WG573367-1 WG573367-2								
Trichlorofluoromethane	98		94		62-150	4		20
1,2-Dichloroethane	89		89		70-130	0		20
1,1,1-Trichloroethane	93		91		67-130	2		20
Bromodichloromethane	91		87		67-130	4		20
trans-1,3-Dichloropropene	86		85		70-130	1		20
cis-1,3-Dichloropropene	89		88		70-130	1		20
1,1-Dichloropropene	97		92		70-130	5		20
Bromoform	84		86		54-136	2		20
1,1,2,2-Tetrachloroethane	86		89		67-130	3		20
Benzene	92		91		70-130	1		25
Toluene	91		89		70-130	2		25
Ethylbenzene	90		88		70-130	2		20
Chloromethane	87		85		64-130	2		20
Bromomethane	62		53		39-139	16		20
Vinyl chloride	92		87		55-140	6		20
Chloroethane	92		90		55-138	2		20
1,1-Dichloroethene	97		95		61-145	2		25
trans-1,2-Dichloroethene	95		93		70-130	2		20
Trichloroethene	95		92		70-130	3		25
1,2-Dichlorobenzene	88		93		70-130	6		20
1,3-Dichlorobenzene	88		91		70-130	3		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: 149 CHARLTON ROAD

Project Number: 11421.00

Lab Number: L1220111

Report Date: 11/14/12

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: WG573367-1 WG573367-2								
1,4-Dichlorobenzene	87		91		70-130	4		20
Methyl tert butyl ether	90		89		63-130	1		20
p/m-Xylene	90		90		70-130	0		20
o-Xylene	91		90		70-130	1		20
cis-1,2-Dichloroethene	93		92		70-130	1		20
Dibromomethane	90		88		70-130	2		20
1,4-Dichlorobutane	84		87		70-130	4		20
1,2,3-Trichloropropane	86		89		64-130	3		20
Styrene	93		91		70-130	2		20
Dichlorodifluoromethane	85		81		36-147	5		20
Acetone	89		70		58-148	24	Q	20
Carbon disulfide	92		90		51-130	2		20
2-Butanone	114		81		63-138	34	Q	20
Vinyl acetate	93		90		70-130	3		20
4-Methyl-2-pentanone	92		87		59-130	6		20
2-Hexanone	83		77		57-130	8		20
Ethyl methacrylate	86		85		70-130	1		20
Acrylonitrile	91		85		70-130	7		20
Bromochloromethane	96		95		70-130	1		20
Tetrahydrofuran	94		96		58-130	2		20
2,2-Dichloropropane	94		92		63-133	2		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: 149 CHARLTON ROAD

Project Number: 11421.00

Lab Number: L1220111

Report Date: 11/14/12

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: WG573367-1 WG573367-2								
1,2-Dibromoethane	89		86		70-130	3		20
1,3-Dichloropropane	90		90		70-130	0		20
1,1,1,2-Tetrachloroethane	91		88		64-130	3		20
Bromobenzene	89		91		70-130	2		20
n-Butylbenzene	86		88		53-136	2		20
sec-Butylbenzene	88		89		70-130	1		20
tert-Butylbenzene	89		92		70-130	3		20
o-Chlorotoluene	87		92		70-130	6		20
p-Chlorotoluene	88		89		70-130	1		20
1,2-Dibromo-3-chloropropane	88		85		41-144	3		20
Hexachlorobutadiene	77		84		63-130	9		20
Isopropylbenzene	89		92		70-130	3		20
p-Isopropyltoluene	89		92		70-130	3		20
Naphthalene	68	Q	66	Q	70-130	3		20
n-Propylbenzene	89		92		69-130	3		20
1,2,3-Trichlorobenzene	68	Q	66	Q	70-130	3		20
1,2,4-Trichlorobenzene	74		73		70-130	1		20
1,3,5-Trimethylbenzene	85		88		64-130	3		20
1,2,4-Trimethylbenzene	88		92		70-130	4		20
trans-1,4-Dichloro-2-butene	79		73		70-130	8		20
Ethyl ether	88		88		59-134	0		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: 149 CHARLTON ROAD

Project Number: 11421.00

Lab Number: L1220111

Report Date: 11/14/12

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: WG573367-1 WG573367-2								
Isopropyl Ether	91		91		70-130	0		20
tert-Butyl Alcohol	116		106		70-130	9		20
Ethyl-Tert-Butyl-Ether	92		91		70-130	1		20
Tertiary-Amyl Methyl Ether	88		87		66-130	1		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	92		94		70-130
Toluene-d8	97		94		70-130
4-Bromofluorobenzene	99		106		70-130
Dibromofluoromethane	103		102		70-130

Lab Control Sample Analysis**Batch Quality Control****Project Name:** 149 CHARLTON ROAD**Project Number:** 11421.00**Lab Number:** L1220111**Report Date:** 11/14/12

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01 Batch: WG573425-1 WG573425-2								
1,4-Dioxane	112		104		70-130	7		25

Matrix Spike Analysis

Batch Quality Control

Project Name: 149 CHARLTON ROAD
Project Number: 11421.00

Lab Number: L1220111
Report Date: 11/14/12

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Microextractables by GC - Westborough Lab Associated sample(s): 01 QC Batch ID: WG573047-3 QC Sample: L1220178-01 Client ID: MS Sample												
1,2-Dibromoethane	ND	0.256	0.278	109		-	-		70-130	-		20
1,2-Dibromo-3-chloropropane	ND	0.256	0.256	95		-	-		70-130	-		20

SEMIVOLATILES

Project Name: 149 CHARLTON ROAD**Lab Number:** L1220111**Project Number:** 11421.00**Report Date:** 11/14/12**SAMPLE RESULTS**

Lab ID: L1220111-01
Client ID: SB-2/VHB-2
Sample Location: STURBRIDGE, MA
Matrix: Water
Analytical Method: 1,8270D
Analytical Date: 11/13/12 12:16
Analyst: RC

Date Collected: 11/07/12 09:30
Date Received: 11/07/12
Field Prep: Not Specified
Extraction Method: EPA 3510C
Extraction Date: 11/12/12 15:40

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: 149 CHARLTON ROAD**Lab Number:** L1220111**Project Number:** 11421.00**Report Date:** 11/14/12**SAMPLE RESULTS**

Lab ID: L1220111-01

Date Collected: 11/07/12 09:30

Client ID: SB-2/VHB-2

Date Received: 11/07/12

Sample Location: STURBRIDGE, MA

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	53		21-120
Phenol-d6	33		10-120
Nitrobenzene-d5	65		23-120
2-Fluorobiphenyl	73		15-120
2,4,6-Tribromophenol	71		10-120
4-Terphenyl-d14	89		41-149

Project Name: 149 CHARLTON ROAD**Lab Number:** L1220111**Project Number:** 11421.00**Report Date:** 11/14/12**SAMPLE RESULTS**

Lab ID: L1220111-01
Client ID: SB-2/VHB-2
Sample Location: STURBRIDGE, MA
Matrix: Water
Analytical Method: 1,8270D-SIM
Analytical Date: 11/10/12 14:09
Analyst: AS

Date Collected: 11/07/12 09:30
Date Received: 11/07/12
Field Prep: Not Specified
Extraction Method: EPA 3510C
Extraction Date: 11/08/12 02:48

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	41		21-120
Phenol-d6	26		10-120
Nitrobenzene-d5	73		23-120
2-Fluorobiphenyl	69		15-120
2,4,6-Tribromophenol	75		10-120
4-Terphenyl-d14	79		41-149



Project Name: 149 CHARLTON ROAD

Lab Number: L1220111

Project Number: 11421.00

Report Date: 11/14/12

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270D-SIM
 Analytical Date: 11/10/12 12:20
 Analyst: AS

Extraction Method: EPA 3510C
 Extraction Date: 11/08/12 02:48

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01 Batch: WG572537-1					
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: 149 CHARLTON ROAD

Lab Number: L1220111

Project Number: 11421.00

Report Date: 11/14/12

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270D-SIM
 Analytical Date: 11/10/12 12:20
 Analyst: AS

Extraction Method: EPA 3510C
 Extraction Date: 11/08/12 02:48

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01 Batch: WG572537-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	66		21-120
Phenol-d6	59		10-120
Nitrobenzene-d5	93		23-120
2-Fluorobiphenyl	83		15-120
2,4,6-Tribromophenol	105		10-120
4-Terphenyl-d14	106		41-149

Project Name: 149 CHARLTON ROAD

Lab Number: L1220111

Project Number: 11421.00

Report Date: 11/14/12

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270D
 Analytical Date: 11/13/12 11:05
 Analyst: RC

Extraction Method: EPA 3510C
 Extraction Date: 11/12/12 15:40

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG573201-1					
Benzidine	ND		ug/l	20	--
1,2,4-Trichlorobenzene	ND		ug/l	5.0	--
Bis(2-chloroethyl)ether	ND		ug/l	2.0	--
1,2-Dichlorobenzene	ND		ug/l	2.0	--
1,3-Dichlorobenzene	ND		ug/l	2.0	--
1,4-Dichlorobenzene	ND		ug/l	2.0	--
3,3'-Dichlorobenzidine	ND		ug/l	5.0	--
2,4-Dinitrotoluene	ND		ug/l	5.0	--
2,6-Dinitrotoluene	ND		ug/l	5.0	--
Azobenzene	ND		ug/l	2.0	--
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	--
4-Bromophenyl phenyl ether	ND		ug/l	2.0	--
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	--
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	--
Hexachlorocyclopentadiene	ND		ug/l	20	--
Isophorone	ND		ug/l	5.0	--
Nitrobenzene	ND		ug/l	2.0	--
NDPA/DPA	ND		ug/l	2.0	--
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	--
Butyl benzyl phthalate	ND		ug/l	5.0	--
Di-n-butylphthalate	ND		ug/l	5.0	--
Di-n-octylphthalate	ND		ug/l	5.0	--
Diethyl phthalate	ND		ug/l	5.0	--
Dimethyl phthalate	ND		ug/l	5.0	--
Aniline	ND		ug/l	2.0	--
4-Chloroaniline	ND		ug/l	5.0	--
2-Nitroaniline	ND		ug/l	5.0	--
3-Nitroaniline	ND		ug/l	5.0	--
4-Nitroaniline	ND		ug/l	5.0	--
Dibenzofuran	ND		ug/l	2.0	--
n-Nitrosodimethylamine	ND		ug/l	2.0	--



Project Name: 149 CHARLTON ROAD

Lab Number: L1220111

Project Number: 11421.00

Report Date: 11/14/12

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270D
 Analytical Date: 11/13/12 11:05
 Analyst: RC

Extraction Method: EPA 3510C
 Extraction Date: 11/12/12 15:40

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG573201-1					
2,4,6-Trichlorophenol	ND		ug/l	5.0	--
p-Chloro-m-cresol	ND		ug/l	2.0	--
2-Chlorophenol	ND		ug/l	2.0	--
2,4-Dichlorophenol	ND		ug/l	5.0	--
2,4-Dimethylphenol	ND		ug/l	5.0	--
2-Nitrophenol	ND		ug/l	10	--
4-Nitrophenol	ND		ug/l	10	--
2,4-Dinitrophenol	ND		ug/l	20	--
4,6-Dinitro-o-cresol	ND		ug/l	10	--
Phenol	ND		ug/l	5.0	--
2-Methylphenol	ND		ug/l	5.0	--
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	--
2,4,5-Trichlorophenol	ND		ug/l	5.0	--
Benzoic Acid	ND		ug/l	50	--
Benzyl Alcohol	ND		ug/l	2.0	--
Carbazole	ND		ug/l	2.0	--
Pyridine	ND		ug/l	5.0	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	66		21-120
Phenol-d6	41		10-120
Nitrobenzene-d5	76		23-120
2-Fluorobiphenyl	86		15-120
2,4,6-Tribromophenol	80		10-120
4-Terphenyl-d14	98		41-149

Lab Control Sample Analysis **Batch Quality Control**

Project Name: 149 CHARLTON ROAD

Project Number: 11421.00

Lab Number: L1220111

Report Date: 11/14/12

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: WG572537-2 WG572537-3								
Acenaphthene	68		74		37-111	8		40
2-Chloronaphthalene	65		69		40-140	6		40
Fluoranthene	95		94		40-140	1		40
Hexachlorobutadiene	48		55		40-140	14		40
Naphthalene	63		68		40-140	8		40
Benzo(a)anthracene	95		96		40-140	1		40
Benzo(a)pyrene	85		86		40-140	1		40
Benzo(b)fluoranthene	99		93		40-140	6		40
Benzo(k)fluoranthene	93		101		40-140	8		40
Chrysene	81		82		40-140	1		40
Acenaphthylene	76		80		40-140	5		40
Anthracene	81		81		40-140	0		40
Benzo(ghi)perylene	97		101		40-140	4		40
Fluorene	80		86		40-140	7		40
Phenanthrene	78		79		40-140	1		40
Dibenzo(a,h)anthracene	85		86		40-140	1		40
Indeno(1,2,3-cd)Pyrene	96		99		40-140	3		40
Pyrene	89		88		26-127	1		40
1-Methylnaphthalene	66		73		40-140	10		40
2-Methylnaphthalene	65		70		40-140	7		40
Pentachlorophenol	68		72		9-103	6		40

Lab Control Sample Analysis

Batch Quality Control

Project Name: 149 CHARLTON ROAD

Lab Number: L1220111

Project Number: 11421.00

Report Date: 11/14/12

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: WG572537-2 WG572537-3								
Hexachlorobenzene	81		80		40-140	1		40
Hexachloroethane	53		60		40-140	12		40

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	52		61		21-120
Phenol-d6	36		42		10-120
Nitrobenzene-d5	83		91		23-120
2-Fluorobiphenyl	79		84		15-120
2,4,6-Tribromophenol	89		91		10-120
4-Terphenyl-d14	87		86		41-149

Lab Control Sample Analysis

Batch Quality Control

Project Name: 149 CHARLTON ROAD

Project Number: 11421.00

Lab Number: L1220111

Report Date: 11/14/12

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: WG573201-2 WG573201-3								
Benzidine	8	Q	2	Q	10-75	132	Q	30
1,2,4-Trichlorobenzene	87		80		39-98	8		30
Bis(2-chloroethyl)ether	89		83		40-140	7		30
1,2-Dichlorobenzene	86		80		40-140	7		30
1,3-Dichlorobenzene	86		78		40-140	10		30
1,4-Dichlorobenzene	87		79		36-97	10		30
3,3'-Dichlorobenzidine	83		87		40-140	5		30
2,4-Dinitrotoluene	109	Q	116	Q	24-96	6		30
2,6-Dinitrotoluene	97		104		40-140	7		30
Azobenzene	110		115		40-140	4		30
4-Chlorophenyl phenyl ether	101		106		40-140	5		30
4-Bromophenyl phenyl ether	101		107		40-140	6		30
Bis(2-chloroisopropyl)ether	96		88		40-140	9		30
Bis(2-chloroethoxy)methane	90		86		40-140	5		30
Hexachlorocyclopentadiene	70		68		40-140	3		30
Isophorone	92		89		40-140	3		30
Nitrobenzene	94		88		40-140	7		30
NitrosoDiPhenylAmine(NDPA)/DPA	103		109		40-140	6		30
Bis(2-Ethylhexyl)phthalate	119		128		40-140	7		30
Butyl benzyl phthalate	114		121		40-140	6		30
Di-n-butylphthalate	112		122		40-140	9		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: 149 CHARLTON ROAD

Project Number: 11421.00

Lab Number: L1220111

Report Date: 11/14/12

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: WG573201-2 WG573201-3								
Di-n-octylphthalate	118		124		40-140	5		30
Diethyl phthalate	104		111		40-140	7		30
Dimethyl phthalate	102		108		40-140	6		30
Aniline	41		30	Q	40-140	31	Q	30
4-Chloroaniline	62		60		40-140	3		30
2-Nitroaniline	98		102		52-143	4		30
3-Nitroaniline	74		84		25-145	13		30
4-Nitroaniline	109		116		51-143	6		30
Dibenzofuran	104		112		40-140	7		30
n-Nitrosodimethylamine	58		52		22-74	11		30
2,4,6-Trichlorophenol	94		96		30-130	2		30
P-Chloro-M-Cresol	97		100	Q	23-97	3		30
2-Chlorophenol	92		86		27-123	7		30
2,4-Dichlorophenol	95		90		30-130	5		30
2,4-Dimethylphenol	92		88		30-130	4		30
2-Nitrophenol	89		84		30-130	6		30
4-Nitrophenol	62		68		10-80	9		30
2,4-Dinitrophenol	83		86		20-130	4		30
4,6-Dinitro-o-cresol	98		104		20-164	6		30
Phenol	49		47		12-110	4		30
2-Methylphenol	84		82		30-130	2		30

Lab Control Sample Analysis**Batch Quality Control****Project Name:** 149 CHARLTON ROAD**Lab Number:** L1220111**Project Number:** 11421.00**Report Date:** 11/14/12

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: WG573201-2 WG573201-3								
3-Methylphenol/4-Methylphenol	80		77		30-130	4		30
2,4,5-Trichlorophenol	92		96		30-130	4		30
Benzoic Acid	24		26		10-164	8		30
Benzyl Alcohol	76		72		26-116	5		30
Carbazole	109		118		55-144	8		30
Pyridine	29		14		10-66	70	Q	30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	72		67		21-120
Phenol-d6	49		47		10-120
Nitrobenzene-d5	85		81		23-120
2-Fluorobiphenyl	93		91		15-120
2,4,6-Tribromophenol	114		122	Q	10-120
4-Terphenyl-d14	104		112		41-149

PCBS

Project Name: 149 CHARLTON ROAD
Project Number: 11421.00

Lab Number: L1220111
Report Date: 11/14/12

SAMPLE RESULTS

Lab ID: L1220111-01
Client ID: SB-2/VHB-2
Sample Location: STURBRIDGE, MA
Matrix: Water
Analytical Method: 5,608
Analytical Date: 11/10/12 12:49
Analyst: KB

Date Collected: 11/07/12 09:30
Date Received: 11/07/12
Field Prep: Not Specified
Extraction Method: EPA 608
Extraction Date: 11/08/12 17:14
Cleanup Method1: EPA 3665A
Cleanup Date1: 11/10/12
Cleanup Method2: EPA 3660B
Cleanup Date2: 11/10/12

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	76		30-150
Decachlorobiphenyl	86		30-150

Project Name: 149 CHARLTON ROAD**Lab Number:** L1220111**Project Number:** 11421.00**Report Date:** 11/14/12

Method Blank Analysis Batch Quality Control

Analytical Method: 5,608
 Analytical Date: 11/10/12 13:28
 Analyst: KB

Extraction Method: EPA 608
 Extraction Date: 11/08/12 17:14
 Cleanup Method1: EPA 3665A
 Cleanup Date1: 11/10/12
 Cleanup Method2: EPA 3660B
 Cleanup Date2: 11/10/12

Parameter	Result	Qualifier	Units	RL	MDL
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 01 Batch: WG572694-1					
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	62		30-150
Decachlorobiphenyl	86		30-150

Matrix Spike Analysis

Batch Quality Control

Project Name: 149 CHARLTON ROAD
Project Number: 11421.00

Lab Number: L1220111
Report Date: 11/14/12

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: WG572694-3 QC Sample: L1220111-01 Client ID: SB-2/VHB-2												
Aroclor 1016	ND	1.02	0.837	82		-	-		40-140	-		50
Aroclor 1260	ND	1.02	0.689	68		-	-		40-140	-		50

Surrogate	MS		MSD		Acceptance Criteria
	% Recovery	Qualifier	% Recovery	Qualifier	
2,4,5,6-Tetrachloro-m-xylene	68				30-150
Decachlorobiphenyl	55				30-150

Lab Control Sample Analysis**Batch Quality Control****Project Name:** 149 CHARLTON ROAD**Lab Number:** L1220111**Project Number:** 11421.00**Report Date:** 11/14/12

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01 Batch: WG572694-2								
Aroclor 1016	86		-		40-140	-		50
Aroclor 1260	72		-		40-140	-		50

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	56				30-150
Decachlorobiphenyl	88				30-150

Lab Duplicate Analysis Batch Quality Control

Project Name: 149 CHARLTON ROAD

Project Number: 11421.00

Lab Number: L1220111

Report Date: 11/14/12

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01 QC Batch ID: WG572694-4 QC Sample: L1220169-08 Client ID: DUP Sample						
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
Aroclor 1262	ND	ND	ug/l	NC		50
Aroclor 1268	ND	ND	ug/l	NC		50

Surrogate	%Recovery	Qualifier	%Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	75		80		30-150
Decachlorobiphenyl	89		93		30-150

METALS

Project Name: 149 CHARLTON ROAD

Lab Number: L1220111

Project Number: 11421.00

Report Date: 11/14/12

SAMPLE RESULTS

Lab ID: L1220111-01

Date Collected: 11/07/12 09:30

Client ID: SB-2/VHB-2

Date Received: 11/07/12

Sample Location: STURBRIDGE, 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	ND		mg/l	0.0005	--	1	11/08/12 08:45	11/10/12 02:41	EPA 3005A	1,6020A	BM
Arsenic, Total	0.0010		mg/l	0.0005	--	1	11/08/12 08:45	11/10/12 02:41	EPA 3005A	1,6020A	BM
Cadmium, Total	ND		mg/l	0.0002	--	1	11/08/12 08:45	11/10/12 02:41	EPA 3005A	1,6020A	BM
Chromium, Total	ND		mg/l	0.0010	--	1	11/08/12 08:45	11/10/12 02:41	EPA 3005A	1,6020A	BM
Copper, Total	ND		mg/l	0.0010	--	1	11/08/12 08:45	11/10/12 02:41	EPA 3005A	1,6020A	BM
Iron, Total	3.7		mg/l	0.05	--	1	11/08/12 08:45	11/08/12 15:46	EPA 3005A	19,200.7	KL
Lead, Total	ND		mg/l	0.0010	--	1	11/08/12 08:45	11/10/12 02:41	EPA 3005A	1,6020A	BM
Mercury, Total	ND		mg/l	0.0002	--	1	11/09/12 15:10	11/12/12 17:00	EPA 245.1	3,245.1	JH
Nickel, Total	0.0014		mg/l	0.0005	--	1	11/08/12 08:45	11/10/12 02:41	EPA 3005A	1,6020A	BM
Selenium, Total	ND		mg/l	0.005	--	1	11/08/12 08:45	11/10/12 02:41	EPA 3005A	1,6020A	BM
Silver, Total	ND		mg/l	0.0003	--	1	11/08/12 08:45	11/10/12 02:41	EPA 3005A	1,6020A	BM
Zinc, Total	0.0222		mg/l	0.0100	--	1	11/08/12 08:45	11/10/12 02:41	EPA 3005A	1,6020A	BM



Project Name: 149 CHARLTON ROAD

Lab Number: L1220111

Project Number: 11421.00

Report Date: 11/14/12

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: WG572558-1									
Antimony, Total	ND	mg/l	0.0005	--	1	11/08/12 08:45	11/10/12 01:45	1,6020A	BM
Arsenic, Total	ND	mg/l	0.0005	--	1	11/08/12 08:45	11/10/12 01:45	1,6020A	BM
Cadmium, Total	ND	mg/l	0.0002	--	1	11/08/12 08:45	11/10/12 01:45	1,6020A	BM
Chromium, Total	ND	mg/l	0.0010	--	1	11/08/12 08:45	11/10/12 01:45	1,6020A	BM
Copper, Total	ND	mg/l	0.0010	--	1	11/08/12 08:45	11/10/12 01:45	1,6020A	BM
Lead, Total	ND	mg/l	0.0010	--	1	11/08/12 08:45	11/10/12 01:45	1,6020A	BM
Nickel, Total	ND	mg/l	0.0005	--	1	11/08/12 08:45	11/10/12 01:45	1,6020A	BM
Selenium, Total	ND	mg/l	0.005	--	1	11/08/12 08:45	11/10/12 01:45	1,6020A	BM
Silver, Total	ND	mg/l	0.0003	--	1	11/08/12 08:45	11/10/12 01:45	1,6020A	BM
Zinc, Total	ND	mg/l	0.0100	--	1	11/08/12 08:45	11/10/12 01:45	1,6020A	BM

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: WG572561-1									
Iron, Total	ND	mg/l	0.05	--	1	11/08/12 08:45	11/08/12 15:40	19,200.7	KL

Prep Information

Digestion Method: EPA 3005A

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Westborough Lab for sample(s): 01 Batch: WG572674-1									
Mercury, Total	ND	mg/l	0.0002	--	1	11/09/12 15:10	11/12/12 16:54	3,245.1	JH

Prep Information

Digestion Method: EPA 245.1

Lab Control Sample Analysis

Batch Quality Control

Project Name: 149 CHARLTON ROAD

Project Number: 11421.00

Lab Number: L1220111

Report Date: 11/14/12

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01 Batch: WG572558-2								
Antimony, Total	92		-		80-120	-		
Arsenic, Total	108		-		80-120	-		
Cadmium, Total	103		-		80-120	-		
Chromium, Total	91		-		80-120	-		
Copper, Total	93		-		80-120	-		
Lead, Total	104		-		80-120	-		
Nickel, Total	92		-		80-120	-		
Selenium, Total	108		-		80-120	-		
Silver, Total	91		-		80-120	-		
Zinc, Total	107		-		80-120	-		
Total Metals - Westborough Lab Associated sample(s): 01 Batch: WG572561-2								
Iron, Total	110		-		85-115	-		
Total Metals - Westborough Lab Associated sample(s): 01 Batch: WG572674-2								
Mercury, Total	87		-		85-115	-		

Matrix Spike Analysis **Batch Quality Control**

Project Name: 149 CHARLTON ROAD
Project Number: 11421.00

Lab Number: L1220111
Report Date: 11/14/12

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: WG572558-4 QC Sample: L1220111-01 Client ID: SB-2/VHB-2												
Antimony, Total	ND	0.5	0.4694	94		-	-		80-120	-		20
Arsenic, Total	0.0010	0.12	0.1310	108		-	-		80-120	-		20
Cadmium, Total	ND	0.051	0.0514	101		-	-		80-120	-		20
Chromium, Total	ND	0.2	0.1773	89		-	-		80-120	-		20
Copper, Total	ND	0.25	0.2334	93		-	-		80-120	-		20
Lead, Total	ND	0.51	0.5649	111		-	-		80-120	-		20
Nickel, Total	0.0014	0.5	0.4539	90		-	-		80-120	-		20
Selenium, Total	ND	0.12	0.125	104		-	-		80-120	-		20
Silver, Total	ND	0.05	0.0458	92		-	-		80-120	-		20
Zinc, Total	0.0222	0.5	0.5451	104		-	-		80-120	-		20
Total Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG572561-4 QC Sample: L1220111-01 Client ID: SB-2/VHB-2												
Iron, Total	3.7	1	4.7	100		-	-		75-125	-		20
Total Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG572674-4 QC Sample: L1220181-01 Client ID: MS Sample												
Mercury, Total	ND	0.001	0.0012	120		-	-		70-130	-		20

Project Name: 149 CHARLTON ROAD
Project Number: 11421.00

Lab Duplicate Analysis

Batch Quality Control

Lab Number: L1220111
Report Date: 11/14/12

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG572558-3 QC Sample: L1220111-01 Client ID: SB-2/VHB-2						
Antimony, Total	ND	ND	mg/l	NC		20
Arsenic, Total	0.0010	0.0009	mg/l	11		20
Cadmium, Total	ND	ND	mg/l	NC		20
Chromium, Total	ND	ND	mg/l	NC		20
Copper, Total	ND	0.0013	mg/l	NC		20
Lead, Total	ND	ND	mg/l	NC		20
Nickel, Total	0.0014	0.0012	mg/l	11		20
Selenium, Total	ND	ND	mg/l	NC		20
Silver, Total	ND	ND	mg/l	NC		20
Zinc, Total	0.0222	0.0210	mg/l	6		20
Total Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG572561-3 QC Sample: L1220111-01 Client ID: SB-2/VHB-2						
Iron, Total	3.7	3.5	mg/l	6		20
Total Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG572674-3 QC Sample: L1220181-01 Client ID: DUP Sample						
Mercury, Total	ND	ND	mg/l	NC		20

INORGANICS & MISCELLANEOUS

Project Name: 149 CHARLTON ROAD
Project Number: 11421.00

Lab Number: L1220111
Report Date: 11/14/12

SAMPLE RESULTS

Lab ID: L1220111-01
Client ID: SB-2/VHB-2
Sample Location: STURBRIDGE, MA
Matrix: Water

Date Collected: 11/07/12 09:30
Date Received: 11/07/12
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	-	11/12/12 09:30	30,2540D	DW
Cyanide, Total	0.006		mg/l	0.005	--	1	11/08/12 13:08	11/08/12 16:16	30,4500CN-CE	JO
Chlorine, Total Residual	ND		mg/l	0.02	--	1	-	11/07/12 22:30	30,4500CL-D	EL
TPH	ND		mg/l	4.00	--	1	11/09/12 07:00	11/12/12 16:45	74,1664A	JO
Phenolics, Total	0.06		mg/l	0.03	--	1	11/09/12 12:30	11/09/12 15:30	4,420.1	MP
Chromium, Hexavalent	ND		mg/l	0.010	--	1	11/08/12 00:15	11/08/12 00:44	30,3500CR-D	JT
Anions by Ion Chromatography - Westborough Lab										
Chloride	120		mg/l	12	--	25	-	11/07/12 23:29	44,300.0	AU



Project Name: 149 CHARLTON ROAD

Lab Number: L1220111

Project Number: 11421.00

Report Date: 11/14/12

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: WG572502-1										
Chromium, Hexavalent	ND		mg/l	0.010	--	1	11/08/12 00:15	11/08/12 00:40	30,3500CR-D	JT
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG572506-1										
Chlorine, Total Residual	ND		mg/l	0.02	--	1	-	11/07/12 22:30	30,4500CL-D	EL
Anions by Ion Chromatography - Westborough Lab for sample(s): 01 Batch: WG572510-1										
Chloride	ND		mg/l	0.50	--	1	-	11/07/12 18:53	44,300.0	AU
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG572603-1										
Cyanide, Total	ND		mg/l	0.005	--	1	11/08/12 13:08	11/08/12 16:10	30,4500CN-CE	JO
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG572807-1										
TPH	ND		mg/l	4.00	--	1	11/09/12 07:00	11/12/12 16:45	74,1664A	JO
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG572865-1										
Phenolics, Total	ND		mg/l	0.03	--	1	11/09/12 12:30	11/09/12 15:29	4,420.1	MP
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG573053-1										
Solids, Total Suspended	ND		mg/l	5.0	NA	1	-	11/12/12 09:30	30,2540D	DW

Lab Control Sample Analysis

Batch Quality Control

Project Name: 149 CHARLTON ROAD

Project Number: 11421.00

Lab Number: L1220111

Report Date: 11/14/12

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG572502-2								
Chromium, Hexavalent	101		-		85-115	-		20
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG572506-2								
Chlorine, Total Residual	97		-		90-110	-		
Anions by Ion Chromatography - Westborough Lab Associated sample(s): 01 Batch: WG572510-2								
Chloride	105		-		90-110	-		
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG572603-2								
Cyanide, Total	108		-		90-110	-		
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG572807-2								
TPH	85		-		64-132	-		34
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG572865-2								
Phenolics, Total	102		-		82-111	-		12

Matrix Spike Analysis **Batch Quality Control**

Project Name: 149 CHARLTON ROAD

Project Number: 11421.00

Lab Number: L1220111

Report Date: 11/14/12

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: WG572502-4 QC Sample: L1220111-01 Client ID: SB-2/VHB-2												
Chromium, Hexavalent	ND	0.1	0.099	99		-	-		85-115	-		20
Anions by Ion Chromatography - Westborough Lab Associated sample(s): 01 QC Batch ID: WG572510-3 QC Sample: L1220014-03 Client ID: MS Sample												
Chloride	ND	4	4.3	108		-	-		40-151	-		18
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG572603-4 QC Sample: L1220162-01 Client ID: MS Sample												
Cyanide, Total	0.005	0.2	0.091	42	Q	-	-		90-110	-		30
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG572807-4 QC Sample: L1220194-01 Client ID: MS Sample												
TPH	ND	22	16.3	74		-	-		64-132	-		34
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG572865-4 QC Sample: L1220194-01 Client ID: MS Sample												
Phenolics, Total	0.04	0.8	0.91	109		-	-		77-124	-		12

Project Name: 149 CHARLTON ROAD
Project Number: 11421.00

Lab Duplicate Analysis

Batch Quality Control

Lab Number: L1220111
Report Date: 11/14/12

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG572502-3 QC Sample: L1220111-01 Client ID: SB-2/VHB-2						
Chromium, Hexavalent	ND	ND	mg/l	NC		20
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG572506-3 QC Sample: L1220146-01 Client ID: DUP Sample						
Chlorine, Total Residual	1.2	1.3	mg/l	8		20
Anions by Ion Chromatography - Westborough Lab Associated sample(s): 01 QC Batch ID: WG572510-4 QC Sample: L1220014-03 Client ID: DUP Sample						
Chloride	ND	ND	mg/l	NC		18
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG572603-3 QC Sample: L1220162-01 Client ID: DUP Sample						
Cyanide, Total	0.005	ND	mg/l	NC		30
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG572807-3 QC Sample: L1220194-02 Client ID: DUP Sample						
TPH	ND	ND	mg/l	NC		34
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG572865-3 QC Sample: L1220179-02 Client ID: DUP Sample						
Phenolics, Total	0.10	0.06	mg/l	50	Q	12

Project Name: 149 CHARLTON ROAD

Lab Number: L1220111

Project Number: 11421.00

Report Date: 11/14/12

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Reagent H2O Preserved Vials Frozen on: NA

Cooler Information Custody Seal

Cooler

A Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1220111-01A	Vial Na2S2O3 preserved	A	N/A	4.5	Y	Absent	8260(7),8260-SIM(14)
L1220111-01B	Vial Na2S2O3 preserved	A	N/A	4.5	Y	Absent	8260(7),8260-SIM(14)
L1220111-01C	Vial Na2S2O3 preserved	A	N/A	4.5	Y	Absent	504(14)
L1220111-01D	Vial Na2S2O3 preserved	A	N/A	4.5	Y	Absent	504(14)
L1220111-01E	Amber 1000ml unpreserved	A	7	4.5	Y	Absent	8270TCL(7)
L1220111-01F	Amber 1000ml unpreserved	A	7	4.5	Y	Absent	8270TCL(7)
L1220111-01G	Amber 1000ml unpreserved	A	7	4.5	Y	Absent	8270TCL-SIM(7)
L1220111-01H	Amber 1000ml unpreserved	A	7	4.5	Y	Absent	8270TCL-SIM(7)
L1220111-01I	Amber 1000ml Na2S2O3	A	7	4.5	Y	Absent	PCB-608(7)
L1220111-01J	Amber 1000ml Na2S2O3	A	7	4.5	Y	Absent	PCB-608(7)
L1220111-01K	Amber 1000ml HCl preserved	A	N/A	4.5	Y	Absent	TPH-1664(28)
L1220111-01L	Amber 1000ml HCl preserved	A	N/A	4.5	Y	Absent	TPH-1664(28)
L1220111-01M	Plastic 1000ml unpreserved	A	N/A	4.5	Y	Absent	TSS-2540(7)
L1220111-01N	Amber 500ml H2SO4 preserved	A	<2	4.5	Y	Absent	TPHENOL-420(28)
L1220111-01O	Plastic 500ml unpreserved	A	7	4.5	Y	Absent	TRC-4500(1)
L1220111-01P	Plastic 500ml unpreserved	A	7	4.5	Y	Absent	CL-300(28),HEXCR-3500(1)
L1220111-01Q	Plastic 250ml NaOH preserved	A	>12	4.5	Y	Absent	TCN-4500(14)
L1220111-01R	Plastic 500ml HNO3 preserved	A	<2	4.5	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)
L1220111-01W	Amber 1000ml unpreserved	A	N/A	4.5	Y	Absent	-
L1220111-01X	Amber 1000ml unpreserved	A	N/A	4.5	Y	Absent	-
L1220111-01Y	Amber 1000ml unpreserved	A	N/A	4.5	Y	Absent	-
L1220111-01Z	Amber 1000ml unpreserved	A	N/A	4.5	Y	Absent	-

*Values in parentheses indicate holding time in days



Project Name: 149 CHARLTON ROAD
Project Number: 11421.00

Lab Number: L1220111
Report Date: 11/14/12

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: 149 CHARLTON ROAD
Project Number: 11421.00

Lab Number: L1220111
Report Date: 11/14/12

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: 149 CHARLTON ROAD
Project Number: 11421.00

Lab Number: L1220111
Report Date: 11/14/12

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 August 16, 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, 200.8, 6020, 245.1, 1311, 1312, 3005A, Enterolert, 9223D, 9222D. Organic Parameters: 608, 624, 625, 8081A, 8082, 8330, 8151A, 8260B, 8270C, 3510C, 3630C, 5030B, ME-DRO, ME-GRO, MA-EPH, MA-VPH.)

Solid Waste/Soil (Inorganic Parameters: 9010B, 9012A, 9014A, 9030B, 9040B, 9045C, 6010B, 7471A, 7196A, 9050A, 1010, 1030, 9065, 1311, 1312, 3005A, 3050B. Organic Parameters: ME-DRO, ME-GRO, MA-EPH, MA-VPH, 8260B, 8270C, 8330, 8151A, 8081A, 8082, 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; ColilertQT 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 6010B, 6010C, 6020, 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, 9030B, 9040B, SM2120B, 2310B, 2320B, 2540B, 2540D, 4500H+B, 4500CL-E, 4500CN-E, 4500NH3-H, 4500NO3-F, 4500NO2-B, 4500P-E, 4500-S2-D, 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, 8260B, 8270C, 8270D, 8330, EPA 624, 625, 608, SW-846 8082, 8082A, 8081A, 8081B, 8151A, 8330, 8270C-SIM, 8270D-SIM.)

Solid & Chemical Materials (Inorganic Parameters: SW-846 6010B, 6010C, 7196A, 7471A, 1010, 1030, 9010, 9012A, 9014, 9030B, 9040B, 9045C, 9050, 9065,1311, 1312, 3005A, 3050B, 3060A. Organic Parameters: SW-846 3540C, 3546, 3050B, 3580A, 3630C, 5030B, 5035, 8260B, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 8330, 8151A, 8015B, 8015C, 8082, 8082A, 8081A, 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, 2540G, 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, 3005A, 3015, EPA 6010B, 6010C, 6020, 6020A, 7196A, 3060A, SW-846 9010B, 9030B. Organic Parameters: SW-846 8260B, 8260C, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 3510C, EPA 608, 624, 625, SW-846 3630C, 5030B, 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, 9010B, 9030B, 1010, 1030, 1311, 1312, 3005A, 3050B, 7471A, 7471B, 9014, 9012A, 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, 3630C, 5030B, 5035L, 5035H, NJ OQA-QAM-025 Rev.7, 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, 245.2, 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, 9010B, 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 1010, 1030, EPA 6010B, 6010C, 7196A, 7471A, 7471B, 9012A, 9014, 9065, 9050A, EPA 1311, 1312, 3005A, 3050B, 9010B, 9040C, 9045D. Organic Parameters: EPA 8260B, 8260C, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 8015B, 8015C, 8081A, 8081B, 8151A, 8330, 8082 8082A, 3540C, 3546, 3580, 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, 7471A, 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, 245.2, 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, 3501., 350.2, 353.2, 420.1, 6010B, 6010C, 6020, 6020A, 7196A, 7470A, 9010B, 9030B, 9040B, Lachat 10-107-06-2-D, NJ-EPH, 2120B, 2310B, 2320B, 2340B, 2510C, 2540B, 2540C, 3500Cr-D, 436C, 4500CN-CE, 4500Cl-E, 4500F-B, 4500F-C, 4500H+-B, 4500NO2-B, 4500NO3-F, 4500S-D, 4500SO3-B, 5310BCD, 5540C. Organic Parameters: EPA 3510C, 3630C, 5030B, 625, 624, 608, 8081A, 8081B, 8082, 8082A, 8151A, 8260B, 8270C, 8270D, 8330, 8015B,)

Solid & Hazardous Waste (Inorganic Parameters: EPA 350.1, 1010, 1030, 1311, 1312, 3005A, 3050B, 3060A, 6010B, 6010C, 6020A, 7196A, 7471A, 7471B, 9010B, 9012A, 9014, 9040B, 9045C, 9050, 9065, SM 4500NH3-BH, 9030B, 9038, 9251. Organic Parameters: 3540C, 3546, 3580A, 3630C, 5035, 8015B, 8015C, 8081A, 8081B, 8082, 8082A, 8151A, 8260B, 8270C, 8270D, 8270C-SIM, 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 Commission on Environmental Quality Certificate/Lab ID: T104704476-09-1. **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, 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 5035, 3540C, 3546, 3550, 3580, 3630C, 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. 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 Methylnaphthalenes, Total Dimethylnaphthalenes, 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, SO₄ in a soil matrix. **EPA 9071:** Total Petroleum Hydrocarbons, Oil & Grease.



CHAIN OF CUSTODY

PAGE 1 OF 1

8 Wakeup Drive
Westboro, MA 01581
Tel: 508-858-9220

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

Client Information

Client: **VHB**Address: **101 Walnut Street****Waterbury, MA**Phone: **617-937-1770**Email: **dmalyan@VHB.com**

Additional Project Information:

Project Information

Project Name: **149 Charterhouse Road**Project Location: **Spa bridge, MA**Project #: **11421.00**Project Manager: **Paul Melchior**

ALPHA Quote #:

Turn-Around Time

☒ Standard ☐ RUSH (only confirmed if pre-approved)
Date Due: **11/14/12**

Date Rec'd in Lab:

11/07/12

ALPHA Job #:

1182011

Report Information - Data Deliverables

INDEX ☒ EMAIL

Billing Information

Same as Client Info

PO #: **11421.00**

Regulatory Requirements & Project Information Requirements

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

Criteria

ANALYSIS

- VOC: ☐ 8260 ☐ 624 ☐ 524.2
 SVOC: ☐ ABN ☐ PAH
 METALS: ☐ MCP 13 ☐ MCP 14 ☐ RCP 15
 METALS: ☐ RCRA5 ☐ RCRA8 ☐ PP13
 EPH: ☐ Ranges & Targets ☐ Ranges Only
 VPH: ☐ Ranges & Targets ☐ Ranges Only
☐ PCB ☐ PEST
 TPH: ☐ Quant Only ☐ Fingerprint
☒ NPDES RGP Permit Package

SAMPLE INFO

- ☐ Filtration
☐ Field
☐ Lab to do
☐ Preservation
☐ Lab to do

Sample Comments

TOTAL # BOTTLES

ALPHA Lab ID
(Lab Use Only)Collection
Date TimeSample
MatrixSampler
Initials

Sample Comments

2011 1 382/VHB2

11/7/12 9:30

CW

Dum

X

Sample Comments

Container Type

- P= Plastic
 A= Amber glass
 V= Vial
 G= Glass
 B= Beakers 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= Na₂S₂O₈
 I= Ascorbic Acid
 J= NH₄Cl
 K= Zn Acetate
 O= Other

Relinquished By:

Date/Time

Received By:

Date/Time

Container Type

Preservative

11/7/12 11:20
11/7/12 11:20

All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.

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