



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 1

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

CERTIFIED MAIL RETURN RECEIPT REQUESTED

MAY 24 2013

Nicole Merrill
Supervisor-Special Projects
Stop and Shop Supermarket, LLC
1385 Hancock Street
Quincy, MA 02169

Re: Authorization to discharge under the Remediation General Permit (RGP) –
MAG910000. Proposed Fuel Facility site located at 671 Main Street, Winchester, MA
01890, Middlesex County; Authorization # MAG910577

Dear Ms. Merrill:

Based on the review of a Notice of Intent (NOI) submitted on behalf of the Stop and Shop Supermarket Company, LLC, by the firm Vanasse Hangen Brustlin, Inc. (VHB), 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 your consulting firm representative has marked "Believed Present." The checklist also includes other parameters for which your laboratory reports indicated there was insufficient sensitivity to detect these parameters at the minimum levels established in Appendix VI of the RGP.

Also, please note that the metals included on the checklist are dilution dependent pollutants and subject to discharge limitations based on a dilution factor range (DFR). With the limited dilution to Horn Pond Brook, 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 limit for arsenic of 17.9 ug/L, cadmium of 0.36 ug/L, trivalent chromium of 87.35 ug/L, copper of 9.31 ug/L, lead of 2.33 ug/L, nickel of 51.91 ug/L, zinc of 119.2 ug/L and iron of 1,790 ug/L, are required to achieve permit compliance at your site. Please note that these metal limitations have increased above the limits set, in Appendix IV of the RGP under the 1-5 dilution factor range. The reason for the increase has to do with the new RGP regulations which allows for a limit increase based on the metal limit times the available dilution of the receiving stream. The available dilution in this case is 1.79. See footnote eleven at the end of the "Summary of Monitoring Parameters" listed below for further explanation.

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 December 31, 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, Chief
Storm Water and Construction
Permits Section

Enclosure

cc: Robert Kubit, MassDEP
James M. Gill, Winchester DPW
William S. Taber, VHB

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

NPDES Authorization Number:		MAG910577
Authorization Issued:	May, 2013	
Facility/Site Name:	Proposed Fuel Facility	
Facility/Site Address:	671 Main Street, Massachusetts 01890, Middlesex County	
	Email address of owner: Nicole.Merrill@aholdusa.com	
Legal Name of Operator:	Stop and Shop Supermarket Company LLC.	
Operator contact name, title, and Address:	Nicole Merrill, Supervisor – Special Projects	
	Email: Same as the owner	
Estimated date of The Project Completion:	12-31-2013	
Category and Sub-Category:	Category III- Contaminated Construction Dewatering. Sub-category B. Known Contaminated Sites	
RGP Termination Date:	September 10, 2015	
Receiving Water:	Horn Pond Brook	

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	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)
	(BTEX) ⁴	
	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

	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)
✓	a. Benzo(a) Anthracene ⁷	0.0038 ug/L /Me#8270D/ ML 5ug/L, Me#610/ML 5ug/L& Me#625/ML 5ug/L
✓	b. Benzo(a) Pyrene ⁷	0.0038 ug/L /Me#8270D/ ML 5ug/L, Me#610/ML 5ug/L& Me#625/ML 5ug/L
✓	c. Benzo(b)Fluoranthene ⁷	0.0038 ug/L /Me#8270D/ ML 5ug/L, Me#610/ML 5ug/L& Me#625/ML 5ug/L
✓	d. Benzo(k)Fluoranthene ⁷	0.0038 ug/L /Me#8270D/ ML 5ug/L, Me#610/ML 5ug/L& Me#625/ML 5ug/L
✓	e. Chrysene ⁷	0.0038 ug/L /Me#8270D/ML 5ug/L, Me#610/ML 5ug/L& Me#625/ML 5ug/L
	f. Dibenzo(a,h)anthracene ⁷	0.0038 ug/L /Me#8270D/ML 5ug/L, Me#610/ML 5ug/L& Me#625/ML 5ug/L
✓	g. Indeno(1,2,3-cd) Pyrene ⁷	0.0038 ug/L /Me#8270D/ML 5ug/L, Me#610/ML 5ug/L& Me#625/ML 5ug/L
	36. Total Group II Polycyclic Aromatic Hydrocarbons (PAH)	100 ug/L
	h. Acenaphthene	X/Me#8270D/ML 5ug/L, Me#610/ML 5ug/L & Me#625/ML 5ug/L
	i. Acenaphthylene	X/Me#8270D/ML 5ug/L, Me#610/ML 5ug/L & Me#625/ML 5ug/L
	j. Anthracene	X/Me#8270D/ML 5ug/L, Me#610/ML 5ug/L & Me#625/ML 5ug/L
	k. Benzo(ghi) Perylene	X/Me#8270D/ML 5ug/L, Me#610/ML 5ug/L & Me#625/ML 5ug/L
	l. Fluoranthene	X/Me#8270D/ML 5ug/L, Me#610/ML 5ug/L & Me#625/ML 5ug/L
	m. Fluorene	X/Me#8270D/ML 5ug/L, Me#610/ML 5ug/L & Me#625/ML 5ug/L
	n. Naphthalene ⁵	20 ug/L / Me#8270/ML 5ug/L, Me#610/ML 5ug/L & Me#625/ML 5ug/L
	o. Phenanthrene	X/Me#8270D/ML 5ug/L, Me#610/ML 5ug/L & Me#625/ML 5ug/L
	p. Pyrene	X/Me#8270D/ML 5ug/L, Me#610/ML 5ug/L & Me#625/ML 5ug/L
	37. Total Polychlorinated Biphenyls (PCBs) ^{8, 9}	0.000064 ug/L/Me# 608/ ML 0.5 ug/L
✓	38. Chloride	Monitor only/Me# 300.0/ ML 100 ug/L

	Metal parameter	Total Recoverable Metal Limit @ H ¹⁰ = 50 mg/l CaCO₃ for discharges in Massachusetts (ug/l) ^{11/12}	Minimum level=ML
		Freshwater	
	39. Antimony	5.6/ML 10	

	Metal parameter	Total Recoverable Metal Limit @ H¹⁰ = 50 mg/l CaCO₃ for discharges in Massachusetts (ug/l)^{11/12}		Minimum level=ML	
		Freshwater			
✓	40. Arsenic **	17.9/ML20			
✓	41. Cadmium **	0.35/ML10			
✓	42. Chromium III (trivalent) **	87.35/ML15			
	43. Chromium VI (hexavalent) **	11.4/ML10			
✓	44. Copper **	9.31/ML15			
✓	45. Lead **	2.33/ML20			
✓	46. Mercury **	1.61/ML0.2			
✓	47. Nickel **	51.91/ML20			
	48. Selenium **	5/ML20			
	49. Silver	1.2/ML10			
✓	50. Zinc **	119.2/ML15			
✓	51. Iron	1,790/ML 20			

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

Footnotes:

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

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

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

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

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

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

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

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

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

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

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

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

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

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

¹⁴ Temperature sampling per Method 170.1



May 14, 2013

Vanasse Hangen Brustlin, Inc.

Ref: 11622.00

U.S. Environmental Protection Agency
5 Post Office Square, Suite 100
Mail Code OEP06-4
Boston, MA 02109-3912
Attn: Remediation General Permit NOI Processing

Re: Remediation General Permit
671 Main Street, Winchester, Massachusetts

To Whom It May Concern,

On behalf of The Stop & Shop Supermarket Company LLC, Vanasse Hangen Brustlin, Inc. (VHB) has prepared the attached Remediation General Permit Notice of Intent (NOI) for the purposes of dewatering during the construction of a fuel facility at 671 Main Street in Winchester, Massachusetts. The proposed discharge is to a nearby storm drain that flows to the Horn Pond Brook (feeding Judkins Pond) and ultimately to the Aberjona River. It should be noted that one sample was collected from a monitoring well for the purposes of characterizing the effluent prior to treatment to satisfy the requirements of the RGP application. Due to low recharge of the well, excess sediment appears to have been suspended in the sample, which resulted in higher laboratory concentrations than would otherwise be expected. The treatment system has been designed for these results, which are assumed to be a conservative representation of actual groundwater conditions.

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 e-mail 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: Nicole Merrill, Project Supervisor

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: 71.138		671 Main Street	
latitude: 42.455	5541		
b) Name of facility/site owner : Nicole Merrill Supervisor - Special Projects		Town: Winchester	
Email address of facility/site owner : Nicole.Merrill@aholdusa.com		State:	Zip:
		Massachusetts	01890
Telephone no. of facility/site owner : (617) 770-6219		County: USA	
Fax no. of facility/site owner : (617) 770-8945		Owner is (check one): 1. Federal ☐ 2. State/Tribal ☐	
Address of owner (if different from site):		3. Private ☒ 4. Other ☐ if so, describe:	
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, LLC		Operator fax no.: N/A	Operator email: Nicole.Merrill@aholdusa.com
Operator contact name and title: Nicole Merrill, Supervisor - Special Projects			
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 ☐ RTNs 3-4315 and 3-18310

e) Is site/facility subject to any State permitting, license, or other action which is causing the generation of discharge? Y ☐ N ☒

If Y, please list:

1. site identification # assigned by the state of NH or MA:
2. permit or license # assigned:
3. state agency contact information: name, location, and telephone number:

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

1. Multi-Sector General Permit? Y ☐ N ☒,
if Y, number:
2. Final Dewatering General Permit? Y ☐ N ☒,
if Y, number:
3. EPA Construction General Permit? Y ☐ N ☒,
if Y, number:
4. Individual NPDES permit? Y ☐ N ☒,
if Y, number:
5. any other water quality related individual or general permit? Y ☐ N ☒, if Y, number:

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

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

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

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

b) Provide the following information about each discharge:

1) Number of discharge points:	1	2) What is the maximum and average flow rate of discharge (in cubic feet per second, ft ³ /s)? 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>
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3) Latitude and longitude of each discharge within 100 feet:

pt.1: lat. <u>42.455</u>	long. <u>-71.138</u>	pt.2: lat. <u></u>	long. <u></u>	
pt.3: lat. <u></u>	long. <u></u>	pt.4: lat. <u></u>	long. <u></u>	
pt.5: lat. <u></u>	long. <u></u>	pt.6: lat. <u></u>	long. <u></u>	
pt.7: lat. <u></u>	long. <u></u>	pt.8: lat. <u></u>	long. <u></u>	etc.

4) If hydrostatic testing, total volume of the discharge (gals): None

5) Is the discharge intermittent ☒ or seasonal ☐?
Is discharge ongoing? Y ☐ N ☒

c) Expected dates of discharge (mm/dd/yy): start 06/01/2013 end 12/31/2013

d) Please attach a line drawing or flow schematic showing water flow through the facility including:

1. sources of intake water. 2. contributing flow from the operation. 3. treatment units. and 4. discharge points and receiving waters(s). (See attached)

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	2540D	500000	20000000	32753	20000000	10917
2. Total Residual Chlorine (TRC)		☒	☐								
3. Total Petroleum Hydrocarbons (TPH)		☒	☐								
4. Cyanide (CN)	57125	☒	☐								
5. Benzene (B)	71432	☒	☐								
6. Toluene (T)	108883	☒	☐								
7. Ethylbenzene (E)	100414	☒	☐								
8. (m,p,o) Xylenes (X)	108883; 106423; 95476; 1330207	☒	☐								
9. Total BTEX ²	n/a	☒	☐								
10. Ethylene Dibromide (EDB) (1,2-Dibromoethane) ³	106934	☒	☐								
11. Methyl-tert-Butyl Ether (MtBE)	1634044	☒	☐								
12. tert-Butyl Alcohol (TBA) (Tertiary-Butanol)	75650	☒	☐								

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

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

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

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

<u>Parameter *</u>	<u>CAS Number</u>	<u>Believed Absent</u>	<u>Believed Present</u>	<u># of Samples</u>	<u>Sample Type (e.g., grab)</u>	<u>Analytical Method Used (method #)</u>	<u>Minimum Level (ML) of Test Method</u>	<u>Maximum daily value</u>		<u>Average daily value</u>	
								<u>concentration (ug/l)</u>	<u>mass (kg)</u>	<u>concentration (ug/l)</u>	<u>mass (kg)</u>
28. Vinyl Chloride (Chloroethene)	75014	☒	☐								
29. Acetone	67641	☒	☐								
30. 1,4 Dioxane	123911	☒	☐								
31. Total Phenols	108952	☒	☐								
32. Pentachlorophenol (PCP)	87865	☒	☐								
33. Total Phthalates (Phthalate esters) ⁴		☒	☐								
34. Bis (2-Ethylhexyl) Phthalate [Di- (ethylhexyl) Phthalate]	117817	☒	☐								
35. Total Group I Polycyclic Aromatic Hydrocarbons (PAH)		☒	☐								
a. Benzo(a) Anthracene	56553	☐	☒	1	Grab	8270D	0.2	0.45	0.000737	0.45	0.000246
b. Benzo(a) Pyrene	50328	☐	☒	1	Grab	8270D	0.2	0.31	0.000508	0.31	0.000169
c. Benzo(b)Fluoranthene	205992	☐	☒	1	Grab	8270D	0.2	0.44	0.000721	0.44	0.00024
d. Benzo(k)Fluoranthene	207089	☐	☒	1	Grab	8270D	0.2	0.23	0.000377	0.23	0.00013
e. Chrysene	21801	☐	☒	1	Grab	8270D	0.2	0.43	0.001549	0.43	0.000235
f. Dibenzo(a,h)anthracene	53703	☒	☐								
g. Indeno(1,2,3-cd) Pyrene	193395	☐	☒	1	Grab	8270D	0.2	0.28	0.001009	0.28	0.00015
36. Total Group II Polycyclic Aromatic Hydrocarbons (PAH)		☒	☐								

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	☒	☐								
i. Acenaphthylene	208968	☒	☐								
j. Anthracene	120127	☒	☐								
k. Benzo(ghi) Perylene	191242	☒	☐								
l. Fluoranthene	206440	☒	☐								
m. Fluorene	86737	☒	☐								
n. Naphthalene	91203	☒	☐								
o. Phenanthrene	85018	☒	☐								
p. Pyrene	129000	☒	☐								
37. Total Polychlorinated Biphenyls (PCBs)	85687; 84742; 117840; 84662; 131113; 117817.	☒	☐								
38. Chloride	16887006	☒	☐								
39. Antimony	7440360	☒	☐								
40. Arsenic	7440382	☐	☒	1	Grab	6020A		31.81	0.052094	31.81	0.017365
41. Cadmium	7440439	☐	☒	1	Grab	6020A		3.12	0.00511	3.12	0.001703
42. Chromium III (trivalent)	16065831	☐	☒	1	Grab	6020A		50.02	0.081916	50.02	0.02731
43. Chromium VI (hexavalent)	18540299	☒	☐								
44. Copper	7440508	☐	☒	1	Grab	6020A		94.46	0.154695	94.46	0.051565
45. Lead	7439921	☐	☒	1	Grab	6020A		286.3	0.468866	286.3	0.156289
46. Mercury	7439976	☐	☒	1	Grab	245.1		12.1	0.019816	12.1	0.006605
47. Nickel	7440020	☐	☒	1	Grab	6020A		47.45	0.077708	47.45	0.025903
48. Selenium	7782492	☒	☐								
49. Silver	7440224	☒	☐								
50. Zinc	7440666	☐	☒	1	Grab	6020A		3326	5.446899	3326	1.815633
51. Iron	7439896	☐	☒	1	Grab	6020A		170000	278.404	170000	92.80145
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):

Step 1: Do any of the metals in the influent exceed the effluent limits in Appendix III (i.e., the limits set at zero dilution)? Y ☒ N ☐		If yes, which metals? As, Cd, Cr III, Cu, Fe, Pb, Hg, Ni, Zn
Step 2: For any metals which exceed the Appendix III limits, calculate the dilution factor (DF) using the formula in Part I.A.3.c (step 2) of the NOI instructions or as determined by the State prior to the submission of this NOI. What is the dilution factor for applicable metals?		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: Arsenic DF: 1.687 Metal: Cadmium DF: 1.687 Metal: Trivalent Chromium DF: 1.687 Metal: Copper DF: 1.687 Etc.	Iron DF: 1.687 Lead DF: 1.687 Mercury DF: 1.687 Nickel DF: 1.687 Zinc DF: 1.687	Arsenic, Cadmium, Copper, Iron, Lead, Mercury, Zinc

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: Water will be pumped into on-Site frac tank(s) to allow solids to settle and decrease turbidity to better manage the treatment process. The water will then be pumped from the frac tank(s) and be treated with three bag filters, a carbon vessel (LGAC) and an organoclay vessel prior to discharge into a stormwater drain that flows into the nearby Horn Pond Brook (connects to Aberjona River).						
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):	Organoclay		

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:

Treated effluent will be discharged to an on-Site storm drain, which eventually discharges to the Aberjona River.

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

1. For multiple discharges, number the discharges sequentially.

2. For indirect dischargers, indicate the location of the discharge to the indirect conveyance and the discharge to surface water

The map should also include the location and distance to the nearest sanitary sewer as well as the locus of nearby sensitive receptors (based on USGS topographical mapping), such as surface waters, drinking water supplies, and wetland areas.

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

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)?

Ammonia, Arsenic, Escherichia Coli, Oxygen, Phosphorous, Turbidity, Aquatic Macroinvertebrate Biassessments, Sediment Biassays - Chronic Toxicity Freshwater

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.

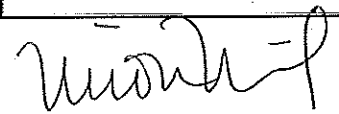
Please provide any supplemental information. Attach any analytical data used to support the application. Attach any certification(s) required by the general permit.

5(e): According to the USGS StreamStats Information accessed online, there are two gauging stations located within the vicinity of the Site. Site number 01102480 (Aberjona River at Swanton Street) has a calculated 7Q10 of 1.16 cfs and site number 01102500 (Aberjona River at Winchester, MA) has a 7Q10 of 0.46 cfs. As a conservative estimate, the lowest 7Q10 was selected for this application.

6(d): According to the Federal Wildlife Service, the only Town in Middlesex County, Massachusetts to contain an endangered species is Groton, Massachusetts. No species are listed under the Town of Winchester.

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:	Proposed Fuel Facility
Operator signature:	
Printed Name & Title:	Nicole Merrill - Agent for Stop & Shop - Project Supervisor
Date:	5/13/13



Source: USGS Hyannis Quadrangle/USGS 2008 Aerial Imagery

Legend

 Site

Vanasse Hangen Brustlin, Inc.

FIGURE 1
Site Location Map
Proposed Fuel Facility
671 Main Street
Winchester, Massachusetts

MassDEP - Bureau of Waste Site Cleanup

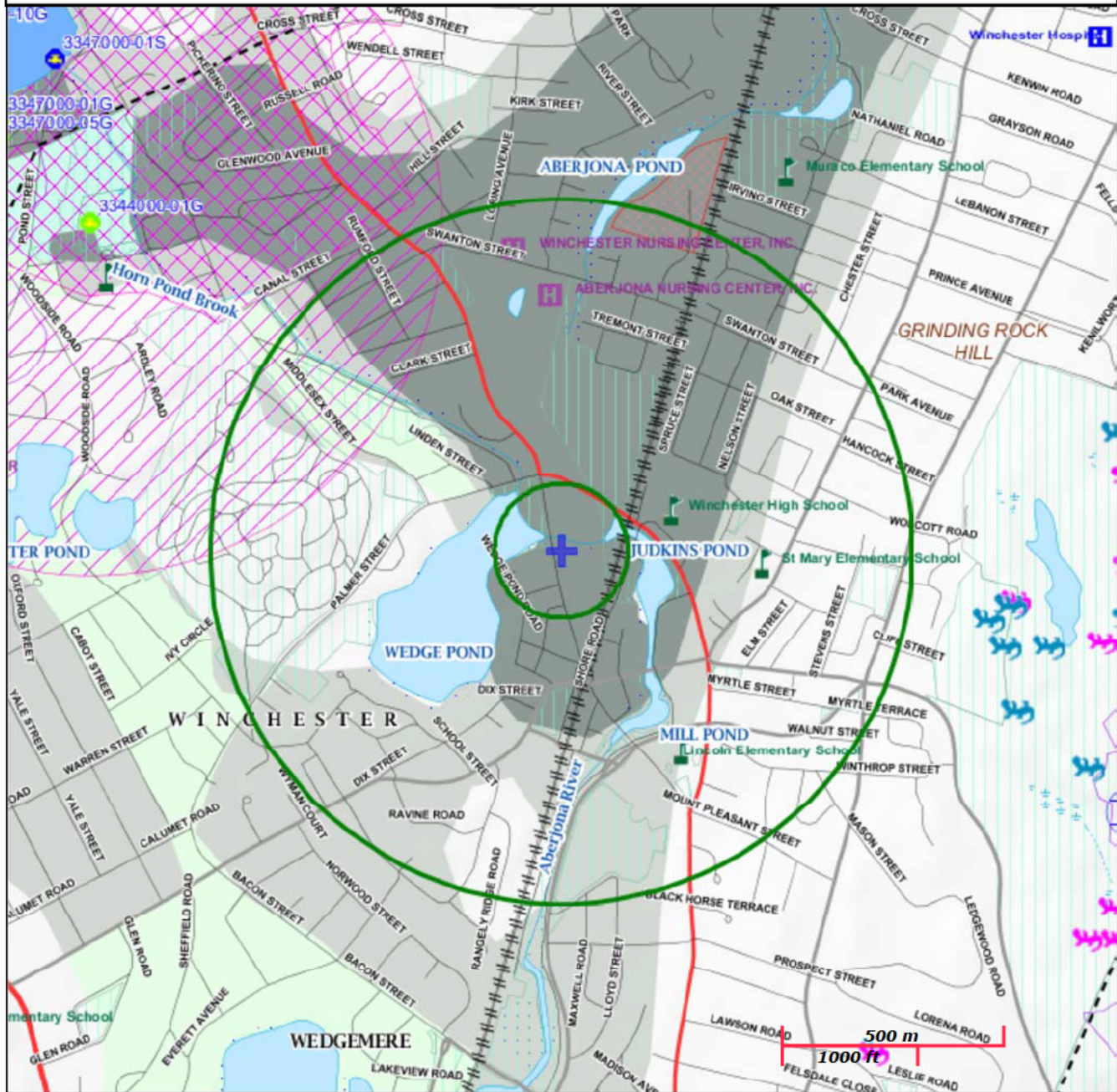
Site Information: MCP Numerical Ranking System Map: 500 feet & 0.5 Mile Radii

671 MAIN STREET WINCHESTER, MA
NAD83 UTM Meters
5229446mN, -7919019mE (Zone 18)
April 10, 2013

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



MassDEP
Commonwealth of Massachusetts
Department of Environmental Protection



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

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

Table 1
Summary of Groundwater Analytical Results
RGP Parameters
671 Main Street
Winchester, Massachusetts



LOCATION	RGP	Units	Limit Type	RGP-1
SAMPLING DATE	Effluent			4/8/2013
LAB SAMPLE ID	Limit			L1306014-01
Anions by Ion Chromatography				
Chloride	NE	ug/l	Monitor Only	284000
General Chemistry				
Chlorine, Total Residual	11	ug/l	Monthly Average	100 U
Chromium, Hexavalent	11.4	ug/l	Monthly Average	10 U
Cyanide, Total	5 2	ug/l	Monthly Average	5 U
Phenolics, Total	300	ug/l	Daily Maximum	40
Solids, Total Suspended	30000	ug/l	Monthly Average	2000000
TPH	5000	ug/l	Daily Maximum	4000 U
Microextractables by GC				
1,2-Dibromoethane	0.05	ug/l	Daily Maximum	0.01 U
Polychlorinated Biphenyls by GC				
Aroclor 1016	NE	ug/l	Limited as Total PCBs	0.25 U
Aroclor 1221	NE	ug/l	Limited as Total PCBs	0.25 U
Aroclor 1232	NE	ug/l	Limited as Total PCBs	0.25 U
Aroclor 1242	NE	ug/l	Limited as Total PCBs	0.25 U
Aroclor 1248	NE	ug/l	Limited as Total PCBs	0.25 U
Aroclor 1254	NE	ug/l	Limited as Total PCBs	0.25 U
Aroclor 1260	NE	ug/l	Limited as Total PCBs	0.25 U
Total PCBs	0.000064	ug/l	Daily Maximum	-
Semivolatile Organics by GC/MS				
Bis(2-ethylhexyl)phthalate	6.0	ug/l	Daily Maximum	3 U
Butyl benzyl phthalate	NE	ug/l	Limited as Total Phthalates	5 U
Di-n-butylphthalate	NE	ug/l	Limited as Total Phthalates	5 U
Di-n-octylphthalate	NE	ug/l	Limited as Total Phthalates	5 U
Dibenzofuran	NE	ug/l	Limited as Total Phthalates	2 U
Diethyl phthalate	NE	ug/l	Limited as Total Phthalates	5 U
Dimethyl phthalate	NE	ug/l	Limited as Total Phthalates	5 U
Total Phthalates	3 0	ug/l	Monthly Average	-
1,2,4-Trichlorobenzene	NE	ug/l	N/A	5 U
1,2-Dichlorobenzene	NE	ug/l	N/A	2 U
1,3-Dichlorobenzene	NE	ug/l	N/A	2 U
1,4-Dichlorobenzene	NE	ug/l	N/A	2 U
2,4,5-Trichlorophenol	NE	ug/l	N/A	5 U
2,4,6-Trichlorophenol	NE	ug/l	N/A	5 U
2,4-Dichlorophenol	NE	ug/l	N/A	5 U
2,4-Dimethylphenol	NE	ug/l	N/A	5 U
2,4-Dinitrophenol	NE	ug/l	N/A	20 U
2,4-Dinitrotoluene	NE	ug/l	N/A	5 U
2,6-Dinitrotoluene	NE	ug/l	N/A	5 U
2-Chlorophenol	NE	ug/l	N/A	2 U
2-Methylphenol	NE	ug/l	N/A	5 U
2-Nitroaniline	NE	ug/l	N/A	5 U
2-Nitrophenol	NE	ug/l	N/A	10 U
3,3'-Dichlorobenzidine	NE	ug/l	N/A	5 U
3-Methylphenol/4-Methylphenol	NE	ug/l	N/A	5 U
3-Nitroaniline	NE	ug/l	N/A	5 U
4,6-Dinitro-o-cresol	NE	ug/l	N/A	10 U
4-Bromophenyl phenyl ether	NE	ug/l	N/A	2 U
4-Chloroaniline	NE	ug/l	N/A	5 U
4-Chlorophenyl phenyl ether	NE	ug/l	N/A	2 U
4-Nitroaniline	NE	ug/l	N/A	5 U
4-Nitrophenol	NE	ug/l	N/A	10 U
Aniline	NE	ug/l	N/A	2 U
Azobenzene	NE	ug/l	N/A	2 U
Benzidine	NE	ug/l	N/A	20 U
Benzoic Acid	NE	ug/l	N/A	50 U
Benzyl Alcohol	NE	ug/l	N/A	2 U
Bis(2-chloroethoxy)methane	NE	ug/l	N/A	5 U
Bis(2-chloroethyl)ether	NE	ug/l	N/A	2 U
Bis(2-chloroisopropyl)ether	NE	ug/l	N/A	2 U
Carbazole	NE	ug/l	N/A	2 U
Hexachlorocyclopentadiene	NE	ug/l	N/A	20 U
Isophorone	NE	ug/l	N/A	5 U
n-Nitrosodimethylamine	NE	ug/l	N/A	2 U
NDPA/DPA	NE	ug/l	N/A	2 U

Table 1
Summary of Groundwater Analytical Results
RGP Parameters
671 Main Street
Winchester, Massachusetts



LOCATION	RGP	Units	Limit Type	RGP-1	
SAMPLING DATE	Effluent			4/8/2013	
LAB SAMPLE ID	Limit			L1306014-01	
Nitrobenzene	NE	ug/l	N/A	2	U
p-Chloro-m-cresol	NE	ug/l	N/A	2	U
Phenol	NE	ug/l	N/A	5	U
Pyridine	NE	ug/l	N/A	5	U
Semivolatile Organics by GC/MS-SIM					
Benzo(a)anthracene	0.0038	ug/l	Daily Maximum	0.45	
Benzo(a)pyrene	0.0038	ug/l	Daily Maximum	0.31	
Benzo(b)fluoranthene	0.0038	ug/l	Daily Maximum	0.44	
Benzo(k)fluoranthene	0.0038	ug/l	Daily Maximum	0.23	
Chrysene	0.0038	ug/l	Daily Maximum	0.43	
Dibenzo(a,h)anthracene	0.0038	ug/l	Daily Maximum	0.2	U
Indeno(1,2,3-cd)Pyrene	0.0038	ug/l	Daily Maximum	0.28	
Total Group I PAHs	10.0	ug/l	Daily Maximum	2.14	
Acenaph hene	NE	ug/l	Limited as Group II PAHs	1.3	
Acenaph hylene	NE	ug/l	Limited as Group II PAHs	0.2	U
Anthracene	NE	ug/l	Limited as Group II PAHs	0.64	
Benzo(ghi)perylene	NE	ug/l	Limited as Group II PAHs	0.25	
Fluoranthene	NE	ug/l	Limited as Group II PAHs	1.8	
Fluorene	NE	ug/l	Limited as Group II PAHs	1.2	
Phenanthrene	NE	ug/l	Limited as Group II PAHs	2.1	
Pyrene	NE	ug/l	Limited as Group II PAHs	1.4	
Total Group II PAHs	100	ug/l	Daily Maximum	8.69	
1-Methylnaphthalene	NE	ug/l	N/A	1.5	
2-Chloronaphthalene	NE	ug/l	N/A	0.2	U
2-Methylnaphthalene	NE	ug/l	N/A	0.2	U
Hexachlorobenzene	NE	ug/l	N/A	0.8	U
Hexachlorobutadiene	NE	ug/l	N/A	0.5	U
Hexachloroethane	NE	ug/l	N/A	0.8	U
Naphthalene	20	ug/l	Daily Maximum	0.2	U
Pentachlorophenol	1.0	ug/l	Daily Maximum	0.8	U
Total Metals					
Antimony, Total	5.6	ug/l	Daily Maximum	1	U
Arsenic, Total	10	ug/l	Monthly Average	31.81	
Barium, Total	NE	ug/l	Monthly Average	1830	
Cadmium, Total	0.2	ug/l	Monthly Average	3.12	
Chromium, Total*	48.8	ug/l	Monthly Average	50.02	
Copper, Total	5.2	ug/l	Monthly Average	94.46	
Iron, Total	1000	ug/l	Daily Maximum	170000	
Lead, Total	1.3	ug/l	Monthly Average	286.3	
Mercury, Total	0.9	ug/l	Monthly Average	12.1	
Nickel, Total	29	ug/l	Monthly Average	47.45	
Selenium, Total	5	ug/l	Monthly Average	5	U
Silver, Total	1.2	ug/l	Daily Maximum	0.4	U
Zinc, Total	66.6	ug/l	Monthly Average	3326	
Volatile Organics by GC/MS					
1,1,1,2-Tetrachloroethane	NE	ug/l	N/A	0.5	U
1,1,1-Trichloroethane	200	ug/l	Daily Maximum	0.5	U
1,1,2,2-Tetrachloroethane	NE	ug/l	N/A	0.5	U
1,1,2-Trichloroethane	5.0	ug/l	Daily Maximum	0.75	U
1,1-Dichloroethane	70	ug/l	Daily Maximum	0.75	U
1,1-Dichloroethene	3.2	ug/l	Daily Maximum	0.5	U
1,1-Dichloropropene	NE	ug/l	N/A	2.5	U
1,2,3-Trichlorobenzene	NE	ug/l	N/A	2.5	U
1,2,3-Trichloropropane	NE	ug/l	N/A	5	U
1,2,4-Trichlorobenzene	NE	ug/l	N/A	2.5	U
1,2,4-Trimethylbenzene	NE	ug/l	N/A	2.5	U
1,2-Dibromo-3-chloropropane	NE	ug/l	N/A	2.5	U
1,2-Dibromoethane	NE	ug/l	N/A	2	U
1,2-Dichlorobenzene	600	ug/l	Daily Maximum	2.5	U
1,2-Dichloroethane	5	ug/l	Daily Maximum	0.5	U
1,2-Dichloropropane	NE	ug/l	N/A	1.8	U
1,3,5-Trimethylbenzene	NE	ug/l	N/A	2.5	U

Table 1
Summary of Groundwater Analytical Results
RGP Parameters
671 Main Street
Winchester, Massachusetts



LOCATION	RGP	Units	Limit Type	RGP-1
SAMPLING DATE	Effluent			4/8/2013
LAB SAMPLE ID	Limit			L1306014-01
1,3-Dichlorobenzene	320	ug/l	Daily Maximum	2.5 U
1,3-Dichloropropane	NE	ug/l	N/A	2.5 U
1,4-Dichlorobenzene	5	ug/l	Daily Maximum	2.5 U
2,2-Dichloropropane	NE	ug/l	N/A	2.5 U
2-Butanone	NE	ug/l	N/A	5 U
2-Hexanone	NE	ug/l	N/A	5 U
4-Methyl-2-pentanone	NE	ug/l	N/A	5 U
Acetone	NE	ug/l	Monitor Only	5 U
Acrylonitrile	NE	ug/l	N/A	5 U
Bromobenzene	NE	ug/l	N/A	2.5 U
Bromochloromethane	NE	ug/l	N/A	2.5 U
Bromodichloromethane	NE	ug/l	N/A	0.5 U
Bromoform	NE	ug/l	N/A	2 U
Bromomethane	NE	ug/l	N/A	1 U
Carbon disulfide	NE	ug/l	N/A	5 U
Carbon tetrachloride	4.4	ug/l	Daily Maximum	0.5 U
Chlorobenzene	NE	ug/l	N/A	0.5 U
Chloroethane	NE	ug/l	N/A	1 U
Chloroform	NE	ug/l	N/A	0.75 U
Chloromethane	NE	ug/l	N/A	2.5 U
cis-1,2-Dichloroethene	70	ug/l	Daily Maximum	0.5 U
cis-1,3-Dichloropropene	NE	ug/l	N/A	0.5 U
Dibromochloromethane	NE	ug/l	N/A	0.5 U
Dibromomethane	NE	ug/l	N/A	5 U
Dichlorodifluoromethane	NE	ug/l	N/A	5 U
Ethyl ether	NE	ug/l	N/A	2.5 U
Ethyl methacrylate	NE	ug/l	N/A	5 U
Hexachlorobutadiene	NE	ug/l	N/A	0.5 U
Isopropylbenzene	NE	ug/l	N/A	0.78 U
Methyl tert butyl ether	70	ug/l	Daily Maximum	1.5 U
Methylene chloride	4.6	ug/l	Daily Maximum	3 U
n-Butylbenzene	NE	ug/l	N/A	0.69 U
n-Propylbenzene	NE	ug/l	N/A	0.85 U
Naphthalene	20	ug/l	Daily Maximum	2.5 U
o-Chlorotoluene	NE	ug/l	N/A	2.5 U
o-Xylene	NE	ug/l	N/A	1 U
p-Chlorotoluene	NE	ug/l	N/A	2.5 U
p-Isopropyltoluene	NE	ug/l	N/A	0.5 U
p/m-Xylene	NE	ug/l	N/A	1 U
sec-Butylbenzene	NE	ug/l	N/A	1.8 U
Styrene	NE	ug/l	N/A	1 U
Tert-Butyl Alcohol	NE	ug/l	Monitor Only	350 U
tert-Butylbenzene	NE	ug/l	Monitor Only	2.5 U
Tertiary-Amyl Methyl Ether	NE	ug/l	N/A	2 U
Tetrachloroethene	5.0	ug/l	Daily Maximum	0.5 U
Tetrahydrofuran	NE	ug/l	N/A	5 U
trans-1,2-Dichloroethene	NE	ug/l	N/A	0.75 U
trans-1,3-Dichloropropene	NE	ug/l	N/A	0.5 U
trans-1,4-Dichloro-2-butene	NE	ug/l	N/A	2.5 U
Trichloroethene	5.0	ug/l	Daily Maximum	0.5 U
Trichlorofluoromethane	NE	ug/l	N/A	2.5 U
Vinyl acetate	NE	ug/l	N/A	5 U
Vinyl chloride	2.0	ug/l	Daily Maximum	1 U
Benzene	NE	ug/l	Limited as Total BTEX	0.5 U
Toluene	NE	ug/l	Limited as Total BTEX	0.75 U
Ethylbenzene	NE	ug/l	Limited as Total BTEX	0.5 U
Xylenes, Total	NE	ug/l	Limited as Total BTEX	1 U
Total BTEX	100	ug/l	Daily Maximum	-
Volatile Organics by GC/MS-SIM				
1,4-Dioxane	NE	ug/l	Monitor Only	3 U

Notes:

Bolded, shaded, and underlined results exceed applicable regulatory thresholds

"ug/L" = Micrograms per liter, also known as parts per billion (ppb)

"NE" = Standard has not been established

"U" = Not detected above the laboratory reporting limit which is shown to the left

"RGP" = Remediation and Miscellaneous Sites General Permit

* = Chromium compared to trivalent standard due to Hexavalent analytical results less than laboratory detection limit



Vanasse Hangen Brustlin, Inc.

Figure 1

May 6, 2013

RGP Reference
Stop & Shop Fuel Facility
671 Main Street
Winchester, Massachusetts



SERVICE TECH, INC.

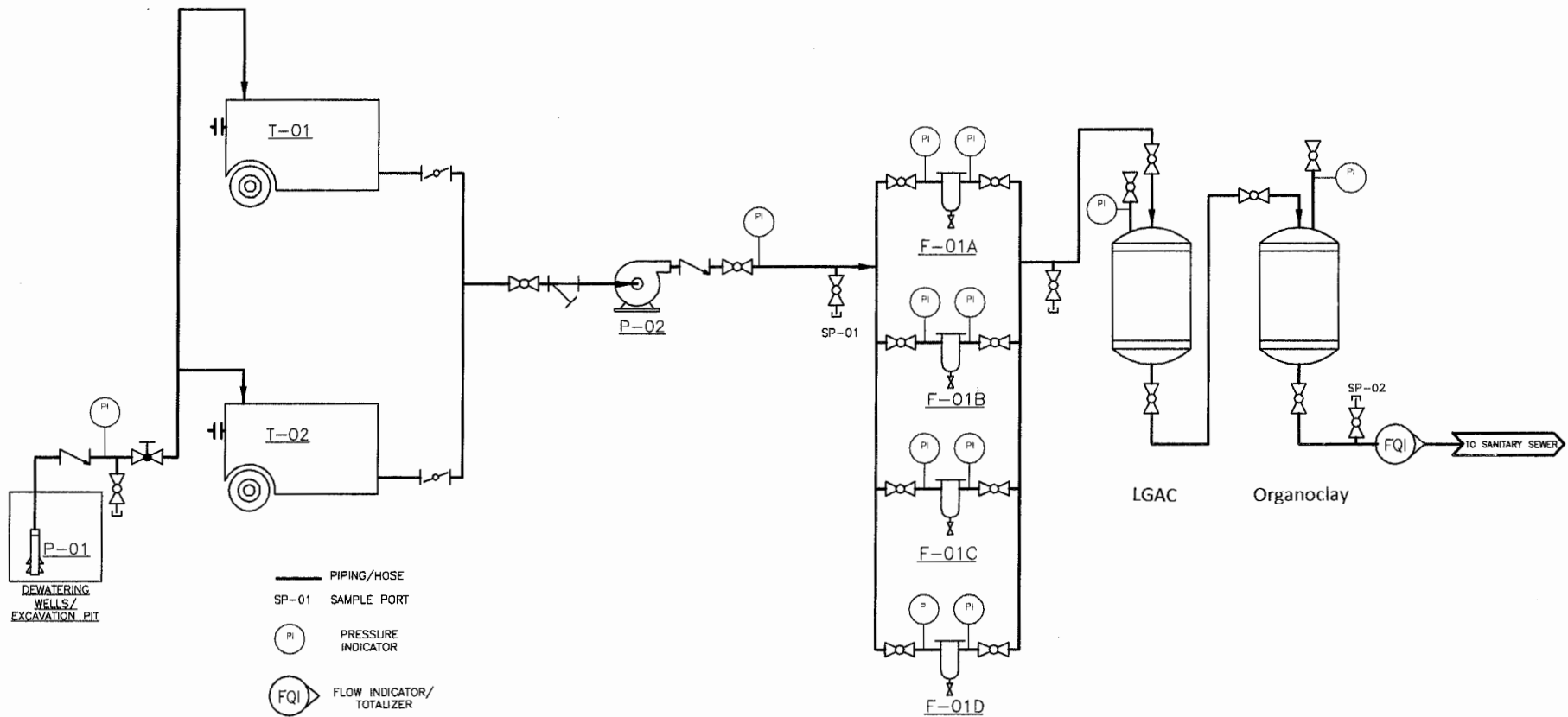
Activated Carbon Engineering, Sales and Service

P-01
DEWATERING PUMP
20-100 GPM
SUBMERSIBLE
PUMP

T-01/ T-02
FRAC TANK
21,000 GAL

P-02
CENTRIFUGAL
PUMP 100 GPM
GAS POWERED

F-01A/B/C/D
BAG FILTER
25 MICRON



NOTE:
THERE MAY BE SINGLE OR MULTIPLE
DEWATERING PUMPS. THE TOTAL DEWATERING
FLOW RATE RANGE= 20-100 GPM

EXCAVATION DE-WATERING
PROCESS FLOW DRAWING



StreamStats Data-Collection Station Report

USGS Station Number 01102500
Station Name ABERJONA RIVER AT WINCHESTER, MA

[Click here to link to available data on NWIS-Web for this site.](#)

Descriptive Information

Station Type Gaging Station, continuous record
Regulated? True
Period of Record 1939-present
Remarks Flow affected by diversions. Some regulation by Winchester at dam 1800 feet upstream.
Latitude (degrees NAD83) 42.44731778
Longitude (degrees NAD83) -71.13894278
Hydrologic unit code 01090001
Local Basin 19-Boston Harbor
County 017-Middlesex
MCD 80510-Winchester town
Directions to station 0.5 mile upstream from head of Mystic Lakes

Physical Characteristics

Characteristic Name	Value	Units	Citation Number
Drainage_Area	24.1	square miles	30

Streamflow Statistics

Statistic Name	Value	Units	Citation Number
Low-Flow Statistics			
7_Day_10_Year_Low_Flow	0.46	cubic feet per second	19
7_Day_2_Year_Low_Flow	0.92	cubic feet per second	19
Flow-Duration Statistics			
1_Percent_Duration	189.06	cubic feet per second	41
10_Percent_Duration	69	cubic feet per second	41
20_Percent_Duration	45	cubic feet per second	41
25_Percent_Duration	38	cubic feet per second	41
30_Percent_Duration	33	cubic feet per second	41
40_Percent_Duration	24	cubic feet per second	41
5_Percent_Duration	96	cubic feet per second	41
50_Percent_Duration	17	cubic feet per second	41
60_Percent_Duration	12	cubic feet per second	41
70_Percent_Duration	7.37	cubic feet per second	41
75_Percent_Duration	5.6	cubic feet per second	41
80_Percent_Duration	4.1	cubic feet per second	41

90_Percent_Duration	1.5	cubic feet per second	41
95_Percent_Duration	0.8	cubic feet per second	41
99_Percent_Duration	0.5	cubic feet per second	41
General Flow Statistics			
Average_daily_streamflow	29.691	cubic feet per second	41
Maximum_daily_flow	1110	cubic feet per second	41
Minimum_daily_flow	0.25	cubic feet per second	41
Std_Dev_of_daily_flows	43.751	cubic feet per second	41
Base Flow Statistics			
Average_BFI_value	0.469	dimensionless	42
Number_of_years_to_compute_BFI	64	years	42
Std_dev_of_annual_BFI_values	0.065	dimensionless	42

Citations

Citation Number Citation Name and URL

-
- | | |
|----|---|
| 19 | Wandle, S.W., Jr., 1984, Gazetteer of Hydrologic Characteristics of Streams in Massachusetts--Coastal River Basins of the North Shore and Massachusetts Bay: U.S. Geological Survey Water-Resources Investigations Report 84-4281 |
| 30 | Imported from NWIS file |
| 41 | Wolock, D.M., 2003, Flow characteristics at U.S. Geological Survey streamgages in the conterminous United States: U.S. Geological Survey Open-File Report 03-146, digital data set |
| 42 | Wolock, D.M., 2003, Base-flow index grid for the conterminous United States: U.S. Geological Survey Open-File Report 03-263, digital data set |
-



StreamStats Data-Collection Station Report

USGS Station Number 01102480
Station Name ABERJONA RIVER AT SWANTON ST AT WINCHESTER, MA

[Click here to link to available data on NWIS-Web for this site.](#)

Descriptive Information

Station Type Low Flow, partial record
Regulated? True
Period of Record 1973-75
Remarks None
Latitude (degrees NAD83) 42.46092889
Longitude (degrees NAD83) -71.1369983
Hydrologic unit code 01090001
Local Basin 19-Boston Harbor
County 017-Middlesex
MCD 80510-Winchester town
Directions to station 20 feet upstream from Swanton Street

Physical Characteristics

Characteristic Name	Value	Units	Citation Number
Area_of_Coarse_Stratified_Drift	6.7	square miles	30
Area_of_Lakes_and_Ponds	0.11	square miles	30
Area_of_Wetlands	0.27	square miles	30
Drainage_Area	13.44	square miles	30
Maximum_Basin_Elevation	277	feet	30
Mean_Basin_Elevation	138	feet	30
Mean_Basin_Slope_ft_per_mi	1.98	feet per mi	30
Minimum_Basin_Elevation	20	feet	30
Total_Stream_Length	15.11	miles	30

Streamflow Statistics

Statistic Name	Value	Units	Citation Number
Low-Flow Statistics			
7_Day_10_Year_Low_Flow	1.16	cubic feet per second	15
7_Day_2_Year_Low_Flow	0.37	cubic feet per second	15
Stand_Er_of_7_Day_10_Year_Min	21	percent	15
Stand_Er_of_7_Day_2_Year_Min	34.4	percent	15
Flow-Duration Statistics			
50_Percent_Duration	11.4	cubic feet per second	15
55_Percent_Duration	9.89	cubic feet per second	15
60_Percent_Duration	8.49	cubic feet per second	15

65_Percent_Duration	7.08	cubic feet per second	15
70_Percent_Duration	5.96	cubic feet per second	15
75_Percent_Duration	4.83	cubic feet per second	15
80_Percent_Duration	3.86	cubic feet per second	15
85_Percent_Duration	2.84	cubic feet per second	15
90_Percent_Duration	2.04	cubic feet per second	15
93_Percent_Duration	1.51	cubic feet per second	15
95_Percent_Duration	1.18	cubic feet per second	15
97_Percent_Duration	0.82	cubic feet per second	15
98_Percent_Duration	0.64	cubic feet per second	15
99_Percent_Duration	0.47	cubic feet per second	15
Stand_Er_of_50_Percent_Duration	14.5	percent	15
Stand_Er_of_55_Percent_Duration	13.2	percent	15
Stand_Er_of_60_Percent_Duration	12.1	percent	15
Stand_Er_of_65_Percent_Duration	11	percent	15
Stand_Er_of_70_Percent_Duration	10.2	percent	15
Stand_Er_of_75_Percent_Duration	9.9	percent	15
Stand_Er_of_80_Percent_Duration	10.3	percent	15
Stand_Er_of_85_Percent_Duration	11.8	percent	15
Stand_Er_of_90_Percent_Duration	14.4	percent	15
Stand_Er_of_93_Percent_Duration	17.4	percent	15
Stand_Er_of_95_Percent_Duration	20	percent	15
Stand_Er_of_97_Percent_Duration	23.9	percent	15
Stand_Er_of_98_Percent_Duration	26.7	percent	15
Stand_Er_of_99_Percent_Duration	30.4	percent	15

Citations

Citation Number Citation Name and URL

- | | |
|----|--|
| 15 | Ries, K.G., III, 1999, Streamflow measurements, basin characteristics, and streamflow statistics for low-flow partial-record stations operated in Massachusetts from 1989 through 1996: U.S. Geological Survey Water Resources Investigations Report 99-4006, 162 p. |
| 30 | Imported from NWIS file |
-

Massachusetts Cultural Resource Information System

MACRIS

MACRIS Search Results

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

Inv. No.	Property Name	Street	Town	Year
WNT.901	Converse Bridge	Main St	Winchester	1914
WNT.908	Boston and Lowell Railroad Signal Bridge	Main St	Winchester	1930
WNT.295	Russell, James W. House	86 Main St	Winchester	1872
WNT.296	Symmes, Alice House	208 Main St	Winchester	1893
WNT.298	Symmes, Dea. John House	212 Main St	Winchester	1807
WNT.300	Symmes, Marshall House	230 Main St	Winchester	1817
WNT.301	Symmes, Marshall Tenant House	233 Main St	Winchester	1875
WNT.302	Symmes, Walter F. House	243 Main St	Winchester	1889
WNT.303	Symmes, Fred M. House	282 Main St	Winchester	1880
WNT.304	Mason, Susan F. and Elizabeth N. House	288-290 Main St	Winchester	1905
WNT.305	Wells, Thomas F. House	319 Main St	Winchester	1889
WNT.306	Grafton, S. G. House	326 Main St	Winchester	1850
WNT.307	Weld, Aaron D. House	336 Main St	Winchester	1851
WNT.308	Hayward, A. H. - Dwinell, James F. House	346 Main St	Winchester	1844
WNT.270	Plummer, Bard - Lawson, Thomas W. House	366 Main St	Winchester	1853
WNT.271	Wilbur, Hervy House	379 Main St	Winchester	1845
WNT.269	Hovey, Josiah - Winn, Dennis House	384 Main St	Winchester	1841
WNT.285	Murdock, John K. House	387 Main St	Winchester	1905
WNT.268	Hutchinson, Samuel - Blood, Cyrus House	394-396 Main St	Winchester	1840
WNT.267	Sharon House	403 Main St	Winchester	1835
WNT.266	Vinton, Alfred - Putnam, Ralph C. House	409 Main St	Winchester	1865
WNT.265	Parker, Harrison Barn	410 Main St	Winchester	1865
WNT.263	Vinton, Alfred House	417 Main St	Winchester	1854
WNT.262	Simonds, William House	418-420 Main St	Winchester	1877
WNT.1015	McCall Junior High School	458 Main St	Winchester	1932
WNT.309	Winchester Unitarian Church	478 Main St	Winchester	1899
WNT.129	Locatelli, Albert J. Building	522-546 Main St	Winchester	1935

Monday, April 15, 2013

Page 1 of 3

Inv. No.	Property Name	Street	Town	Year
WNT.128	Ripley, Frank L. Block	527-535 Main St	Winchester	1910
WNT.1021	Woolworth, F. W. Company	537-539 Main St	Winchester	1927
WNT.1013	Woolworth, F. W. Company	547-551 Main St	Winchester	1930
WNT.1022	Lieberman Block	547-551 Main St	Winchester	1890
WNT.1017		552-564 Main St	Winchester	1915
WNT.127	Brown, George P. - Stanton, Jacob C. Jr. Block	553-559 Main St	Winchester	1879
WNT.126	White, Col. Samuel B. Building	568-572 Main St	Winchester	1889
WNT.1018		576 Main St	Winchester	1960
WNT.1019		584 Main St	Winchester	1970
WNT.125	Harriman, William House and Harness Shop	600 Main St	Winchester	1875
WNT.1020		600 Main St	Winchester	1940
WNT.124	Niles, Louiville V. Apartment House	612-626 Main St	Winchester	1896
WNT.123	Mystic Valley Garage	632 Main St	Winchester	1909
WNT.530	Marion, Leonard W. Carriage Factory	724 Main St	Winchester	1889
WNT.529	Cutter, Andrew House	735-737 Main St	Winchester	1831
WNT.528	Cutter, Henry House	760-762 Main St	Winchester	1845
WNT.527	Holt, Stephen A. House	778 Main St	Winchester	1861
WNT.1047		805 Main St	Winchester	1880
WNT.1048		807 Main St	Winchester	1880
WNT.1036		808-810 Main St	Winchester	1925
WNT.1049	Farrow, Eugene B. House	809-811 Main St	Winchester	1880
WNT.1038	Church, Dr. Benjamin T. Double House	812-814 Main St	Winchester	1886
WNT.1050		815-817 Main St	Winchester	1880
WNT.1051		823 Main St	Winchester	1880
WNT.1052	Cutter House	826-828 Main St	Winchester	1880
WNT.1053		831 Main St	Winchester	1970
WNT.1037	Farrow, Joshua House	834 Main St	Winchester	1870
WNT.1122	Farrow, Joshua Shop	834 Main St	Winchester	
WNT.1054		844 Main St	Winchester	1935
WNT.526	Beatty, J. - Lytton, Henry House	846 Main St	Winchester	1860
WNT.1055		848-850 Main St	Winchester	1890
WNT.1057		864 Main St	Winchester	1965
WNT.1058		872-880 Main St	Winchester	1925
WNT.1059		881-889 Main St	Winchester	1965
WNT.1060		890-892 Main St	Winchester	2000
WNT.1061		891-893 Main St	Winchester	1890
WNT.1062	Moffet - Benincasa Double House	895-897 Main St	Winchester	1920
WNT.525	Moseley, Charles H. House	898 Main St	Winchester	1870

Inv. No.	Property Name	Street	Town	Year
WNT.1039	Taylor, Samuel House	905 Main St	Winchester	1860
WNT.1063		907 Main St	Winchester	1920
WNT.1040	Dowd, Patrick House	910 Main St	Winchester	1860
WNT.524	Blanchard and Kendall Wood Company Mill	921 Main St	Winchester	1905
WNT.522	Nichols, Stilman House	940-942 Main St	Winchester	1851
WNT.521	Winn, J. F. Fuel Company Office Building	955 Main St	Winchester	1900
WNT.523	Blanchard and Kendall Wood Company Warehouse	955 Main St	Winchester	1905
WNT.520	Bean, George G. Petticoat Factory	959 Main St	Winchester	1909
WNT.519	Russell, Charles House	993 Main St	Winchester	1841
WNT.1124	Immaculate Conception Roman Catholic Rectory	1004 Main St	Winchester	1936
WNT.517	Hutchinson, Albert A. Leather Machine Factory	1021 Main St	Winchester	1906
WNT.518	Chapman Gravity Spindle Factory	1021 Main St	Winchester	1910

FEDERALLY LISTED ENDANGERED AND THREATENED SPECIES IN MASSACHUSETTS

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

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



ANALYTICAL REPORT

Lab Number:	L1306014
Client:	VHB Environmental Engineering 101 Walnut Street PO Box 9151 Watertown, MA 02471
ATTN:	Paul McKinlay
Phone:	(617) 924-1770
Project Name:	671 MAIN STREET
Project Number:	11622.00
Report Date:	04/15/13

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

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

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



Project Name: 671 MAIN STREET
Project Number: 11622.00

Lab Number: L1306014
Report Date: 04/15/13

Alpha Sample ID	Client ID	Sample Location	Collection Date/Time
L1306014-01	RGP-1	WINCHESTER, MA	04/08/13 10:00

Project Name: 671 MAIN STREET
Project Number: 11622.00

Lab Number: L1306014
Report Date: 04/15/13

Case Narrative

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

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

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

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

HOLD POLICY

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

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

Project Name: 671 MAIN STREET
Project Number: 11622.00

Lab Number: L1306014
Report Date: 04/15/13

Case Narrative (continued)

Metals

The WG600735-4 MS recovery, performed on L1306014-01, are outside the acceptance criteria for Antimony (77%), Copper (122%), and Selenium (40%). A post digestion spike was performed with acceptable recoveries for Antimony (121%), Copper (125%), and Selenium (115%).

The WG600735-4 MS recovery for Zinc (135%), performed on L1306014-01, does not apply because the sample concentration is greater than four times the spike amount added.

The WG600736-4 MS recovery for Iron (1000%), performed on L1306014-01, does not apply because the sample concentration is greater than four times the spike amount added.

Chlorine, Total Residual

L1306014-01 has an elevated detection limit due to the dilution required by the sample matrix.

Cyanide, Total

WG600742: A Laboratory Duplicate was prepared with the sample batch, however, the sample and duplicate required re-analysis; therefore, the duplicate result could not be reported.

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

Authorized Signature:

 Cynthia McQueen

Title: Technical Director/Representative

Date: 04/15/13

ORGANICS

VOLATILES

Project Name: 671 MAIN STREET**Lab Number:** L1306014**Project Number:** 11622.00**Report Date:** 04/15/13**SAMPLE RESULTS**

Lab ID: L1306014-01
Client ID: RGP-1
Sample Location: WINCHESTER, MA
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 04/09/13 21:10
Analyst: PD

Date Collected: 04/08/13 10:00
Date Received: 04/08/13
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	3.0	--	1
1,1-Dichloroethane	ND		ug/l	0.75	--	1
Chloroform	ND		ug/l	0.75	--	1
Carbon tetrachloride	ND		ug/l	0.50	--	1
1,2-Dichloropropane	ND		ug/l	1.8	--	1
Dibromochloromethane	ND		ug/l	0.50	--	1
1,1,2-Trichloroethane	ND		ug/l	0.75	--	1
Tetrachloroethene	ND		ug/l	0.50	--	1
Chlorobenzene	ND		ug/l	0.50	--	1
Trichlorofluoromethane	ND		ug/l	2.5	--	1
1,2-Dichloroethane	ND		ug/l	0.50	--	1
1,1,1-Trichloroethane	ND		ug/l	0.50	--	1
Bromodichloromethane	ND		ug/l	0.50	--	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	--	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	--	1
1,1-Dichloropropene	ND		ug/l	2.5	--	1
Bromoform	ND		ug/l	2.0	--	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	--	1
Benzene	ND		ug/l	0.50	--	1
Toluene	ND		ug/l	0.75	--	1
Ethy benzene	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: 671 MAIN STREET**Lab Number:** L1306014**Project Number:** 11622.00**Report Date:** 04/15/13**SAMPLE RESULTS**

Lab ID: L1306014-01
 Client ID: RGP-1
 Sample Location: WINCHESTER, MA

Date Collected: 04/08/13 10:00
 Date Received: 04/08/13
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methyl tert butyl ether	1.5		ug/l	1.0	--	1
p/m-Xylene	ND		ug/l	1.0	--	1
o-Xylene	ND		ug/l	1.0	--	1
Xylenes, Total	ND		ug/l	1.0	--	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	--	1
Dibromomethane	ND		ug/l	5.0	--	1
1,2,3-Trichloropropane	ND		ug/l	5.0	--	1
Styrene	ND		ug/l	1.0	--	1
Dichlorodifluoromethane	ND		ug/l	5.0	--	1
Acetone	ND		ug/l	5.0	--	1
Carbon disulfide	ND		ug/l	5.0	--	1
2-Butanone	ND		ug/l	5.0	--	1
Vinyl acetate	ND		ug/l	5.0	--	1
4-Methyl-2-pentanone	ND		ug/l	5.0	--	1
2-Hexanone	ND		ug/l	5.0	--	1
Ethyl methacrylate	ND		ug/l	5.0	--	1
Acrylonitrile	ND		ug/l	5.0	--	1
Bromochloromethane	ND		ug/l	2.5	--	1
Tetrahydrofuran	ND		ug/l	5.0	--	1
2,2-Dichloropropane	ND		ug/l	2.5	--	1
1,2-Dibromoethane	ND		ug/l	2.0	--	1
1,3-Dichloropropane	ND		ug/l	2.5	--	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	--	1
Bromobenzene	ND		ug/l	2.5	--	1
n-Buty benzene	0.69		ug/l	0.50	--	1
sec-Buty benzene	1.8		ug/l	0.50	--	1
tert-Butylbenzene	ND		ug/l	2.5	--	1
o-Chlorotoluene	ND		ug/l	2.5	--	1
p-Chlorotoluene	ND		ug/l	2.5	--	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	--	1
Hexachlorobutadiene	ND		ug/l	0.50	--	1
Isopropylbenzene	0.78		ug/l	0.50	--	1
p-Isopropyltoluene	ND		ug/l	0.50	--	1
Naphthalene	ND		ug/l	2.5	--	1
n-Propy benzene	0.85		ug/l	0.50	--	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	--	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	--	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	--	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	--	1

Project Name: 671 MAIN STREET**Lab Number:** L1306014**Project Number:** 11622.00**Report Date:** 04/15/13**SAMPLE RESULTS**

Lab ID: L1306014-01
 Client ID: RGP-1
 Sample Location: WINCHESTER, MA

Date Collected: 04/08/13 10:00
 Date Received: 04/08/13
 Field Prep: Not Specified

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

trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	--	1
Ethyl ether	ND		ug/l	2.5	--	1
Tert-Butyl Alcohol	350		ug/l	10	--	1
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	105		70-130
Toluene-d8	107		70-130
4-Bromofluorobenzene	104		70-130
Dibromofluoromethane	103		70-130

Project Name: 671 MAIN STREET**Lab Number:** L1306014**Project Number:** 11622.00**Report Date:** 04/15/13**SAMPLE RESULTS**

Lab ID: L1306014-01
Client ID: RGP-1
Sample Location: WINCHESTER, MA
Matrix: Water
Analytical Method: 1,8260C-SIM(M)
Analytical Date: 04/09/13 21:10
Analyst: PD

Date Collected: 04/08/13 10:00
Date Received: 04/08/13
Field Prep: Not Specified

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

Project Name: 671 MAIN STREET**Lab Number:** L1306014**Project Number:** 11622.00**Report Date:** 04/15/13**SAMPLE RESULTS**

Lab ID: L1306014-01
Client ID: RGP-1
Sample Location: WINCHESTER, MA
Matrix: Water
Analytical Method: 14,504.1
Analytical Date: 04/10/13 15:40
Analyst: SH

Date Collected: 04/08/13 10:00
Date Received: 04/08/13
Field Prep: Not Specified
Extraction Date: 04/10/13 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: 671 MAIN STREET**Lab Number:** L1306014**Project Number:** 11622.00**Report Date:** 04/15/13**Method Blank Analysis**
Batch Quality Control

Analytical Method: 14,504.1

Analytical Date: 04/10/13 13:52

Analyst: SH

Extraction Date: 04/10/13 10:30

Parameter	Result	Qualifier	Units	RL	MDL
Microextractables by GC - Westborough Lab for sample(s): 01 Batch: WG600656-1					
1,2-Dibromoethane	ND		ug/l	0.010	--

Project Name: 671 MAIN STREET**Lab Number:** L1306014**Project Number:** 11622.00**Report Date:** 04/15/13**Method Blank Analysis**
Batch Quality Control

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

Analytical Date: 04/09/13 13:16

Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01 Batch: WG600752-3					
1,4-Dioxane	ND		ug/l	3.0	--

Project Name: 671 MAIN STREET

Lab Number: L1306014

Project Number: 11622.00

Report Date: 04/15/13

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C

Analytical Date: 04/09/13 13:16

Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG600753-3					
Methylene chloride	ND		ug/l	3.0	--
1,1-Dichloroethane	ND		ug/l	0.75	--
Chloroform	ND		ug/l	0.75	--
Carbon tetrachloride	ND		ug/l	0.50	--
1,2-Dichloropropane	ND		ug/l	1.8	--
Dibromochloromethane	ND		ug/l	0.50	--
1,1,2-Trichloroethane	ND		ug/l	0.75	--
2-Chloroethylvinyl ether	ND		ug/l	10	--
Tetrachloroethene	ND		ug/l	0.50	--
Chlorobenzene	ND		ug/l	0.50	--
Trichlorofluoromethane	ND		ug/l	2.5	--
1,2-Dichloroethane	ND		ug/l	0.50	--
1,1,1-Trichloroethane	ND		ug/l	0.50	--
Bromodichloromethane	ND		ug/l	0.50	--
trans-1,3-Dichloropropene	ND		ug/l	0.50	--
cis-1,3-Dichloropropene	ND		ug/l	0.50	--
1,1-Dichloropropene	ND		ug/l	2.5	--
Bromoform	ND		ug/l	2.0	--
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	--
Benzene	ND		ug/l	0.50	--
Toluene	ND		ug/l	0.75	--
Ethy benzene	ND		ug/l	0.50	--
Chloromethane	ND		ug/l	2.5	--
Bromomethane	ND		ug/l	1.0	--
Vinyl chloride	ND		ug/l	1.0	--
Chloroethane	ND		ug/l	1.0	--
1,1-Dichloroethene	ND		ug/l	0.50	--
trans-1,2-Dichloroethene	ND		ug/l	0.75	--
Trichloroethene	ND		ug/l	0.50	--
1,2-Dichlorobenzene	ND		ug/l	2.5	--
1,3-Dichlorobenzene	ND		ug/l	2.5	--

Project Name: 671 MAIN STREET

Lab Number: L1306014

Project Number: 11622.00

Report Date: 04/15/13

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C

Analytical Date: 04/09/13 13:16

Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG600753-3					
1,4-Dichlorobenzene	ND		ug/l	2.5	--
Methyl tert butyl ether	ND		ug/l	1.0	--
p/m-Xylene	ND		ug/l	1.0	--
o-Xylene	ND		ug/l	1.0	--
Xylenes, Total	ND		ug/l	1.0	--
cis-1,2-Dichloroethene	ND		ug/l	0.50	--
Dibromomethane	ND		ug/l	5.0	--
1,2,3-Trichloropropane	ND		ug/l	5.0	--
Styrene	ND		ug/l	1.0	--
Dichlorodifluoromethane	ND		ug/l	5.0	--
Acetone	ND		ug/l	5.0	--
Carbon disulfide	ND		ug/l	5.0	--
2-Butanone	ND		ug/l	5.0	--
Vinyl acetate	ND		ug/l	5.0	--
4-Methyl-2-pentanone	ND		ug/l	5.0	--
2-Hexanone	ND		ug/l	5.0	--
Ethyl methacrylate	ND		ug/l	5.0	--
Acrylonitrile	ND		ug/l	5.0	--
Bromochloromethane	ND		ug/l	2.5	--
Tetrahydrofuran	ND		ug/l	5.0	--
2,2-Dichloropropane	ND		ug/l	2.5	--
1,2-Dibromoethane	ND		ug/l	2.0	--
1,3-Dichloropropane	ND		ug/l	2.5	--
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	--
Bromobenzene	ND		ug/l	2.5	--
n-Buty benzene	ND		ug/l	0.50	--
sec-Buty benzene	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: 671 MAIN STREET

Lab Number: L1306014

Project Number: 11622.00

Report Date: 04/15/13

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 04/09/13 13:16
 Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG600753-3					
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-Propy benzene	ND		ug/l	0.50	--
1,2,3-Trichlorobenzene	ND		ug/l	2.5	--
1,2,4-Trichlorobenzene	ND		ug/l	2.5	--
1,3,5-Trimethylbenzene	ND		ug/l	2.5	--
1,3,5-Trichlorobenzene	ND		ug/l	2.0	--
1,2,4-Trimethylbenzene	ND		ug/l	2.5	--
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	--
Ethyl ether	ND		ug/l	2.5	--
Methyl Acetate	ND		ug/l	10	--
Ethyl Acetate	ND		ug/l	10	--
Isopropyl Ether	ND		ug/l	2.0	--
Cyclohexane	ND		ug/l	10	--
Tert-Butyl Alcohol	ND		ug/l	10	--
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0	--
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	--
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		ug/l	10	--
Methyl cyclohexane	ND		ug/l	10	--
p-Diethylbenzene	ND		ug/l	2.0	--
4-Ethyltoluene	ND		ug/l	2.0	--
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	--

Project Name: 671 MAIN STREET**Lab Number:** L1306014**Project Number:** 11622.00**Report Date:** 04/15/13**Method Blank Analysis**
Batch Quality Control

Analytical Method: 1,8260C

Analytical Date: 04/09/13 13:16

Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
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Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG600753-3					
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Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	99		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	106		70-130
D bromofluoromethane	102		70-130

Lab Control Sample Analysis**Batch Quality Control****Project Name:** 671 MAIN STREET**Lab Number:** L1306014**Project Number:** 11622.00**Report Date:** 04/15/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Microextractables by GC - Westborough Lab Associated sample(s): 01 Batch: WG600656-2								
1,2-Dibromoethane	103		-		70-130	-		20

Volatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01 Batch: WG600752-1 WG600752-2								
1,4-Dioxane	94		92		70-130	2		25

Lab Control Sample Analysis Batch Quality Control

Project Name: 671 MAIN STREET

Project Number: 11622.00

Lab Number: L1306014

Report Date: 04/15/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG600753-1 WG600753-2								
Methylene chloride	103		108		70-130	5		20
1,1-Dichloroethane	100		102		70-130	2		20
Chloroform	105		105		70-130	0		20
Carbon tetrachloride	112		110		63-132	2		20
1,2-Dichloropropane	93		95		70-130	2		20
Dibromochloromethane	95		91		63-130	4		20
1,1,2-Trichloroethane	85		90		70-130	6		20
2-Chloroethylvinyl ether	63	Q	61	Q	70-130	3		20
Tetrachloroethene	105		100		70-130	5		20
Chlorobenzene	97		99		75-130	2		25
Trichlorofluoromethane	115		108		62-150	6		20
1,2-Dichloroethane	99		100		70-130	1		20
1,1,1-Trichloroethane	111		107		67-130	4		20
Bromodichloromethane	99		101		67-130	2		20
trans-1,3-Dichloropropene	94		95		70-130	1		20
cis-1,3-Dichloropropene	98		95		70-130	3		20
1,1-Dichloropropene	103		102		70-130	1		20
Bromoform	83		90		54-136	8		20
1,1,2,2-Tetrachloroethane	77		77		67-130	0		20
Benzene	100		99		70-130	1		25
Toluene	98		95		70-130	3		25

Lab Control Sample Analysis Batch Quality Control

Project Name: 671 MAIN STREET

Project Number: 11622.00

Lab Number: L1306014

Report Date: 04/15/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG600753-1 WG600753-2								
Ethylbenzene	100		98		70-130	2		20
Chloromethane	88		84		64-130	5		20
Bromomethane	64		66		39-139	3		20
Vinyl chloride	103		101		55-140	2		20
Chloroethane	105		113		55-138	7		20
1,1-Dichloroethene	104		106		61-145	2		25
trans-1,2-Dichloroethene	112		107		70-130	5		20
Trichloroethene	106		102		70-130	4		25
1,2-Dichlorobenzene	93		92		70-130	1		20
1,3-Dichlorobenzene	96		92		70-130	4		20
1,4-Dichlorobenzene	94		92		70-130	2		20
Methyl tert butyl ether	92		93		63-130	1		20
p/m-Xylene	102		99		70-130	3		20
o-Xylene	102		98		70-130	4		20
cis-1,2-Dichloroethene	102		101		70-130	1		20
Dibromomethane	91		96		70-130	5		20
1,2,3-Trichloropropane	88		81		64-130	8		20
Styrene	98		96		70-130	2		20
Dichlorodifluoromethane	106		101		36-147	5		20
Acetone	104		102		58-148	2		20
Carbon disulfide	111		108		51-130	3		20

Lab Control Sample Analysis Batch Quality Control

Project Name: 671 MAIN STREET

Project Number: 11622.00

Lab Number: L1306014

Report Date: 04/15/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG600753-1 WG600753-2								
2-Butanone	90		81		63-138	11		20
Vinyl acetate	95		97		70-130	2		20
4-Methyl-2-pentanone	83		75		59-130	10		20
2-Hexanone	80		72		57-130	11		20
Ethyl methacrylate	84		82		70-130	2		20
Acrylonitrile	83		83		70-130	0		20
Bromochloromethane	100		101		70-130	1		20
Tetrahydrofuran	75		75		58-130	0		20
2,2-Dichloropropane	115		106		63-133	8		20
1,2-Dibromoethane	92		90		70-130	2		20
1,3-Dichloropropane	93		90		70-130	3		20
1,1,1,2-Tetrachloroethane	102		104		64-130	2		20
Bromobenzene	92		91		70-130	1		20
n-Butylbenzene	102		98		53-136	4		20
sec-Butylbenzene	100		96		70-130	4		20
tert-Butylbenzene	96		95		70-130	1		20
o-Chlorotoluene	97		94		70-130	3		20
p-Chlorotoluene	94		93		70-130	1		20
1,2-Dibromo-3-chloropropane	86		79		41-144	8		20
Hexachlorobutadiene	113		103		63-130	9		20
Isopropylbenzene	98		93		70-130	5		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: 671 MAIN STREET

Project Number: 11622.00

Lab Number: L1306014

Report Date: 04/15/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG600753-1 WG600753-2								
p-Isopropyltoluene	101		95		70-130	6		20
Naphthalene	72		73		70-130	1		20
n-Propylbenzene	96		94		69-130	2		20
1,2,3-Trichlorobenzene	78		84		70-130	7		20
1,2,4-Trichlorobenzene	86		87		70-130	1		20
1,3,5-Trimethylbenzene	92		96		64-130	4		20
1,3,5-Trichlorobenzene	97		95		70-130	2		20
1,2,4-Trimethylbenzene	93		91		70-130	2		20
trans-1,4-Dichloro-2-butene	73		72		70-130	1		20
Ethyl ether	96		92		59-134	4		20
Methyl Acetate	87		81		70-130	7		20
Ethyl Acetate	83		80		70-130	4		20
Isopropyl Ether	102		98		70-130	4		20
Cyclohexane	102		100		70-130	2		20
tert-Butyl Alcohol	89		86		70-130	3		20
Ethyl-Tert-Butyl-Ether	95		94		70-130	1		20
Tertiary-Amyl Methyl Ether	92		89		66-130	3		20
1,1,2-Trichloro-1,2,2-Trifluoroethane	117		114		70-130	3		20
Methyl cyclohexane	103		99		70-130	4		20
1,4-Diethylbenzene	101		96		70-130	5		20
4-Ethyltoluene	98		95		70-130	3		20

Lab Control Sample Analysis**Batch Quality Control****Project Name:** 671 MAIN STREET**Lab Number:** L1306014**Project Number:** 11622.00**Report Date:** 04/15/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG600753-1 WG600753-2								
1,2,4,5-Tetramethylbenzene	94		94		70-130	0		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	105		99		70-130
Toluene-d8	97		99		70-130
4-Bromofluorobenzene	100		97		70-130
Dibromofluoromethane	103		102		70-130

Matrix Spike Analysis

Batch Quality Control

Project Name: 671 MAIN STREET

Project Number: 11622.00

Lab Number: L1306014

Report Date: 04/15/13

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Microextractables by GC - Westborough Lab Associated sample(s): 01 QC Batch ID: WG600656-3 QC Sample: L1305710-15 Client ID: MS Sample												
1,2-Dibromoethane	ND	0.252	0.278	110		-	-		70-130	-		20

SEMIVOLATILES

Project Name: 671 MAIN STREET**Lab Number:** L1306014**Project Number:** 11622.00**Report Date:** 04/15/13**SAMPLE RESULTS**

Lab ID: L1306014-01
Client ID: RGP-1
Sample Location: WINCHESTER, MA
Matrix: Water
Analytical Method: 1,8270D
Analytical Date: 04/15/13 09:49
Analyst: RC

Date Collected: 04/08/13 10:00
Date Received: 04/08/13
Field Prep: Not Specified
Extraction Method: EPA 3510C
Extraction Date: 04/08/13 20:27

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: 671 MAIN STREET**Lab Number:** L1306014**Project Number:** 11622.00**Report Date:** 04/15/13**SAMPLE RESULTS**

Lab ID: L1306014-01
 Client ID: RGP-1
 Sample Location: WINCHESTER, MA

Date Collected: 04/08/13 10:00
 Date Received: 04/08/13
 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	29		21-120
Phenol-d6	23		10-120
Nitrobenzene-d5	53		23-120
2-Fluorobiphenyl	48		15-120
2,4,6-Tribromophenol	79		10-120
4-Terphenyl-d14	73		41-149

Project Name: 671 MAIN STREET**Lab Number:** L1306014**Project Number:** 11622.00**Report Date:** 04/15/13**SAMPLE RESULTS**

Lab ID: L1306014-01
Client ID: RGP-1
Sample Location: WINCHESTER, MA
Matrix: Water
Analytical Method: 1,8270D-SIM
Analytical Date: 04/09/13 14:47
Analyst: AS

Date Collected: 04/08/13 10:00
Date Received: 04/08/13
Field Prep: Not Specified
Extraction Method: EPA 3510C
Extraction Date: 04/08/13 20:29

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	1.3		ug/l	0.20	--	1
2-Chloronaphthalene	ND		ug/l	0.20	--	1
Fluoranthene	1.8		ug/l	0.20	--	1
Hexachlorobutadiene	ND		ug/l	0.50	--	1
Naphthalene	ND		ug/l	0.20	--	1
Benzo(a)anthracene	0.45		ug/l	0.20	--	1
Benzo(a)pyrene	0.31		ug/l	0.20	--	1
Benzo(b)fluoranthene	0.44		ug/l	0.20	--	1
Benzo(k)fluoranthene	0.23		ug/l	0.20	--	1
Chrysene	0.43		ug/l	0.20	--	1
Acenaphthylene	ND		ug/l	0.20	--	1
Anthracene	0.64		ug/l	0.20	--	1
Benzo(ghi)perylene	0.25		ug/l	0.20	--	1
Fluorene	1.2		ug/l	0.20	--	1
Phenanthrene	2.1		ug/l	0.20	--	1
Dibenzo(a,h)anthracene	ND		ug/l	0.20	--	1
Indeno(1,2,3-cd)Pyrene	0.28		ug/l	0.20	--	1
Pyrene	1.4		ug/l	0.20	--	1
1-Methylnaphthalene	1.5		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	32		21-120
Phenol-d6	23		10-120
Nitrobenzene-d5	53		23-120
2-Fluorobiphenyl	50		15-120
2,4,6-Tribromophenol	92		10-120
4-Terphenyl-d14	71		41-149

Project Name: 671 MAIN STREET

Lab Number: L1306014

Project Number: 11622.00

Report Date: 04/15/13

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270D
 Analytical Date: 04/09/13 10:21
 Analyst: RC

Extraction Method: EPA 3510C
 Extraction Date: 04/08/13 20:27

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG600343-1					
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: 671 MAIN STREET

Lab Number: L1306014

Project Number: 11622.00

Report Date: 04/15/13

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270D
 Analytical Date: 04/09/13 10:21
 Analyst: RC

Extraction Method: EPA 3510C
 Extraction Date: 04/08/13 20:27

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG600343-1					
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	43		21-120
Phenol-d6	25		10-120
Nitrobenzene-d5	64		23-120
2-Fluorobiphenyl	59		15-120
2,4,6-Tribromophenol	87		10-120
4-Terphenyl-d14	78		41-149

Project Name: 671 MAIN STREET

Lab Number: L1306014

Project Number: 11622.00

Report Date: 04/15/13

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270D-SIM
 Analytical Date: 04/09/13 15:17
 Analyst: AS

Extraction Method: EPA 3510C
 Extraction Date: 04/08/13 20:29

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01 Batch: WG600344-1					
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: 671 MAIN STREET**Lab Number:** L1306014**Project Number:** 11622.00**Report Date:** 04/15/13**Method Blank Analysis**
Batch Quality ControlAnalytical Method: 1,8270D-SIM
Analytical Date: 04/09/13 15:17
Analyst: ASExtraction Method: EPA 3510C
Extraction Date: 04/08/13 20:29

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01 Batch: WG600344-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	51		21-120
Phenol-d6	34		10-120
Nitrobenzene-d5	79		23-120
2-Fluorobiphenyl	71		15-120
2,4,6-Tribromophenol	86		10-120
4-Terphenyl-d14	76		41-149

Lab Control Sample Analysis

Batch Quality Control

Project Name: 671 MAIN STREET

Project Number: 11622.00

Lab Number: L1306014

Report Date: 04/15/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG600343-2 WG600343-3								
Benzidine	62		52		10-75	18		30
1,2,4-Trichlorobenzene	68		66		39-98	3		30
Bis(2-chloroethyl)ether	83		79		40-140	5		30
1,2-Dichlorobenzene	67		67		40-140	0		30
1,3-Dichlorobenzene	64		64		40-140	0		30
1,4-Dichlorobenzene	68		67		36-97	1		30
3,3'-Dichlorobenzidine	85		64		40-140	28		30
2,4-Dinitrotoluene	140	Q	117	Q	24-96	18		30
2,6-Dinitrotoluene	140		122		40-140	14		30
Azobenzene	116		99		40-140	16		30
4-Chlorophenyl phenyl ether	110		94		40-140	16		30
4-Bromophenyl phenyl ether	123		104		40-140	17		30
Bis(2-chloroisopropyl)ether	75		70		40-140	7		30
Bis(2-chloroethoxy)methane	91		84		40-140	8		30
Hexachlorocyclopentadiene	41		39	Q	40-140	5		30
Isophorone	102		94		40-140	8		30
Nitrobenzene	93		84		40-140	10		30
NitrosoDiPhenylAmine(NDPA)/DPA	118		100		40-140	17		30
Bis(2-Ethylhexyl)phthalate	134		111		40-140	19		30
Butyl benzyl phthalate	141	Q	116		40-140	19		30
Di-n-butylphthalate	140		115		40-140	20		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: 671 MAIN STREET

Project Number: 11622.00

Lab Number: L1306014

Report Date: 04/15/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG600343-2 WG600343-3								
Di-n-octylphthalate	123		104		40-140	17		30
Diethyl phthalate	127		108		40-140	16		30
Dimethyl phthalate	120		101		40-140	17		30
Aniline	38	Q	29	Q	40-140	27		30
4-Chloroaniline	54		42		40-140	25		30
2-Nitroaniline	132		117		52-143	12		30
3-Nitroaniline	78		57		25-145	31	Q	30
4-Nitroaniline	120		101		51-143	17		30
Dibenzofuran	99		87		40-140	13		30
n-Nitrosodimethylamine	58		57		22-74	2		30
2,4,6-Trichlorophenol	120		105		30-130	13		30
P-Chloro-M-Cresol	123	Q	108	Q	23-97	13		30
2-Chlorophenol	93		85		27-123	9		30
2,4-Dichlorophenol	104		94		30-130	10		30
2,4-Dimethylphenol	112		102		30-130	9		30
2-Nitrophenol	111		96		30-130	14		30
4-Nitrophenol	79		80		10-80	1		30
2,4-Dinitrophenol	106		91		20-130	15		30
4,6-Dinitro-o-cresol	136		113		20-164	18		30
Phenol	48		44		12-110	9		30
2-Methylphenol	92		89		30-130	3		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: 671 MAIN STREET

Project Number: 11622.00

Lab Number: L1306014

Report Date: 04/15/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG600343-2 WG600343-3								
3-Methylphenol/4-Methylphenol	82		80		30-130	2		30
2,4,5-Trichlorophenol	128		110		30-130	15		30
Benzoic Acid	41		32		10-164	25		30
Benzyl Alcohol	75		79		26-116	5		30
Carbazole	119		98		55-144	19		30
Pyridine	43		41		10-66	5		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	65		61		21-120
Phenol-d6	47		44		10-120
Nitrobenzene-d5	96		94		23-120
2-Fluorobiphenyl	96		85		15-120
2,4,6-Tribromophenol	136	Q	112		10-120
4-Terphenyl-d14	111		90		41-149

Lab Control Sample Analysis

Batch Quality Control

Project Name: 671 MAIN STREET

Project Number: 11622.00

Lab Number: L1306014

Report Date: 04/15/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01 Batch: WG600344-2 WG600344-3								
Acenaphthene	73		73		37-111	0		40
2-Chloronaphthalene	72		71		40-140	1		40
Fluoranthene	84		93		40-140	10		40
Hexachlorobutadiene	61		58		40-140	5		40
Naphthalene	72		69		40-140	4		40
Benzo(a)anthracene	87		98		40-140	12		40
Benzo(a)pyrene	73		81		40-140	10		40
Benzo(b)fluoranthene	74		84		40-140	13		40
Benzo(k)fluoranthene	76		85		40-140	11		40
Chrysene	79		88		40-140	11		40
Acenaphthylene	79		79		40-140	0		40
Anthracene	76		83		40-140	9		40
Benzo(ghi)perylene	75		82		40-140	9		40
Fluorene	81		80		40-140	1		40
Phenanthrene	72		78		40-140	8		40
Dibenzo(a,h)anthracene	73		80		40-140	9		40
Indeno(1,2,3-cd)Pyrene	79		86		40-140	8		40
Pyrene	80		88		26-127	10		40
1-Methylnaphthalene	74		73		40-140	1		40
2-Methylnaphthalene	73		72		40-140	1		40
Pentachlorophenol	105	Q	113	Q	9-103	7		40

Lab Control Sample Analysis**Batch Quality Control****Project Name:** 671 MAIN STREET**Lab Number:** L1306014**Project Number:** 11622.00**Report Date:** 04/15/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01 Batch: WG600344-2 WG600344-3								
Hexachlorobenzene	67		70		40-140	4		40
Hexachloroethane	63		59		40-140	7		40

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	55		54		21-120
Phenol-d6	39		38		10-120
Nitrobenzene-d5	80		77		23-120
2-Fluorobiphenyl	70		66		15-120
2,4,6-Tribromophenol	96		100		10-120
4-Terphenyl-d14	72		77		41-149

PCBS

Project Name: 671 MAIN STREET**Lab Number:** L1306014**Project Number:** 11622.00**Report Date:** 04/15/13**SAMPLE RESULTS**

Lab ID: L1306014-01
Client ID: RGP-1
Sample Location: WINCHESTER, MA
Matrix: Water
Analytical Method: 5,608
Analytical Date: 04/09/13 11:26
Analyst: KB

Date Collected: 04/08/13 10:00
Date Received: 04/08/13
Field Prep: Not Specified
Extraction Method: EPA 608
Extraction Date: 04/08/13 19:13
Cleanup Method1: EPA 3665A
Cleanup Date1: 04/08/13
Cleanup Method2: EPA 3660B
Cleanup Date2: 04/08/13

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	51		30-150
Decachlorobiphenyl	39		30-150

Project Name: 671 MAIN STREET
Project Number: 11622.00

Lab Number: L1306014
Report Date: 04/15/13

Method Blank Analysis
Batch Quality Control

Analytical Method: 5,608
Analytical Date: 04/09/13 09:41
Analyst: KB

Extraction Method: EPA 608
Extraction Date: 04/08/13 19:13
Cleanup Method1: EPA 3665A
Cleanup Date1: 04/08/13
Cleanup Method2: EPA 3660B
Cleanup Date2: 04/08/13

Parameter	Result	Qualifier	Units	RL	MDL
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 01 Batch: WG600325-1					
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	39		30-150
Decachlorobiphenyl	61		30-150

Matrix Spike Analysis

Batch Quality Control

Project Name: 671 MAIN STREET

Project Number: 11622.00

Lab Number: L1306014

Report Date: 04/15/13

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01 QC Batch ID: WG600325-3 QC Sample: L1305861-02 Client ID: MS Sample												
Aroclor 1016	ND	1.06	ND	0	Q	-	-		40-140	-		50
Aroclor 1260	ND	1.06	ND	0	Q	-	-		40-140	-		50

Surrogate	MS		MSD		Acceptance Criteria
	% Recovery	Qualifier	% Recovery	Qualifier	
2,4,5,6-Tetrachloro-m-xylene	16	Q			30-150
Decachlorobiphenyl	17	Q			30-150

Lab Control Sample Analysis Batch Quality Control

Project Name: 671 MAIN STREET

Lab Number: L1306014

Project Number: 11622.00

Report Date: 04/15/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01 Batch: WG600325-2								
Aroclor 1016	54		-		40-140	-		50
Aroclor 1260	54		-		40-140	-		50

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	48				30-150
Decachlorobiphenyl	66				30-150

Lab Duplicate Analysis

Batch Quality Control

Project Name: 671 MAIN STREET

Project Number: 11622.00

Lab Number: L1306014

Report Date: 04/15/13

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01 QC Batch ID: WG600325-4 QC Sample: L1306014-01 Client ID: RGP-1						
Aroclor 1016	ND	ND	ug/l	NC		50
Aroclor 1221	ND	ND	ug/l	NC		50
Aroclor 1232	ND	ND	ug/l	NC		50
Aroclor 1242	ND	ND	ug/l	NC		50
Aroclor 1248	ND	ND	ug/l	NC		50
Aroclor 1254	ND	ND	ug/l	NC		50
Aroclor 1260	ND	ND	ug/l	NC		50

Surrogate	%Recovery	Qualifier	%Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	51		40		30-150
Decachlorobiphenyl	39		28	Q	30-150

METALS

Project Name: 671 MAIN STREET

Lab Number: L1306014

Project Number: 11622.00

Report Date: 04/15/13

SAMPLE RESULTS

Lab ID: L1306014-01

Date Collected: 04/08/13 10:00

Client ID: RGP-1

Date Received: 04/08/13

Sample Location: WINCHESTER, 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	0.00100	--	1	04/10/13 11:28	04/10/13 17:19	EPA 3005A	1,6020A	AK
Arsenic, Total	0.03181		mg/l	0.00050	--	1	04/10/13 11:28	04/10/13 17:19	EPA 3005A	1,6020A	AK
Barium, Total	1.830		mg/l	0.00050	--	1	04/10/13 11:28	04/10/13 17:19	EPA 3005A	1,6020A	AK
Cadmium, Total	0.00312		mg/l	0.00020	--	1	04/10/13 11:28	04/10/13 17:19	EPA 3005A	1,6020A	AK
Chromium, Total	0.05002		mg/l	0.00100	--	1	04/10/13 11:28	04/10/13 17:19	EPA 3005A	1,6020A	AK
Copper, Total	0.09446		mg/l	0.00100	--	1	04/10/13 11:28	04/10/13 17:19	EPA 3005A	1,6020A	AK
Iron, Total	170		mg/l	0.05	--	1	04/10/13 11:28	04/12/13 00:35	EPA 3005A	19,200.7	TT
Lead, Total	0.2863		mg/l	0.00050	--	1	04/10/13 11:28	04/10/13 17:19	EPA 3005A	1,6020A	AK
Mercury, Total	0.0121		mg/l	0.0010	--	1	04/10/13 15:17	04/10/13 18:58	EPA 245.1	3,245.1	JH
Nickel, Total	0.04745		mg/l	0.00050	--	1	04/10/13 11:28	04/10/13 17:19	EPA 3005A	1,6020A	AK
Selenium, Total	ND		mg/l	0.00500	--	1	04/10/13 11:28	04/10/13 17:19	EPA 3005A	1,6020A	AK
Silver, Total	ND		mg/l	0.00040	--	1	04/10/13 11:28	04/10/13 17:19	EPA 3005A	1,6020A	AK



Project Name: 671 MAIN STREET

Lab Number: L1306014

Project Number: 11622.00

Report Date: 04/15/13

SAMPLE RESULTS

Lab ID: L1306014-01 D

Date Collected: 04/08/13 10:00

Client ID: RGP-1

Date Received: 04/08/13

Sample Location: WINCHESTER, 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											
Zinc, Total	3.326		mg/l	0.2000	--	20	04/10/13 11:28	04/10/13 17:02	EPA 3005A	1,6020A	AK



Project Name: 671 MAIN STREET

Lab Number: L1306014

Project Number: 11622.00

Report Date: 04/15/13

Method Blank Analysis Batch Quality Control

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Westborough Lab for sample(s): 01 Batch: WG600735-1									
Antimony, Total	ND	mg/l	0.00100	--	1	04/10/13 11:28	04/10/13 16:24	1,6020A	AK
Arsenic, Total	ND	mg/l	0.00050	--	1	04/10/13 11:28	04/10/13 16:24	1,6020A	AK
Barium, Total	ND	mg/l	0.00050	--	1	04/10/13 11:28	04/10/13 16:24	1,6020A	AK
Cadmium, Total	ND	mg/l	0.00020	--	1	04/10/13 11:28	04/10/13 16:24	1,6020A	AK
Chromium, Total	ND	mg/l	0.00100	--	1	04/10/13 11:28	04/10/13 16:24	1,6020A	AK
Copper, Total	ND	mg/l	0.00100	--	1	04/10/13 11:28	04/10/13 16:24	1,6020A	AK
Lead, Total	ND	mg/l	0.00050	--	1	04/10/13 11:28	04/10/13 16:24	1,6020A	AK
Nickel, Total	ND	mg/l	0.00050	--	1	04/10/13 11:28	04/10/13 16:24	1,6020A	AK
Selenium, Total	ND	mg/l	0.00500	--	1	04/10/13 11:28	04/10/13 16:24	1,6020A	AK
Silver, Total	ND	mg/l	0.00040	--	1	04/10/13 11:28	04/10/13 16:24	1,6020A	AK
Zinc, Total	ND	mg/l	0.01000	--	1	04/10/13 11:28	04/10/13 16:24	1,6020A	AK

Prep Information

Digestion Method: EPA 3005A

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Westborough Lab for sample(s): 01 Batch: WG600736-1									
Iron, Total	ND	mg/l	0.05	--	1	04/10/13 11:28	04/12/13 00:27	19,200.7	TT

Prep Information

Digestion Method: EPA 3005A

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Westborough Lab for sample(s): 01 Batch: WG600814-1									
Mercury, Total	ND	mg/l	0.0002	--	1	04/10/13 15:17	04/10/13 18:47	3,245.1	JH

Prep Information

Digestion Method: EPA 245.1



Lab Control Sample Analysis

Batch Quality Control

Project Name: 671 MAIN STREET

Project Number: 11622.00

Lab Number: L1306014

Report Date: 04/15/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01 Batch: WG600735-2								
Antimony, Total	104		-		80-120	-		
Arsenic, Total	119		-		80-120	-		
Barium, Total	100		-		80-120	-		
Cadmium, Total	108		-		80-120	-		
Chromium, Total	104		-		80-120	-		
Copper, Total	111		-		80-120	-		
Lead, Total	106		-		80-120	-		
Nickel, Total	109		-		80-120	-		
Selenium, Total	115		-		80-120	-		
Silver, Total	106		-		80-120	-		
Zinc, Total	113		-		80-120	-		
Total Metals - Westborough Lab Associated sample(s): 01 Batch: WG600736-2								
Iron, Total	100		-		85-115	-		
Total Metals - Westborough Lab Associated sample(s): 01 Batch: WG600814-2								
Mercury, Total	100		-		85-115	-		

Matrix Spike Analysis **Batch Quality Control**

Project Name: 671 MAIN STREET
Project Number: 11622.00

Lab Number: L1306014
Report Date: 04/15/13

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG600735-4 QC Sample: L1306014-01 Client ID: RGP-1												
Antimony, Total	ND	0.5	0.3832	77	Q	-	-		80-120	-		20
Arsenic, Total	0.03181	0.12	0.1765	120		-	-		80-120	-		20
Barium, Total	1.830	2	3.618	89		-	-		80-120	-		20
Cadmium, Total	0.00312	0.51	0.5238	102		-	-		80-120	-		20
Chromium, Total	0.05002	0.2	0.2623	106		-	-		80-120	-		20
Copper, Total	0.09446	0.25	0.4004	122	Q	-	-		80-120	-		20
Lead, Total	0.2863	0.51	0.8651	113		-	-		80-120	-		20
Nickel, Total	0.04745	0.5	0.5692	104		-	-		80-120	-		20
Selenium, Total	ND	0.12	ND	0	Q	-	-		80-120	-		20
Silver, Total	ND	0.05	0.05067	101		-	-		80-120	-		20
Zinc, Total	3.326	0.5	4.002	135	Q	-	-		80-120	-		20
Total Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG600736-4 QC Sample: L1306014-01 Client ID: RGP-1												
Iron, Total	170	1	180	1000	Q	-	-		75-125	-		20
Total Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG600814-4 QC Sample: L1305824-01 Client ID: MS Sample												
Mercury, Total	ND	0.001	0.0012	116		-	-		70-130	-		20

Lab Duplicate Analysis

Batch Quality Control

Project Name: 671 MAIN STREET

Project Number: 11622.00

Lab Number: L1306014

Report Date: 04/15/13

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG600735-3 QC Sample: L1306014-01 Client ID: RGP-1						
Zinc, Total	3.326	3.426	mg/l	3		20
Total Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG600735-3 QC Sample: L1306014-01 Client ID: RGP-1						
Antimony, Total	ND	ND	mg/l	NC		20
Arsenic, Total	0.03181	0.03545	mg/l	11		20
Barium, Total	1.830	1.764	mg/l	4		20
Cadmium, Total	0.00312	0.00349	mg/l	11		20
Chromium, Total	0.05002	0.05710	mg/l	13		20
Copper, Total	0.09446	0.1155	mg/l	20		20
Lead, Total	0.2863	0.3457	mg/l	19		20
Nickel, Total	0.04745	0.05173	mg/l	9		20
Selenium, Total	ND	ND	mg/l	NC		20
Silver, Total	ND	ND	mg/l	NC		20
Total Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG600736-3 QC Sample: L1306014-01 Client ID: RGP-1						
Iron, Total	170	170	mg/l	0		20
Total Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG600814-3 QC Sample: L1305824-01 Client ID: DUP Sample						
Mercury, Total	ND	ND	mg/l	NC		20

INORGANICS & MISCELLANEOUS

Project Name: 671 MAIN STREET
Project Number: 11622.00

Lab Number: L1306014
Report Date: 04/15/13

SAMPLE RESULTS

Lab ID: L1306014-01
Client ID: RGP-1
Sample Location: WINCHESTER, MA
Matrix: Water

Date Collected: 04/08/13 10:00
Date Received: 04/08/13
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	20000		mg/l	500	NA	100	-	04/10/13 14:00	30,2540D	DW
Cyanide, Total	ND		mg/l	0.005	--	1	04/10/13 09:30	04/10/13 14:39	30,4500CN-CE	JO
Chlorine, Total Residual	ND		mg/l	0.10	--	5	-	04/08/13 20:15	30,4500CL-D	DE
TPH	ND		mg/l	4.00	--	1	04/11/13 07:30	04/11/13 11:00	74,1664A	ML
Phenolics, Total	0.040		mg/l	0.030	--	1	04/11/13 10:30	04/11/13 12:35	4,420.1	MP
Chromium, Hexavalent	ND		mg/l	0.010	--	1	04/08/13 21:30	04/08/13 22:01	30,3500CR-D	DE
Anions by Ion Chromatography - Westborough Lab										
Chloride	284.		mg/l	12.5	--	25	-	04/09/13 03:17	44,300.0	AU



Project Name: 671 MAIN STREET

Lab Number: L1306014

Project Number: 11622.00

Report Date: 04/15/13

Method Blank Analysis Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG600339-1										
Chlorine, Total Residual	ND		mg/l	0.02	--	1	-	04/08/13 20:15	30,4500CL-D	DE
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG600340-1										
Chromium, Hexavalent	ND		mg/l	0.010	--	1	04/08/13 21:30	04/08/13 22:00	30,3500CR-D	DE
Anions by Ion Chromatography - Westborough Lab for sample(s): 01 Batch: WG600610-1										
Chloride	ND		mg/l	0.500	--	1	-	04/08/13 18:17	44,300.0	AU
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG600699-1										
Solids, Total Suspended	ND		mg/l	5.0	NA	1	-	04/10/13 14:00	30,2540D	DW
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG600742-1										
Cyanide, Total	ND		mg/l	0.005	--	1	04/10/13 09:30	04/10/13 14:30	30,4500CN-CE	JO
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG601025-1										
TPH	ND		mg/l	4.00	--	1	04/11/13 07:30	04/11/13 11:00	74,1664A	ML
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG601036-1										
Phenolics, Total	ND		mg/l	0.030	--	1	04/11/13 10:30	04/11/13 12:34	4,420.1	MP

Lab Control Sample Analysis Batch Quality Control

Project Name: 671 MAIN STREET

Project Number: 11622.00

Lab Number: L1306014

Report Date: 04/15/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG600339-2								
Chlorine, Total Residual	93		-		90-110	-		
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG600340-2								
Chromium, Hexavalent	100		-		85-115	-		20
Anions by Ion Chromatography - Westborough Lab Associated sample(s): 01 Batch: WG600610-2								
Chloride	106		-		90-110	-		
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG600742-2								
Cyanide, Total	110		-		90-110	-		
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG601025-2								
TPH	85		-		64-132	-		34
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG601036-2								
Phenolics, Total	109		-		82-111	-		12

Matrix Spike Analysis **Batch Quality Control**

Project Name: 671 MAIN STREET

Project Number: 11622.00

Lab Number: L1306014

Report Date: 04/15/13

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG600340-4 QC Sample: L1306014-01 Client ID: RGP-1												
Chromium, Hexavalent	ND	0.1	0.097	97		-	-		85-115	-		20
Anions by Ion Chromatography - Westborough Lab Associated sample(s): 01 QC Batch ID: WG600610-3 QC Sample: L1305867-05 Client ID: MS Sample												
Chloride	3.01	4	6.92	98		-	-		40-151	-		18
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG600742-4 QC Sample: L1306127-02 Client ID: MS Sample												
Cyanide, Total	0.010	0.2	0.211	100		-	-		90-110	-		30
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG601025-4 QC Sample: L1306014-01 Client ID: RGP-1												
TPH	ND	20.4	18.3	80		-	-		64-132	-		34
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG601036-4 QC Sample: L1306198-01 Client ID: MS Sample												
Phenolics, Total	ND	0.8	0.82	102		-	-		77-124	-		12

Lab Duplicate Analysis Batch Quality Control

Project Name: 671 MAIN STREET

Project Number: 11622.00

Lab Number: L1306014

Report Date: 04/15/13

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG600339-3 QC Sample: L1306014-01 Client ID: RGP-1						
Chlorine, Total Residual	ND	ND	mg/l	NC		20
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG600340-3 QC Sample: L1306014-01 Client ID: RGP-1						
Chromium, Hexavalent	ND	ND	mg/l	NC		20
Anions by Ion Chromatography - Westborough Lab Associated sample(s): 01 QC Batch ID: WG600610-4 QC Sample: L1305867-05 Client ID: DUP Sample						
Chloride	3.01	3.01	mg/l	0		18
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG600699-2 QC Sample: L1305770-01 Client ID: DUP Sample						
Solids, Total Suspended	36	34.	mg/l	6		20
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG601025-3 QC Sample: L1305861-01 Client ID: DUP Sample						
TPH	43.3	12.9	mg/l	108	Q	34
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG601036-3 QC Sample: L1306196-02 Client ID: DUP Sample						
Phenolics, Total	0.11	0.060	mg/l	59	Q	12

Project Name: 671 MAIN STREET

Project Number: 11622.00

Lab Number: L1306014

Report Date: 04/15/13

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Reagent H2O Preserved Vials Frozen on: NA

Cooler Information Custody Seal

Cooler

A Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1306014-01A	Amber 1000ml unpreserved	A	7	6.3	Y	Absent	8270TCL-SIM(7)
L1306014-01B	Amber 1000ml unpreserved	A	7	6.3	Y	Absent	8270TCL(7)
L1306014-01C	Plastic 250ml HNO3 preserved	A	<2	6.3	Y	Absent	BA-6020T(180),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)
L1306014-01D	Amber 1000ml HCl preserved	A	N/A	6.3	Y	Absent	TPH-1664(28)
L1306014-01E	Amber 1000ml HCl preserved	A	N/A	6.3	Y	Absent	TPH-1664(28)
L1306014-01F	Vial HCl preserved	A	N/A	6.3	Y	Absent	8260-SIM(14),8260(14)
L1306014-01H	Vial HCl preserved	A	N/A	6.3	Y	Absent	8260-SIM(14),8260(14)
L1306014-01I	Vial HCl preserved	A	N/A	6.3	Y	Absent	8260-SIM(14),8260(14)
L1306014-01J	Amber 1000ml H2SO4 preserved	A	<2	6.3	Y	Absent	TPHENOL-420(28)
L1306014-01K	Plastic 1000ml unpreserved	A	7	6.3	Y	Absent	TSS-2540(7)
L1306014-01L	Vial Na2S2O3 preserved	A	N/A	6.3	Y	Absent	504(14)
L1306014-01M	Vial Na2S2O3 preserved	A	N/A	6.3	Y	Absent	504(14)
L1306014-01O	Plastic 500ml unpreserved	A	7	6.3	Y	Absent	HEXCR-3500(1)
L1306014-01P	Plastic 250ml NaOH preserved	A	>12	6.3	Y	Absent	TCN-4500(14)
L1306014-01Q	Plastic 500ml unpreserved	A	7	6.3	Y	Absent	CL-300(28),TRC-4500(1)
L1306014-01R	Amber 1000ml unpreserved	A	7	6.3	Y	Absent	8270TCL(7)
L1306014-01S	Amber 1000ml unpreserved	A	7	6.3	Y	Absent	8270TCL-SIM(7)
L1306014-01T	Amber 1000ml Na2S2O3	A	7	6.3	Y	Absent	PCB-608(7)
L1306014-01U	Amber 1000ml Na2S2O3	A	7	6.3	Y	Absent	PCB-608(7)
L1306014-01W	Vial Na2S2O3 preserved	A	N/A	6.3	Y	Absent	8260-SIM(14)
L1306014-01X	Vial Na2S2O3 preserved	A	N/A	6.3	Y	Absent	8260-SIM(14)
L1306014-01Y	Vial Na2S2O3 preserved	A	N/A	6.3	Y	Absent	8260-SIM(14)

*Values in parentheses indicate holding time in days

Project Name: 671 MAIN STREET
Project Number: 11622.00

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GLOSSARY

Acronyms

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

Footnotes

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

Terms

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

Data Qualifiers

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

Report Format: Data Usability Report



Project Name: 671 MAIN STREET
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Data Qualifiers

due to obvious interference.

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

Project Name: 671 MAIN STREET
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REFERENCES

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

LIMITATION OF LIABILITIES

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

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



Certificate/Approval Program Summary

Last revised December 19, 2012 - Westboro Facility

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

CHAIN OF CUSTODY

PAGE 1 OF 1

Date Rec'd in Lab: 4/6/12

ALPHA Job #: 61300814

8 Walkup Drive
Westboro, MA 01581
Tel: 508-898-9220

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

Project Information

Project Name: 671 Main Street

Project Location: Winchester, N.H.

Project #: 11622.00

Project Manager: Paul McKinley

ALPHA Quote #:

Turn-Around Time

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

Date Due: 4/15/13

Report Information - Data Deliverables

☒ ADEX ☐ EMAIL

Billing Information

☒ Same as Client info	PO #: 11672.00
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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

Client Information

Client: VHB

Address: 101 Walnut Street
Watertown, MA

Phone: 617-924-1770

Email: Analyst@guail

Additional Project Information:

ANALYSIS

VOC: ☐ 8260 ☐ 824 ☐ 524.2

SVOC: ☐ ABN ☐ PAH

METALS: ☐ MCP 13 ☐ MCP 14 ☐ RCP 15

METALS: ☐ RCRA5 ☐ RCRA8 ☐ PPI3

EPH: ☐ Ranges & Targets ☐ Ranges Only

VPH: ☐ Ranges & Targets ☐ Ranges Only

TPH: ☐ PEST

TPH: ☐ Quant Only ☐ Fingerprint

NPDES RCP Permit
w/ RCRA & HMTK

SAMPLE INFO

Filtration
☐ Field
☐ Lab to do

Preservation
☐ Lab to do

THE
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S

Sample Comments

[illegible]**Container Type**

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

Preservative

A= None
B= HCl
C= HNO₃
D= H₂SO₄
E= NaOH
F= MeOH
G= NaHSO₄
H = Na₂S₂O₃
I= Ascorbic Acid
J = NH₄Cl
K= Zn Acetate
O= Other

Container Type

Preservative

Relinquished By:

Date/Time

Received By:

Date/Time

7/8/2013 - 11:50

4/8/13 USC

All samples submitted are subject to Alpha's Terms and Conditions.
See reverse side.
FORM NO: 01.01 (rev. 12-Mar-2012)