



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 1

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

CERTIFIED MAIL

January 13, 2011

Mike Robinson
Project Manager
AMEC Earth and Environmental, Inc.
2 Robbins Road
Westford, MA 01886

Re: Authorization to discharge under the Remediation General Permit (RGP) –
MAG910000.Grove Street Manufacturing site at 65 Grove Street, Watertown, MA
02472, Middlesex County, Authorization # MAG910456.

Dear Mr. Robinson:

Based on the review of your Notice of Intent (NOI) submitted on behalf of GE Water and Process Technologies, Inc., for the site referenced above, the U.S. Environmental Protection Agency (EPA) hereby authorizes you, as the named Operator, to discharge in accordance with the provisions of the RGP at that site. Your authorization number is listed above.

The checklist enclosed with this RGP authorization indicates the pollutants for 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 check list 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 that based on the historic presence of contamination at the site we are retaining pollutants 1,1 dichloroethane (DCA), cis-1,2 dichloroethene (DCE), Tetrachloroethene (PCE), trichloroethene, and the metals zinc and copper which were reported at levels above the Appendix III criteria limits, to be monitored at the site. Also, we have included monitoring for 1-4dioxane because the minimum level (ML) of

detection for this pollutant was reported at 250ug/L rather than the required 50ug/L in the RGP.

Finally the list 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. Recertification's can be submitted to EPA within six (6) to twelve (12) months of operations in accordance with the 2010 RGP requirements.

This general permit and authorization to discharge will expire on September 9, 2015. You have reported that this project will terminate on September 30, 2011. 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,



David M. Webster, Chief
Industrial Permits Branch

Enclosure

cc: Kathleen Keohane, MassDEP

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

NPDES Permit Number:	MAG910456-Reissuance
Date Permit Issued:	January 2011
Facility/Site Name:	Grove Street Manufacturing
Facility/Site Address:	65 Grove Street, Watertown, MA 02472 , Middlesex County Email address of owner:colleen.connor@ge.com; Phone n:203-373-2756
Legal Name of Operator:	AMEC Earth & Environmental, Inc.
Operator contact name, title, and Address:	Mike Robinson Project Manager, 2 Robbins Road Westford, MA 01886 Email Mike.j.robinson@amec.com
Estimated Date of Completion	September 30,2011
Category and Sub-Category:	Category I- Non Petroleum Site Remediation. Sub-category A. Volatile Organic Compounds (VOC) only sites.
Receiving Water:	Sawins Pond.

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#60.2/ML 5ug/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 5ug/L
	5. Benzene (B)	5ug/L /50.0 ug/L for hydrostatic testing only/ Me#8260C/ML 2 ug/L
	6. Toluene (T)	(limited as ug/L total BTEX)/ Me#8260C/ ML 2ug/L
	7. Ethylbenzene (E)	(limited as ug/L total BTEX) Me#8260C/ ML 2ug/L
	8. (m,p,o) Xylenes (X)	(limited as ug/L total BTEX) Me#8260C/ ML 2ug/L
	9. Total Benzene, Toluene, Ethyl Benzene, and Xylenes (BTEX) ⁴	100 ug/L/ Me#8260C/ ML 2ug/L
	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)	Monitor Only (ug/L)/ Me#8260C/ ML

	<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)
	(TertiaryButanol)	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/ ML5ug/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/ML5ug/L,Me#604 &625/ML 10ug/L
	33. Total Phthalates (Phthalate esters) ⁶	3.0 ug/L ** /Me#8270D/ML 5ug/L, Me#606/ML 10ug/L& Me#625/ML 5ug/L
	34. Bis (2-Ethylhexyl) Phthalate [Di- (ethylhexyl) Phthalate]	6.0 ug/L /Me#8270D/ML 5ug/L,Me#606/ML 10ug/L & Me#625/ML 5ug/L
	35. Total Group I Polycyclic Aromatic Hydrocarbons (PAH)	10.0 ug/L
	a. Benzo(a) Anthracene ⁷	0.0038 ug/L /Me#8270D/ ML 5ug/L, Me#610/ML 5ug/L& Me#625/ML 5ug/L
	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,

	<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)
		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 0.1ug/L

		<u>Total Recoverable Metal Limit @ H ¹⁰ = 50 mg/l CaCO3 for discharges in Massachusetts (ug/l)</u> <u>11</u>		
	<u>Metal parameter</u>	<u>Freshwater</u>	<u>Saltwater</u>	
	39. Antimony	5.6/10mL		
	40. Arsenic **	10/20mL	36/20mL	
	41. Cadmium **	0.2/10ml	8.9/10mL	
	42. Chromium III (trivalent) **	48.8/15mL	100/15mL	
	43. Chromium VI (hexavalent) **	11.4/10mL	50.3/10mL	
✓	44. Copper **	114/15mL	3.7/15mL	

	Metal parameter	Total Recoverable Metal Limit @ H¹⁰ = 50 mg/l CaCO₃ for discharges in Massachusetts (ug/l) ¹¹			
		Freshwater	Saltwater		
	45. Lead **	1.3/20mL	8.5/20mL		
	46. Mercury **	0.9/0.2mL	1.1/0.2mL		
	47. Nickel **	29/20mL	8.2/20mL		
	48. Selenium **	5/20mL	71/20mL		
	49. Silver	1.2/10mL	2.2/10mL		
✓	50. Zinc **	666/15mL	85.6/15mL		
	51. Iron	1,000/20mL			

	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



December 3, 2010

US Environmental Protection Agency
Shelly Puleo
Victor Alvarez
Industrial NPDES Permits (CIP)
1 Congress Street, Suite 1100
Boston, MA 02114-2023

**Re: Notice of Intent, Remediation General Permit
65 Grove Street, Watertown, Massachusetts**

AMEC Earth and Environmental, Inc. (AMEC) is submitting this Notice of Intent (NOI) form on behalf of GE Water and Process Technologies, Inc. (GE WPT) for the property located at 65 Grove Street in Watertown, Massachusetts (the Site). This NOI is being submitted in order to obtain authorization under the 2010 Remediation General Permit to allow the discharge of treated groundwater to an unnamed tributary locally known as Sawins Pond or Sawins Brook via the local municipal storm sewer system. Sawins Pond or Sawins Brook ultimately discharges to the Charles River. AMEC has constructed a dual-phase vacuum extraction system to remediate impacted soil and groundwater at the Site and discharged groundwater under the 2005 Remediation General Permit.

The remediation activities are being conducted as a Release Abatement Measure (RAM) in accordance with the Massachusetts Contingency Plan (RTN 3-29027) to address the presence of chlorinated volatile organic compounds (VOCs) in soil and groundwater. The site is classified as Category II – Non-Petroleum Site Remediation and Subcategory A – VOC Contamination only.

The Town of Watertown has issued a permit dated April 28, 2010 to allow the discharge of the treated groundwater into the municipal storm sewer system (MS4).

If you have any questions regarding this notice, please contact me at (978) 692-9090.

Sincerely,

Mike Robinson
Project Scientist

cc: Cliff Chambliss – GE WPT
Colleen Connor – GE WPT

Attachment 1: Notice of Intent
Attachment 2: Process Flow Diagram
Attachment 3: Site Layout Figure
Attachment 4: Discharge Locations
Attachment 5: Town of Watertown, MA Dewatering Drainage Permit dated April 28, 2010
Attachment 6: Environmental Species Act Eligibility Supporting Information
Attachment 7: Laboratory Data

AMEC Earth & Environmental, Inc.
2 Robbins Road
Westford, MA 01886 USA
Tel (978) 692-9090
Fax (978) 692-6633

www.amec.com

Attachment 1: Notice of Intent

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 :		Grove Street Manufacturing		Facility/site mailing address:	
Location of facility/site :		Facility SIC code(s):		Street:	
Longitude:	-71.1545	3589, 3081		65 Grove Street	
Latitude:	42.3708				
b) Name of facility/site owner :				Town: Watertown	
Email address of facility/site owner:				State:	
colleen.connor@ge.com				MA	
Telephone no. of facility/site owner :		1-203-373-2756		Zip:	
				02472	
Fax no. of facility/site owner :		1-203-373-3791		County:	
				Middlesex	
Address of owner (if different from site):				Owner is (check one): 1. Federal ☐ 2. State/Tribal ☐ 3. Private ☒ 4. Other ☐ if so, describe:	
Street:		3135 Easton Tpke W1B			
Town:	Fairfield	State:	CT	Zip:	06828
				County:	USA
c) Legal name of operator :				Operator telephone no: 978-692-9090	
AMEC Earth & Environmental				Operator fax no.: 978-692-6633	
Operator contact name and title:		Mike Robinson, Project Manager		Operator email: mike.j.robinson@amec.com	
Address of operator (if different from owner):		Street:		2 Robbins Road	
Town:	Westford	State:	MA	Zip:	01886
				County:	Middlesex

d) Check Y for "yes" or N for "no" for the following: 1. Has a prior NPDES permit exclusion been granted for the discharge? Y ☐ N ☒, if Y, number: 2. Has a prior NPDES application (Form 1 & 2C) ever been filed for the discharge? Y ☒ N ☐, if Y, date and tracking #: 3. Is the discharge a "new discharge" as defined by 40 CFR 122.2? Y ☐ N ☒ 4. For sites in Massachusetts, is the discharge covered under the Massachusetts Contingency Plan (MCP) and exempt from state permitting? Y ☒ N ☐	
e) Is site/facility subject to any State permitting, license, or other action which is causing the generation of discharge? Y ☐ N ☒ If Y, please list: 1. site identification # assigned by the state of NH or MA: 2. permit or license # assigned: 3. state agency contact information: name, location, and telephone number:	f) Is the site/facility covered by any other EPA permit, including: 1. Multi-Sector General Permit? Y ☐ N ☒, if Y, number: 2. Final Dewatering General Permit? Y ☐ N ☒, if Y, number: 3. EPA Construction General Permit? Y ☐ N ☒, if Y, number: 4. Individual NPDES permit? Y ☐ N ☒, if Y, number: 5. any other water quality related individual or general permit? Y ☐ N ☒, if Y, number:
g) Is the site/facility located within or does it discharge to an Area of Critical Environmental Concern (ACEC)? Y ☐ N ☒	
h) Based on the facility/site information and any historical sampling data, identify the sub-category into which the potential discharge falls.	
Activity Category	Activity Sub-Category
I - Petroleum Related Site Remediation	A. Gasoline Only Sites ☐ B. Fuel Oils and Other Oil Sites (including Residential Non-Business Remediation Discharges) ☐ C. Petroleum Sites with Additional Contamination ☐
II - Non Petroleum Site Remediation	A. Volatile Organic Compound (VOC) Only Sites ☒ B. VOC Sites with Additional Contamination ☐ C. Primarily Heavy Metal Sites ☐
III - Contaminated Construction Dewatering	A. General Urban Fill Sites ☐ B. Known Contaminated Sites ☐

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

a) Describe the discharge activities for which the owner/applicant is seeking coverage:																	
Discharge of treated groundwater generated by on-site remediation system																	
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, ft³/s)? Max. flow 0.134 Is maximum flow a design value? Y ☐ N ☐ Average flow (include units) 0.048 gal/s Is average flow a design value or estimate? actual																
3) Latitude and longitude of each discharge within 100 feet:	<table border="1"> <tr> <td>pt.1: lat</td> <td>long</td> <td>pt.2: lat</td> <td>long</td> </tr> <tr> <td>pt.3: lat</td> <td>long</td> <td>pt.4: lat</td> <td>long</td> </tr> <tr> <td>pt.5: lat</td> <td>long</td> <td>pt.6: lat</td> <td>long</td> </tr> <tr> <td>pt.7: lat</td> <td>long</td> <td>pt.8: lat</td> <td>long</td> </tr> </table>	pt.1: lat	long	pt.2: lat	long	pt.3: lat	long	pt.4: lat	long	pt.5: lat	long	pt.6: lat	long	pt.7: lat	long	pt.8: lat	long
pt.1: lat	long	pt.2: lat	long														
pt.3: lat	long	pt.4: lat	long														
pt.5: lat	long	pt.6: lat	long														
pt.7: lat	long	pt.8: lat	long														
4) If hydrostatic testing, total volume of the discharge (gals):	5) Is the discharge intermittent ☒ or seasonal ☐ ? Is discharge ongoing? Y ☒ N ☐																
c) Expected dates of discharge (mm/dd/yy): start Jun 1, 2010 end Sep 30, 2011																	
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 Attachments 2 and 3																	

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	10	ND			
2. Total Residual Chlorine (TRC)		☒	☐	1	Grab	4500CL	20	ND			
3. Total Petroleum Hydrocarbons (TPH)		☒	☐	1	Grab	1664	4000	ND			
4. Cyanide (CN)	57125	☒	☐	1	Grab	8260	5	ND			
5. Benzene (B)	71432	☐	☐	1	Grab	8260	1	ND			
6. Toluene (T)	108883	☐	☐	1	Grab	8260	1	ND			
7. Ethylbenzene (E)	100414	☐	☐	1	Grab	8260	1	ND			
8. (m,p,o) Xylenes (X)	108883; 106423; 95476; 1330207	☐	☐	1	Grab	8260	3	ND			
9. Total BTEX ²	n/a	☐	☐	1	Grab	8260		ND			
10. Ethylene Dibromide (EDB) (1,2-Dibromoethane) ³	106934	☐	☐								
11. Methyl-tert-Butyl Ether (MtBE)	1634044	☒	☐	1	Grab	8260	2	ND			
12. tert-Butyl Alcohol (TBA) (Tertiary-Butanol)	75650	☒	☐	1	Grab	8260	2	ND			

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

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

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

<u>Parameter *</u>	<u>CAS Number</u>	<u>Believed Absent</u>	<u>Believed Present</u>	<u># of Samples</u>	<u>Sample Type (e.g., grab)</u>	<u>Analytical Method Used (method #)</u>	<u>Minimum Level (ML) of Test Method</u>	<u>Maximum daily value</u>		<u>Average daily value</u>	
								<u>concentration (ug/l)</u>	<u>mass (kg)</u>	<u>concentration (ug/l)</u>	<u>mass (kg)</u>
13. tert-Amyl Methyl Ether (TAME)	9940508	☒	☐	1	Grab	8260	2	ND			
14. Naphthalene	91203	☒	☐	1	Grab	8260	2	ND			
15. Carbon Tetrachloride	56235	☒	☐	1	Grab	8260	1	ND			
16. 1,2 Dichlorobenzene (o-DCB)	95501	☐	☐	1	Grab	8260	1	ND			
17. 1,3 Dichlorobenzene (m-DCB)	541731	☐	☐	1	Grab	8260	1	ND			
18. 1,4 Dichlorobenzene (p-DCB)	106467	☐	☐	1	Grab	8260	1	ND			
18a. Total dichlorobenzene		☐	☐	1	Grab	8260		ND			
19. 1,1 Dichloroethane (DCA)	75343	☐	☐	1	Grab	8260	1	ND			
20. 1,2 Dichloroethane (DCA)	107062	☐	☐	1	Grab	8260	1	ND			
21. 1,1 Dichloroethene (DCE)	75354	☐	☐	1	Grab	8260	1	ND			
22. cis-1,2 Dichloroethene (DCE)	156592	☐	☐	1	Grab	8260	1	ND			
23. Methylene Chloride	75092	☐	☐	1	Grab	8260	2	ND			
24. Tetrachloroethene (PCE)	127184	☐	☐	1	Grab	8260	1	3.2			
25. 1,1,1 Trichloro-ethane (TCA)	71556	☐	☐	1	Grab	8260	1	ND			
26. 1,1,2 Trichloro-ethane (TCA)	79005	☐	☐	1	Grab	8260	1	ND			
27. Trichloroethene (TCE)	79016	☐	☐	1	Grab	8260	1	1.3			

<u>Parameter *</u>	<u>CAS Number</u>	<u>Believed Absent</u>	<u>Believed Present</u>	<u># of Samples</u>	<u>Sample Type (e.g., grab)</u>	<u>Analytical Method Used (method #)</u>	<u>Minimum Level (ML) of Test Method</u>	<u>Maximum daily value</u>		<u>Average daily value</u>	
								<u>concentration (ug/l)</u>	<u>mass (kg)</u>	<u>concentration (ug/l)</u>	<u>mass (kg)</u>
28. Vinyl Chloride (Chloroethene)	75014	☒	☐	1	Grab	8260	1	ND			
29. Acetone	67641	☒	☐	1	Grab	8260	5	ND			
30. 1,4 Dioxane	123911	☒	☐	1	Grab	8260	250	ND			
31. Total Phenols	108952	☐	☐	1	Grab	8270		ND			
32. Pentachlorophenol (PCP)	87865	☒	☐	1	Grab	8270	10	ND			
33. Total Phthalates (Phthalate esters) ⁴		☒	☐	1	Grab	8270		ND			
34. Bis (2-Ethylhexyl) Phthalate [Di-(ethylhexyl) Phthalate]	117817	☒	☐	1	Grab	8270	2.1	ND			
35. Total Group I Polycyclic Aromatic Hydrocarbons (PAH)		☒	☐	1	Grab	8270		ND			
a. Benzo(a) Anthracene	56553	☐	☐								
b. Benzo(a) Pyrene	50328	☐	☐								
c. Benzo(b)Fluoranthene	205992	☐	☐								
d. Benzo(k)Fluoranthene	207089	☐	☐								
e. Chrysene	21801	☐	☐								
f. Dibenzo(a,h)anthracene	53703	☐	☐								
g. Indeno(1,2,3-cd) Pyrene	193395	☐	☐								
36. Total Group II Polycyclic Aromatic Hydrocarbons (PAH)		☐	☐								

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.	☒	☐	1	Grab	8082	0.25	ND			
	38. Chloride	☐	☐								
	39. Antimony	☐	☐								
	40. Arsenic	☐	☐								
	41. Cadmium	☐	☐								
42. Chromium III (trivalent)	16065831	☐	☐								
43. Chromium VI (hexavalent)	18540299	☐	☐								
44. Copper	7440508	☐	☐								
45. Lead	7439921	☐	☐								
46. Mercury	7439976	☐	☐								
47. Nickel	7440020	☐	☐								
48. Selenium	7782492	☐	☐								
49. Silver	7440224	☐	☐								
50. Zinc	7440666	☐	☐								
51. Iron	7439896	☐	☐								
Other (describe):		☐	☐								

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

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

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

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:					
See Attachments 2 and 3					
b) Identify each applicable treatment unit (check all that apply):	Frac. tank ☐	Air stripper ☒	Oil/water separator ☐	Equalization tanks ☒	Bag filter ☒
	Chlorination ☐	De-chlorination ☐	Other (please describe):		
				GAC filter ☒	

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 5 gpm Maximum flow rate of treatment system 50 gpm Design flow rate of treatment system 40 gpm	
d) A description of chemical additives being used or planned to be used (attach MSDS sheets):	
None	

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 groundwater pumped to nearby catch basin that drains to an unnamed tributary locally known as Sawins Pond and Sawins Brook.					
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 discharges, indicate the location of the discharge to the indirect conveyance and the discharge to surface water The map should also include the location and distance to the nearest sanitary sewer as well as the locus of nearby sensitive receptors (based on USGS topographical mapping), such as surface waters, drinking water supplies, and wetland areas.					
d) Provide the state water quality classification of the receiving water Class B					
e) Provide the reported or calculated seven day-ten year low flow (7Q10) of the receiving water 3.4 cfs (Charles River) cfs Please attach any calculation sheets used to support stream flow and dilution calculations.					
f) Is the receiving water a listed 303(d) water quality impaired or limited water? Y ☒ N ☐ If yes, for which pollutant(s)?					
Is there a final TMDL? Y ☒ N ☐ If yes, for which pollutant(s)? pathogens, E-coli					

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.

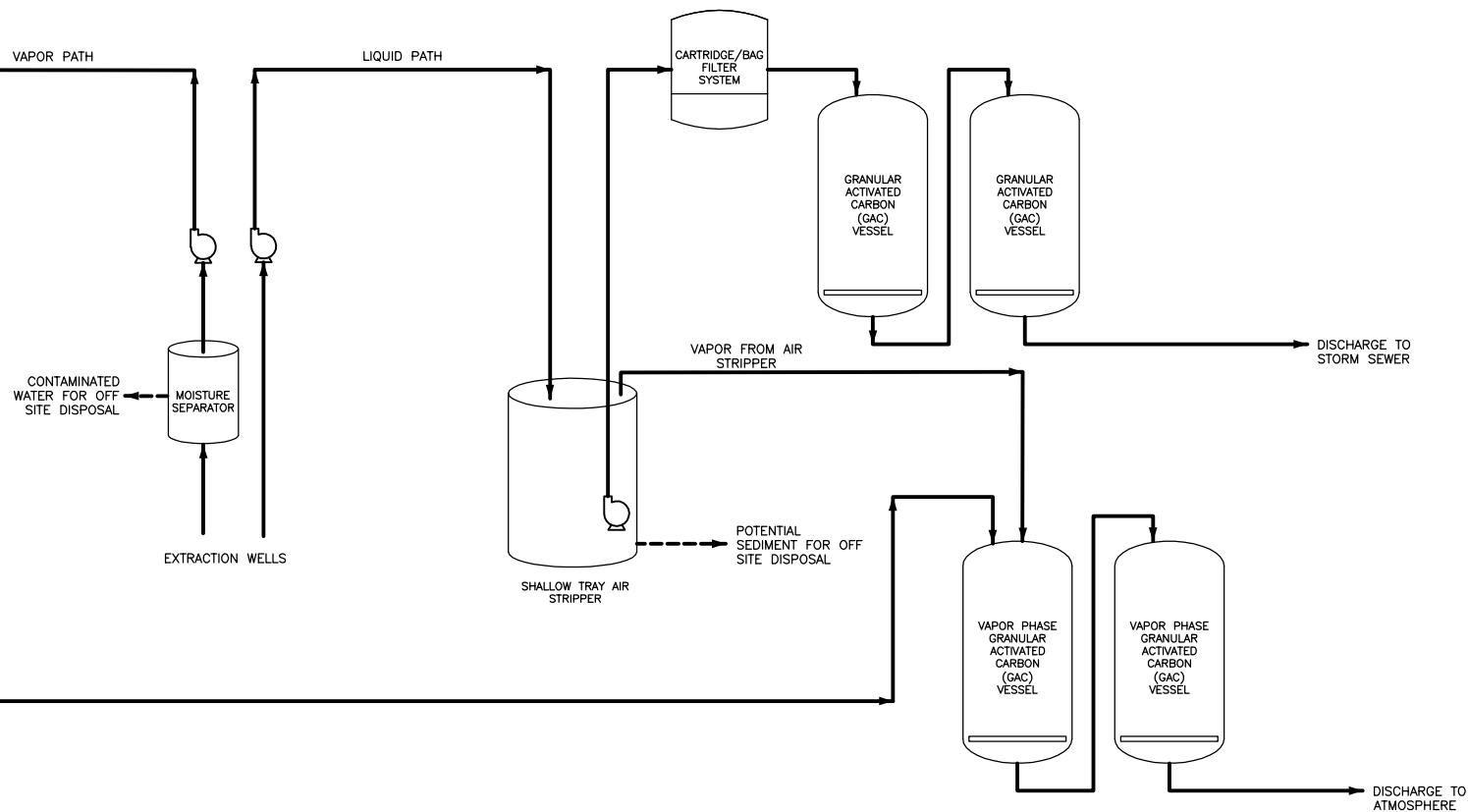
Please provide any supplemental information. Attach any analytical data used to support the application. Attach any certification(s) required by the general permit.

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:	Grove Street Manufacturing Facility, GE Ionics, 65 Grove Street, Watertown MA
Operator signature:	
Printed Name & Title:	Michael Robinson, Project Scientist
Date:	12/3/10

Attachment 2: Process Flow Diagram



AMEC
Earth & Environmental, Inc.
2 Robbins Road
Westford, Massachusetts 01886
Telephone: (978) 692-9090
Fax: (978) 692-6633
Web: www.amec.com



CLIENT:
GE WATER AND PROCESS
TECHNOLOGIES, INC.

PROJECT:
WATERTOWN,
MASSACHUSETTS

REV	DATE	DESCRIPTION

ISSUE / REVISION:

DESIGNED BY: LEL/RJB DRAWN BY: DED/RJB

CHECKED BY: JT DATE: 02/19/10

SCALE: AS SHOWN ISSUE / REVISION: 0

DISCIPLINE LEAD: PROJECT MANAGER:

PROJECT ENGINEER:

PROJECT NUMBER: 778190012

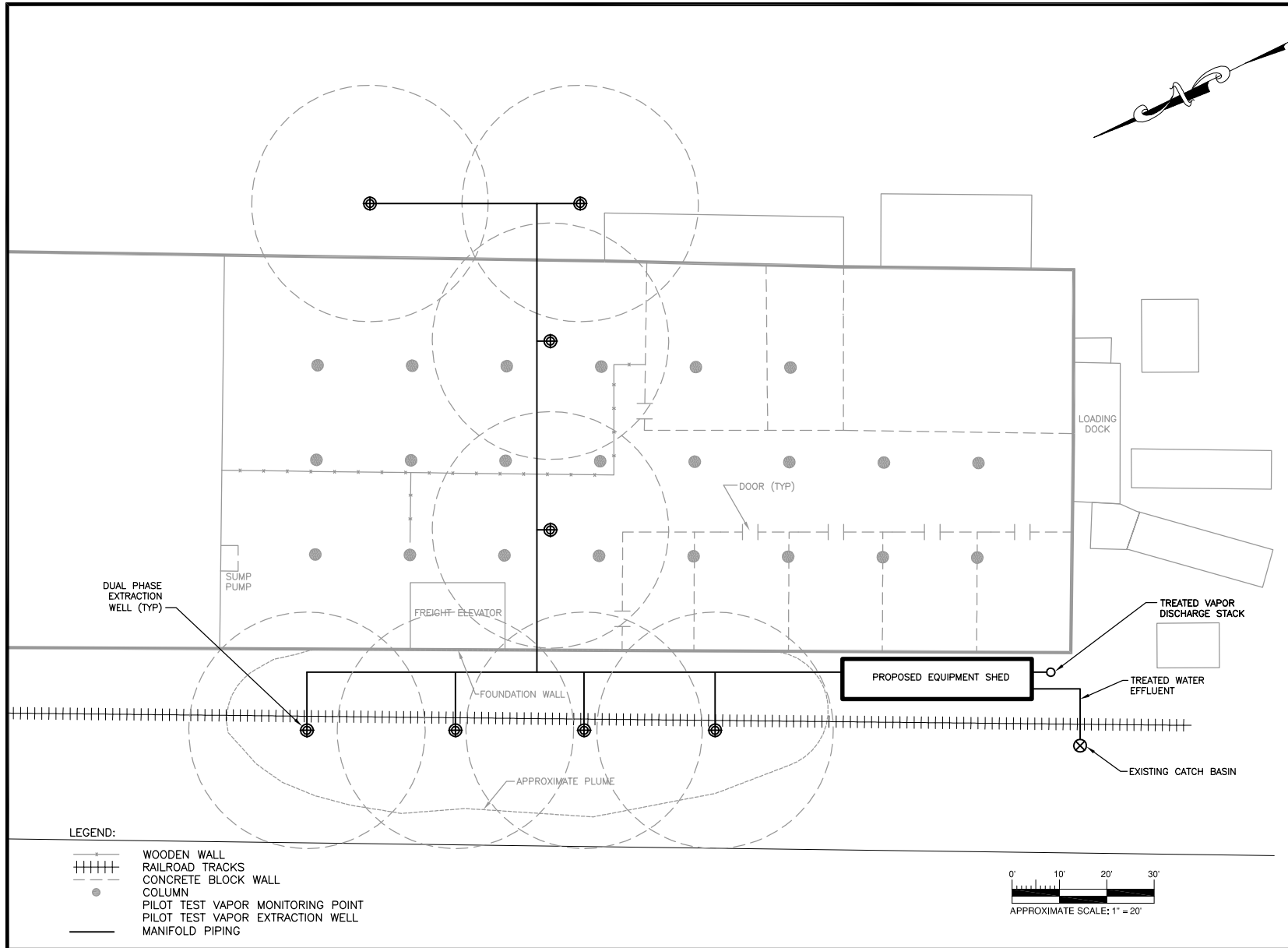
TITLE:

DUAL PHASE EXTRACTION
SYSTEM
PROCESS FLOW DIAGRAM

FIGURE NUMBER:

8

Attachment 3: Site Layout Figure



AMEC
 Earth & Environmental, Inc.
 2 Robbins Road
 Westford, Massachusetts 01886
 Telephone: (978) 692-9090
 Fax: (978) 692-6633
 Web: www.amec.com

amec

CLIENT:
 GE WATER AND PROCESS
 TECHNOLOGIES, INC.

PROJECT:
 WATERTOWN,
 MASSACHUSETTS

REV	DATE	DESCRIPTION

ISSUE / REVISION:

DESIGNED BY: LEL/RJB	DRAWN BY: DED/RJB
-------------------------	----------------------

CHECKED BY: JT	DATE: 02/19/10
-------------------	-------------------

SCALE: AS SHOWN	ISSUE / REVISION: 0
--------------------	------------------------

DISCIPLINE LEAD:	PROJECT MANAGER:
------------------	------------------

PROJECT ENGINEER:

PROJECT NUMBER:
778190012

TITLE:

DUAL PHASE EXTRACTION
SYSTEM LAYOUT

FIGURE NUMBER:

Attachment 4: Discharge Locations

[Send To Printer](#)[Back To MSR Maps](#)[Change to 11x17 Print Size](#)[Show Grid Lines](#)[Change to Landscape](#)

USGS Somerville, Massachusetts, United States 01 Jul 1991

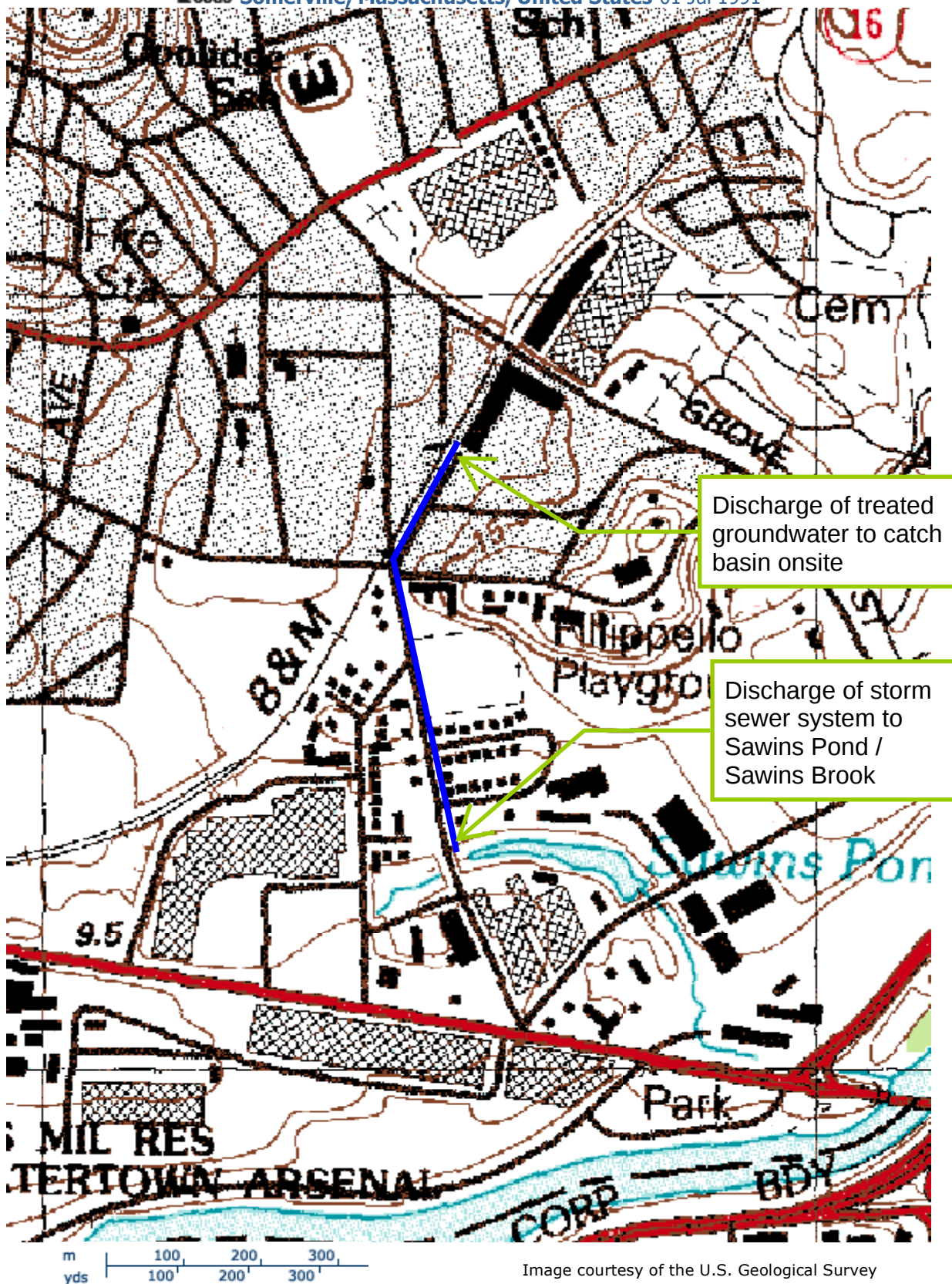


Image courtesy of the U.S. Geological Survey

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Attachment 5: Town of Watertown Dewatering Drainage Permit

DEPARTMENT OF PUBLIC WORKS
TOWN OF WATERTOWN, MASSACHUSETTS

APPLICATION FOR A DEWATERING DRAINAGE PERMIT

To the Town of Watertown, Massachusetts:

The undersigned, being the

Owner's Agent
(Owner, Owner's Agent)

IONICS
(GE Power + Process)

of the property located at 65 Grove St., does
(Number) (Street)

hereby request a permit to discharge dewatering drainage to the public sewer to serve the

GE Power & Process Site

(Residence, Commercial Building, etc.)

at said location.

1. The following indicated substance(s) will be discharge from the proposed construction area into the sewer:

Substance

Treated Groundwater Discharge to storm sewer

(50 gpm max.)

(0 gpm min.)

Substance

Specify other substances

2. The maximum number of days discharge will occur: ≈ 2 years or 730 days

3. Beginning on June 1 2010 and ending on June 1 2012

4. The name and address of person or firm who will perform the proposed work is

AMEC Earth & Environmental, 2 Robbins Rd. Westford MA 01886

5. Plans and specifications for the method of dewatering drainage discharge are attached hereunto as Exhibit "A".

In consideration of the granting of this permit, the undersigned agrees:

1. To accept and abide by all provisions of the Rules and Regulations for discharge into and for the Use of Public Sewers of the Town of Watertown, Massachusetts, and of all other pertinent rules and regulations that may be adopted in the future.
2. To maintain the building sewer at no expense to the Town.
3. To notify the Superintendent when the building sewer is ready for inspection and connection to the public sewer, but before any portion of the work is covered.

Date 4/27/2010

Signed Leo Lavolette, AMEC E+E

(Applicant)

2 Robbins Rd. Westford, MA 01886

(Address of Applicant)

\$ n/a inspection fee paid.

(Certification by Town Treasurer)

Application approved and permit issued:

Date 4/28/10

Number

Signed [Signature]

Superintendent

Attachment 6: ESA Eligibility Supporting Information



Environmental Species Act Eligibility

This project (65 Grove Street, Watertown, MA) meets the eligibility requirements of the Environmental Species Act under Criterion A *"No federally-listed threatened or endangered species or federally-designated critical habitat are present."* A copy of the most current county species list pages for the Middlesex County is attached. The only federally listed environmental or threatened species in Middlesex County is Groton. There are no federally listed species in Watertown.

Additionally, according to the Massachusetts Department of Fish and Wildlife Natural Heritage and Environmental Species Program there are no state-listed rare plants or animals in the town based on the most recent information in the September 2009 NHESP database (See attached). Accordingly there are also no Priority Habitats and Estimated Habitats of listed species in Watertown. A figure from the MassGIS online viewer is attached.

FEDERALLY LISTED ENDANGERED AND THREATENED SPECIES IN MASSACHUSETTS

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

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

7/31/2008



MassWildlife

Massachusetts Division of Fisheries & Wildlife

Wayne F. MacCallum, Director



Natural Heritage & Endangered Species

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Rare Species by Town

MESA (Massachusetts Endangered Species Act) and Federal Status

Quick Links

- » [Town Index](#)
- » [MESA List](#)
- » [Contact Us](#)

E = Endangered T = Threatened SC = Special Concern

Most Recent Observation

This field represents the most recent observation of that species in a town. However, because they are rare, many MESA-listed species are difficult to detect even when they are present. Natural Heritage does not have the resources to be able to conduct methodical species surveys in each town on a regular basis. Therefore, the fact that the 'Most Recent Observation' recorded for a species may be several years old should not be interpreted as meaning that the species no longer occurs in a town. However, Natural Heritage regards records older than twenty-five years historic.

Click on a town below to view MESA-listed species for that town. To print the species for a particular town, highlight the species using your mouse, go to Print under the File Menu, click on 'Selection' under 'Print Range' and click OK.

For more information about a particular species, view the list of [Natural Heritage Fact Sheets](#).

These data were extracted from the database of the Natural Heritage and Endangered Species Program in September 2009.

[Wakefield](#) | [Wales](#) | [Walpole](#) | [Waltham](#) | [Ware](#) | [Wareham](#) | [Warren](#) | [Warwick](#) |
[Washington](#) | [Watertown](#) | [Wayland](#) | [Webster](#) | [Wellesley](#) | [Wellfleet](#) | [Wendell](#) | [Wenham](#) |
[West Boylston](#) | [West Bridgewater](#) | [West Brookfield](#) | [West Newbury](#) | [West Springfield](#) |
[West Stockbridge](#) | [West Tisbury](#) | [Westborough](#) | [Westfield](#) | [Westford](#) | [Westhampton](#) |
[Westminster](#) | [Weston](#) | [Westport](#) | [Westwood](#) | [Weymouth](#) | [Whately](#) | [Whitman](#) |
[Wilbraham](#) | [Williamsburg](#) | [Williamstown](#) | [Wilmington](#) | [Winchendon](#) | [Winchester](#) |
[Windsor](#) | [Winthrop](#) | [Woburn](#) | [Worcester](#) | [Worthington](#) | [Wrentham](#)

Town	Taxonomic Group	Scientific Name	Common Name	MESA Status	Federal Status	Most Recent Observation
WAKEFIELD	Amphibian	Ambystoma laterale	Blue-spotted Salamander	SC		1989
WAKEFIELD	Amphibian	Ambystoma opacum	Marbled Salamander	T		1974

WAKEFIELD Beetle	Cicindela rufiventris hentzii	Hentz's Redbelly Tiger Beetle	T	1909
WAKEFIELD Bird	Gallinula chloropus	Common Moorhen	SC	1990
WAKEFIELD Vascular Plant	Eriophorum gracile	Slender Cottongrass	T	1913
WAKEFIELD Vascular Plant	Houstonia longifolia	Long-leaved Bluet	E	1915

Town	Taxonomic Group	Scientific Name	Common Name	MESA Status	Federal Status	Most Recent Observation
WALES Amphibian		Ambystoma laterale	Blue-spotted Salamander	SC		2000
WALES Amphibian		Ambystoma opacum	Marbled Salamander	T		2000
WALES Dragonfly/Damselfly		Rhionaeschna mutata	Spatterdock Darner	SC		2008
WALES Reptile		Glyptemys insculpta	Wood Turtle	SC		2001
WALES Reptile		Terrapene carolina	Eastern Box Turtle	SC		1999
WALES Vascular Plant		Veronicastrum virginicum	Culver's-root	T		1941

Town	Taxonomic Group	Scientific Name	Common Name	MESA Status	Federal Status	Most Recent Observation
WALPOLE Amphibian		Ambystoma laterale	Blue-spotted Salamander	SC		1992
WALPOLE Butterfly/Moth		Callophrys hesseli	Hessel's Hairstreak	SC		1987
WALPOLE Vascular Plant		Ophioglossum pusillum	Adder's-tongue Fern	T		1908
WALPOLE Vascular Plant		Rhododendron maximum	Great Laurel	T		1908

Town	Taxonomic Group	Scientific Name	Common Name	MESA Status	Federal Status	Most Recent Observation
WALTHAM Amphibian		Ambystoma opacum	Marbled Salamander	T		1800s
WALTHAM Beetle		Cicindela purpurea	Purple Tiger Beetle	SC		1897
WALTHAM Beetle		Cicindela rufiventris hentzii	Hentz's Redbelly Tiger Beetle	T		1892
WALTHAM Bird		Circus cyaneus	Northern Harrier	T		1879
WALTHAM Bird		Vermivora chrysoptera	Golden-winged Warbler	E		1906
WALTHAM Crustacean		Eubbranchipus intricatus	Intricate Fairy Shrimp	SC		1904
WALTHAM Dragonfly/Damselfly		Neurocordulia obsoleta	Umber Shadowdragon	SC		1997
WALTHAM Vascular Plant		Asclepias verticillata	Linear-leaved Milkweed	T		2004
WALTHAM Vascular Plant		Houstonia longifolia	Long-leaved Bluet	E		1910

WALTHAM	Vascular Plant	Linum medium var. texanum	Rigid Flax	T	1908
WALTHAM	Vascular Plant	Ludwigia sphaerocarpa	Round-fruited False-loosestrife	E	1881
WALTHAM	Vascular Plant	Oxalis violacea	Violet Wood-sorrel	E	1883
WALTHAM	Vascular Plant	Platanthera flava var. herbiola	Pale Green Orchis	T	1886

Town	Taxonomic Group	Scientific Name	Common Name	MESA Status	Federal Status	Most Recent Observation
WARE	Amphibian	Ambystoma laterale	Blue-spotted Salamander	SC		1800s
WARE	Bird	Haliaeetus leucocephalus	Bald Eagle	E		2009
WARE	Bird	Podilymbus podiceps	Pied-billed Grebe	E		2000
WARE	Butterfly/Moth	Cicinnus melsheimeri	Melsheimer's Sack Bearer	T		Historic
WARE	Butterfly/Moth	Rhodoecia aurantiago	Orange Sallow Moth	T		2003
WARE	Dragonfly/Damselfly	Gomphus abbreviatus	Spine-crowned Clubtail	E		2004
WARE	Dragonfly/Damselfly	Ophiogomphus aspersus	Brook Snaketail	SC		2004
WARE	Dragonfly/Damselfly	Ophiogomphus carolus	Riffle Snaketail	T		2004
WARE	Dragonfly/Damselfly	Stylurus spiniceps	Arrow Clubtail	T		2004
WARE	Fish	Notropis bifrenatus	Bridle Shiner	SC		2005
WARE	Mammal	Synaptomys cooperi	Southern Bog Lemming	SC		1992
WARE	Mussel	Alasmidonta undulata	Triangle Floater	SC		2007
WARE	Mussel	Alasmidonta varicosa	Brook Floater (Swollen Wedgemussel)	E		1997
WARE	Mussel	Strophitus undulatus	Creeper	SC		2007
WARE	Reptile	Glyptemys insculpta	Wood Turtle	SC		2008
WARE	Reptile	Terrapene carolina	Eastern Box Turtle	SC		1928
WARE	Vascular Plant	Adlumia fungosa	Climbing Fumitory	SC		2008
WARE	Vascular Plant	Asclepias purpurascens	Purple Milkweed	E		2007
WARE	Vascular Plant	Carex bushii	Bush's Sedge	E		2007
WARE	Vascular Plant	Claytonia virginica	Narrow-leaved Spring Beauty	E		2008
WARE	Vascular Plant	Liatris scariosa var. novae-angliae	New England Blazing Star	SC		1931
WARE	Vascular Plant	Pedicularis lanceolata	Swamp Lousewort	E		Historic
WARE	Vascular Plant	Rhododendron maximum	Great Laurel	T		2007

Town	Taxonomic Group	Scientific Name	Common Name	MESA Status	Federal Status	Most Recent Observation
WAREHAM	Amphibian	Ambystoma opacum	Marbled Salamander	T		1900
WAREHAM	Bird	Accipiter striatus	Sharp-shinned Hawk	SC		1988
WAREHAM	Bird	Charadrius melodus	Piping Plover	T	T	2006

WAREHAM Bird	Parula americana	Northern Parula	T		1889
WAREHAM Bird	Sterna dougallii	Roseate Tern	E	E	2008
WAREHAM Bird	Sterna hirundo	Common Tern	SC		2008
WAREHAM Butterfly/Moth	Apamea inebriata	Drunk Apamea Moth	SC		2002
WAREHAM Butterfly/Moth	Catocala herodias gerhardi	Gerhard's Underwing Moth	SC		2002
WAREHAM Butterfly/Moth	Chaetagnathia cerata	Waxed Sallow Moth	SC		1900s
WAREHAM Butterfly/Moth	Cicinnus melsheimeri	Melsheimer's Sack Bearer	T		1974
WAREHAM Butterfly/Moth	Cingilia catenaria	Chain Dot Geometer	SC		1977
WAREHAM Butterfly/Moth	Cycnia inopinatus	Unexpected Cycnia	T		1975
WAREHAM Butterfly/Moth	Hemileuca maia	Barrens Buckmoth	SC		2002
WAREHAM Butterfly/Moth	Hypomecis buchholzaria	Buchholz's Gray	E		1968
WAREHAM Butterfly/Moth	Itame sp. 1 nr. inextricata	Pine Barrens Itame	SC		1978
WAREHAM Butterfly/Moth	Lithophane viridipallens	Pale Green Pinion Moth	SC		2002
WAREHAM Butterfly/Moth	Metarranthia pilosaria	Coastal Swamp Metarranthia Moth	SC		1978
WAREHAM Butterfly/Moth	Papaipema appassionate	Pitcher Plant Borer Moth	T		1971
WAREHAM Butterfly/Moth	Papaipema sulphurata	Water-willow Stem Borer	T		1987
WAREHAM Butterfly/Moth	Psectraglaea carnosia	Pink Sallow	SC		1978
WAREHAM Butterfly/Moth	Spartiniphaga inops	Spartina Borer Moth	SC		1977
WAREHAM Dragonfly/Damselfly	Anax longipes	Comet Darner	SC		1913
WAREHAM Dragonfly/Damselfly	Boyeria grafiana	Ocellated Darner	SC		1912
WAREHAM Dragonfly/Damselfly	Enallagma laterale	New England Bluet	SC		1987
WAREHAM Mammal	Synaptomys cooperi	Southern Bog Lemming	SC		1894
WAREHAM Mussel	Alasmodonta heterodon	Dwarf Wedgemussel	E	E	Historic
WAREHAM Mussel	Alasmodonta undulata	Triangle Floater	SC		1999
WAREHAM Mussel	Leptodea ochracea	Tidewater Mucket	SC		1999
WAREHAM Reptile	Malaclemys terrapin	Diamond-backed Terrapin	T		2008
WAREHAM Reptile	Pseudemys rubriventris pop. 1	Northern Red-bellied Cooter	E	E	2005
WAREHAM Reptile	Terrapene carolina	Eastern Box Turtle	SC		2009
WAREHAM Vascular Plant	Ageratina aromatica	Lesser Snakeroot	E		1935
WAREHAM Vascular Plant	Aristida purpurascens	Purple Needlegrass	T		1987
WAREHAM Vascular Plant	Cardamine longii	Long's Bitter-cress	E		2000
WAREHAM Vascular Plant	Carex striata	Walter's Sedge	E		1986
WAREHAM Vascular Plant	Corema conradii	Broom Crowberry	SC		2008
WAREHAM Vascular Plant	Cyperus houghtonii	Houghton's Flatsedge	E		1890
WAREHAM Vascular Plant	Dichanthelium dichotomum ssp. mattamuskeetense	Mattamuskeet Panic-grass	E		1950
WAREHAM Vascular Plant	Elatine americana	American Waterwort	E		1980
WAREHAM Vascular Plant	Eriocaulon parkeri	Parker's Pipewort	E		2006

WAREHAM	Vascular Plant	<i>Liatris scariosa</i> var. <i>novae-angliae</i>	New England Blazing Star	SC	2000
WAREHAM	Vascular Plant	<i>Linum medium</i> var. <i>texanum</i>	Rigid Flax	T	1931
WAREHAM	Vascular Plant	<i>Nabalus serpentarius</i>	Lion's Foot	E	1933
WAREHAM	Vascular Plant	<i>Sabatia kennedyana</i>	Plymouth Gentian	SC	2000
WAREHAM	Vascular Plant	<i>Sagittaria teres</i>	Terete Arrowhead	SC	2000
WAREHAM	Vascular Plant	<i>Setaria parviflora</i>	Bristly Foxtail	SC	2000
WAREHAM	Vascular Plant	<i>Spartina cynosuroides</i>	Salt Reedgrass	T	1989
WAREHAM	Vascular Plant	<i>Symphyotrichum concolor</i>	Eastern Silvery Aster	E	1926
WAREHAM	Vascular Plant	<i>Tillaea aquatica</i>	Pygmyweed	T	2006
WAREHAM	Vascular Plant	<i>Utricularia subulata</i>	Subulate Bladderwort	SC	1975

Town	Taxonomic Group	Scientific Name	Common Name	MESA Status	Federal Status	Most Recent Observation
WARREN	Bird	<i>Botaurus lentiginosus</i>	American Bittern	E		1999
WARREN	Butterfly/Moth	<i>Rhodoecia aurantiago</i>	Orange Sallow Moth	T		2009
WARREN	Dragonfly/Damselfly	<i>Gomphus abbreviatus</i>	Spine-crowned Clubtail	E		2004
WARREN	Reptile	<i>Glyptemys insculpta</i>	Wood Turtle	SC		1996
WARREN	Vascular Plant	<i>Calamagrostis stricta</i> ssp. <i>inexpansa</i>	New England Northern Reed Grass	E		2005
WARREN	Vascular Plant	<i>Clematis occidentalis</i>	Purple Clematis	SC		Historic
WARREN	Vascular Plant	<i>Corallorhiza odontorhiza</i>	Autumn Coralroot	SC		2001
WARREN	Vascular Plant	<i>Ranunculus pensylvanicus</i>	Bristly Buttercup	SC		2008
WARREN	Vascular Plant	<i>Veronicastrum virginicum</i>	Culver's-root	T		1927

Town	Taxonomic Group	Scientific Name	Common Name	MESA Status	Federal Status	Most Recent Observation
WARWICK	Amphibian	<i>Ambystoma jeffersonianum</i>	Jefferson Salamander	SC		1995
WARWICK	Bird	<i>Botaurus lentiginosus</i>	American Bittern	E		2007
WARWICK	Dragonfly/Damselfly	<i>Enallagma laterale</i>	New England Bluet	SC		2002
WARWICK	Dragonfly/Damselfly	<i>Rhionaeschna mutata</i>	Spatterdock Darner	SC		2002
WARWICK	Dragonfly/Damselfly	<i>Somatochlora elongata</i>	Ski-tipped Emerald	SC		2002
WARWICK	Mammal	<i>Sorex palustris</i>	Water Shrew	SC		Historic
WARWICK	Mussel	<i>Strophitus undulatus</i>	Creeper	SC		1997
WARWICK	Reptile	<i>Glyptemys insculpta</i>	Wood Turtle	SC		2006
WARWICK	Vascular Plant	<i>Hypericum ascyron</i>	Giant St. John's-wort	E		2000
WARWICK	Vascular Plant	<i>Mimulus moschatus</i>	Muskflower	E		1909

Town	Taxonomic	Scientific	Common	MESA	Federal	Most
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	Group	Name	Name	Status	Status	Recent Observation
WASHINGTON	Amphibian	Ambystoma jeffersonianum	Jefferson Salamander	SC		2000
WASHINGTON	Bird	Botaurus lentiginosus	American Bittern	E		2008
WASHINGTON	Bird	Cistothorus platensis	Sedge Wren	E		1934
WASHINGTON	Bird	Gallinula chloropus	Common Moorhen	SC		1999
WASHINGTON	Bird	Ixobrychus exilis	Least Bittern	E		2008
WASHINGTON	Butterfly/Moth	Pieris oleracea	Mustard White	T		1986
WASHINGTON	Dragonfly/Damselfly	Enallagma carunculatum	Tule Bluet	SC		2001
WASHINGTON	Fish	Notropis bifrenatus	Bridle Shiner	SC		1996
WASHINGTON	Vascular Plant	Listera cordata	Heartleaf Twayblade	E		1856
WASHINGTON	Vascular Plant	Rhododendron maximum	Great Laurel	T		Historic

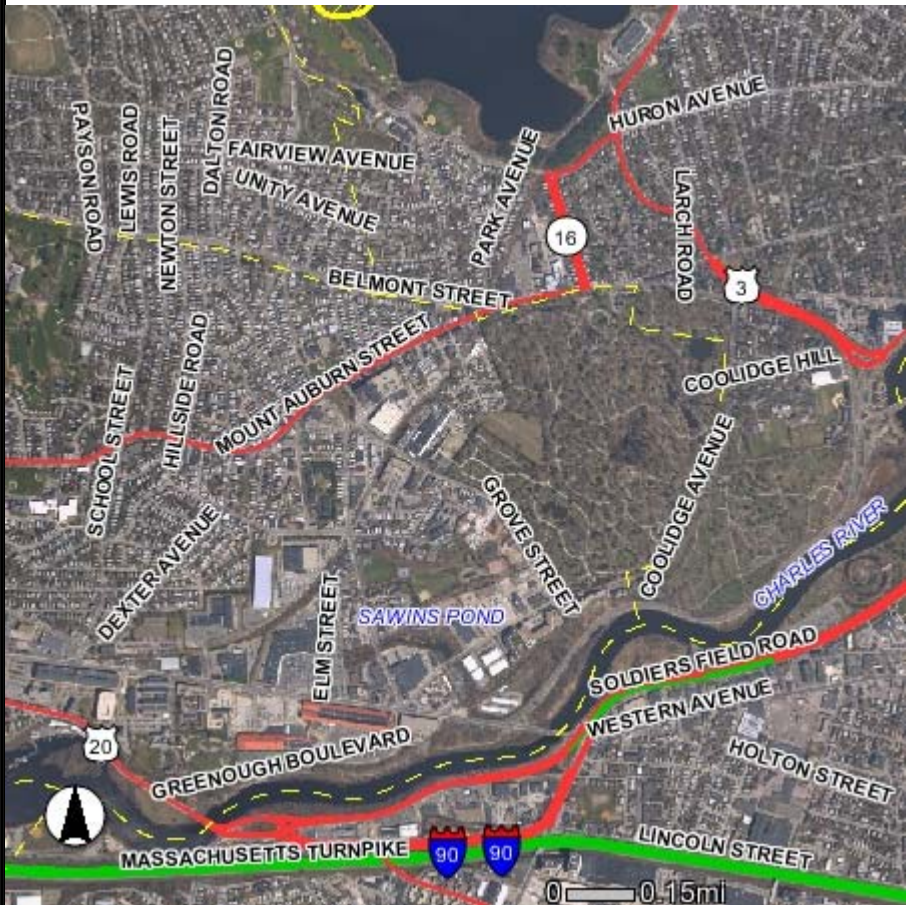
Town	Taxonomic Group	Scientific Name	Common Name	MESA Status	Federal Status	Most Recent Observation
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WATERTOWN -At this time we are not aware of any state-listed rare plants or animals in this town. This evaluation is based on the information in the NHESP database as of September 2009.

Town	Taxonomic Group	Scientific Name	Common Name	MESA Status	Federal Status	Most Recent Observation
WAYLAND	Amphibian	Ambystoma laterale	Blue-spotted Salamander	SC		2008
WAYLAND	Bird	Ammodramus henslowii	Henslow's Sparrow	E		1948
WAYLAND	Bird	Botaurus lentiginosus	American Bittern	E		1984
WAYLAND	Bird	Cistothorus platensis	Sedge Wren	E		1890
WAYLAND	Bird	Gallinula chloropus	Common Moorhen	SC		2006
WAYLAND	Bird	Ixobrychus exilis	Least Bittern	E		2008
WAYLAND	Bird	Podilymbus podiceps	Pied-billed Grebe	E		2006
WAYLAND	Bird	Rallus elegans	King Rail	T		1980
WAYLAND	Fish	Notropis bifrenatus	Bridle Shiner	SC		1951
WAYLAND	Mussel	Ligumia nasuta	Eastern Pondmussel	SC		Historic
WAYLAND	Reptile	Terrapene carolina	Eastern Box Turtle	SC		2006
WAYLAND	Vascular Plant	Bolboschoenus fluviatilis	River Bulrush	SC		2004
WAYLAND	Vascular Plant	Lipocarpha micrantha	Dwarf Bulrush	T		1909
WAYLAND	Vascular Plant	Senna hebecarpa	Wild Senna	E		1912

Town	Taxonomic Group	Scientific Name	Common Name	MESA Status	Federal Status	Most Recent Observation
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2008 Priority Habitat and Estimated Habitat Natural Heritage & Endangered Species Program



Legend

Land Feature Names

EOT-OTP Roads Names

EOT-OTP Roads

- Limited Access Highway
- Multi-lane Hwy, Not Limited Access
- Other Numbered Hwy

Place Names

Surrounding States
Labels

- Surrounding States
- NHESP 2008 Priority Habitats of Rare Species and also Estimated Habitats of Rare Wildlife
- NHESP 2008 MA Priority Habitats of Rare Species

Color Orthos 2005

Attachment 7: Laboratory Data



06/23/10

Technical Report for

AMEC

GE Watertown MA

778190012

Accutest Job Number: M91769

Sampling Date: 05/28/10

Report to:

mike.j.robinson@amec.com

ATTN: Distribution6

Total number of pages in report: **64**



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Reza Fand
Lab Director

Client Service contact: Kristen Blanchard 508-481-6200

Certifications: MA (M-MA136) CT (PH-0109) NH (250210) RI (00071) ME (MA00136) FL (E87579) NY (11791) NJ (MA926) PA (002) ND (R-188) CO MN (11546AA) NC (653) IL (002337) DoD/ISO/IEC 17025:2005 (L2235)

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Test results relate only to samples analyzed.

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Sample Summary

AMEC

Job No: M91769

GE Watertown MA
Project No: 778190012

Sample Number	Collected		Received	Matrix		Client Sample ID
	Date	Time By		Code	Type	
M91769-1	05/28/10	12:00 MR	05/28/10	AQ	Ground Water	WW-1

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: AMEC

Job No M91769

Site: GE Watertown MA

Report Date 6/23/2010 1:07:50 PM

1 Sample(s) were collected on 05/28/2010 and were received at Accutest on 05/28/2010 properly preserved, at 1.7 Deg. C and intact. These Samples received an Accutest job number of M91769. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section of this report.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

Extractables by GCMS By Method SW846 8270C

Matrix AQ	Batch ID: OP21513
------------------	--------------------------

- All samples were extracted within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- BS/BSD Recovery(s) for Hexachlorocyclopentadiene, Phenol are outside control limits. Blank Spike meets program technical requirements.
- M91769-1 for Nitrobenzene-d5, 2,4,6-Tribromophenol, Phenol-d5, 2-Fluorobiphenyl, 2-Fluorophenol, Terphenyl-d14: Outside control limits due to possible matrix interference. Sample results confirmed by re-extraction/reanalysis.
- RPD(s) of OP21513-BSD for several compounds: Outside control limits. Individual spike recoveries within acceptance limits.
- Only selected compounds requested.

Matrix AQ	Batch ID: OP21605
------------------	--------------------------

- M91769-1: Confirmation run for surrogate recoveries.

Volatiles by GC By Method MADEP VPH REV 1.1

Matrix AQ	Batch ID: GBH674
------------------	-------------------------

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.

Volatiles by GC By Method SW846 8015

Matrix AQ	Batch ID: GWX2347
------------------	--------------------------

- All samples were analyzed within the recommended method holding time.
- Sample(s) M91769-1MS, M91769-1MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.

Extractables by GC By Method SW846 8082

Matrix AQ	Batch ID: OP21528
------------------	--------------------------

- All samples were extracted within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) M91846-6MS, M91846-6MSD were used as the QC samples indicated.

Extractables by GC By Method SW846-8015

Matrix AQ

Batch ID: OP21534

- All samples were extracted within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.

Metals By Method SW846 6010B

Matrix AQ

Batch ID: MP15352

- All samples were digested within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) M91770-3DUP, M91770-3MS, M91770-3SDL, M91770-3DUP were used as the QC samples for metals.
- RPD(s) for Duplicate for Antimony, Arsenic, Cadmium, Lead, Selenium are outside control limits for sample MP15352-D1. RPD acceptable due to low duplicate and sample concentrations.
- RPD(s) for Serial Dilution for Antimony, Arsenic, Cadmium, Copper, Lead, Selenium are outside control limits for sample MP15352-SD1. Percent difference acceptable due to low initial sample concentration (< 50 times IDL).
- Only selected metals requested.

Metals By Method SW846 7470A

Matrix AQ

Batch ID: MP15355

- All samples were digested within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) M91770-3DUP, M91770-3MS were used as the QC samples for metals.

Wet Chemistry By Method SM21 2540D

Matrix AQ

Batch ID: GN32028

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) M91769-1DUP were used as the QC samples for Solids, Total Suspended.

Wet Chemistry By Method SM21 4500CL F

Matrix AQ

Batch ID: GN31998

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) M91769-1DUP, M91769-1MS were used as the QC samples for Total Residual Chlorine.

The Accutest Laboratories of New England certifies that all analysis were performed within method specification. It is further recommended that this report to be used in its entirety. The Accutest Laboratories of NE, Laboratory Director or assignee as verified by the signature on the cover page has authorized the release of this report(M91769).



Sample Results

Report of Analysis

Report of Analysis

Page 1 of 3

Client Sample ID:	WW-1		
Lab Sample ID:	M91769-1	Date Sampled:	05/28/10
Matrix:	AQ - Ground Water	Date Received:	05/28/10
Method:	SW846 8270C SW846 3510C	Percent Solids:	n/a
Project:	GE Watertown MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	S15474.D	1	06/04/10	AA	06/02/10	OP21513	MSS568
Run #2 ^a	S16010.D	1	06/22/10	AA	06/11/10	OP21605	MSS588

	Initial Volume	Final Volume
Run #1	970 ml	1.0 ml
Run #2	780 ml	1.0 ml

ABN TCL List

CAS No.	Compound	Result	RL	Units	Q
95-57-8	2-Chlorophenol	ND	5.2	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	10	ug/l	
120-83-2	2,4-Dichlorophenol	ND	10	ug/l	
105-67-9	2,4-Dimethylphenol	ND	10	ug/l	
51-28-5	2,4-Dinitrophenol	ND	21	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	10	ug/l	
95-48-7	2-Methylphenol	ND	10	ug/l	
	3&4-Methylphenol	ND	10	ug/l	
88-75-5	2-Nitrophenol	ND	10	ug/l	
100-02-7	4-Nitrophenol	ND	21	ug/l	
87-86-5	Pentachlorophenol	ND	10	ug/l	
108-95-2	Phenol	ND	5.2	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	10	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	10	ug/l	
83-32-9	Acenaphthene	ND	5.2	ug/l	
208-96-8	Acenaphthylene	ND	5.2	ug/l	
120-12-7	Anthracene	ND	5.2	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.2	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.2	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.2	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.2	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.2	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	5.2	ug/l	
85-68-7	Butyl benzyl phthalate	ND	5.2	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.2	ug/l	
106-47-8	4-Chloroaniline	ND	10	ug/l	
86-74-8	Carbazole	ND	5.2	ug/l	
218-01-9	Chrysene	ND	5.2	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	5.2	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	5.2	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	5.2	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	5.2	ug/l	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	WW-1	Date Sampled:	05/28/10
Lab Sample ID:	M91769-1	Date Received:	05/28/10
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8270C SW846 3510C		
Project:	GE Watertown MA		

ABN TCL List

CAS No.	Compound	Result	RL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	5.2	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	5.2	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	5.2	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	10	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	10	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.2	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	5.2	ug/l	
132-64-9	Dibenzofuran	ND	5.2	ug/l	
84-74-2	Di-n-butyl phthalate	ND	5.2	ug/l	
117-84-0	Di-n-octyl phthalate	ND	5.2	ug/l	
84-66-2	Diethyl phthalate	ND	5.2	ug/l	
131-11-3	Dimethyl phthalate	ND	5.2	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.1	ug/l	
206-44-0	Fluoranthene	ND	5.2	ug/l	
86-73-7	Fluorene	ND	5.2	ug/l	
118-74-1	Hexachlorobenzene	ND	5.2	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.2	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	10	ug/l	
67-72-1	Hexachloroethane	ND	5.2	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.2	ug/l	
78-59-1	Isophorone	ND	5.2	ug/l	
91-57-6	2-Methylnaphthalene	ND	5.2	ug/l	
88-74-4	2-Nitroaniline	ND	10	ug/l	
99-09-2	3-Nitroaniline	ND	10	ug/l	
100-01-6	4-Nitroaniline	ND	10	ug/l	
91-20-3	Naphthalene	ND	5.2	ug/l	
98-95-3	Nitrobenzene	ND	5.2	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	5.2	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.2	ug/l	
85-01-8	Phenanthrene	ND	5.2	ug/l	
129-00-0	Pyrene	ND	5.2	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.2	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	5% ^b	46%	15-110%
4165-62-2	Phenol-d5	2% ^b	27%	15-110%
118-79-6	2,4,6-Tribromophenol	10% ^b	88%	15-110%
4165-60-0	Nitrobenzene-d5	10% ^b	74%	30-130%
321-60-8	2-Fluorobiphenyl	10% ^b	75%	30-130%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	WW-1		
Lab Sample ID:	M91769-1	Date Sampled:	05/28/10
Matrix:	AQ - Ground Water	Date Received:	05/28/10
Method:	SW846 8270C SW846 3510C	Percent Solids:	n/a
Project:	GE Watertown MA		

ABN TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1718-51-0	Terphenyl-d14	11% ^b	84%	30-130%

- (a) Confirmation run for surrogate recoveries.
(b) Outside control limits due to possible matrix interference. Sample results confirmed by re-extraction/reanalysis.

ND = Not detected	J = Indicates an estimated value
RL = Reporting Limit	B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range	N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	WW-1		
Lab Sample ID:	M91769-1	Date Sampled:	05/28/10
Matrix:	AQ - Ground Water	Date Received:	05/28/10
Method:	MADEP VPH REV 1.1	Percent Solids:	n/a
Project:	GE Watertown MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BH13104.D	1	06/02/10	AP	n/a	n/a	GBH674
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

MA-VPH List

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	2.0	ug/l	
100-41-4	Ethylbenzene	ND	2.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	
91-20-3	Naphthalene	ND	3.0	ug/l	
108-88-3	Toluene	ND	2.0	ug/l	
	m,p-Xylene	ND	2.0	ug/l	
95-47-6	o-Xylene	ND	2.0	ug/l	
	C5- C8 Aliphatics (Unadj.)	ND	50	ug/l	
	C9- C12 Aliphatics (Unadj.)	ND	50	ug/l	
	C9- C10 Aromatics (Unadj.)	ND	50	ug/l	
	C5- C8 Aliphatics	ND	50	ug/l	
	C9- C12 Aliphatics	ND	50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
615-59-8	2,5-Dibromotoluene	97%		70-130%
615-59-8	2,5-Dibromotoluene	94%		70-130%

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	WW-1						
Lab Sample ID:	M91769-1				Date Sampled:	05/28/10	
Matrix:	AQ - Ground Water				Date Received:	05/28/10	
Method:	SW846 8015				Percent Solids:	n/a	
Project:	GE Watertown MA						

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	WX49711.D	1	05/31/10	AF	n/a	n/a	GWX2347
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	Units	Q
	TPH-GRO (VOA)	ND	0.10	mg/l	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits	
615-59-8	2,5-Dibromotoluene	87%		60-126%	

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	WW-1	Date Sampled:	05/28/10
Lab Sample ID:	M91769-1	Date Received:	05/28/10
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8082 SW846 3510C		
Project:	GE Watertown MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF76920.D	1	06/06/10	SL	06/03/10	OP21528	GEF3467
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	5.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	0.25	ug/l	
11104-28-2	Aroclor 1221	ND	0.25	ug/l	
11141-16-5	Aroclor 1232	ND	0.25	ug/l	
53469-21-9	Aroclor 1242	ND	0.25	ug/l	
12672-29-6	Aroclor 1248	ND	0.25	ug/l	
11097-69-1	Aroclor 1254	ND	0.25	ug/l	
11096-82-5	Aroclor 1260	ND	0.25	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	81%		30-150%
877-09-8	Tetrachloro-m-xylene	84%		30-150%
2051-24-3	Decachlorobiphenyl	67%		30-150%
2051-24-3	Decachlorobiphenyl	61%		30-150%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	WW-1						
Lab Sample ID:	M91769-1				Date Sampled:	05/28/10	
Matrix:	AQ - Ground Water				Date Received:	05/28/10	
Method:	SW846-8015 SW846 3510C				Percent Solids:	n/a	
Project:	GE Watertown MA						

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BC40443.D	1	06/05/10	KD	06/04/10	OP21534	GBC2022
Run #2							

	Initial Volume	Final Volume
Run #1	980 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
	TPH-DRO (Semi-VOA)	ND	0.20	mg/l	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits	
3386-33-2	1-Chlorooctadecane	77%		33-150%	

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: WW-1	Date Sampled: 05/28/10
Lab Sample ID: M91769-1	Date Received: 05/28/10
Matrix: AQ - Ground Water	Percent Solids: n/a
Project: GE Watertown MA	

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analized By	Method	Prep Method
Antimony	< 6.0	6.0	ug/l	1	06/01/10	06/01/10 DA	SW846 6010B ²	SW846 3010A ³
Arsenic	< 10	10	ug/l	1	06/01/10	06/01/10 DA	SW846 6010B ²	SW846 3010A ³
Beryllium	< 4.0	4.0	ug/l	1	06/01/10	06/01/10 DA	SW846 6010B ²	SW846 3010A ³
Cadmium	< 4.0	4.0	ug/l	1	06/01/10	06/01/10 DA	SW846 6010B ²	SW846 3010A ³
Chromium	< 10	10	ug/l	1	06/01/10	06/01/10 DA	SW846 6010B ²	SW846 3010A ³
Copper	71.3	25	ug/l	1	06/01/10	06/01/10 DA	SW846 6010B ²	SW846 3010A ³
Iron	311	100	ug/l	1	06/01/10	06/01/10 DA	SW846 6010B ²	SW846 3010A ³
Lead	< 5.0	5.0	ug/l	1	06/01/10	06/01/10 DA	SW846 6010B ²	SW846 3010A ³
Mercury	< 0.20	0.20	ug/l	1	06/01/10	06/02/10 MA	SW846 7470A ¹	SW846 7470A ⁴
Nickel	< 40	40	ug/l	1	06/01/10	06/01/10 DA	SW846 6010B ²	SW846 3010A ³
Selenium	< 10	10	ug/l	1	06/01/10	06/01/10 DA	SW846 6010B ²	SW846 3010A ³
Silver	< 5.0	5.0	ug/l	1	06/01/10	06/01/10 DA	SW846 6010B ²	SW846 3010A ³
Thallium	< 10	10	ug/l	1	06/01/10	06/01/10 DA	SW846 6010B ²	SW846 3010A ³
Zinc	322	20	ug/l	1	06/01/10	06/01/10 DA	SW846 6010B ²	SW846 3010A ³

- (1) Instrument QC Batch: MA11845
 (2) Instrument QC Batch: MA11848
 (3) Prep QC Batch: MP15352
 (4) Prep QC Batch: MP15355

RL = Reporting Limit

Report of Analysis

Client Sample ID:	WW-1	Date Sampled:	05/28/10
Lab Sample ID:	M91769-1	Date Received:	05/28/10
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	GE Watertown MA		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Solids, Total Suspended	< 4.0	4.0	mg/l	1	06/03/10	BF	SM21 2540D
Total Residual Chlorine	< 0.050	0.050	mg/l	1	05/29/10 09:00	MA	SM21 4500CL F

RL = Reporting Limit



Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Certification Exceptions
- Parameter Certifications (MA)
- Chain of Custody
- MCP Form
- VPH Form
- Sample Tracking Chronicle

Parameter Certifications

Job Number: M91769
Account: AMECMAW AMEC
Project: GE Watertown MA

The following parameters included in this report are certified by the state of MA.

Parameter	CAS#	Method	Mat	Certification Status
Solids, Total Suspended		SM21 2540D	AQ	Accutest is certified for this parameter.
Total Residual Chlorine		SM21 4500CL F	AQ	Accutest is certified for this parameter.

4.1
4



ACCUTEST
Laboratories

CHAIN OF CUSTODY

495 TECHNOLOGY CENTER WEST • BUILDING ONE
MARLBOROUGH, MA 01752
TEL: 508-481-6200 • FAX: 508-481-7753

ACCUTEST JOB #:

M91769

ACCUTEST QUOTE #:

CLIENT INFORMATION			FACILITY INFORMATION			ANALYTICAL INFORMATION										MATRIX CODES	
NAME <u>AMEC ETE</u>			PROJECT NAME <u>GE</u>			VP6 TPH-6 TPH-D SVOC PCB PP Metals & Fe TSS TRChlorine										DW - DRINKING WATER GW - GROUND WATER WW - WASTE WATER SO - SOIL SL - SLUDGE OI - OIL LIQ - OTHER LIQUID SOL - OTHER SOLID	
ADDRESS <u>2 Robbins Rd</u>			LOCATION <u>Westford MA 01886</u>														
CITY, STATE ZIP <u>MA 01886</u>			PROJECT NO.														
SEND REPORT TO: PHONE # <u>978-692-9090</u>			FAX # <u>978-692-6633</u>														
ACCUTEST SAMPLE #	FIELD ID / POINT OF COLLECTION	COLLECTION		SAMPLED BY:	MATRIX	# OF BOTTLES	PRESERVATION						LAB USE ONLY				
		DATE	TIME				NO	NOH	NOH	NOH	NOH						
-1	WW-1	5/28	1200	WJL	WW	11	9	1	6								
<u>WJL 5/28/10</u>																	
DATA TURNAROUND INFORMATION			DATA DELIVERABLE INFORMATION			COMMENTS/REMARKS											
☐ 14 DAYS STANDARD ☐ 7 DAYS RUSH ☐ 48 HOUR EMERGENCY ☒ OTHER <u>30 day possible</u>			☒ STANDARD ☐ COMMERCIAL "B" ☐ DISK DELIVERABLE ☐ STATE FORMS ☐ OTHER (SPECIFY) _____			19BB, 15D, 6D 4LC											
14 DAY TURNAROUND HARDCOPY, EMERGENCY OR RUSH IS FAX DATA UNLESS PREVIOUSLY APPROVED																	
SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION, INCLUDING COURIER DELIVERY																	
RELINQUISHED BY SAMPLER: 1. <u>WJL</u>	DATE TIME: <u>5/28 1242</u>	RECEIVED BY: 1. <u>Will</u>	RELINQUISHED BY: 2. <u>Will</u>	DATE TIME: <u>5/28/10</u>	RECEIVED BY: 2. <u>Will</u>												
RELINQUISHED BY: 3.	DATE TIME:	RECEIVED BY: 3.	RELINQUISHED BY: 4.	DATE TIME:	RECEIVED BY: 4.												
RELINQUISHED BY: 5.	DATE TIME:	RECEIVED BY: 5.	SEAL #	PRESERVE WHERE APPLICABLE ☐	ON ICE ☐	TEMPERATURE <u>1.7</u> C											

M91769: Chain of Custody

Page 1 of 2



Accutest Laboratories Sample Receipt Summary

Accutest Job Number: M91769

Client: AMEC

Immediate Client Services Action Required: No

Date / Time Received: 5/28/2010 1:55:00 PM

No. Coolers: 1

Client Service Action Required at Login: No

Project: GE WATERTOWN

Airbill #'s: N/A

Cooler Security

Y or N

Y or N

- | | | | | | |
|---------------------------|-------------------------------------|--------------------------|-----------------------|-------------------------------------|--------------------------|
| 1. Custody Seals Present: | ☒ | ☐ | 3. COC Present: | ☒ | ☐ |
| 2. Custody Seals Intact: | ☒ | ☐ | 4. Smpl Dates/Time OK | ☒ | ☐ |

Cooler Temperature

Y or N

- | | | |
|------------------------------|-------------------------------------|--------------------------|
| 1. Temp criteria achieved: | ☒ | ☐ |
| 2. Cooler temp verification: | Infrared gun | |
| 3. Cooler media: | Ice (bag) | |

Quality Control Preservation

Y or N

N/A

- | | | |
|---------------------------------|-------------------------------------|--------------------------|
| 1. Trip Blank present / cooler: | ☐ | ☐ |
| 2. Trip Blank listed on COC: | ☐ | ☐ |
| 3. Samples preserved properly: | ☒ | ☐ |
| 4. VOCs headspace free: | ☒ | ☐ |

Sample Integrity - Documentation

Y or N

- | | | |
|--|-------------------------------------|--------------------------|
| 1. Sample labels present on bottles: | ☒ | ☐ |
| 2. Container labeling complete: | ☒ | ☐ |
| 3. Sample container label / COC agree: | ☒ | ☐ |

Sample Integrity - Condition

Y or N

- | | | |
|----------------------------------|-------------------------------------|--------------------------|
| 1. Sample recvd within HT: | ☒ | ☐ |
| 2. All containers accounted for: | ☒ | ☐ |
| 3. Condition of sample: | Intact | |

Sample Integrity - Instructions

Y or N N/A

- | | | | |
|---|-------------------------------------|-------------------------------------|-------------------------------------|
| 1. Analysis requested is clear: | ☒ | ☐ | |
| 2. Bottles received for unspecified tests | ☐ | ☒ | |
| 3. Sufficient volume rec'd for analysis: | ☒ | ☐ | |
| 4. Compositing instructions clear: | ☐ | ☐ | ☒ |
| 5. Filtering instructions clear: | ☐ | ☐ | ☒ |

Comments

Accutest Laboratories
V:508.481.6200

495 Technology Center West, Bldg One
F: 508.481.7753

Marlborough, MA
www.accutest.com

M91769: Chain of Custody
Page 2 of 2



Massachusetts Department
of Environmental Protection
Bureau of Waste Site Cleanup

BWSC-CAM

21 May 2004

Final

Exhibit VII A-1

Revision No. 3.2

Page 10 of 32

Title: MADEP MCP Response Action Analytical Report Certification Form

MADEP MCP Analytical Method Report Certification Form

Laboratory Name: Accutest Laboratories of New England

Project #: M91769

Project Location: GE Watertown MA

MADEP RTN ¹ None

This form provides certifications for the following data set:
M91769-1

Sample Matrices: Groundwater X Soil/Sediment () Drinking Water () Other: () ()

MCP SW-846

Methods Used

8260B ()

8151A ()

8330 ()

6010B (X)

7470A/1A (X)

8270C (X)

8081A ()

VPH (X)

6020 ()

9014M ² ()

8082 (X)

8021B ()

EPH ()

7000 S ³ ()

7196A ()

As specified in MADEP
Compendium of
Analytical Methods.

1 List Release Tracking Number (RTN), if known

2 M - SW-846 Method 9014 or MADEP Physiologically Available Cyanide (PAC) Method

3 S - SW-846 Methods 7000 Series List Individual method and analyte

(Check all that apply)

An affirmative response to questions A, B, C, and D is required for "Presumptive Certainty status

- A** Were all samples received by the laboratory in a condition consistent with that described on the Chain-of-Custody documentation for the data set? ☒ Yes ☐ No ¹
- B** Were all QA/QC procedures required for the specified analytical method(s) included in this report followed, including the requirement to note and discuss in a narrative QC data that did not meet appropriate performance standards or guidelines? ☒ Yes ☐ No ¹
- C** Does the data included in this report meet all the analytical requirements for "Presumptive Certainty", as described in Section 2.0 (a), (b), (c) and (d) of the MADEP document CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"? ☒ Yes ☐ No ¹
- D** **VPH and EPH methods only:** Was the VPH or EPH method run without significant modifications, as specified in Section 11.3? ☒ Yes ☐ No ¹

A response to questions E and F below is required for "Presumptive Certainty" status

- E** Were all QC performance standards and recommendations for the specified methods achieved? ☐ Yes ☒ No ¹
Refer to Narrative
- F** Were results for all analyte-list compounds/elements for the specified method(s) reported? ☐ Yes ☒ No ¹
Refer to Narrative

¹ All Negative responses must be addressed in an attached Environmental Laboratory case narrative.

I the undersigned, attest under the pains and penalties of perjury that, based upon my personal inquiry of those responsible for obtaining the information, the material contained in this analytical report is, to the best of my knowledge and belief, accurate and complete.

Signature:

Position: Laboratory Director

Printed Name: Reza Tand

Date: 06/23/2010

MADEP VPH FORM

Matrix	Aqueous ☒ Soil ☐ Sediment ☐ Other ☐
Containers	Satisfactory ☒ Broken ☐ Leaking ☐
Aqueous Preservatives	N/A ☐ pH <= 2 ☒ pH > 2 ☐
Temperature	Received on Ice ☐ Received at 4 Deg. C ☐ Other ☒ 1.7 Deg. C
Methanol	N/A

Method for Ranges:	MADEP VPH REV 1.1	Client ID: WW-1	Lab ID: M91769-1
Method for Target Analytes:	MADEP VPH REV 1.1	Date Collected: 5/28/2010	Date Received: 5/28/2010
VPH Surrogate Standards		Date Extracted:	First Date Run:
PID: 2,5-Dibromotoluene		N/A	6/2/2010
FID: 2,5-Dibromotoluene		% Solids:	Low Dilution:
		N/A	1
			Last Date Run:
			N/A
			High Dilution:
			N/A

Unadjusted Ranges	CAS #	Elution Range	Units	Result	RDL	Q
C5- C8 Aliphatics (Unadj.)		N/A	ug/l	ND ^A	50	
C9- C10 Aromatics (Unadj.)		N/A	ug/l	ND ^A	50	
C9- C12 Aliphatics (Unadj.)		N/A	ug/l	ND ^A	50	

Target Analytes

Ethylbenzene	100-41-4	C9-C12	ug/l	ND	2
Toluene	108-88-3	C5-C8	ug/l	ND	2
Methyl Tert Butyl Ether	1634-04-4	C5-C8	ug/l	ND	1
Benzene	71-43-2	C5-C8	ug/l	ND	2
Naphthalene	91-20-3	N/A	ug/l	ND	3
o-Xylene	95-47-6	C9-C12	ug/l	ND	2
m,p-Xylene		C9-C12	ug/l	ND	2

Adjusted Ranges

C5- C8 Aliphatics	N/A	ug/l	ND ^B	50
C9- C12 Aliphatics	N/A	ug/l	ND ^C	50

Surrogate Recoveries

				Acceptance Range
FID:2,5-Dibromotoluene	%	97		70-130 %
PID:2,5-Dibromotoluene	%	94		70-130 %

Footnotes

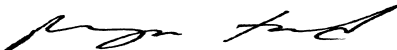
- A Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range
- B Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range. C5-C8 Aliphatic Hydrocarbons exclude the concentration of Target Analytes eluting in that range.
- C Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range. C9-C12 aliphatic Hydrocarbons exclude conc of Target Analytes eluting in that range AND concentration of C9-C10 Aromatic Hydrocarbons.
- Z A 'J' qualifier indicates an estimated value

Were all QA/QC procedures REQUIRED by the VPH Method followed? ☒ Yes ☐ No- Details Attached

Were all performance/acceptance standards for required QA/QC procedures achieved? ☒ Yes ☐ No- Details Attached

Were any significant modifications made to the VPH method, as specified in Sect. 11.3? ☒ No ☐ Yes- Details Attached

I attest under the pains and penalties of perjury that, based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Signature 
Printed Name **Reza Tand**

Postition **Laboratory Director**
Date **6/23/2010**

Internal Sample Tracking Chronicle

AMEC

Job No: M91769

GE Watertown MA
Project No: 778190012

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
M91769-1 WW-1	Collected: 28-MAY-10 12:00	By: MR	Received: 28-MAY-10	By: JB		
M91769-1	SM21 4500CL F	29-MAY-10 09:00	MA			TRC
M91769-1	SW846 8015	31-MAY-10 11:01	AF			V8015GRO
M91769-1	SW846 6010B	01-JUN-10 17:55	DA	01-JUN-10	EM	AG,AS,BE,CD,CR,CU,FE,NI,PB, SB,SE,TL,ZN
M91769-1	MADEP VPH REV 1.1	02-JUN-10 01:03	AP			VMAVPH
M91769-1	SW846 7470A	02-JUN-10 11:18	MA	01-JUN-10	MA	HG
M91769-1	SM21 2540D	03-JUN-10	BF			TSS
M91769-1	SW846 8270C	04-JUN-10 14:04	AA	02-JUN-10	AJ	AB8270TCL
M91769-1	SW846-8015	05-JUN-10 16:00	KD	04-JUN-10	AJ	B8015DRO
M91769-1	SW846 8082	06-JUN-10 07:41	SL	03-JUN-10	AJ	P8082PCB
M91769-1	SW846 8270C	22-JUN-10 17:43	AA	11-JUN-10	MEW	AB8270TCL



GC/MS Semi-volatiles

5

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Internal Standard Area Summaries
- Surrogate Recovery Summaries

Method Blank Summary

Page 1 of 3

Job Number: M91769

Account: AMECMAW AMEC

Project: GE Watertown MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP21513-MB	S15471.D	1	06/04/10	AA	06/02/10	OP21513	MSS568

The QC reported here applies to the following samples:

Method: SW846 8270C

M91769-1

CAS No.	Compound	Result	RL	Units	Q
95-57-8	2-Chlorophenol	ND	5.0	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	10	ug/l	
120-83-2	2,4-Dichlorophenol	ND	10	ug/l	
105-67-9	2,4-Dimethylphenol	ND	10	ug/l	
51-28-5	2,4-Dinitrophenol	ND	20	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	10	ug/l	
95-48-7	2-Methylphenol	ND	10	ug/l	
	3&4-Methylphenol	ND	10	ug/l	
88-75-5	2-Nitrophenol	ND	10	ug/l	
100-02-7	4-Nitrophenol	ND	20	ug/l	
87-86-5	Pentachlorophenol	ND	10	ug/l	
108-95-2	Phenol	ND	5.0	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	10	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	10	ug/l	
83-32-9	Acenaphthene	ND	5.0	ug/l	
208-96-8	Acenaphthylene	ND	5.0	ug/l	
120-12-7	Anthracene	ND	5.0	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.0	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.0	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.0	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.0	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.0	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	5.0	ug/l	
85-68-7	Butyl benzyl phthalate	ND	5.0	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.0	ug/l	
106-47-8	4-Chloroaniline	ND	10	ug/l	
86-74-8	Carbazole	ND	5.0	ug/l	
218-01-9	Chrysene	ND	5.0	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	5.0	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	5.0	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	5.0	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	5.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	5.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	5.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	5.0	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	10	ug/l	

Method Blank Summary

Page 2 of 3

Job Number: M91769

Account: AMECMAW AMEC

Project: GE Watertown MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP21513-MB	S15471.D	1	06/04/10	AA	06/02/10	OP21513	MSS568

The QC reported here applies to the following samples:

Method: SW846 8270C

M91769-1

CAS No.	Compound	Result	RL	Units	Q
606-20-2	2,6-Dinitrotoluene	ND	10	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	5.0	ug/l	
132-64-9	Dibenzofuran	ND	5.0	ug/l	
84-74-2	Di-n-butyl phthalate	ND	5.0	ug/l	
117-84-0	Di-n-octyl phthalate	ND	5.0	ug/l	
84-66-2	Diethyl phthalate	ND	5.0	ug/l	
131-11-3	Dimethyl phthalate	ND	5.0	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	ug/l	
206-44-0	Fluoranthene	ND	5.0	ug/l	
86-73-7	Fluorene	ND	5.0	ug/l	
118-74-1	Hexachlorobenzene	ND	5.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	10	ug/l	
67-72-1	Hexachloroethane	ND	5.0	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.0	ug/l	
78-59-1	Isophorone	ND	5.0	ug/l	
91-57-6	2-Methylnaphthalene	ND	5.0	ug/l	
88-74-4	2-Nitroaniline	ND	10	ug/l	
99-09-2	3-Nitroaniline	ND	10	ug/l	
100-01-6	4-Nitroaniline	ND	10	ug/l	
91-20-3	Naphthalene	ND	5.0	ug/l	
98-95-3	Nitrobenzene	ND	5.0	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	5.0	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	ug/l	
85-01-8	Phenanthrene	ND	5.0	ug/l	
129-00-0	Pyrene	ND	5.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/l	

CAS No.	Surrogate Recoveries	Limits
367-12-4	2-Fluorophenol	40% 15-110%
4165-62-2	Phenol-d5	24% 15-110%
118-79-6	2,4,6-Tribromophenol	84% 15-110%
4165-60-0	Nitrobenzene-d5	76% 30-130%

Method Blank Summary

Job Number: M91769
Account: AMECMAW AMEC
Project: GE Watertown MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP21513-MB	S15471.D	1	06/04/10	AA	06/02/10	OP21513	MSS568

The QC reported here applies to the following samples:

Method: SW846 8270C

M91769-1

CAS No.	Surrogate Recoveries	Limits
321-60-8	2-Fluorobiphenyl	77% 30-130%
1718-51-0	Terphenyl-d14	85% 30-130%

Blank Spike/Blank Spike Duplicate Summary

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Job Number: M91769

Account: AMECMAW AMEC

Project: GE Watertown MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP21513-BS	S15472.D	1	06/04/10	AA	06/02/10	OP21513	MSS568
OP21513-BSD	S15473.D	1	06/04/10	AA	06/02/10	OP21513	MSS568

The QC reported here applies to the following samples:

Method: SW846 8270C

M91769-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
95-57-8	2-Chlorophenol	100	68.4	68	54.0	54	24* a	30-130/20
59-50-7	4-Chloro-3-methyl phenol	100	82.5	83	67.3	67	20	30-130/20
120-83-2	2,4-Dichlorophenol	100	82.8	83	65.5	66	23* a	30-130/20
105-67-9	2,4-Dimethylphenol	100	80.0	80	64.4	64	22* a	30-130/20
51-28-5	2,4-Dinitrophenol	100	87.0	87	69.2	69	23* a	30-130/20
534-52-1	4,6-Dinitro-o-cresol	100	88.0	88	71.7	72	20	30-130/20
95-48-7	2-Methylphenol	100	60.2	60	47.9	48	23* a	30-130/20
	3&4-Methylphenol	200	116	58	91.5	46	24* a	30-130/20
88-75-5	2-Nitrophenol	100	79.1	79	62.5	63	23* a	30-130/20
100-02-7	4-Nitrophenol	100	41.2	41	34.3	34	18	30-130/20
87-86-5	Pentachlorophenol	100	82.4	82	66.1	66	22* a	30-130/20
108-95-2	Phenol	100	27.3	27* b	22.9	23* b	18	30-130/20
95-95-4	2,4,5-Trichlorophenol	100	85.8	86	67.6	68	24* a	30-130/20
88-06-2	2,4,6-Trichlorophenol	100	85.5	86	68.6	69	22* a	30-130/20
83-32-9	Acenaphthene	50	38.8	78	30.9	62	23* a	40-140/20
208-96-8	Acenaphthylene	50	28.1	56	22.3	45	23* a	40-140/20
120-12-7	Anthracene	50	39.1	78	31.8	64	21* a	40-140/20
56-55-3	Benzo(a)anthracene	50	42.7	85	37.1	74	14	40-140/20
50-32-8	Benzo(a)pyrene	50	40.4	81	34.6	69	15	40-140/20
205-99-2	Benzo(b)fluoranthene	50	40.1	80	35.3	71	13	40-140/20
191-24-2	Benzo(g,h,i)perylene	50	39.8	80	34.4	69	15	40-140/20
207-08-9	Benzo(k)fluoranthene	50	47.1	94	40.3	81	16	40-140/20
101-55-3	4-Bromophenyl phenyl ether	50	40.3	81	33.1	66	20	40-140/20
85-68-7	Butyl benzyl phthalate	50	40.4	81	34.2	68	17	40-140/20
91-58-7	2-Chloronaphthalene	50	38.4	77	30.1	60	24* a	40-140/20
106-47-8	4-Chloroaniline	50	25.1	50	27.1	54	8	40-140/20
86-74-8	Carbazole	50	40.5	81	33.7	67	18	40-140/20
218-01-9	Chrysene	50	41.0	82	35.8	72	14	40-140/20
111-91-1	bis(2-Chloroethoxy)methane	50	36.4	73	29.4	59	21* a	40-140/20
111-44-4	bis(2-Chloroethyl)ether	50	33.4	67	26.5	53	23* a	40-140/20
108-60-1	bis(2-Chloroisopropyl)ether	50	33.3	67	26.1	52	24* a	40-140/20
7005-72-3	4-Chlorophenyl phenyl ether	50	42.5	85	33.6	67	23* a	40-140/20
95-50-1	1,2-Dichlorobenzene	50	32.9	66	26.2	52	23* a	40-140/20
541-73-1	1,3-Dichlorobenzene	50	32.0	64	25.7	51	22* a	40-140/20
106-46-7	1,4-Dichlorobenzene	50	32.3	65	26.0	52	22* a	40-140/20
121-14-2	2,4-Dinitrotoluene	50	41.9	84	34.4	69	20	40-140/20

Blank Spike/Blank Spike Duplicate Summary

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Job Number: M91769

Account: AMECMAW AMEC

Project: GE Watertown MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP21513-BS	S15472.D	1	06/04/10	AA	06/02/10	OP21513	MSS568
OP21513-BSD	S15473.D	1	06/04/10	AA	06/02/10	OP21513	MSS568

The QC reported here applies to the following samples:

Method: SW846 8270C

M91769-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
606-20-2	2,6-Dinitrotoluene	50	41.9	84	34.4	69	20	40-140/20
91-94-1	3,3'-Dichlorobenzidine	50	32.6	65	29.5	59	10	40-140/20
53-70-3	Dibenzo(a,h)anthracene	50	39.3	79	34.1	68	14	40-140/20
132-64-9	Dibenzofuran	50	39.8	80	31.8	64	22* a	40-140/20
84-74-2	Di-n-butyl phthalate	50	41.6	83	35.0	70	17	40-140/20
117-84-0	Di-n-octyl phthalate	50	47.2	94	40.6	81	15	40-140/20
84-66-2	Diethyl phthalate	50	43.8	88	35.3	71	21* a	40-140/20
131-11-3	Dimethyl phthalate	50	40.7	81	32.9	66	21* a	40-140/20
117-81-7	bis(2-Ethylhexyl)phthalate	50	44.1	88	38.8	78	13	40-140/20
206-44-0	Fluoranthene	50	40.7	81	34.0	68	18	40-140/20
86-73-7	Fluorene	50	41.6	83	33.1	66	23* a	40-140/20
118-74-1	Hexachlorobenzene	50	39.9	80	33.9	68	16	40-140/20
87-68-3	Hexachlorobutadiene	50	36.9	74	29.7	59	22* a	40-140/20
77-47-4	Hexachlorocyclopentadiene	50	13.6	27* b	11.4	23* b	18	40-140/20
67-72-1	Hexachloroethane	50	34.5	69	26.8	54	25* a	40-140/20
193-39-5	Indeno(1,2,3-cd)pyrene	50	39.6	79	34.6	69	13	40-140/20
78-59-1	Isophorone	50	30.0	60	24.4	49	21* a	40-140/20
91-57-6	2-Methylnaphthalene	50	36.6	73	28.9	58	24* a	40-140/20
88-74-4	2-Nitroaniline	50	40.7	81	32.6	65	22* a	40-140/20
99-09-2	3-Nitroaniline	50	27.3	55	28.3	57	4	40-140/20
100-01-6	4-Nitroaniline	50	38.0	76	33.6	67	12	40-140/20
91-20-3	Naphthalene	50	36.1	72	28.8	58	22* a	40-140/20
98-95-3	Nitrobenzene	50	36.5	73	29.5	59	21* a	40-140/20
621-64-7	N-Nitroso-di-n-propylamine	50	40.3	81	31.1	62	26* a	40-140/20
86-30-6	N-Nitrosodiphenylamine	50	39.2	78	32.2	64	20	40-140/20
85-01-8	Phenanthrene	50	36.9	74	30.5	61	19	40-140/20
129-00-0	Pyrene	50	40.5	81	34.6	69	16	40-140/20
120-82-1	1,2,4-Trichlorobenzene	50	36.4	73	29.2	58	22* a	40-140/20

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
367-12-4	2-Fluorophenol	43%	35%	15-110%
4165-62-2	Phenol-d5	26%	22%	15-110%
118-79-6	2,4,6-Tribromophenol	85%	69%	15-110%
4165-60-0	Nitrobenzene-d5	75%	60%	30-130%

Blank Spike/Blank Spike Duplicate Summary

Job Number: M91769
Account: AMECMAW AMEC
Project: GE Watertown MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP21513-BS	S15472.D	1	06/04/10	AA	06/02/10	OP21513	MSS568
OP21513-BSD	S15473.D	1	06/04/10	AA	06/02/10	OP21513	MSS568

The QC reported here applies to the following samples:

Method: SW846 8270C

M91769-1

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
321-60-8	2-Fluorobiphenyl	79%	62%	30-130%
1718-51-0	Terphenyl-d14	84%	77%	30-130%

- (a) Outside control limits. Individual spike recoveries within acceptance limits.
- (b) Outside control limits. Blank Spike meets program technical requirements.

Semivolatile Internal Standard Area Summary

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Job Number: M91769
Account: AMECMAW AMEC
Project: GE Watertown MA

Check Std: MSS568-CC534	Injection Date: 06/04/10
Lab File ID: S15469.D	Injection Time: 11:43
Instrument ID: GCMSS	Method: SW846 8270C

	IS 1		IS 2		IS 3		IS 4		IS 5		IS 6	
	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT
Check Std	191728	5.49	793619	6.83	444146	8.97	755698	11.13	807767	15.46	656602	17.69
Upper Limit ^a	383456	5.99	1587238	7.33	888292	9.47	1511396	11.63	1615534	15.96	1313204	18.19
Lower Limit ^b	95864	4.99	396810	6.33	222073	8.47	377849	10.63	403884	14.96	328301	17.19

Lab Sample ID	IS 1		IS 2		IS 3		IS 4		IS 5		IS 6	
	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT
OP21513-MB	136111	5.49	540617	6.82	293219	8.97	495461	11.13	524331	15.46	477607	17.68
OP21513-BS	156700	5.49	684817	6.82	372090	8.97	640066	11.13	630460	15.46	549452	17.68
OP21513-BSD	149310	5.49	628099	6.82	340545	8.97	582041	11.13	573789	15.46	509280	17.68
M91769-1	140193	5.49	560873	6.82	304897	8.97	521002	11.13	532569	15.46	503588	17.68
ZZZZZZ	139450	5.49	559611	6.82	306131	8.97	526669	11.13	538346	15.46	503927	17.68
ZZZZZZ	142326	5.49	566167	6.82	308140	8.97	525872	11.13	550412	15.46	514670	17.68
ZZZZZZ	141187	5.49	556703	6.82	307098	8.97	520712	11.13	552192	15.46	510297	17.68
ZZZZZZ	147961	5.49	593772	6.82	341001	8.97	565498	11.13	567119	15.46	518874	17.68
ZZZZZZ	151456	5.49	592313	6.82	322094	8.97	565802	11.13	576320	15.46	535030	17.68
ZZZZZZ	141407	5.49	567034	6.82	306207	8.97	535329	11.13	544745	15.46	506965	17.68
ZZZZZZ	142367	5.49	564681	6.82	302430	8.97	525721	11.13	538860	15.46	497279	17.68
ZZZZZZ	148528	5.49	590328	6.82	319551	8.97	552333	11.13	561873	15.46	516970	17.68
ZZZZZZ	146607	5.49	585926	6.82	317546	8.97	549528	11.13	563788	15.46	516633	17.68
ZZZZZZ	144792	5.49	576188	6.82	314445	8.97	537492	11.13	548291	15.46	508016	17.68
ZZZZZZ	139166	5.49	544532	6.82	298835	8.97	517809	11.13	540178	15.46	494812	17.68
ZZZZZZ	146199	5.49	576355	6.82	312791	8.97	543501	11.13	566310	15.46	514671	17.68
ZZZZZZ	147205	5.49	577119	6.82	316269	8.97	546392	11.13	570696	15.46	521219	17.67
ZZZZZZ	145007	5.49	574468	6.82	317013	8.97	539396	11.13	554039	15.46	500215	17.67

IS 1 = 1,4-Dichlorobenzene-d4
IS 2 = Naphthalene-d8
IS 3 = Acenaphthene-D10
IS 4 = Phenanthrene-d10
IS 5 = Chrysene-d12
IS 6 = Perylene-d12

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Semivolatile Internal Standard Area Summary

Page 1 of 1

Job Number: M91769
Account: AMECMAW AMEC
Project: GE Watertown MA

Check Std: MSS588-CC586	Injection Date: 06/22/10
Lab File ID: S16003.D	Injection Time: 14:26
Instrument ID: GCMSS	Method: SW846 8270C

	IS 1		IS 2		IS 3		IS 4		IS 5		IS 6	
	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT
Check Std	335494	5.31	1357223	6.64	735637	8.75	1196969	10.90	1101141	15.22	844649	17.43
Upper Limit ^a	670988	5.81	2714446	7.14	1471274	9.25	2393938	11.40	2202282	15.72	1689298	17.93
Lower Limit ^b	167747	4.81	678612	6.14	367819	8.25	598485	10.40	550571	14.72	422325	16.93

Lab Sample ID	IS 1		IS 2		IS 3		IS 4		IS 5		IS 6	
	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT
OP21605-MB	229114	5.31	941353	6.63	513458	8.75	844518	10.89	791790	15.20	653305	17.42
OP21605-BS	287270	5.31	1135965	6.64	580038	8.75	899109	10.89	797003	15.21	676665	17.43
ZZZZZZ	290025	5.31	1129641	6.63	560383	8.75	864716	10.89	751871	15.20	647661	17.43
ZZZZZZ	214797	5.31	883408	6.63	494416	8.75	848937	10.89	928323	15.21	906721	17.43
ZZZZZZ	191342	5.31	769373	6.63	412850	8.75	693179	10.89	726083	15.20	687024	17.43
ZZZZZZ	198047	5.31	781247	6.63	415052	8.75	694626	10.89	720372	15.20	693710	17.42
M91769-1 ^c	220734	5.31	872895	6.63	466546	8.75	788653	10.89	811758	15.20	734034	17.43
OP21605-MS	196181	5.31	836751	6.64	454830	8.75	776093	10.90	856177	15.21	852928	17.43
OP21605-MSD	197190	5.31	825781	6.64	444010	8.75	745725	10.89	784398	15.21	791888	17.43
OP21684-MB	175450	5.32	691418	6.64	369233	8.75	636981	10.89	670092	15.20	644422	17.43
OP21684-BS	204785	5.32	842233	6.64	467920	8.75	771801	10.90	781600	15.21	722472	17.43
ZZZZZZ	233255	5.31	982659	6.64	566955	8.75	962704	10.89	805202	15.20	606884	17.42
ZZZZZZ	212943	5.31	865852	6.64	502974	8.75	925061	10.89	1011084	15.21	764972	17.43
ZZZZZZ	211624	5.31	857337	6.63	486249	8.75	876888	10.89	972960	15.21	758258	17.43
ZZZZZZ	206909	5.32	801862	6.63	431449	8.75	743876	10.89	740166	15.20	663454	17.42
ZZZZZZ	354032	5.32	1042505	6.64	424901	8.75	646316	10.89	693515	15.22	603020	17.44
ZZZZZZ	352388	5.32	1057336	6.64	466498	8.75	740284	10.89	717707	15.21	658949	17.43
M92108-6	236972	5.32	1061915	6.65	593197	8.76	1005969	10.90	844837	15.21	700005	17.43
ZZZZZZ	200571	5.32	772876	6.64	413366	8.75	688528	10.89	691722	15.21	659610	17.43
ZZZZZZ	201607	5.32	786286	6.64	419848	8.75	707466	10.89	693575	15.21	656887	17.43
ZZZZZZ	194293	5.32	758438	6.64	416527	8.75	710547	10.89	728222	15.21	623115	17.43
OP21684-MS	266362	5.32	1118007	6.65	586570	8.76	973653	10.90	928087	15.22	788063	17.43
OP21684-MSD	287410	5.32	1247379	6.65	683811	8.76	1135368	10.90	922516	15.22	807476	17.43

IS 1 = 1,4-Dichlorobenzene-d4
IS 2 = Naphthalene-d8
IS 3 = Acenaphthene-D10
IS 4 = Phenanthrene-d10
IS 5 = Chrysene-d12
IS 6 = Perylene-d12

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.

(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

(c) Confirmation run for surrogate recoveries.

Semivolatile Surrogate Recovery Summary

Job Number: M91769
Account: AMECMAW AMEC
Project: GE Watertown MA

Method: SW846 8270C	Matrix: AQ
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Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3	S4	S5	S6
M91769-1	S16010.D	46.0	27.0	88.0	74.0	75.0	84.0
M91769-1	S15474.D	5.0* a	2.0* a	10.0* a	10.0* a	10.0* a	11.0* a
OP21513-BS	S15472.D	43.0	26.0	85.0	75.0	79.0	84.0
OP21513-BSD	S15473.D	35.0	22.0	69.0	60.0	62.0	77.0
OP21513-MB	S15471.D	40.0	24.0	84.0	76.0	77.0	85.0

Surrogate Compounds	Recovery Limits
S1 = 2-Fluorophenol	15-110%
S2 = Phenol-d5	15-110%
S3 = 2,4,6-Tribromophenol	15-110%
S4 = Nitrobenzene-d5	30-130%
S5 = 2-Fluorobiphenyl	30-130%
S6 = Terphenyl-d14	30-130%

(a) Outside control limits due to possible matrix interference. Sample results confirmed by re-extraction/reanalysis.

5.4.1
5



GC Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Surrogate Recovery Summaries

Method Blank Summary

Page 1 of 1

Job Number: M91769

Account: AMECMAW AMEC

Project: GE Watertown MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GBH674-MB	BH13091.D	1	06/01/10	AP	n/a	n/a	GBH674

The QC reported here applies to the following samples:

Method: MADEP VPH REV 1.1

M91769-1

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	2.0	ug/l	
100-41-4	Ethylbenzene	ND	2.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	
91-20-3	Naphthalene	ND	3.0	ug/l	
108-88-3	Toluene	ND	2.0	ug/l	
95-47-6	m,p-Xylene	ND	2.0	ug/l	
	o-Xylene	ND	2.0	ug/l	
	C5- C8 Aliphatics (Unadj.)	ND	50	ug/l	
	C9- C12 Aliphatics (Unadj.)	ND	50	ug/l	
	C9- C10 Aromatics (Unadj.)	ND	50	ug/l	
	C5- C8 Aliphatics	ND	50	ug/l	
	C9- C12 Aliphatics	ND	50	ug/l	

CAS No.	Surrogate Recoveries	Limits
615-59-8	2,5-Dibromotoluene	94% 70-130%
615-59-8	2,5-Dibromotoluene	91% 70-130%

Method Blank Summary

Job Number: M91769
Account: AMECMAW AMEC
Project: GE Watertown MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GWX2347-MB	WX49709.D	1	05/31/10	AF	n/a	n/a	GWX2347

The QC reported here applies to the following samples: Method: SW846 8015

M91769-1

CAS No.	Compound	Result	RL	Units	Q
	TPH-GRO (VOA)	ND	0.10	mg/l	

CAS No.	Surrogate Recoveries	Limits
615-59-8	2,5-Dibromotoluene	89% 60-126%

Blank Spike Summary

Job Number: M91769
Account: AMECMAW AMEC
Project: GE Watertown MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GWX2347-BSP	WX49710.D	1	05/31/10	AF	n/a	n/a	GWX2347

The QC reported here applies to the following samples: Method: SW846 8015

M91769-1

CAS No.	Compound	Spike mg/l	BSP mg/l	BSP %	Limits
	TPH-GRO (VOA)	0.4	0.343	86	68-134

CAS No.	Surrogate Recoveries	BSP	Limits
615-59-8	2,5-Dibromotoluene	76%	60-126%

Blank Spike/Blank Spike Duplicate Summary

Page 1 of 1

Job Number: M91769

Account: AMECMAW AMEC

Project: GE Watertown MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GBH674-BSP	BH13092.D	1	06/01/10	AP	n/a	n/a	GBH674
GBH674-BSD	BH13093.D	1	06/01/10	AP	n/a	n/a	GBH674

The QC reported here applies to the following samples:

Method: MADEP VPH REV 1.1

M91769-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	50	53.6	107	52.6	105	2	70-130/25
100-41-4	Ethylbenzene	50	53.8	108	52.0	104	3	70-130/25
1634-04-4	Methyl Tert Butyl Ether	50	53.5	107	52.7	105	2	70-130/25
91-20-3	Naphthalene	50	47.2	94	47.0	94	0	70-130/25
108-88-3	Toluene	50	53.9	108	51.3	103	5	70-130/25
95-47-6	m,p-Xylene	100	105	105	102	102	3	70-130/25
	o-Xylene	50	50.8	102	49.5	99	3	70-130/25
	C5- C8 Aliphatics (Unadj.)	150	141	94	138	92	2	70-130/25
	C9- C12 Aliphatics (Unadj.)	150	162	108	159	106	2	70-130/25
	C9- C10 Aromatics (Unadj.)	50	52.2	104	51.5	103	1	70-130/25

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
615-59-8	2,5-Dibromotoluene	99%	96%	70-130%
615-59-8	2,5-Dibromotoluene	97%	95%	70-130%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: M91769
Account: AMECMAW AMEC
Project: GE Watertown MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
M91769-1MS	WX49712.D	1	05/31/10	AF	n/a	n/a	GWX2347
M91769-1MSD	WX49713.D	1	05/31/10	AF	n/a	n/a	GWX2347
M91769-1	WX49711.D	1	05/31/10	AF	n/a	n/a	GWX2347

The QC reported here applies to the following samples:

Method: SW846 8015

M91769-1

CAS No.	Compound	M91769-1 mg/l	Spike Q	MS mg/l	MS %	MSD mg/l	MSD %	RPD	Limits Rec/RPD
	TPH-GRO (VOA)	ND	0.4	0.374	94	0.364	91	3	72-131/20

CAS No.	Surrogate Recoveries	MS	MSD	M91769-1	Limits
615-59-8	2,5-Dibromotoluene	90%	92%	87%	60-126%

Volatile Surrogate Recovery Summary

Job Number: M91769
Account: AMECMAW AMEC
Project: GE Watertown MA

Method: MADEP VPH REV 1.1	Matrix: AQ
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Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 ^a	S1 ^b
M91769-1	BH13104.D	97.0	94.0
GBH674-BSD	BH13093.D	96.0	95.0
GBH674-BSP	BH13092.D	99.0	97.0
GBH674-MB	BH13091.D	94.0	91.0

Surrogate Compounds
Recovery Limits

S1 = 2,5-Dibromotoluene
70-130%

- (a) Recovery from GC signal #1
- (b) Recovery from GC signal #2

Volatile Surrogate Recovery Summary

Job Number: M91769
Account: AMECMAW AMEC
Project: GE Watertown MA

Method: SW846 8015	Matrix: AQ
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Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 ^a
M91769-1	WX49711.D	87.0
GWX2347-BSP	WX49710.D	76.0
GWX2347-MB	WX49709.D	89.0
M91769-1MS	WX49712.D	90.0
M91769-1MSD	WX49713.D	92.0

Surrogate Compounds	Recovery Limits
S1 = 2,5-Dibromotoluene	60-126%

(a) Recovery from GC signal #1



GC Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Surrogate Recovery Summaries

Method Blank Summary

Job Number: M91769
Account: AMECMAW AMEC
Project: GE Watertown MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP21528-MB	EF76915.D	1	06/06/10	SL	06/03/10	OP21528	GEF3467

The QC reported here applies to the following samples: Method: SW846 8082

M91769-1

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	0.25	ug/l	
11104-28-2	Aroclor 1221	ND	0.25	ug/l	
11141-16-5	Aroclor 1232	ND	0.25	ug/l	
53469-21-9	Aroclor 1242	ND	0.25	ug/l	
12672-29-6	Aroclor 1248	ND	0.25	ug/l	
11097-69-1	Aroclor 1254	ND	0.25	ug/l	
11096-82-5	Aroclor 1260	ND	0.25	ug/l	

CAS No.	Surrogate Recoveries	Limits
877-09-8	Tetrachloro-m-xylene	79% 30-150%
877-09-8	Tetrachloro-m-xylene	79% 30-150%
2051-24-3	Decachlorobiphenyl	64% 30-150%
2051-24-3	Decachlorobiphenyl	63% 30-150%

Method Blank Summary

Job Number: M91769
Account: AMECMAW AMEC
Project: GE Watertown MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP21534-MB	BC40440.D	1	06/05/10	KD	06/04/10	OP21534	GBC2022

The QC reported here applies to the following samples: Method: SW846-8015

M91769-1

CAS No.	Compound	Result	RL	Units	Q
	TPH-DRO (Semi-VOA)	ND	0.20	mg/l	

CAS No.	Surrogate Recoveries	Limits
3386-33-2	1-Chlorooctadecane	44% 33-150%

7.1.2
7

Blank Spike Summary

Job Number: M91769
Account: AMECMAW AMEC
Project: GE Watertown MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP21528-BS	EF76916.D	1	06/06/10	SL	06/03/10	OP21528	GEF3467

The QC reported here applies to the following samples: Method: SW846 8082

M91769-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
12674-11-2	Aroclor 1016	2	1.9	95	40-140
11104-28-2	Aroclor 1221		ND		40-140
11141-16-5	Aroclor 1232		ND		40-140
53469-21-9	Aroclor 1242		ND		40-140
12672-29-6	Aroclor 1248		ND		40-140
11097-69-1	Aroclor 1254		ND		40-140
11096-82-5	Aroclor 1260	2	1.9	95	40-140

CAS No.	Surrogate Recoveries	BSP	Limits
877-09-8	Tetrachloro-m-xylene	83%	30-150%
877-09-8	Tetrachloro-m-xylene	79%	30-150%
2051-24-3	Decachlorobiphenyl	61%	30-150%
2051-24-3	Decachlorobiphenyl	58%	30-150%

7.2.1
7

Blank Spike/Blank Spike Duplicate Summary

Job Number: M91769
Account: AMECMAW AMEC
Project: GE Watertown MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP21534-BS	BC40441.D	1	06/05/10	KD	06/04/10	OP21534	GBC2022
OP21534-BSD	BC40442.D	1	06/05/10	KD	06/04/10	OP21534	GBC2022

The QC reported here applies to the following samples: Method: SW846-8015

M91769-1

CAS No.	Compound	Spike mg/l	BSP mg/l	BSP %	BSD mg/l	BSD %	RPD	Limits Rec/RPD
	TPH-DRO (Semi-VOA)	2.5	2.17	87	2.35	94	8	46-120/30

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
3386-33-2	1-Chlorooctadecane	48%	57%	33-150%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: M91769
Account: AMECMAW AMEC
Project: GE Watertown MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP21528-MS	EF76917.D	1	06/06/10	SL	06/03/10	OP21528	GEF3467
OP21528-MSD	EF76918.D	1	06/06/10	SL	06/03/10	OP21528	GEF3467
M91846-6	EF76919.D	1	06/06/10	SL	06/03/10	OP21528	GEF3467

The QC reported here applies to the following samples: Method: SW846 8082

M91769-1

CAS No.	Compound	M91846-6 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
12674-11-2	Aroclor 1016	ND		2	1.9	95	1.9	95	0	40-140/50
11104-28-2	Aroclor 1221	ND			ND		ND		nc	40-140/50
11141-16-5	Aroclor 1232	ND			ND		ND		nc	40-140/50
53469-21-9	Aroclor 1242	ND			ND		ND		nc	40-140/50
12672-29-6	Aroclor 1248	ND			ND		ND		nc	40-140/50
11097-69-1	Aroclor 1254	ND			ND		ND		nc	40-140/50
11096-82-5	Aroclor 1260	ND		2	1.9	95	1.9	95	0	40-140/50

CAS No.	Surrogate Recoveries	MS	MSD	M91846-6	Limits
877-09-8	Tetrachloro-m-xylene	85%	80%	76%	30-150%
877-09-8	Tetrachloro-m-xylene	84%	80%	76%	30-150%
2051-24-3	Decachlorobiphenyl	58%	59%	55%	30-150%
2051-24-3	Decachlorobiphenyl	55%	56%	55%	30-150%

Semivolatile Surrogate Recovery Summary

Job Number: M91769
Account: AMECMAW AMEC
Project: GE Watertown MA

Method: SW846 8082	Matrix: AQ
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Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 a	S1 b	S2 a	S2 b
M91769-1	EF76920.D	81.0	84.0	67.0	61.0
OP21528-BS	EF76916.D	83.0	79.0	61.0	58.0
OP21528-MB	EF76915.D	79.0	79.0	64.0	63.0
OP21528-MS	EF76917.D	85.0	84.0	58.0	55.0
OP21528-MSD	EF76918.D	80.0	80.0	59.0	56.0

Surrogate Compounds	Recovery Limits
S1 = Tetrachloro-m-xylene	30-150%
S2 = Decachlorobiphenyl	30-150%

(a) Recovery from GC signal #1
(b) Recovery from GC signal #2

7.5.1
7

Semivolatile Surrogate Recovery Summary

Job Number: M91769
Account: AMECMAW AMEC
Project: GE Watertown MA

Method: SW846-8015	Matrix: AQ
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Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 ^a
M91769-1	BC40443.D	77.0
OP21534-BS	BC40441.D	48.0
OP21534-BSD	BC40442.D	57.0
OP21534-MB	BC40440.D	44.0

Surrogate Compounds	Recovery Limits
S1 = 1-Chlorooctadecane	33-150%

(a) Recovery from GC signal #1

7.5.2
7



Metals Analysis

QC Data Summaries

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Includes the following where applicable:

- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: M91769
Account: AMECMAW - AMEC
Project: GE Watertown MA

QC Batch ID: MP15352
Matrix Type: AQUEOUS

Methods: SW846 6010B
Units: ug/l

Prep Date: 06/01/10

Metal	RL	IDL	MDL	MB raw	final
Aluminum	200	7	14		
Antimony	6.0	.79	1.2	0.40	<6.0
Arsenic	10	.57	1.9	0.40	<10
Barium	200	2	3.7		
Beryllium	4.0	.15	.2	0.0	<4.0
Boron	100	1.2	1.5		
Cadmium	4.0	.12	.12	0.10	<4.0
Calcium	5000	15	39		
Chromium	10	.42	.5	-0.40	<10
Cobalt	50	.17	.3		
Copper	25	.81	.8	1.6	<25
Gold	50	.97	1.7		
Iron	100	2.8	4.1	3.8	<100
Lead	5.0	.57	1.5	-0.70	<5.0
Magnesium	5000	25	32		
Manganese	15	.12	.9		
Molybdenum	100	.24	.6		
Nickel	40	.12	.3	-0.10	<40
Palladium	50	1.2	2.5		
Platinum	50	4.4	7		
Potassium	5000	29	30		
Selenium	10	1.3	1.7	0.50	<10
Silicon	100	2.1	7.2		
Silver	5.0	.49	.5	0.0	<5.0
Sodium	5000	27	31		
Strontium	10	.06	.3		
Thallium	10	.56	.7	-1.2	<10
Tin	100	.31	.4		
Titanium	50	.4	.5		
Tungsten	100	3.4	12		
Vanadium	30	.63	1.1		
Zinc	20	.72	2	0.30	<20

Associated samples MP15352: M91769-1

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: M91769
Account: AMECMAW - AMEC
Project: GE Watertown MA

QC Batch ID: MP15352
Matrix Type: AQUEOUS

Methods: SW846 6010B
Units: ug/l

Prep Date:

Metal

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

8.1.1

8

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: M91769
Account: AMECMAW - AMEC
Project: GE Watertown MA

QC Batch ID: MP15352
Matrix Type: AQUEOUS

Methods: SW846 6010B
Units: ug/l

Prep Date: 06/01/10 06/01/10

Metal	M91770-3 Original MS		Spikelot MPICP	% Rec	QC Limits	M91770-3 Original DUP		RPD	QC Limits
Aluminum									
Antimony	1.3	517	500	103.1	75-125	1.3	1.7	26.7 (a)	0-20
Arsenic	0.80	524	500	104.6	75-125	0.80	1.1	31.6 (a)	0-20
Barium	anr								
Beryllium	0.0	499	500	99.8	75-125	0.0	0.0	NC	0-20
Boron									
Cadmium	0.40	522	500	104.3	75-125	0.40	0.50	22.2 (a)	0-20
Calcium									
Chromium	0.0	493	500	98.6	75-125	0.0	0.0	NC	0-20
Cobalt									
Copper	4.0	534	500	106.0	75-125	4.0	4.2	4.9	0-20
Gold									
Iron	400	2410	2000	100.5	75-125	400	413	3.2	0-20
Lead	0.70	989	1000	98.8	75-125	0.70	0.0	200.0(a)	0-20
Magnesium									
Manganese									
Molybdenum									
Nickel	4.2	503	500	99.8	75-125	4.2	4.2	0.0	0-20
Palladium									
Platinum									
Potassium									
Selenium	1.7	516	500	102.9	75-125	1.7	3.2	61.2 (a)	0-20
Silicon									
Silver	0.0	215	200	107.5	75-125	0.0	0.0	NC	0-20
Sodium									
Strontium									
Thallium	0.0	482	500	96.4	75-125	0.0	0.0	NC	0-20
Tin									
Titanium									
Tungsten									
Vanadium									
Zinc	65.1	574	500	101.8	75-125	65.1	65.5	0.6	0-20

Associated samples MP15352: M91769-1

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: M91769
Account: AMECMAW - AMEC
Project: GE Watertown MA

QC Batch ID: MP15352
Matrix Type: AQUEOUS

Methods: SW846 6010B
Units: ug/l

Prep Date:

Metal

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

(anr) Analyte not requested

(a) RPD acceptable due to low duplicate and sample concentrations.

8.1.2

8

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: M91769
 Account: AMECMAW - AMEC
 Project: GE Watertown MA

QC Batch ID: MP15352
 Matrix Type: AQUEOUS

Methods: SW846 6010B
 Units: ug/l

Prep Date: 06/01/10

06/01/10

Metal	BSP Result	Spikelot MPICP	% Rec	QC Limits	BSD Result	Spikelot MPICP	% Rec	BSD RPD	QC Limit
Aluminum									
Antimony	507	500	101.4	80-120	501	500	100.2	1.2	20
Arsenic	510	500	102.0	80-120	508	500	101.6	0.4	20
Barium	anr								
Beryllium	496	500	99.2	80-120	502	500	100.4	1.2	20
Boron									
Cadmium	515	500	103.0	80-120	507	500	101.4	1.6	20
Calcium									
Chromium	499	500	99.8	80-120	501	500	100.2	0.4	20
Cobalt									
Copper	524	500	104.8	80-120	518	500	103.6	1.2	20
Gold									
Iron	2020	2000	101.0	80-120	2050	2000	102.5	1.5	20
Lead	997	1000	99.7	80-120	993	1000	99.3	0.4	20
Magnesium									
Manganese									
Molybdenum									
Nickel	501	500	100.2	80-120	498	500	99.6	0.6	20
Palladium									
Platinum									
Potassium									
Selenium	511	500	102.2	80-120	503	500	100.6	1.6	20
Silicon									
Silver	210	200	105.0	80-120	208	200	104.0	1.0	20
Sodium									
Strontium									
Thallium	494	500	98.8	80-120	493	500	98.6	0.2	20
Tin									
Titanium									
Tungsten									
Vanadium									
Zinc	514	500	102.8	80-120	507	500	101.4	1.4	20

Associated samples MP15352: M91769-1

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: M91769
Account: AMECMAW - AMEC
Project: GE Watertown MA

QC Batch ID: MP15352
Matrix Type: AQUEOUS

Methods: SW846 6010B
Units: ug/l

Prep Date:

Metal

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

8.1.3

8

SERIAL DILUTION RESULTS SUMMARY

Login Number: M91769
Account: AMECMAW - AMEC
Project: GE Watertown MA

QC Batch ID: MP15352
Matrix Type: AQUEOUS

Methods: SW846 6010B
Units: ug/l

Prep Date: 06/01/10

Metal	M91770-3 Original	SDL 1:5	%DIF	QC Limits
Aluminum				
Antimony	1.30	0.00	100.0(a)	0-10
Arsenic	0.800	0.00	100.0(a)	0-10
Barium	anr			
Beryllium	0.00	0.00	NC	0-10
Boron				
Cadmium	0.400	0.00	100.0(a)	0-10
Calcium				
Chromium	0.00	0.00	NC	0-10
Cobalt				
Copper	4.00	5.30	32.5 (a)	0-10
Gold				
Iron	400	390	2.4	0-10
Lead	0.700	0.00	100.0(a)	0-10
Magnesium				
Manganese				
Molybdenum				
Nickel	4.20	3.90	7.1	0-10
Palladium				
Platinum				
Potassium				
Selenium	1.70	0.00	100.0(a)	0-10
Silicon				
Silver	0.00	0.00	NC	0-10
Sodium				
Strontium				
Thallium	0.00	0.00	NC	0-10
Tin				
Titanium				
Tungsten				
Vanadium				
Zinc	65.1	66.9	2.8	0-10

Associated samples MP15352: M91769-1

8.1.4
8

SERIAL DILUTION RESULTS SUMMARY

Login Number: M91769
Account: AMECMAW - AMEC
Project: GE Watertown MA

QC Batch ID: MP15352
Matrix Type: AQUEOUS

Methods: SW846 6010B
Units: ug/l

Prep Date:

Metal

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(anr) Analyte not requested

(a) Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

8.1.4

8

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: M91769
Account: AMECMAW - AMEC
Project: GE Watertown MA

QC Batch ID: MP15355
Matrix Type: AQUEOUS

Methods: SW846 7470A
Units: ug/l

Prep Date: 06/01/10

Metal	RL	IDL	MDL	MB raw	final
Mercury	0.20	.028	.048	-0.029	<0.20

Associated samples MP15355: M91769-1

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

82.1

8

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: M91769
Account: AMECMAW - AMEC
Project: GE Watertown MA

QC Batch ID: MP15355
Matrix Type: AQUEOUS

Methods: SW846 7470A
Units: ug/l

Prep Date: 06/01/10 06/01/10

Metal	M91770-3 Original	MS	SpikeLot HGRWS1	% Rec	QC Limits	M91770-3 Original	DUP	RPD	QC Limits
Mercury	0.0	3.3	3	110.0	75-125	0.0	0.0	NC	0-20

Associated samples MP15355: M91769-1

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

8.2.2

8

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: M91769
 Account: AMECMAW - AMEC
 Project: GE Watertown MA

QC Batch ID: MP15355
 Matrix Type: AQUEOUS

Methods: SW846 7470A
 Units: ug/l

Prep Date: 06/01/10 06/01/10

Metal	BSP Result	SpikeLot HGRWS1	% Rec	QC Limits	BSD Result	SpikeLot HGRWS1	% Rec	BSD RPD	QC Limit
Mercury	2.9	3	96.7	80-120	2.9	3	96.7	0.0	20

Associated samples MP15355: M91769-1

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (anr) Analyte not requested

8.2.3

8



General Chemistry

QC Data Summaries

Includes the following where applicable:

- Method Blank and Blank Spike Summaries
- Duplicate Summaries
- Matrix Spike Summaries

METHOD BLANK AND SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: M91769
Account: AMECMAW - AMEC
Project: GE Watertown MA

Analyte	Batch ID	RL	MB Result	Units	Spike Amount	BSP Result	BSP %Recov	QC Limits
Solids, Total Suspended	GN32028	4.0	0.0	mg/l				
Total Residual Chlorine	GN31998	0.050	0.0	mg/l	1	0.93	93.0	80-120%

Associated Samples:
Batch GN31998: M91769-1
Batch GN32028: M91769-1
(*) Outside of QC limits

DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: M91769
Account: AMECMAW - AMEC
Project: GE Watertown MA

Analyte	Batch ID	QC Sample	Units	Original Result	DUP Result	RPD	QC Limits
Solids, Total Suspended	GN32028	M91769-1	mg/l	0.0	0.0	0.0	0-20%
Total Residual Chlorine	GN31998	M91769-1	mg/l	0.0	0.0	0.0	0-20%

Associated Samples:
Batch GN31998: M91769-1
Batch GN32028: M91769-1
(*) Outside of QC limits

MATRIX SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: M91769
Account: AMECMAW - AMEC
Project: GE Watertown MA

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MS Result	%Rec	QC Limits
Total Residual Chlorine	GN31998	M91769-1	mg/l	0.0	1	0.80	80.0	75-125%

Associated Samples:

Batch GN31998: M91769-1

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits



ANALYTICAL REPORT

Lab Number:	L1016589
Client:	AMEC Earth & Environmental 2 Robbins Road Westford, MA 01886
ATTN:	Rob Bukowski
Phone:	(978) 692-9090
Project Name:	GE WATERTOWN
Project Number:	Not Specified
Report Date:	10/26/10

Certifications & Approvals: MA (M-MA086), NY NELAC (11148), CT (PH-0574), NH (2003), NJ (MA935), RI (LAO00065), ME (MA0086), PA (Registration #68-03671), USDA (Permit #S-72578), US Army Corps of Engineers, Naval FESC.

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



Project Name: GE WATERTOWN
Project Number: Not Specified

Lab Number: L1016589
Report Date: 10/26/10

Alpha Sample ID	Client ID	Sample Location	Collection Date/Time
L1016589-01	GW-INFLUENT-M5	WATERTOWN, MA	10/21/10 13:00
L1016589-02	GW-EFFLUENT-M5	WATERTOWN, MA	10/21/10 13:15

Project Name: GE WATERTOWN

Lab Number: L1016589

Project Number: Not Specified

Report Date: 10/26/10

MADEP MCP Response Action Analytical Report Certification

This form provides certifications for all samples performed by MCP methods. Please refer to the Sample Results and Container Information sections of this report for specification of MCP methods used for each analysis. The following questions pertain only to MCP Analytical Methods.

An affirmative response to questions A through F is required for "Presumptive Certainty" status		
A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?	YES
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	YES
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	YES
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data?"	YES
E a.	VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications).	N/A
E b.	APH and TO-15 Methods only: Was the complete analyte list reported for each method?	N/A
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?	YES
A response to questions G, H and I is required for "Presumptive Certainty" status		
G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	NO
H	Were all QC performance standards specified in the CAM protocol(s) achieved?	NO
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	NO
For any questions answered "No", please refer to the case narrative section on the following page(s).		

Please note that sample matrix information is located in the Sample Results section of this report.



Project Name: GE WATERTOWN
Project Number: Not Specified

Lab Number: L1016589
Report Date: 10/26/10

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. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

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.

For additional information, please contact Client Services at 800-624-9220.

MCP Related Narratives

Volatile Organics

In reference to question G:

One or more of the target analytes did not achieve the requested CAM reporting limits.

In reference to question H:

The WG439190-1/-2 LCS/LCSD recoveries, associated with L1016589-01 and -02, are above the individual acceptance criteria for Trichlorofluoromethane (133%/145%), but within the overall method allowances. The results of the associated samples are reported; however, all positive detects are considered to have a potentially high bias for this compound.

The WG439190-1/-2 LCS/LCSD recoveries, associated with L1016589-01 and -02, are outside the acceptance criteria for two compounds; however, they have been identified as "difficult" analytes and are within the 40-160% acceptance limits. The results of the associated samples are reported; however, all results are

Project Name: GE WATERTOWN
Project Number: Not Specified

Lab Number: L1016589
Report Date: 10/26/10

Case Narrative (continued)

considered to have a potentially high bias for Acetone (LCSD at 135%) and a potentially low bias for Carbon disulfide (66%/68%).

The initial calibration, associated with L1016589-01 and -02, did not meet the method required minimum response factor for 2-Butanone, 4-Methyl-2-pentanone, 1,4-Dioxane and Tetrahydrofuran and utilized a quadratic fit for Acetone.

The continuing calibration standard, associated with L1016589-01 and -02, is outside the acceptance criteria for several compounds; however, it is within overall method allowances. A copy of the continuing calibration standard is included as an addendum to this report.

Metals

In reference to question I:

All samples were analyzed for a subset of MCP elements per the Chain of Custody.

Non MCP Related Narratives

Solids, Total Suspended

L1016589-01 has a non-detect result at an elevated detection limit due to limited sample volume available for analysis.

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

Authorized Signature:  Elizabeth Simmons

Title: Technical Director/Representative

Date: 10/26/10

ORGANICS

VOLATILES

Project Name: GE WATERTOWN**Lab Number:** L1016589**Project Number:** Not Specified**Report Date:** 10/26/10**SAMPLE RESULTS**

Lab ID: L1016589-01
Client ID: GW-INFLUENT-M5
Sample Location: WATERTOWN, MA
Matrix: Water
Analytical Method: 97,8260B
Analytical Date: 10/25/10 18:12
Analyst: MM

Date Collected: 10/21/10 13:00
Date Received: 10/21/10
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Methylene chloride	ND		ug/l	2.0	--	1
1,1-Dichloroethane	ND		ug/l	1.0	--	1
Chloroform	ND		ug/l	1.0	--	1
Carbon tetrachloride	ND		ug/l	1.0	--	1
1,2-Dichloropropane	ND		ug/l	1.0	--	1
Dibromochloromethane	ND		ug/l	1.0	--	1
1,1,2-Trichloroethane	ND		ug/l	1.0	--	1
Tetrachloroethene	3.2		ug/l	1.0	--	1
Chlorobenzene	ND		ug/l	1.0	--	1
Trichlorofluoromethane	ND		ug/l	2.0	--	1
1,2-Dichloroethane	ND		ug/l	1.0	--	1
1,1,1-Trichloroethane	ND		ug/l	1.0	--	1
Bromodichloromethane	ND		ug/l	1.0	--	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	2.0	--	1
Bromoform	ND		ug/l	2.0	--	1
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Benzene	ND		ug/l	1.0	--	1
Toluene	ND		ug/l	1.0	--	1
Ethylbenzene	ND		ug/l	1.0	--	1
Chloromethane	ND		ug/l	2.0	--	1
Bromomethane	ND		ug/l	2.0	--	1
Vinyl chloride	ND		ug/l	1.0	--	1
Chloroethane	ND		ug/l	2.0	--	1
1,1-Dichloroethene	ND		ug/l	1.0	--	1
trans-1,2-Dichloroethene	ND		ug/l	1.0	--	1
Trichloroethene	1.3		ug/l	1.0	--	1
1,2-Dichlorobenzene	ND		ug/l	1.0	--	1
1,3-Dichlorobenzene	ND		ug/l	1.0	--	1

Project Name: GE WATERTOWN**Lab Number:** L1016589**Project Number:** Not Specified**Report Date:** 10/26/10**SAMPLE RESULTS**

Lab ID: L1016589-01
 Client ID: GW-INFLUENT-M5
 Sample Location: WATERTOWN, MA

Date Collected: 10/21/10 13:00
 Date Received: 10/21/10
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
1,4-Dichlorobenzene	ND		ug/l	1.0	--	1
Methyl tert butyl ether	ND		ug/l	2.0	--	1
p/m-Xylene	ND		ug/l	2.0	--	1
o-Xylene	ND		ug/l	1.0	--	1
cis-1,2-Dichloroethene	ND		ug/l	1.0	--	1
Dibromomethane	ND		ug/l	2.0	--	1
1,2,3-Trichloropropane	ND		ug/l	2.0	--	1
Styrene	ND		ug/l	1.0	--	1
Dichlorodifluoromethane	ND		ug/l	2.0	--	1
Acetone	ND		ug/l	5.0	--	1
Carbon disulfide	ND		ug/l	2.0	--	1
2-Butanone	ND		ug/l	5.0	--	1
4-Methyl-2-pentanone	ND		ug/l	5.0	--	1
2-Hexanone	ND		ug/l	5.0	--	1
Bromochloromethane	ND		ug/l	2.0	--	1
Tetrahydrofuran	ND		ug/l	10	--	1
2,2-Dichloropropane	ND		ug/l	2.0	--	1
1,2-Dibromoethane	ND		ug/l	2.0	--	1
1,3-Dichloropropane	ND		ug/l	2.0	--	1
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Bromobenzene	ND		ug/l	2.0	--	1
n-Butylbenzene	ND		ug/l	2.0	--	1
sec-Butylbenzene	ND		ug/l	2.0	--	1
tert-Butylbenzene	ND		ug/l	2.0	--	1
o-Chlorotoluene	ND		ug/l	2.0	--	1
p-Chlorotoluene	ND		ug/l	2.0	--	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.0	--	1
Hexachlorobutadiene	ND		ug/l	0.60	--	1
Isopropylbenzene	ND		ug/l	2.0	--	1
p-Isopropyltoluene	ND		ug/l	2.0	--	1
Naphthalene	ND		ug/l	2.0	--	1
n-Propylbenzene	ND		ug/l	2.0	--	1
1,2,3-Trichlorobenzene	ND		ug/l	2.0	--	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	--	1
1,3,5-Trimethylbenzene	ND		ug/l	2.0	--	1
1,2,4-Trimethylbenzene	ND		ug/l	2.0	--	1
Ethyl ether	ND		ug/l	2.0	--	1

Project Name: GE WATERTOWN**Lab Number:** L1016589**Project Number:** Not Specified**Report Date:** 10/26/10**SAMPLE RESULTS****Lab ID:** L1016589-01**Date Collected:** 10/21/10 13:00**Client ID:** GW-INFLUENT-M5**Date Received:** 10/21/10**Sample Location:** WATERTOWN, MA**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Isopropyl Ether	ND		ug/l	2.0	--	1
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0	--	1
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	--	1
1,4-Dioxane	ND		ug/l	250	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	109		70-130
Toluene-d8	106		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	100		70-130

Project Name: GE WATERTOWN**Lab Number:** L1016589**Project Number:** Not Specified**Report Date:** 10/26/10**SAMPLE RESULTS**

Lab ID: L1016589-02
Client ID: GW-EFFLUENT-M5
Sample Location: WATERTOWN, MA
Matrix: Water
Analytical Method: 97,8260B
Analytical Date: 10/25/10 17:40
Analyst: MM

Date Collected: 10/21/10 13:15
Date Received: 10/21/10
Field Prep: Not Specified

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

Project Name: GE WATERTOWN**Lab Number:** L1016589**Project Number:** Not Specified**Report Date:** 10/26/10**SAMPLE RESULTS**

Lab ID: L1016589-02
 Client ID: GW-EFFLUENT-M5
 Sample Location: WATERTOWN, MA

Date Collected: 10/21/10 13:15
 Date Received: 10/21/10
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
1,4-Dichlorobenzene	ND		ug/l	1.0	--	1
Methyl tert butyl ether	ND		ug/l	2.0	--	1
p/m-Xylene	ND		ug/l	2.0	--	1
o-Xylene	ND		ug/l	1.0	--	1
cis-1,2-Dichloroethene	ND		ug/l	1.0	--	1
Dibromomethane	ND		ug/l	2.0	--	1
1,2,3-Trichloropropane	ND		ug/l	2.0	--	1
Styrene	ND		ug/l	1.0	--	1
Dichlorodifluoromethane	ND		ug/l	2.0	--	1
Acetone	ND		ug/l	5.0	--	1
Carbon disulfide	ND		ug/l	2.0	--	1
2-Butanone	ND		ug/l	5.0	--	1
4-Methyl-2-pentanone	ND		ug/l	5.0	--	1
2-Hexanone	ND		ug/l	5.0	--	1
Bromochloromethane	ND		ug/l	2.0	--	1
Tetrahydrofuran	ND		ug/l	10	--	1
2,2-Dichloropropane	ND		ug/l	2.0	--	1
1,2-Dibromoethane	ND		ug/l	2.0	--	1
1,3-Dichloropropane	ND		ug/l	2.0	--	1
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Bromobenzene	ND		ug/l	2.0	--	1
n-Butylbenzene	ND		ug/l	2.0	--	1
sec-Butylbenzene	ND		ug/l	2.0	--	1
tert-Butylbenzene	ND		ug/l	2.0	--	1
o-Chlorotoluene	ND		ug/l	2.0	--	1
p-Chlorotoluene	ND		ug/l	2.0	--	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.0	--	1
Hexachlorobutadiene	ND		ug/l	0.60	--	1
Isopropylbenzene	ND		ug/l	2.0	--	1
p-Isopropyltoluene	ND		ug/l	2.0	--	1
Naphthalene	ND		ug/l	2.0	--	1
n-Propylbenzene	ND		ug/l	2.0	--	1
1,2,3-Trichlorobenzene	ND		ug/l	2.0	--	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	--	1
1,3,5-Trimethylbenzene	ND		ug/l	2.0	--	1
1,2,4-Trimethylbenzene	ND		ug/l	2.0	--	1
Ethyl ether	ND		ug/l	2.0	--	1

Project Name: GE WATERTOWN**Lab Number:** L1016589**Project Number:** Not Specified**Report Date:** 10/26/10**SAMPLE RESULTS**

Lab ID: L1016589-02

Date Collected: 10/21/10 13:15

Client ID: GW-EFFLUENT-M5

Date Received: 10/21/10

Sample Location: WATERTOWN, MA

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Isopropyl Ether	ND		ug/l	2.0	--	1
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0	--	1
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	--	1
1,4-Dioxane	ND		ug/l	250	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	113		70-130
Toluene-d8	106		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	99		70-130

Project Name: GE WATERTOWN

Lab Number: L1016589

Project Number: Not Specified

Report Date: 10/26/10

Method Blank Analysis Batch Quality Control

Analytical Method: 97,8260B
 Analytical Date: 10/25/10 07:41
 Analyst: MM

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics - Westborough Lab for sample(s): 01-02 Batch: WG439190-3					
Methylene chloride	ND		ug/l	2.0	--
1,1-Dichloroethane	ND		ug/l	1.0	--
Chloroform	ND		ug/l	1.0	--
Carbon tetrachloride	ND		ug/l	1.0	--
1,2-Dichloropropane	ND		ug/l	1.0	--
Dibromochloromethane	ND		ug/l	1.0	--
1,1,2-Trichloroethane	ND		ug/l	1.0	--
Tetrachloroethene	ND		ug/l	1.0	--
Chlorobenzene	ND		ug/l	1.0	--
Trichlorofluoromethane	ND		ug/l	2.0	--
1,2-Dichloroethane	ND		ug/l	1.0	--
1,1,1-Trichloroethane	ND		ug/l	1.0	--
Bromodichloromethane	ND		ug/l	1.0	--
trans-1,3-Dichloropropene	ND		ug/l	0.50	--
cis-1,3-Dichloropropene	ND		ug/l	0.50	--
1,1-Dichloropropene	ND		ug/l	2.0	--
Bromoform	ND		ug/l	2.0	--
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	--
Benzene	ND		ug/l	1.0	--
Toluene	ND		ug/l	1.0	--
Ethylbenzene	ND		ug/l	1.0	--
Chloromethane	ND		ug/l	2.0	--
Bromomethane	ND		ug/l	2.0	--
Vinyl chloride	ND		ug/l	1.0	--
Chloroethane	ND		ug/l	2.0	--
1,1-Dichloroethene	ND		ug/l	1.0	--
trans-1,2-Dichloroethene	ND		ug/l	1.0	--
Trichloroethene	ND		ug/l	1.0	--
1,2-Dichlorobenzene	ND		ug/l	1.0	--
1,3-Dichlorobenzene	ND		ug/l	1.0	--
1,4-Dichlorobenzene	ND		ug/l	1.0	--

Project Name: GE WATERTOWN

Lab Number: L1016589

Project Number: Not Specified

Report Date: 10/26/10

Method Blank Analysis Batch Quality Control

Analytical Method: 97,8260B
 Analytical Date: 10/25/10 07:41
 Analyst: MM

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics - Westborough Lab for sample(s): 01-02 Batch: WG439190-3					
Methyl tert butyl ether	ND		ug/l	2.0	--
p/m-Xylene	ND		ug/l	2.0	--
o-Xylene	ND		ug/l	1.0	--
cis-1,2-Dichloroethene	ND		ug/l	1.0	--
Dibromomethane	ND		ug/l	2.0	--
1,2,3-Trichloropropane	ND		ug/l	2.0	--
Styrene	ND		ug/l	1.0	--
Dichlorodifluoromethane	ND		ug/l	2.0	--
Acetone	ND		ug/l	5.0	--
Carbon disulfide	ND		ug/l	2.0	--
2-Butanone	ND		ug/l	5.0	--
4-Methyl-2-pentanone	ND		ug/l	5.0	--
2-Hexanone	ND		ug/l	5.0	--
Bromochloromethane	ND		ug/l	2.0	--
Tetrahydrofuran	ND		ug/l	10	--
2,2-Dichloropropane	ND		ug/l	2.0	--
1,2-Dibromoethane	ND		ug/l	2.0	--
1,3-Dichloropropane	ND		ug/l	2.0	--
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	--
Bromobenzene	ND		ug/l	2.0	--
n-Butylbenzene	ND		ug/l	2.0	--
sec-Butylbenzene	ND		ug/l	2.0	--
tert-Butylbenzene	ND		ug/l	2.0	--
o-Chlorotoluene	ND		ug/l	2.0	--
p-Chlorotoluene	ND		ug/l	2.0	--
1,2-Dibromo-3-chloropropane	ND		ug/l	2.0	--
Hexachlorobutadiene	ND		ug/l	0.60	--
Isopropylbenzene	ND		ug/l	2.0	--
p-Isopropyltoluene	ND		ug/l	2.0	--
Naphthalene	ND		ug/l	2.0	--
n-Propylbenzene	ND		ug/l	2.0	--

Project Name: GE WATERTOWN

Lab Number: L1016589

Project Number: Not Specified

Report Date: 10/26/10

Method Blank Analysis Batch Quality Control

Analytical Method: 97,8260B
 Analytical Date: 10/25/10 07:41
 Analyst: MM

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics - Westborough Lab for sample(s): 01-02 Batch: WG439190-3					
1,2,3-Trichlorobenzene	ND		ug/l	2.0	--
1,2,4-Trichlorobenzene	ND		ug/l	2.0	--
1,3,5-Trimethylbenzene	ND		ug/l	2.0	--
1,2,4-Trimethylbenzene	ND		ug/l	2.0	--
Ethyl ether	ND		ug/l	2.0	--
Isopropyl Ether	ND		ug/l	2.0	--
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0	--
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	--
1,4-Dioxane	ND		ug/l	250	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	108		70-130
Toluene-d8	104		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	100		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: GE WATERTOWN

Project Number: Not Specified

Lab Number: L1016589

Report Date: 10/26/10

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 01-02 Batch: WG439190-1 WG439190-2								
Methylene chloride	102		103		70-130	1		20
1,1-Dichloroethane	102		106		70-130	4		20
Chloroform	100		102		70-130	2		20
Carbon tetrachloride	81		91		70-130	12		20
1,2-Dichloropropane	102		102		70-130	0		20
Dibromochloromethane	75		82		70-130	9		20
1,1,2-Trichloroethane	100		102		70-130	2		20
Tetrachloroethene	102		104		70-130	2		20
Chlorobenzene	98		101		70-130	3		20
Trichlorofluoromethane	133	Q	145	Q	70-130	9		20
1,2-Dichloroethane	108		111		70-130	3		20
1,1,1-Trichloroethane	89		97		70-130	9		20
Bromodichloromethane	85		94		70-130	10		20
trans-1,3-Dichloropropene	85		90		70-130	6		20
cis-1,3-Dichloropropene	81		87		70-130	7		20
1,1-Dichloropropene	98		102		70-130	4		20
Bromoform	71		82		70-130	14		20
1,1,2,2-Tetrachloroethane	100		101		70-130	1		20
Benzene	101		104		70-130	3		20
Toluene	100		102		70-130	2		20
Ethylbenzene	108		110		70-130	2		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: GE WATERTOWN

Project Number: Not Specified

Lab Number: L1016589

Report Date: 10/26/10

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 01-02 Batch: WG439190-1 WG439190-2								
Chloromethane	107		111		70-130	4		20
Bromomethane	106		116		70-130	9		20
Vinyl chloride	116		127		70-130	9		20
Chloroethane	126		130		70-130	3		20
1,1-Dichloroethene	94		101		70-130	7		20
trans-1,2-Dichloroethene	95		97		70-130	2		20
Trichloroethene	97		100		70-130	3		20
1,2-Dichlorobenzene	101		103		70-130	2		20
1,3-Dichlorobenzene	104		105		70-130	1		20
1,4-Dichlorobenzene	104		104		70-130	0		20
Methyl tert butyl ether	88		94		70-130	7		20
p/m-Xylene	109		111		70-130	2		20
o-Xylene	111		113		70-130	2		20
cis-1,2-Dichloroethene	101		102		70-130	1		20
Dibromomethane	97		103		70-130	6		20
1,2,3-Trichloropropane	100		104		70-130	4		20
Styrene	108		111		70-130	3		20
Dichlorodifluoromethane	93		94		70-130	1		20
Acetone	126		135	Q	70-130	7		20
Carbon disulfide	66	Q	68	Q	70-130	3		20
2-Butanone	103		111		70-130	7		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: GE WATERTOWN

Project Number: Not Specified

Lab Number: L1016589

Report Date: 10/26/10

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 01-02 Batch: WG439190-1 WG439190-2								
4-Methyl-2-pentanone	84		93		70-130	10		20
2-Hexanone	87		92		70-130	6		20
Bromochloromethane	96		94		70-130	2		20
Tetrahydrofuran	97		96		70-130	1		20
2,2-Dichloropropane	85		88		70-130	3		20
1,2-Dibromoethane	91		96		70-130	5		20
1,3-Dichloropropane	100		105		70-130	5		20
1,1,1,2-Tetrachloroethane	85		94		70-130	10		20
Bromobenzene	102		103		70-130	1		20
n-Butylbenzene	121		121		70-130	0		20
sec-Butylbenzene	113		112		70-130	1		20
tert-Butylbenzene	110		108		70-130	2		20
o-Chlorotoluene	112		113		70-130	1		20
p-Chlorotoluene	107		108		70-130	1		20
1,2-Dibromo-3-chloropropane	82		93		70-130	13		20
Hexachlorobutadiene	106		102		70-130	4		20
Isopropylbenzene	107		109		70-130	2		20
p-Isopropyltoluene	117		116		70-130	1		20
Naphthalene	88		93		70-130	6		20
n-Propylbenzene	114		114		70-130	0		20
1,2,3-Trichlorobenzene	88		93		70-130	6		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: GE WATERTOWN

Project Number: Not Specified

Lab Number: L1016589

Report Date: 10/26/10

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 01-02 Batch: WG439190-1 WG439190-2								
1,2,4-Trichlorobenzene	97		98		70-130	1		20
1,3,5-Trimethylbenzene	112		113		70-130	1		20
1,2,4-Trimethylbenzene	114		115		70-130	1		20
Ethyl ether	101		105		70-130	4		20
Isopropyl Ether	108		110		70-130	2		20
Ethyl-Tert-Butyl-Ether	92		96		70-130	4		20
Tertiary-Amyl Methyl Ether	91		97		70-130	6		20
1,4-Dioxane	102		99		70-130	3		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	106		108		70-130
Toluene-d8	103		103		70-130
4-Bromofluorobenzene	100		99		70-130
Dibromofluoromethane	97		101		70-130

METALS

Project Name: GE WATERTOWN

Lab Number: L1016589

Project Number: Not Specified

Report Date: 10/26/10

SAMPLE RESULTS

Lab ID: L1016589-01

Date Collected: 10/21/10 13:00

Client ID: GW-INFLUENT-M5

Date Received: 10/21/10

Sample Location: WATERTOWN, MA

Field Prep: Not Specified

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
MCP Total Metals - Westborough Lab											
Antimony, Total	ND		mg/l	0.050	--	1	10/22/10 13:20	10/26/10 08:35	EPA 3005A	97,6010B	MG
Copper, Total	0.059		mg/l	0.010	--	1	10/22/10 13:20	10/26/10 08:35	EPA 3005A	97,6010B	MG
Iron, Total	0.25		mg/l	0.05	--	1	10/22/10 13:20	10/26/10 08:35	EPA 3005A	97,6010B	MG
Lead, Total	ND		mg/l	0.010	--	1	10/22/10 13:20	10/26/10 08:35	EPA 3005A	97,6010B	MG
Nickel, Total	ND		mg/l	0.025	--	1	10/22/10 13:20	10/26/10 08:35	EPA 3005A	97,6010B	MG
Zinc, Total	0.152		mg/l	0.050	--	1	10/22/10 13:20	10/26/10 08:35	EPA 3005A	97,6010B	MG



Project Name: GE WATERTOWN

Lab Number: L1016589

Project Number: Not Specified

Report Date: 10/26/10

SAMPLE RESULTS

Lab ID: L1016589-02

Date Collected: 10/21/10 13:15

Client ID: GW-EFFLUENT-M5

Date Received: 10/21/10

Sample Location: WATERTOWN, MA

Field Prep: Not Specified

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
MCP Total Metals - Westborough Lab											
Antimony, Total	ND		mg/l	0.050	--	1	10/22/10 13:20	10/26/10 08:41	EPA 3005A	97,6010B	MG
Copper, Total	0.024		mg/l	0.010	--	1	10/22/10 13:20	10/26/10 08:41	EPA 3005A	97,6010B	MG
Iron, Total	ND		mg/l	0.05	--	1	10/22/10 13:20	10/26/10 08:41	EPA 3005A	97,6010B	MG
Lead, Total	ND		mg/l	0.010	--	1	10/22/10 13:20	10/26/10 08:41	EPA 3005A	97,6010B	MG
Nickel, Total	ND		mg/l	0.025	--	1	10/22/10 13:20	10/26/10 08:41	EPA 3005A	97,6010B	MG
Zinc, Total	ND		mg/l	0.050	--	1	10/22/10 13:20	10/26/10 08:41	EPA 3005A	97,6010B	MG



Project Name: GE WATERTOWN

Lab Number: L1016589

Project Number: Not Specified

Report Date: 10/26/10

Method Blank Analysis Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
MCP Total Metals - Westborough Lab for sample(s): 01-02 Batch: WG438940-1										
Antimony, Total	ND		mg/l	0.050	--	1	10/22/10 13:20	10/26/10 13:53	97,6010B	MG
Copper, Total	ND		mg/l	0.010	--	1	10/22/10 13:20	10/26/10 13:53	97,6010B	MG
Iron, Total	ND		mg/l	0.05	--	1	10/22/10 13:20	10/26/10 13:53	97,6010B	MG
Lead, Total	ND		mg/l	0.010	--	1	10/22/10 13:20	10/26/10 13:53	97,6010B	MG
Nickel, Total	ND		mg/l	0.025	--	1	10/22/10 13:20	10/26/10 13:53	97,6010B	MG
Zinc, Total	ND		mg/l	0.050	--	1	10/22/10 13:20	10/26/10 13:53	97,6010B	MG

Prep Information

Digestion Method: EPA 3005A

Lab Control Sample Analysis

Batch Quality Control

Project Name: GE WATERTOWN

Project Number: Not Specified

Lab Number: L1016589

Report Date: 10/26/10

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Total Metals - Westborough Lab Associated sample(s): 01-02 Batch: WG438940-2 WG438940-3								
Antimony, Total	110		110		80-120	0		20
Copper, Total	103		103		80-120	0		20
Iron, Total	100		100		80-120	0		20
Lead, Total	111		112		80-120	1		20
Nickel, Total	103		103		80-120	0		20
Zinc, Total	106		107		80-120	1		20

INORGANICS & MISCELLANEOUS

Project Name: GE WATERTOWN

Project Number: Not Specified

Lab Number: L1016589

Report Date: 10/26/10

SAMPLE RESULTS

Lab ID: L1016589-01
 Client ID: GW-INFLUENT-M5
 Sample Location: WATERTOWN, MA
 Matrix: Water

Date Collected: 10/21/10 13:00
 Date Received: 10/21/10
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
MCP General Chemistry - Westborough Lab										
Cyanide, Total	ND		mg/l	0.005	--	1	10/25/10 11:30	10/26/10 11:23	97,9014	JO
General Chemistry - Westborough Lab										
Solids, Total Suspended	ND		mg/l	10	NA	2	-	10/25/10 12:50	30,2540D	DW
Chlorine, Total Residual	ND		mg/l	0.02	--	1	-	10/21/10 17:40	30,4500CL-D	JW
pH	6.8		SU	-	NA	1	-	10/21/10 17:21	1,9040B	JW
TPH	ND		mg/l	4.00	--	1	10/21/10 18:00	10/22/10 13:30	74,1664A	JO



Project Name: GE WATERTOWN

Project Number: Not Specified

Lab Number: L1016589

Report Date: 10/26/10

SAMPLE RESULTS

Lab ID: L1016589-02
 Client ID: GW-EFFLUENT-M5
 Sample Location: WATERTOWN, MA
 Matrix: Water

Date Collected: 10/21/10 13:15
 Date Received: 10/21/10
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
MCP General Chemistry - Westborough Lab										
Cyanide, Total	ND		mg/l	0.005	--	1	10/25/10 11:30	10/26/10 11:24	97,9014	JO
General Chemistry - Westborough Lab										
Solids, Total Suspended	ND		mg/l	5.0	NA	1	-	10/25/10 12:50	30,2540D	DW
Chlorine, Total Residual	ND		mg/l	0.02	--	1	-	10/21/10 17:40	30,4500CL-D	JW
pH	7.3		SU	-	NA	1	-	10/21/10 17:21	1,9040B	JW
TPH	ND		mg/l	4.00	--	1	10/21/10 18:00	10/22/10 13:30	74,1664A	JO



Project Name: GE WATERTOWN
Project Number: Not Specified

Lab Number: L1016589
Report Date: 10/26/10

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): 01-02 Batch: WG438739-1										
Chlorine, Total Residual	ND		mg/l	0.02	--	1	-	10/21/10 17:40	30,4500CL-D	JW
General Chemistry - Westborough Lab for sample(s): 01-02 Batch: WG438741-2										
TPH	ND		mg/l	4.00	--	1	10/21/10 18:00	10/22/10 13:30	74,1664A	JO
General Chemistry - Westborough Lab for sample(s): 01-02 Batch: WG439137-1										
Solids, Total Suspended	ND		mg/l	5.0	NA	1	-	10/25/10 12:50	30,2540D	DW
MCP General Chemistry - Westborough Lab for sample(s): 01-02 Batch: WG439167-3										
Cyanide, Total	ND		mg/l	0.005	--	1	10/25/10 11:30	10/26/10 11:03	97,9014	JO

Lab Control Sample Analysis

Batch Quality Control

Project Name: GE WATERTOWN

Project Number: Not Specified

Lab Number: L1016589

Report Date: 10/26/10

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-02 Batch: WG438739-2								
Chlorine, Total Residual	109		-		90-110	-		
General Chemistry - Westborough Lab Associated sample(s): 01-02 Batch: WG438740-1								
pH	100		-		99-101	-		5
General Chemistry - Westborough Lab Associated sample(s): 01-02 Batch: WG438741-1								
TPH	85		-		64-132	-		34
MCP General Chemistry - Westborough Lab Associated sample(s): 01-02 Batch: WG439167-1 WG439167-2								
Cyanide, Total	81		89		80-120	9		20

Matrix Spike Analysis

Batch Quality Control

Project Name: GE WATERTOWN

Lab Number: L1016589

Project Number: Not Specified

Report Date: 10/26/10

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): 01-02 QC Batch ID: WG438741-3 QC Sample: L1016381-02 Client ID: MS Sample												
TPH	ND	21.3	17.4	82		-	-		64-132	-		34

Lab Duplicate Analysis

Batch Quality Control

Project Name: GE WATERTOWN
Project Number: Not Specified

Lab Number: L1016589
Report Date: 10/26/10

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG438739-3 QC Sample: L1016589-01 Client ID: GW-INFLUENT-M5						
Chlorine, Total Residual	ND	ND	mg/l	NC		20
General Chemistry - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG438740-2 QC Sample: L1016589-01 Client ID: GW-INFLUENT-M5						
pH	6.8	6.8	SU	0		5
General Chemistry - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG438741-4 QC Sample: L1016381-01 Client ID: DUP Sample						
TPH	ND	ND	mg/l	NC		34
General Chemistry - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG439137-2 QC Sample: L1016491-01 Client ID: DUP Sample						
Solids, Total Suspended	170	170	mg/l	0		32

Project Name: GE WATERTOWN**Project Number:** Not Specified**Lab Number:** L1016589**Report Date:** 10/26/10**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(*)
L1016589-01A	Plastic 250ml HNO3 preserved	A	<2	4	Y	Absent	MCP-FE-6010T-10(180),MCP-CU-6010T-10(180),MCP-SB-6010T-10(180),MCP-ZN-6010T-10(180),MCP-NI-6010T-10(180),MCP-PB-6010T-10(180)
L1016589-01B	Plastic 250ml NaOH preserved	A	>12	4	Y	Absent	MCP-TCN9014-10(14)
L1016589-01C	Amber 1000ml HCl preserved	A	<2	4	Y	Absent	TPH-1664(28)
L1016589-01D	Amber 1000ml HCl preserved	A	<2	4	Y	Absent	TPH-1664(28)
L1016589-01E	Plastic 1000ml unpreserved	A	6	4	Y	Absent	PH-9040(1),TRC-4500(1),TSS-2540(7)
L1016589-01F	Vial HCl preserved	A	N/A	4	Y	Absent	MCP-8260-10(14)
L1016589-01G	Vial HCl preserved	A	N/A	4	Y	Absent	MCP-8260-10(14)
L1016589-02A	Plastic 250ml HNO3 preserved	A	<2	4	Y	Absent	MCP-FE-6010T-10(180),MCP-CU-6010T-10(180),MCP-SB-6010T-10(180),MCP-ZN-6010T-10(180),MCP-NI-6010T-10(180),MCP-PB-6010T-10(180)
L1016589-02B	Plastic 250ml NaOH preserved	A	>12	4	Y	Absent	MCP-TCN9014-10(14)
L1016589-02C	Amber 1000ml HCl preserved	A	<2	4	Y	Absent	TPH-1664(28)
L1016589-02D	Amber 1000ml HCl preserved	A	<2	4	Y	Absent	TPH-1664(28)
L1016589-02E	Plastic 1000ml unpreserved	A	6	4	Y	Absent	PH-9040(1),TRC-4500(1),TSS-2540(7)
L1016589-02F	Vial HCl preserved	A	N/A	4	Y	Absent	MCP-8260-10(14)
L1016589-02G	Vial HCl preserved	A	N/A	4	Y	Absent	MCP-8260-10(14)

*Values in parentheses indicate holding time in days



Project Name: GE WATERTOWN
Project Number: Not Specified

Lab Number: L1016589
Report Date: 10/26/10

GLOSSARY

Acronyms

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.
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.

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.
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.
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 due to obvious interference.
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. 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.

Report Format: Data Usability Report



Project Name: GE WATERTOWN**Lab Number:** L1016589**Project Number:** Not Specified**Report Date:** 10/26/10***Data Qualifiers*****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: GE WATERTOWN
Project Number: Not Specified

Lab Number: L1016589
Report Date: 10/26/10

REFERENCES

- 1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IIIA, 1997.
- 30 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WPCF. 18th Edition. 1992.
- 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.
- 97 EPA Test Methods (SW-846) with QC Requirements & Performance Standards for the Analysis of EPA SW-846 Methods under the Massachusetts Contingency Plan, WSC-CAM-IIA, IIB, IIIA, IIIB, IIIC, IIID, VA, VB, VC, VIA, VIB, VIIIA and VIIIB, July 2010.

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 July 19, 2010 - 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, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Vanadium, 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), Ethylene Dibromide (EDB), 1,4-Dioxane (Mod 8270). Microbiology Parameters: Total Coliform-MF mEndo (SM9222B), Total Coliform – Colilert (SM9223 P/A), E. Coli. – Colilert (SM9223 P/A), HPC – Pour Plate (SM9215B), Fecal Coliform – MF m-FC (SM9222D))

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, 2,4-D, 2,4,5-T, 2,4,5-TP(Silvex), Acid Extractables (Phenols), Benzidines, Phthalate Esters, Nitrosamines, Nitroaromatics & Isophorone, Polynuclear Aromatic Hydrocarbons, Haloethers, Chlorinated Hydrocarbons, Volatile Organics, TPH (HEM/SGT), Extractable Petroleum Hydrocarbons (ETPH), MA-EPH, MA-VPH. Microbiology Parameters: Total Coliform – MF mEndo (SM9222B), Total Coliform – MTF (SM9221B), HPC – Pour Plate (SM9215B), Fecal Coliform – MF m-FC (SM9222D), Fecal Coliform – A-1 Broth (SM9221E).)

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, Extractable Petroleum Hydrocarbons (ETPH), MA-EPH, MA-VPH, Dicamba, 2,4-D, 2,4,5-T, 2,4,5-TP(Silvex), Volatile Organics, Acid Extractables (Phenols), 3,3'-Dichlorobenzidine, Phthalates, Nitrosamines, Nitroaromatics & Cyclic Ketones, PAHs, Haloethers, Chlorinated Hydrocarbons.)

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

Drinking Water (Inorganic Parameters: SM9215B, 9222D, 9223B, EPA 180.1, 300.0, 353.2, SM2130B, 2320B, 4500CI-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, Lachat 10-107-06-1-B, SM2320B, 2340B, 2510B, 2540C, 2540D, 426C, 4500CI-D, 4500CI-E, 4500CN-C, 4500CN-E, 4500F-B, 4500F-C, 4500H+B, 4500Norg-B, 4500Norg-C, 4500NH3-B, 4500NH3-G, 4500NH3-H, 4500NO3-F, 4500P-B.5, 4500P-E, 5210B, 5220D, 5310C, EPA 200.7, 200.8, 245.1. Organic Parameters: 608, 624, ME DRO, ME GRO, MA EPH, MA VPH.)

Solid Waste/Soil (Organic Parameters: ME DRO, ME GRO, MA EPH, MA VPH.)

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)
353.2 for: Nitrate-N, Nitrite-N; SM4500NO3-F, 4500F-C, 4500CN-CE, EPA 180.1, SM2130B, SM4500CI-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), 314.0, 332.

Microbiology Parameters: SM9215B; ENZ. SUB. SM9223; 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,Cr,Co,Cu,Fe,Pb,Mn,Mo,Ni,Se,Ag,Sr,Ti,Tl, V,Zn,Ca,Mg,Na,K)
245.1, SM4500H,B, EPA 120.1, SM2510B, 2540C, 2540B, 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-B,C-Titr, 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, SM4500-CN-CE, SM2540D.

Organic Parameters: (EPA 624 for Volatile Halocarbons, Volatile Aromatics)

(608 for: Chlordane, Aldrin, Dieldrin, DDD, DDE, DDT, Heptachlor, Heptachlor Epoxide, PCBs-Water), EPA 625 for SVOC Acid Extractables and SVOC Base/Neutral Extractables, 600/4-81-045-PCB-Oil

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

Drinking Water (Inorganic Parameters: SM6215B, 9222B, 9223B Colilert, EPA 200.7, 200.8, 245.2, 120.1, 300.0, 314.0, SM4500CN-E, 4500H+B, 4500NO₃-F, 2320B, 2510B, 2540C, 4500F-C, 5310C, 2120B, EPA 331.0. *Organic Parameters:* 504.1, 524.2, SM6251B.)

Non-Potable Water (Inorganic Parameters: SM9222D, 9221B, 9222B, 9221E-EC, EPA 200.7, 200.8, 245.1, 245.2, SW-846 6010B, 6020, 7196A, 7470A, SM3500-CR-D, EPA 120.1, 300.0, 350.1, 351.1, 353.2, 420.1, 1664A, SW-846 9010, 9030, 9040B, SM426C, SM2310B, 2540B, 2540D, 4500H+B, 4500NH₃-H, 4500NH₃-E, 4500NO₂-B, 4500P-E, 4500-S₂-D, 5210B, 2320B, 2540C, 4500F-C, 5310C, 5540C, LACHAT 10-117-07-1-B, LACHAT 10-107-06-1-B, LACHAT 10-107-04-1-C, LACHAT 10-107-04-1-J, LACHAT 10-117-07-1-A, SM4500CL-E, LACHAT 10-204-00-1-A, LACHAT 10-107-06-2-D. *Organic Parameters:* SW-846 3005A, 3015A, 3510C, 5030B, 8021B, 8260B, 8270C, 8330, EPA 624, 625, 608, SW-846 8082, 8081A.)

Solid & Chemical Materials (Inorganic Parameters: SW-846 6010B, 7196A, 7471A, 7.3.3.2, 7.3.4.2, 1010, 1030, 9010, 9012A, 9014, 9030B, 9040, 9045C, 9050C, 1311, 3005A, 3050B, 3051A. *Organic Parameters:* SW-846 3540C, 3545, 3580A, 5030B, 5035, 8021B, 8260B, 8270C, 8330, 8151A, 8082, 8081A.)

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

Drinking Water (Inorganic Parameters: SM9222B, 9221E, 9223B, 9215B, 4500NO₃-F, 4500F-C, EPA 300.0, 200.7, 2540C, 2320B, 314.0, SM2120B, 2510B, 5310C, SM4500H-B, EPA 200.8, 245.2. *Organic Parameters:* 504.1, SM6251B, 524.2.)

Non-Potable Water (Inorganic Parameters: SM5210B, EPA 410.4, SM5220D, 4500Cl-D, EPA 300.0, SM2120B, SM4500F-BC, EPA 200.7, 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, SM4500P-B₅+E, 2540B, 2540C, 2540D, EPA 120.1, SM2510B, SM15 426C, SM9221CE, 9222D, 9221B, 9222B, 9215B, 2310B, 2320B, 4500NH₃-H, 4500-S D, EPA 350.1, SM5210B, SW-846 3015, 6020, 7470A, 5540C, 4500H-B, EPA 200.8, SM3500Cr-D, EPA 245.1, 245.2, SW-846 9040B, 3005A, EPA 6010B, 7196A, SW-846 9010B, 9030B. *Organic Parameters:* SW-846 8260B, 8270C, 3510C, EPA 608, 624, 625, SW-846 5030B, 8021B, 8081A, 8082, 8151A, 8330, NJ OQA-QAM-025 Rev.7.)

Solid & Chemical Materials (Inorganic Parameters: SW-846 9040B, 3005A, 6010B, 7196A, 5030B, 9010B, 9030B, 1030, 1311, 3050B, 3051, 7471A, 9014, 9012A, 9045C, 9050A, 9065. *Organic Parameters:* SW-846 8021B, 8081A, 8082, 8151A, 8330, 8260B, 8270C, 1311, 1312, 3540C, 3545, 3550B, 3580A, 5035L, 5035H, NJ OQA-QAM-025 Rev.7.)

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 314.0, 332.0, SM2320B, EPA 300.0, SM2120B, 4500CN-E, 4500F-C, 4500H-B, 4500NO₃-F, 2540C, EPA 120.1, SM 2510B. *Organic Parameters:* EPA 524.2, 504.1.)

Non-Potable Water (Inorganic Parameters: SM9221E, 9222D, 9221B, 9222B, 9215B, 5210B, EPA 410.4, SM5220D, 2310B-4a, 2320B, EPA 200.7, 300.0, LACHAT 10-117-07-1A or B, SM4500Cl-E, 4500F-C, SM15 426C, EPA 350.1, LACHAT 10-107-06-1-B, SM4500NH₃-H, EPA 351.1, LACHAT 10-107-06-2, EPA 353.2, LACHAT 10-107-041-C, SM4500-NO₃-F, 4500-NO₂-B, 4500P-E, 2540C, 2540B, 2540D, EPA 200.8, EPA 6010B, 6020, EPA 7196A, SM3500Cr-D, EPA 245.1, 245.2, 7470A, SM2120B, SM4500-CN-E LACHAT 10-204-00-1-A, EPA 9040B, SM4500-HB, EPA 1664A, SM5310C, EPA 420.1, SM14 510C, EPA 120.1, SM2510B, SM4500S-D, SM5540C, EPA 3005A, 3015. *Organic Parameters:* EPA 624, 8260B, 8270C, 625, 608, 8081A, 8151A, 8330, 8082, EPA 3510C, 5030B, 9010B, 9030B.)

Solid & Hazardous Waste (Inorganic Parameters: 1010, 1030, SW-846 Ch 7 Sec 7.3, EPA 6010B, 7196A, 7471A, 9012A, 9014, 9040B, 9045C, 9065, 9050, EPA 1311, 1312, 3005A, 3050B, 9010B, 9030B. *Organic Parameters:* EPA 8260B, 8270C, 8081A, 8151A, 8330, 8082, 3540C, 3545, 3546, 3580, 5030B, 5035.)

North Carolina Department of the Environment and Natural Resources Certificate/Lab ID : 666. Organic Parameters: MA-EPH, MA-VPH.

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

Non-Potable Water (Organic Parameters: EPA 3510C, 5030B, 625, 624. 608, 8081A, 8082, 8151A, 8260B, 8270C, 8330)

Solid & Hazardous Waste (Inorganic Parameters: EPA 1010, 1030, 1311, 3050B, 3051, 6010B, EPA 7.3.3.2, EPA 7.3.4.2, 7196A, 7471A, 9010B, 9012A, 9014, 9040B, 9045C, 9050, 9065. *Organic Parameters:* 3540C, 3545, 3580A, 5035, 8021B, 8081A, 8082, 8151A, 8260B, 8270C, 8330)

Rhode Island Department of Health Certificate/Lab ID: LAO00065. NELAP Accredited via NY-DOH.

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

Refer to NY-DOH Certificate for Potable and Non-Potable Water.

Texas Commission on Environmental Quality Certificate/Lab ID: T104704476-09-1. NELAP Accredited.

Non-Potable Water (Inorganic Parameters: EPA 120.1, 1664, 200.7, 200.8, 245.1, 245.2, 300.0, 350.1, 351.1, 353.2, 376.2, 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.)

Department of Defense 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, 6020, 245.1, 245.2, 7470A, 9040B, 300.0, 9251, 9038, 350.1, 353.2, 351.1, 120.1, 9050A, 410.4, 9060, 1664, 420.1, LACHAT 10-107-06-1-B, SM 4500CN-E, 4500H-B, 4500CL-E, 4500F-BC, 4500SO₄-E, 426C, 4500NH₃-B, 4500NH₃-H, 4500NO₃-F, 4500NO₂-B, 4500Norg-C, 4500PE, 2510B, 5540C, 5220D, 5310C, 2540B, 2540C, 2540D, 510C, 4500S²⁻-AD, 3005A, 3015, 9010B, 9030B. *Organic Parameters:* EPA 8260B, 8270C, 8330, 625, 8082, 8151A, 8081A, 3510C, 5030B, MassDEP EPH, MassDEP VPH.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 200.7, 6010B, 7471A, 9040B, 9045C, 9065, 420.1, 9012A, 6860, 1311, 1312, 3050B, 9030B, 3051, 9010B, 3540C, SM 510ABC, 4500CN-CE, 2540G, SW-846 7.3, *Organic Parameters:* EPA 8260B, 8270C, 8330, 8082, 8081A, 8151A, 3545, 3546, 3580, 5035, MassDEP EPH, MassDEP VPH.)

Analytes Not Accredited by NELAP

Certification is not available by NELAP for the following analytes: **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. **EPA 350.1** for Ammonia in a Soil matrix.

7A
VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: Alpha Analytical Labs

SDG No.: L1016589

Instrument ID: Quimby.i Calibration Date: 25-OCT-2010 Time: 06:38

Lab File ID: 1025A01.D Init. Calib. Date(s): 18-OCT-2 18-OCT-2

Sample No: 8260CCAL Init. Calib. Times : 11:50 19:44

Compound	RRF	RRF	MIN RRF	%D	MAX %D	
dichlorodifluoromethane	.31988	.298	.1	7	20	
chloromethane	.40133	.42916	.1	-7	20	
vinyl chloride	.21612	.25057	.1	-16	20	
bromomethane	.16874	.17938	.1	-6	20	
chloroethane	.19466	.2454	.1	-26	20	F
trichlorofluoromethane	.36546	.48523	.1	-33	20	F
ethyl ether	.12643	.12784	.05	-1	20	
acrolin	.00672	.01103	.05	-64	20	F
freon-113	.27776	.23297	.1	16	20	
acetone	100	126	.1	-26	20	F
1,1,-dichloroethene	.28727	.27112	.1	6	20	
tert-butyl alcohol	.01007	.00715	.05	29	20	F
iodomethane	.40873	.30487	.05	25	20	F
methylene chloride	.29435	.29913	.1	-2	20	
carbon disulfide	.86335	.56578	.1	34	20	F
acrylonitrile	.05837	.06237	.05	-7	20	
methyl tert butyl ether	.48037	.42021	.1	13	20	
Halothane	.22698	.19437	.05	14	20	
trans-1,2-dichloroethene	.31896	.30248	.1	5	20	
Diisopropyl Ether	1.0579	1.1386	.05	-8	20	
vinyl acetate	.49672	.54245	.05	-9	20	
1,1-dichloroethane	.59184	.60372	.2	-2	20	
Ethyl-Tert-Butyl-Ether	.7357	.67756	.05	8	20	
2-butanone	.06201	.06414	.1	-3	20	F
2,2-dichloropropane	.35899	.30533	.05	15	20	
ethyl acetate	.1381	.12718	.05	8	20	
cis-1,2-dichloroethene	.33057	.3353	.1	-1	20	
chloroform	.52069	.52058	.2	0	20	
bromochloromethane	.12025	.11573	.05	4	20	
tetrahydrofuran	.04286	.04142	.05	3	20	F
1,1,1-trichloroethane	.4238	.37722	.1	11	20	
1,1-dichloropropene	.4407	.43372	.05	2	20	
carbontetrachloride	.31516	.25428	.1	19	20	
Tertiary-Amyl Methyl Ether	.49363	.45147	.05	9	20	
1,2-dichloroethane	.29605	.31928	.1	-8	20	
benzene	1.3316	1.3416	.5	-1	20	
trichloroethene	.3217	.31284	.2	3	20	
1,2-dichloropropane	.31243	.31982	.1	-2	20	

FORM VII

7A
CONTINUING CALIBRATION CHECK

Lab Name: Alpha Analytical Labs

SDG No.: L1016589

Instrument ID: Quimby.i Calibration Date: 25-OCT-2010 Time: 06:38

Lab File ID: 1025A01.D Init. Calib. Date(s): 18-OCT-2 18-OCT-2

Sample No: 8260CCAL Init. Calib. Times : 11:50 19:44

Compound	RRF	RRF	MIN RRF	%D	MAX %D	
=====	=====	=====	=====	=====	=====	
bromodichloromethane	.30433	.25901	.2	15	20	
1,4-dioxane	.00119	.00122	.05	-2	20	F
dibromomethane	.11392	.11088	.05	3	20	
2-chloroethylvinyl ether	.10848	.09644	.05	11	20	
4-methyl-2-pentanone	.05151	.04349	.1	16	20	F
cis-1,3-dichloropropene	.39259	.31853	.2	19	20	
toluene	1.1130	1.1187	.4	-1	20	
trans-1,3-dichloropropene	.36606	.3112	.1	15	20	
1,1,2-trichloroethane	.18819	.18864	.1	0	20	
2-hexanone	.12442	.10841	.1	13	20	
1,3-dichloropropane	.41712	.4184	.05	0	20	
tetrachloroethene	.45092	.45856	.2	-2	20	
chlorodibromomethane	.20956	.15665	.1	25	20	F
1,2-dibromoethane	.21169	.19345	.1	9	20	
chlorobenzene	1.1761	1.1587	.5	1	20	
1,1,1,2-tetrachloroethane	.30735	.26163	.05	15	20	
ethyl benzene	2.1477	2.3183	.1	-8	20	
p/m xylene	.84626	.92391	.1	-9	20	
o xylene	.81328	.90102	.3	-11	20	
styrene	1.2927	1.3933	.31	-8	20	
isopropylbenzene	2.1968	2.3476	.1	-7	20	
trans-1,4-dichloro-2-butene	.04351	.05425	.05	-25	20	F
bromoform	.16521	.11724	.1	29	20	F
1,1,2,2,-tetrachloroethane	.40608	.40446	.3	0	20	
1,2,3-trichloropropane	.32289	.32425	.05	0	20	
n-propylbenzene	4.311	4.9143	.05	-14	20	
bromobenzene	.77565	.79542	.05	-3	20	
4-ethyltoluene	1.8417	1.5975	.05	13	20	
1,3,5-trimethylbenzene	3.0098	3.3888	.05	-13	20	
2-chlorotoluene	2.8219	3.1550	.05	-12	20	
4-chlorotoluene	2.7297	2.9264	.05	-7	20	
tert-butylbenzene	2.5657	2.8217	.05	-10	20	
1,2,4-trimethylbenzene	3.0723	3.5008	.05	-14	20	
sec-butylbenzene	3.7414	4.2218	.05	-13	20	
p-isopropyltoluene	2.9913	3.5105	.05	-17	20	
1,3-dichlorobenzene	1.6232	1.6835	.6	-4	20	
1,4-dichlorobenzene	1.6169	1.6830	.5	-4	20	
n-butylbenzene	3.1405	3.7977	.05	-21	20	F

FORM VII

