



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 1

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

CERTIFIED MAIL RETURN RECEIPT REQUESTED

MAR 23 2012

Dough Murray
Construction Manager
Gershman Brown Crowley, Inc.
14 Breakneck Hill, Suite 101
Lincoln, RI 02865

Re: Authorization to discharge under the Remediation General Permit (RGP) –
MAG910000. Proposed CVS /Store site located at 451 Main Street, Wakefield MA
01880, Middlesex County; Authorization # MAG910527

Dear Mr. Murray:

Based on the review of a Notice of Intent (NOI) submitted on behalf of CVS Caremark Corporation and your firm Gershman Brown Crowley Inc., by the firm Ransom Consulting Engineers and Scientists, for the site referenced above, the U.S. Environmental Protection Agency (EPA) hereby authorizes you, as the named Operator, to discharge in accordance with the provisions of the RGP at that site. Your authorization number is listed above.

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

Please note the enclosed checklist includes parameters you have marked "Believed Present."

Also, please note that the metals included on the checklist are dilution dependent pollutants and subject to limitations based on selected dilution ranges and technology-based ceiling limitations. For each parameter the dilution factor 7.0 for this site is within a dilution range greater than five to ten (>5-10), established in the RGP. (See the RGP Appendix IV for Massachusetts facilities). Therefore, the limits for antimony of 30 ug/L,

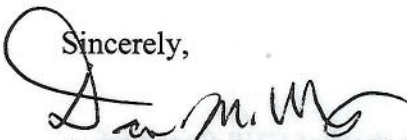
arsenic of 50 ug/L, cadmium of 1.0 ug/L, trivalent chromium of 244 ug/L, hexavalent chromium of 57 ug/L, copper of 26 ug/L, lead of 6.5 ug/L, mercury of 2.3 ug/L, nickel of 145 ug/L, selenium of 25 ug/L, zinc of 333 ug/L and iron of 5,000 ug/L, are required to achieve permit compliance at your site.

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

This general permit and authorization to discharge will expire on September 9, 2015. You have reported that this project will terminate on April 1, 2013. If for any reason the discharge terminates sooner you are required to submit a Notice of Termination (NOT) to the attention of the contact person indicated below within 30 days of project completion.

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

Sincerely,



David M. Webster, Chief
Industrial Permits Branch

Enclosure

cc: Kathleen Keohane, MassDEP
Richard Stinson, Wakefield DPW
Aaron Martin, Ransom

	Metal parameter	Total Recoverable Metal Limit @ H¹⁰= 50 mg/l CaCO₃ for discharges in Massachusetts (ug/l)^{11/12}		Minimum level=ML	
		Freshwater			
✓	41. Cadmium **	1.0/ML10			
✓	42. Chromium III (trivalent) **	244/ML15			
✓	43. Chromium VI (hexavalent) **	57/ML10			
✓	44. Copper **	26/ML15			
✓	45. Lead **	6.5/ML20			
✓	46. Mercury **	2.3/ML0.2			
✓	47. Nickel **	145/ML20			
✓	48. Selenium **	25/ML20			
	49. Silver	6/ML10			
✓	50. Zinc **	333/ML15			
✓	51. Iron	5,000/ML 20			

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

Footnotes:

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

	<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)
	b. Benzo(a) Pyrene ⁷	0.0038 ug/L /Me#8270D/ ML 5ug/L, Me#610/ML 5ug/L& Me#625/ML 5ug/L
	c. Benzo(b)Fluoranthene ⁷	0.0038 ug/L /Me#8270D/ ML 5ug/L, Me#610/ML 5ug/L& Me#625/ML 5ug/L
	d. Benzo(k)Fluoranthene ⁷	0.0038 ug/L /Me#8270D/ ML 5ug/L, Me#610/ML 5ug/L& Me#625/ML 5ug/L
	e. Chrysene ⁷	0.0038 ug/L /Me#8270D/ML 5ug/L, Me#610/ML 5ug/L& Me#625/ML 5ug/L
	f. Dibenzo(a,h)anthracene ⁷	0.0038 ug/L /Me#8270D/ML 5ug/L, Me#610/ML 5ug/L& Me#625/ML 5ug/L
	g. Indeno(1,2,3-cd) Pyrene ⁷	0.0038 ug/L /Me#8270D/ML 5ug/L, Me#610/ML 5ug/L& Me#625/ML 5ug/L
	36. Total Group II Polycyclic Aromatic Hydrocarbons (PAH)	100 ug/L
✓	h. Acenaphthene	X/Me#8270D/ML 5ug/L, Me#610/ML 5ug/L & Me#625/ML 5ug/L
	i. Acenaphthylene	X/Me#8270D/ML 5ug/L, Me#610/ML 5ug/L & Me#625/ML 5ug/L
	j. Anthracene	X/Me#8270D/ML 5ug/L, Me#610/ML 5ug/L & Me#625/ML 5ug/L
	k. Benzo(ghi) Perylene	X/Me#8270D/ML 5ug/L, Me#610/ML 5ug/L & Me#625/ML 5ug/L
	l. Fluoranthene	X/Me#8270D/ML 5ug/L, Me#610/ML 5ug/L & Me#625/ML 5ug/L
	m. Fluorene	X/Me#8270D/ML 5ug/L, Me#610/ML 5ug/L & Me#625/ML 5ug/L
	n. Naphthalene ⁵	20 ug/L / Me#8270/ML 5ug/L, Me#610/ML 5ug/L & Me#625/ML 5ug/L
✓	o. Phenanthrene	X/Me#8270D/ML 5ug/L, Me#610/ML 5ug/L & Me#625/ML 5ug/L
	p. Pyrene	X/Me#8270D/ML 5ug/L, Me#610/ML 5ug/L & Me#625/ML 5ug/L
	37. Total Polychlorinated Biphenyls (PCBs) ^{8,9}	0.000064 ug/L/Me# 608/ ML 0.5 ug/L
✓	38. Chloride	Monitor only/Me# 300.0/ ML 0.1ug/L

	<u>Metal parameter</u>	<u>Total Recoverable Metal Limit @ H ¹⁰ = 50 mg/l CaCO₃ for discharges in Massachusetts (ug/l) ^{11/12}</u>	<u>Minimum level=ML</u>
✓	39. Antimony	Freshwater 30/ML 10	
✓	40. Arsenic **	50/ML 20	

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

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

NPDES Authorization Number:		MAG910527
Authorization Issued:	March, 2012	
Facility/Site Name:	Proposed CVS Pharmacy/Store	
Facility/Site Address:	451 Main Street Wakefield, MA 01880, Middlesex County	
	Email address of Owner: Not provided	
Legal Name of Operator:	Gershman Brown Crowley, Inc.	
Operator contact name, title, and Address:	Doug Murray, Construction Manager	
	14 Breakneck Hill, Suite 101, Lincoln RI 02865	
	Email: dmurray@gershmanbrowncrowley.com	
Estimated date of Completion:	April 1, 2013	
Category and Sub-Category:	Category III- Contaminated Construction Dewatering. Sub-category A and B. General Urban Fill sites and Known Contaminated Sites respectively	
RGP Termination Date:	September 10, 2015	
Receiving Water:		

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/ML5ug/L
	2. Total Residual Chlorine (TRC) ¹	Freshwater = 11 ug/L ** Saltwater = 7.5 ug/L **/ Me#330.5/ML 20ug/L
✓	3. Total Petroleum Hydrocarbons (TPH)	5.0 mg/L/ Me# 1664A/ML 5.0mg/L
	4. Cyanide (CN) ^{2, 3}	Freshwater = 5.2 ug/l ** Saltwater = 1.0 ug/L **/ Me#335.4/ML 10ug/L
✓	5. Benzene (B)	5ug/L /50.0 ug/L for hydrostatic testing only/ Me#8260C/ML 2 ug/L
	6. Toluene (T)	(limited as ug/L total BTEX)/ Me#8260C/ ML 2ug/L
✓	7. Ethylbenzene (E)	(limited as ug/L total BTEX) Me#8260C/ ML 2ug/L
	8. (m,p,o) Xylenes (X)	(limited as ug/L total BTEX) Me#8260C/ ML 2ug/L
✓	9. Total Benzene, Toluene, Ethyl Benzene, and Xylenes (BTEX) ⁴	100 ug/L/ Me#8260C/ ML 2ug/L

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 $DF \times 1,000 \text{ ug/L}$ (the iron base limit). Therefore DF is 1.5, the iron limit will be 1,500 ug/L; DF 2, then iron limit = $1,000 \times 2 = 2,000 \text{ ug/L}$, etc. not to exceed the DF=5.

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

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

¹⁴ Temperature sampling per Method 170.1

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

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

a) Name of facility/site : Proposed CVS Pharmacy/Store		Facility/site mailing address:	
Location of facility/site :	Facility SIC code(s):	Street:	
longitude: 71° 4' 9"	5912	451 Main Street	
latitude: 42° 30' 6"			
b) Name of facility/site owner :		Town: Wakefield	
Email address of facility/site owner:		State:	Zip:
Main 451 Limited Partnership		MA	01880
Telephone no. of facility/site owner : 617-779-0433		County: Middlesex	
Fax no. of facility/site owner :		Owner is (check one): 1. Federal ☐ 2. State/Tribal ☐	
Address of owner (if different from site):		3. Private ☒ 4. Other ☐ if so, describe:	
Street: 1270 Soldiers Field Road			
Town: Brighton	State: MA	Zip: 02135	County: Suffolk
c) Legal name of operator :		Operator telephone no: 401-721-1600	
Gershman Brown Crowley, Inc.		Operator fax no.: 401-721-1601	Operator email: dmurray@gershmanbrowncrow
Operator contact name and title: Doug Murray, Construction Manager			
Address of operator (if different from owner):		Street:	
		14 Breakneck Hill, Suite 101	
Town: Lincoln	State: RI	Zip: 02865	County: Providence

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.

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

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

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:			
The discharge is from groundwater recovered from construction-related excavations during property redevelopment. The discharge will be treated on-site using granular activated charcoal (GAC) and an air-stripper prior to discharge to the storm drain system which discharges to the Mill River.			
b) Provide the following information about each discharge:			
1) Number of discharge points:	2) What is the maximum and average flow rate of discharge (in cubic feet per second, ft ³ /s)?		
1	Max. flow	0.0446 ft ³ /sec	Is maximum flow a design value ? Y ☐ N ☐
	Average flow (include units)	20 gpm	Is average flow a design value or estimate? Estimate
3) Latitude and longitude of each discharge within 100 feet:			
pt.1: lat.	42° 30' 6"	long.	71° 4' 9"
pt.2: lat.		long.	
pt.3: lat.		long.	
pt.4: lat.		long.	
pt.5: lat.		long.	
pt.6: lat.		long.	
pt.7: lat.		long.	
pt.8: lat.		long.	
etc.			
4) If hydrostatic testing, total volume of the discharge (gals):	5) Is the discharge intermittent ☒ or seasonal ☐ ?		
	Is discharge ongoing? Y ☐ N ☒		
c) Expected dates of discharge (mm/dd/yy): start April 1, 2012 end April 1, 2013			
d) Please attach a line drawing or flow schematic showing water flow through the facility including:			
1. sources of intake water. 2. contributing flow from the operation. 3. treatment units. and 4. discharge points and receiving waters(s).			

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	10,000µg/l	ND		ND	
2. Total Residual Chlorine (TRC)		☒	☐	1	Grab	4500CL-D	20 µg/l	ND		ND	
3. Total Petroleum Hydrocarbons (TPH)		☐	☒	6	Grab	1664A	50 µg/l	ND		ND	
4. Cyanide (CN)	57125	☒	☐	1	Grab	4200CN-Ce	5 µg/l	ND		ND	
5. Benzene (B)	71432	☐	☒	43	Grab	8260B	0.5µg/l	ND		ND	
6. Toluene (T)	108883	☒	☐	43	Grab	8260B	1 µg/l	ND		ND	
7. Ethylbenzene (E)	100414	☐	☒	43	Grab	8260B	1 µg/l	ND		ND	
8. (m,p,o) Xylenes (X)	108883; 106423; 95476; 1330207	☒	☐	43	Grab	8260B	1 µg/l	ND		ND	
9. Total BTEX ²	n/a	☐	☒	43	Grab	8260B	0.5ug/l	ND		ND	
10. Ethylene Dibromide (EDB) (1,2-Dibromoethane) ³	106934	☒	☐	1	Grab	501.4	0.01µg/l	ND		ND	
11. Methyl-tert-Butyl Ether (MtBE)	1634044	☐	☒	43	Grab	8260B	2 µg/l	ND		ND	
12. tert-Butyl Alcohol (TBA) (Tertiary-Butanol)	75650	☒	☐	1	Grab	8260B	1µg/l	ND		ND	

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

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

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

<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	☒	☐	43	Grab	8260B	2 µg/l	ND		ND	
14. Naphthalene	91203	☐	☒	43	Grab	8260B	2 µg/l	ND		ND	
15. Carbon Tetrachloride	56235	☒	☐	43	Grab	8260B	1 µg/l	ND		ND	
16. 1,2 Dichlorobenzene (o-DCB)	95501	☐	☒	43	Grab	8260B	1 µg/l	ND		ND	
17. 1,3 Dichlorobenzene (m-DCB)	541731	☐	☒	43	Grab	8260B	1 µg/l	ND		ND	
18. 1,4 Dichlorobenzene (p-DCB)	106467	☐	☒	43	Grab	8260B	1 µg/l	ND		ND	
18a. Total dichlorobenzene		☐	☒	43	Grab	8260B	1 µg/l	ND		ND	
19. 1,1 Dichloroethane (DCA)	75343	☒	☐	43	Grab	8260B	1 µg/l	ND		ND	
20. 1,2 Dichloroethane (DCA)	107062	☐	☒	43	Grab	8260B	1 µg/l	ND		ND	
21. 1,1 Dichloroethene (DCE)	75354	☒	☐	43	Grab	8260B	1 µg/l	ND		ND	
22. cis-1,2 Dichloroethene (DCE)	156592	☐	☒	43	Grab	8260B	1 µg/l	ND		ND	
23. Methylene Chloride	75092	☒	☐	43	Grab	8260B	2 µg/l	ND		ND	
24. Tetrachloroethene (PCE)	127184	☐	☒	43	Grab	8260B	1 µg/l	ND		ND	
25. 1,1,1 Trichloro-ethane (TCA)	71556	☒	☐	43	Grab	8260B	1 µg/l	ND		ND	
26. 1,1,2 Trichloro-ethane (TCA)	79005	☒	☐	43	Grab	8260B	1 µg/l	ND		ND	
27. Trichloroethene (TCE)	79016	☐	☒	43	Grab	8260B	1 µg/l	ND		ND	

<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	☐	☒	43	Grab	8260B	1 µg/l	ND		ND	
29. Acetone	67641	☐	☒	43	Grab	8260B	5 µg/l	ND		ND	
30. 1,4 Dioxane	123911	☒	☐	43	Grab	8260B	250 µg/l	ND		ND	
31. Total Phenols	108952	☒	☐	1	Grab	8270	5µg/l	ND		ND	
32. Pentachlorophenol (PCP)	87865	☒	☐	1	Grab	8270	4 µg/l	ND		ND	
33. Total Phthalates (Phthalate esters) ⁴		☐	☒	1	Grab	8270	5µg/l	ND		ND	
34. Bis (2-Ethylhexyl) Phthalate [Di- (ethylhexyl) Phthalate]	117817	☒	☐	1	Grab	8270	3µg/l	ND		ND	
35. Total Group I Polycyclic Aromatic Hydrocarbons (PAH)		☒	☐	6	Grab	8270	1 µg/l	ND		ND	
a. Benzo(a) Anthracene	56553	☒	☐	6	Grab	8270	1 µg/l	ND		ND	
b. Benzo(a) Pyrene	50328	☒	☐	6	Grab	8270	1 µg/l	ND		ND	
c. Benzo(b)Fluoranthene	205992	☒	☐	6	Grab	8270	1 µg/l	ND		ND	
d. Benzo(k)Fluoranthene	207089	☒	☐	6	Grab	8270	1 µg/l	ND		ND	
e. Chrysene	21801	☒	☐	6	Grab	8270	1 µg/l	ND		ND	
f. Dibenzo(a,h)anthracene	53703	☒	☐	6	Grab	8270	1 µg/l	ND		ND	
g. Indeno(1,2,3-cd) Pyrene	193395	☒	☐	6	Grab	8270	1 µg/l	ND		ND	
36. Total Group II Polycyclic Aromatic Hydrocarbons (PAH)		☒	☐	6	Grab	8270M	1 µg/l	ND		ND	

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	☐	☒	6	Grab	8270M	1 µg/l	ND		ND	
i. Acenaphthylene	208968	☒	☐	6	Grab	8270M	1 µg/l	ND		ND	
j. Anthracene	120127	☒	☐	6	Grab	8270M	1 µg/l	ND		ND	
k. Benzo(ghi) Perylene	191242	☒	☐	6	Grab	8270M	1 µg/l	ND		ND	
l. Fluoranthene	206440	☒	☐	6	Grab	8270M	1 µg/l	ND		ND	
m. Fluorene	86737	☒	☐	6	Grab	8270M	1 µg/l	ND		ND	
n. Naphthalene	91203	☐	☒	6	Grab	8270M	1 µg/l	ND		ND	
o. Phenanthrene	85018	☐	☒	6	Grab	8270M	1 µg/l	ND		ND	
p. Pyrene	129000	☒	☐	6	Grab	8270M	1 µg/l	ND		ND	
37. Total Polychlorinated Biphenyls (PCBs)	85687; 84742; 117840; 84662; 131113; 117817.	☒	☐	1	Grab	608	0.25µg/l	ND		ND	
38. Chloride	16887006	☐	☒	1	Grab	325.2	12,000µg/l	ND		ND	
39. Antimony	7440360	☐	☒	1	Grab	6020	1 µg/l	ND		ND	
40. Arsenic	7440382	☐	☒	1	Grab	6020	0.5 µg/l	ND		ND	
41. Cadmium	7440439	☐	☒	1	Grab	6020	0.2 µg/l	ND		ND	
42. Chromium III (trivalent)	16065831	☐	☒	1	Grab	6020	10 µg/l	ND		ND	
43. Chromium VI (hexavalent)	18540299	☐	☒	1	Grab	3500Cr-D	10 µg/l	ND		ND	
44. Copper	7440508	☐	☒	1	Grab	6020	0.5 µg/l	ND		ND	
45. Lead	7439921	☐	☒	1	Grab	6020	0.5 µg/l	ND		ND	
46. Mercury	7439976	☐	☒	1	Grab	245.1	0.2 µg/l	ND		ND	
47. Nickel	7440020	☐	☒	1	Grab	6020	0.5 µg/l	ND		ND	
48. Selenium	7782492	☐	☒	1	Grab	6020	1 µg/l	ND		ND	
49. Silver	7440224	☒	☐	1	Grab	6020	0.4 µg/l	ND		ND	
50. Zinc	7440666	☐	☒	1	Grab	6020	50 µg/l	ND		ND	
51. Iron	7439896	☐	☒	1	Grab	200.7	50 µg/l	ND		ND	
Other (describe):		☐	☐								

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

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

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

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

a) A description of the treatment system, including a schematic of the proposed or existing treatment system:

The objective of the treatment system is to recover and treat groundwater impacted with petroleum hydrocarbons and chlorinated volatile organic compounds as part of dewatering associated with property redevelopment. Since much of the utility and foundation work must be performed "in the dry", groundwater will be pumped from open excavations into a fractionation tank to allow silt and fines to settle-out. Water from the fractionation tank will be pumped into the treatment system, which will consist of two granular-activated carbon (GAC) filtering vessels, bag filters, and an air stripper to remove chlorinated volatile organic compounds.

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

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

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

Design flow rate of treatment system gpm

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

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:

After treatment, water will be discharged to the storm drain system, which discharges to the Mill River.

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

1. For multiple discharges, number the discharges sequentially.

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

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

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

SB

e) Provide the reported or calculated seven day-ten year low flow (7Q10) of the receiving water cfs

Please attach any calculation sheets used to support stream flow and dilution calculations.

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

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

6. ESA and NHPA Eligibility.

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

a) Using the instructions in Appendix VII and information on Appendix II, under which criterion listed in Part I.C are you eligible for coverage under this general permit?

A ☒ B ☐ C ☐ D ☐ E ☐ F ☐

b) If you selected Criterion D or F, has consultation with the federal services been completed? Y ☐ N ☐ Underway ☐

c) If consultation with U.S. Fish and Wildlife Service and/or NOAA Fisheries Service was completed, was a written concurrence finding that the discharge is “not likely to adversely affect” listed species or critical habitat received? Y ☐ N ☐

d) Attach documentation of ESA eligibility as described in the NOI instructions and required by Appendix VII, Part I.C, Step 4.

e) Using the instructions in Appendix VII, under which criterion listed in Part II.C are you eligible for coverage under this general permit?

1 ☒ 2 ☐ 3 ☐

f) If Criterion 3 was selected, attach all written correspondence with the State or Tribal historic preservation officers, including any terms and conditions that outline measures the applicant must follow to mitigate or prevent adverse effects due to activities regulated by the RGP.

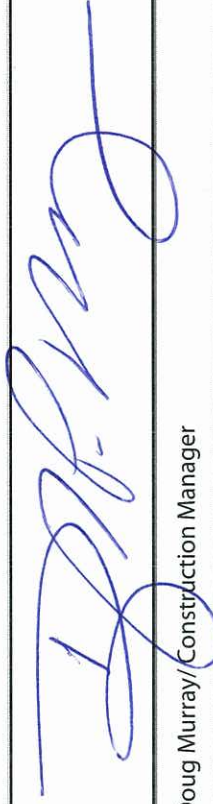
7. Supplemental information.

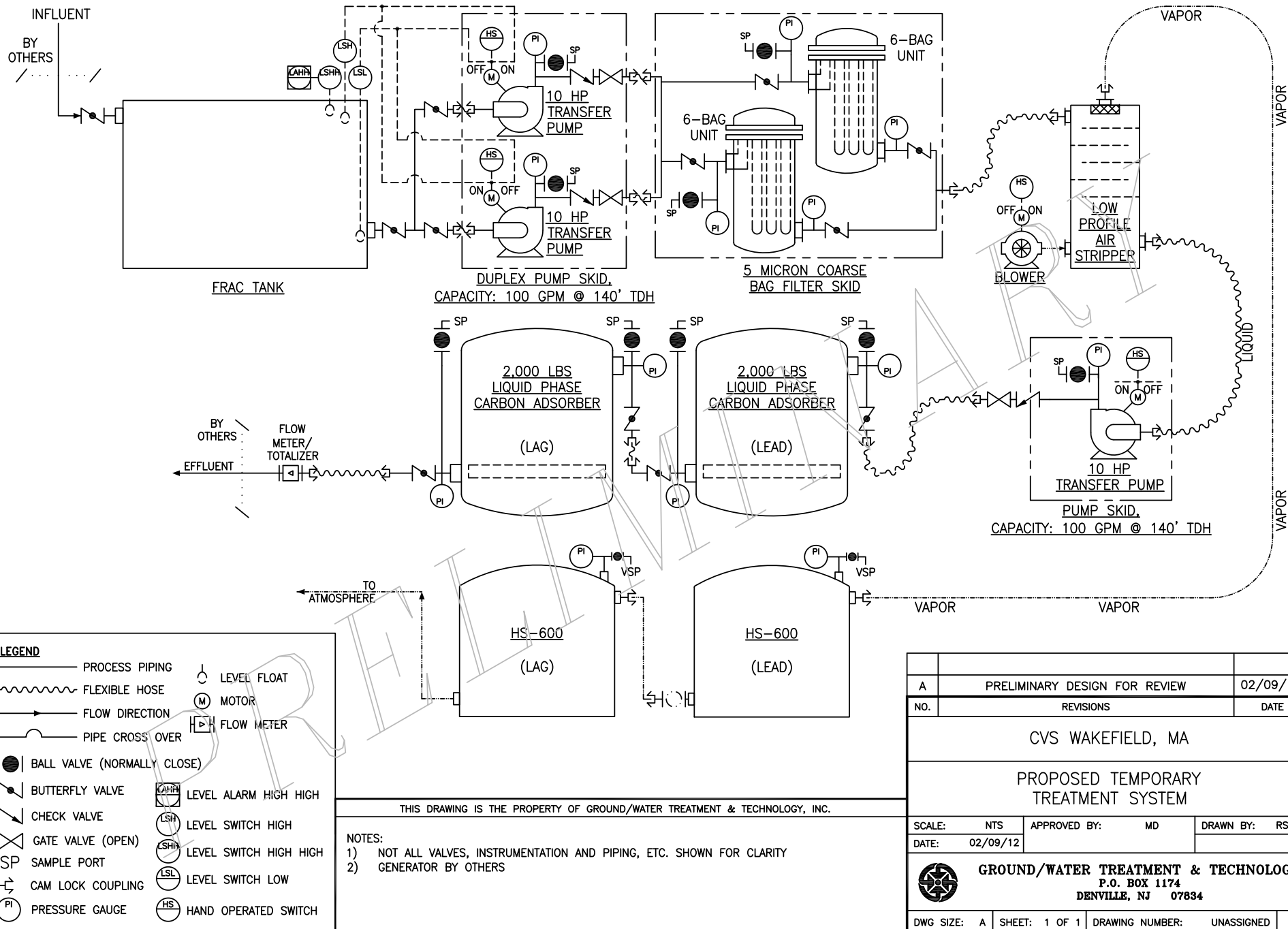
Please provide any supplemental information. Attach any analytical data used to support the application. Attach any certification(s) required by the general permit.

Copies of groundwater laboratory chemical analysis data reports.

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

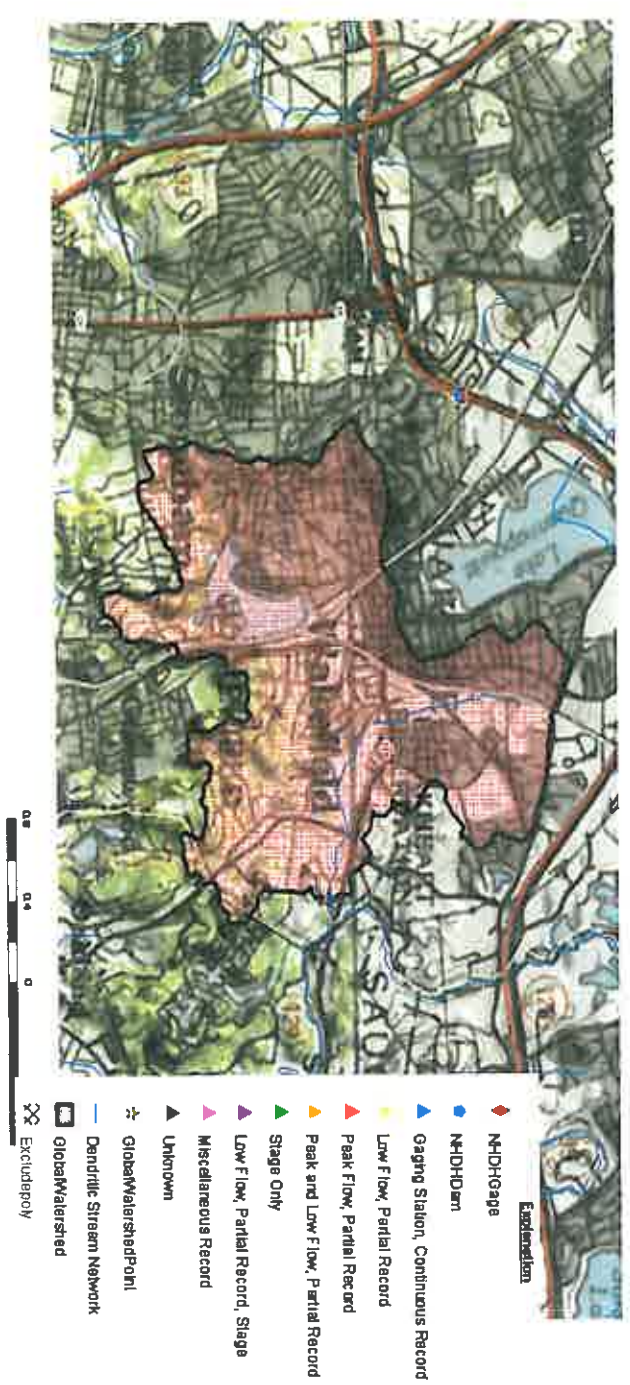
I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage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

Facility/Site Name:	Proposed CVS Pharmacy/Store
Operator signature:	
Printed Name & Title:	Doug Murray/Construction Manager
Date:	3/12/12





Mill River Watershed





Streamstats Ungaged Site Report

Date: Fri Mar 9 2012 09:36:29 Mountain Standard Time

Site Location: Massachusetts

NAD27 Latitude: 42.4979 (42 29 52)

NAD27 Longitude: -71.0452 (-71 02 43)

NAD83 Latitude: 42.4980 (42 29 53)

NAD83 Longitude: -71.0447 (-71 02 41)

Drainage Area: 3.43 mi²

Low Flows Basin Characteristics			
100% Statewide Low Flow (3.43 mi ²)			
Parameter	Value	Regression Equation Valid Range	
		Min	Max
Drainage Area (square miles)	3.43	1.61	149
Mean Basin Slope from 250K DEM (percent)	2.03	0.32	24.6
Stratified Drift per Stream Length (square mile per mile)	0.51	0	1.29
Massachusetts Region (dimensionless)	0	0	1

Probability of Perennial Flow Basin Characteristics			
100% Perennial Flow Probability (3.43 mi ²)			
Parameter	Value	Regression Equation Valid Range	
		Min	Max
Drainage Area (square miles)	3.43 (above max value 1.99)	0.01	1.99
Percent Underlain By Sand And Gravel (percent)	30.34	0	100
Percent Forest (percent)	11.62	0	100
Massachusetts Region (dimensionless)	0	0	1

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

Low Flows Streamflow Statistics					
Statistic	Flow (ft ³ /s)	Prediction Error (percent)	Equivalent years of record	90-Percent Prediction Interval	
				Minimum	Maximum
D50	3.36	18		1.51	7.42
D60	2.62	20		0.75	9.09
D70	1.9	24		0.64	5.57

D75	1.56	26		0.55	4.38
D80	1.52	28		0.56	4.09
D85	1.14	32		0.38	3.42
D90	1.01	37		0.35	2.87
D95	0.57	46		0.16	2
D98	0.38	60		0.094	1.42
D99	0.28	65		0.0643	1.11
M7D2Y	0.55	50		0.15	1.97
AUGD50	1.24	33		0.39	3.84
M7D10Y	0.27	71		0.0593	1.16

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

Probability of Perennial Flow Statistics		
Statistic	Value	Standard Error (percent)
PROBPEREN	0.98	

Dilution Calculation:

$$DF = (Q_d + Q_s)/Q_d$$

DF = Dilution Factor

Q_d = Maximum flow rate of discharge in cubic feet per second (cfs)

Q_s = Receiving Water (Mill River) 7Q10 flow (cfs)

$$Q_d = 25 \text{ gallons per minute (gpm)} \times 0.00223 = 0.05575 \text{ cfs}$$

$$Q_s = 0.27 \text{ cfs}$$

$$\mathbf{DF = 5.84}$$

**Remediation General Permit
Appendix IV**

**Chloride & Total Recoverable Metals Limitations (ug/L)
at Selected Dilution Ranges & Technology-Based Ceiling Limitations for
Facilities Located in Massachusetts and New Hampshire**

**For Facilities Located in Massachusetts (for discharges to freshwater at Hardness =
50 mg/L CaCO₃)¹**

Parameter	Chloride & Total Recoverable Metal Limitations (ug/l) by Dilution Factor Range					Ceiling Value ²
	1 - 5 ⁴	>5 - 10	>10 - 50	>50 - 100	>100	
38. Chloride	Monitor	Monitor	Monitor	Monitor	Monitor	Monitor
39. Antimony	5.6	30	60	141	141	141 ³
40. Arsenic	10	50	100	500	540	540 ⁴
41. Cadmium	0.2	1	2	10	20	260
42. ChromiumIII (Trivalent)	48.8	244	489	1,710	1,710	1,710
43. ChromiumVI (Hexavalent)	11.4	57	114	570	1,140	1,710 ⁵
44. Copper	5.2	26	52	260	520	2,070
45. Lead	1.3	6.5	13	66	132	430
46. Mercury	0.9	2.3	2.3	2.3	2.3	2.3 ³
47. Nickel	29	145	290	1,451	2,380	2,380
48. Selenium	5	25	50	250	408	408 ³
49. Silver	1.2	6	12	57	115	240
50. Zinc	66.6	333	666	1,480	1,480	1,480
51. Iron	1,000	5,000	5,000	5,000	5,000	5,000

Footnotes for Massachusetts:

1. Based on 7Q10 Flow.
2. The Ceiling Value for Cadmium, Chromium, Copper, Lead, Nickel, Silver, and Zinc is a Technology Based Value and represents the "Best Available Control Technology" (BAT) for the Metal Finishing Industry, 40 CFR Section 433.14 (monthly average concentration).
3. Based on 40 CFR 437.42, "The Centralized Waste Treatment Point Source Category - Subpart D - Multiple Wastestreams Best Practicable Control Technology" (BPT) daily maximum.
4. Based on 40 CFR 445.11, "RCRA Subtitle C Landfill Best Practicable Control Technology" (BPT) for Arsenic.
5. Assumes Hexavalent Chromium reduced to Tri-valent Chromium in treatment.
6. For a Dilution Factor Range from 1 to 5, metals limits are calculated using DF times the base limit for the metal. For example, iron limits for DF 1-5 are equal to the base limit of 1,000 ug/L times the DF. For example, if 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.



ANALYTICAL REPORT

Lab Number:	L1203775
Client:	Ransom Environmental 12 Kent Way Suite 100 Byfield, MA 01922-1221
ATTN:	Nancy Marshall
Phone:	(978) 465-1822
Project Name:	CVS WAKEFIELD
Project Number:	101.01054
Report Date:	03/08/12

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

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

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



Project Name: CVS WAKEFIELD
Project Number: 101.01054

Lab Number: L1203775
Report Date: 03/08/12

Alpha Sample ID	Client ID	Sample Location	Collection Date/Time
L1203775-01	GW1	WAKEFIELD, MA	03/06/12 14:45

Project Name: CVS WAKEFIELD
Project Number: 101.01054

Lab Number: L1203775
Report Date: 03/08/12

Case Narrative

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

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

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.

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

Sample Receipt

The Volatile Organics analysis by method EPA 8260 was cancelled at the client's request.

The Metals element list was specified by the client.

Semivolatile Organics

The WG521721-2/-3 LCS/LCSD recoveries, associated with L1203775-01, are below the individual acceptance criteria for Hexachlorocyclopentadiene (27%/29%) and Aniline (34%/32%), but within the overall method allowances. The results of the associated sample are reported.

Project Name: CVS WAKEFIELD
Project Number: 101.01054

Lab Number: L1203775
Report Date: 03/08/12

Case Narrative (continued)

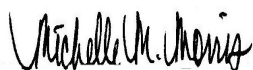
Semivolatile Organics - SIM

L1203775-01 has elevated detection limits due to the dilution required by the sample matrix (interferences with IS).

The WG521722-2/-3 LCS/LCSD RPD, associated with L1203775-01, is above the acceptance criteria for Pentachlorophenol (60%).

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

Authorized Signature:



Michelle M. Morris

Title: Technical Director/Representative

Date: 03/08/12

ORGANICS

VOLATILES

Project Name: CVS WAKEFIELD**Lab Number:** L1203775**Project Number:** 101.01054**Report Date:** 03/08/12**SAMPLE RESULTS**

Lab ID: L1203775-01
Client ID: GW1
Sample Location: WAKEFIELD, MA
Matrix: Water
Analytical Method: 14,504.1
Analytical Date: 03/07/12 11:36
Analyst: SH

Date Collected: 03/06/12 14:45
Date Received: 03/06/12
Field Prep: Not Specified
Extraction Date: 03/07/12 09:00

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

Project Name: CVS WAKEFIELD**Lab Number:** L1203775**Project Number:** 101.01054**Report Date:** 03/08/12**Method Blank Analysis**
Batch Quality Control

Analytical Method: 14,504.1

Analytical Date: 03/07/12 12:25

Analyst: SH

Extraction Date: 03/07/12 09:00

Parameter	Result	Qualifier	Units	RL	MDL
Pesticides by GC - Westborough Lab for sample(s): 01 Batch: WG521767-1					
1,2-Dibromoethane	ND		ug/l	0.010	--

Lab Control Sample Analysis
Batch Quality Control**Project Name:** CVS WAKEFIELD**Project Number:** 101.01054**Lab Number:** L1203775**Report Date:** 03/08/12

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Pesticides by GC - Westborough Lab Associated sample(s): 01 Batch: WG521767-2								
1,2-Dibromoethane	123		-		70-130	-		20

Matrix Spike Analysis

Batch Quality Control

Project Name: CVS WAKEFIELD

Project Number: 101.01054

Lab Number: L1203775

Report Date: 03/08/12

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Pesticides by GC - Westborough Lab Associated sample(s): 01 QC Batch ID: WG521767-3 QC Sample: L1203775-01 Client ID: GW1												
1,2-Dibromoethane	ND	0.253	0.278	110		-	-		70-130	-		20

SEMIVOLATILES

Project Name: CVS WAKEFIELD**Lab Number:** L1203775**Project Number:** 101.01054**Report Date:** 03/08/12**SAMPLE RESULTS**

Lab ID: L1203775-01
Client ID: GW1
Sample Location: WAKEFIELD, MA
Matrix: Water
Analytical Method: 1,8270C
Analytical Date: 03/07/12 14:14
Analyst: RC

Date Collected: 03/06/12 14:45
Date Received: 03/06/12
Field Prep: Not Specified
Extraction Method: EPA 3510C
Extraction Date: 03/06/12 23:44

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzidine	ND		ug/l	20	--	1
1,2,4-Trichlorobenzene	ND		ug/l	5.0	--	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	--	1
1,2-Dichlorobenzene	ND		ug/l	2.0	--	1
1,3-Dichlorobenzene	ND		ug/l	2.0	--	1
1,4-Dichlorobenzene	ND		ug/l	2.0	--	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	--	1
2,4-Dinitrotoluene	ND		ug/l	5.0	--	1
2,6-Dinitrotoluene	ND		ug/l	5.0	--	1
Azobenzene	ND		ug/l	2.0	--	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	--	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	--	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	--	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	--	1
Hexachlorocyclopentadiene	ND		ug/l	20	--	1
Isophorone	ND		ug/l	5.0	--	1
Nitrobenzene	ND		ug/l	2.0	--	1
NitrosoDiPhenylAmine(NDPA)/DPA	ND		ug/l	2.0	--	1
Bis(2-Ethylhexyl)phthalate	ND		ug/l	3.0	--	1
Butyl benzyl phthalate	ND		ug/l	5.0	--	1
Di-n-butylphthalate	5.4		ug/l	5.0	--	1
Di-n-octylphthalate	ND		ug/l	5.0	--	1
Diethyl phthalate	ND		ug/l	5.0	--	1
Dimethyl phthalate	ND		ug/l	5.0	--	1
Aniline	ND		ug/l	2.0	--	1
4-Chloroaniline	ND		ug/l	5.0	--	1
2-Nitroaniline	ND		ug/l	5.0	--	1
3-Nitroaniline	ND		ug/l	5.0	--	1
4-Nitroaniline	ND		ug/l	5.0	--	1
Dibenzofuran	ND		ug/l	2.0	--	1
n-Nitrosodimethylamine	ND		ug/l	2.0	--	1

Project Name: CVS WAKEFIELD**Lab Number:** L1203775**Project Number:** 101.01054**Report Date:** 03/08/12**SAMPLE RESULTS**

Lab ID: L1203775-01
 Client ID: GW1
 Sample Location: WAKEFIELD, MA

Date Collected: 03/06/12 14:45
 Date Received: 03/06/12
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,6-Trichlorophenol	ND		ug/l	5.0	--	1
P-Chloro-M-Cresol	ND		ug/l	2.0	--	1
2-Chlorophenol	ND		ug/l	2.0	--	1
2,4-Dichlorophenol	ND		ug/l	5.0	--	1
2,4-Dimethylphenol	ND		ug/l	5.0	--	1
2-Nitrophenol	ND		ug/l	10	--	1
4-Nitrophenol	ND		ug/l	10	--	1
2,4-Dinitrophenol	ND		ug/l	20	--	1
4,6-Dinitro-o-cresol	ND		ug/l	10	--	1
Phenol	6.2		ug/l	5.0	--	1
2-Methylphenol	ND		ug/l	5.0	--	1
3-Methylphenol/4-Methylphenol	13		ug/l	5.0	--	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	--	1
Benzoic Acid	ND		ug/l	50	--	1
Benzyl Alcohol	70		ug/l	2.0	--	1
Carbazole	ND		ug/l	2.0	--	1
Pyridine	ND		ug/l	5.0	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	41		21-120
Phenol-d6	30		10-120
Nitrobenzene-d5	67		23-120
2-Fluorobiphenyl	66		15-120
2,4,6-Tribromophenol	84		10-120
4-Terphenyl-d14	69		41-149

Project Name: CVS WAKEFIELD**Lab Number:** L1203775**Project Number:** 101.01054**Report Date:** 03/08/12**SAMPLE RESULTS**

Lab ID: L1203775-01 D
 Client ID: GW1
 Sample Location: WAKEFIELD, MA
 Matrix: Water
 Analytical Method: 1,8270C-SIM
 Analytical Date: 03/08/12 09:57
 Analyst: AS

Date Collected: 03/06/12 14:45
 Date Received: 03/06/12
 Field Prep: Not Specified
 Extraction Method: EPA 3510C
 Extraction Date: 03/06/12 23:47

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	ND		ug/l	1.0	--	5
2-Chloronaphthalene	ND		ug/l	1.0	--	5
Fluoranthene	ND		ug/l	1.0	--	5
Hexachlorobutadiene	ND		ug/l	2.5	--	5
Naphthalene	2.6		ug/l	1.0	--	5
Benzo(a)anthracene	ND		ug/l	1.0	--	5
Benzo(a)pyrene	ND		ug/l	1.0	--	5
Benzo(b)fluoranthene	ND		ug/l	1.0	--	5
Benzo(k)fluoranthene	ND		ug/l	1.0	--	5
Chrysene	ND		ug/l	1.0	--	5
Acenaphthylene	ND		ug/l	1.0	--	5
Anthracene	ND		ug/l	1.0	--	5
Benzo(ghi)perylene	ND		ug/l	1.0	--	5
Fluorene	ND		ug/l	1.0	--	5
Phenanthrene	3.2		ug/l	1.0	--	5
Dibenzo(a,h)anthracene	ND		ug/l	1.0	--	5
Indeno(1,2,3-cd)Pyrene	ND		ug/l	1.0	--	5
Pyrene	ND		ug/l	1.0	--	5
1-Methylnaphthalene	2.2		ug/l	1.0	--	5
2-Methylnaphthalene	3.0		ug/l	1.0	--	5
Pentachlorophenol	ND		ug/l	4.0	--	5
Hexachlorobenzene	ND		ug/l	4.0	--	5
Hexachloroethane	ND		ug/l	4.0	--	5

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	56		21-120
Phenol-d6	42		10-120
Nitrobenzene-d5	89		23-120
2-Fluorobiphenyl	92		15-120
2,4,6-Tribromophenol	86		10-120
4-Terphenyl-d14	115		41-149



Project Name: CVS WAKEFIELD

Lab Number: L1203775

Project Number: 101.01054

Report Date: 03/08/12

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270C
 Analytical Date: 03/07/12 12:57
 Analyst: RC

Extraction Method: EPA 3510C
 Extraction Date: 03/06/12 23:44

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG521721-1					
Acenaphthene	ND		ug/l	2.0	--
Benzidine	ND		ug/l	20	--
1,2,4-Trichlorobenzene	ND		ug/l	5.0	--
Hexachlorobenzene	ND		ug/l	2.0	--
Bis(2-chloroethyl)ether	ND		ug/l	2.0	--
2-Chloronaphthalene	ND		ug/l	2.0	--
1,2-Dichlorobenzene	ND		ug/l	2.0	--
1,3-Dichlorobenzene	ND		ug/l	2.0	--
1,4-Dichlorobenzene	ND		ug/l	2.0	--
3,3'-Dichlorobenzidine	ND		ug/l	5.0	--
2,4-Dinitrotoluene	ND		ug/l	5.0	--
2,6-Dinitrotoluene	ND		ug/l	5.0	--
Azobenzene	ND		ug/l	2.0	--
Fluoranthene	ND		ug/l	2.0	--
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	--
4-Bromophenyl phenyl ether	ND		ug/l	2.0	--
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	--
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	--
Hexachlorobutadiene	ND		ug/l	2.0	--
Hexachlorocyclopentadiene	ND		ug/l	20	--
Hexachloroethane	ND		ug/l	2.0	--
Isophorone	ND		ug/l	5.0	--
Naphthalene	ND		ug/l	2.0	--
Nitrobenzene	ND		ug/l	2.0	--
NitrosoDiPhenylAmine(NDPA)/DPA	ND		ug/l	2.0	--
Bis(2-Ethylhexyl)phthalate	ND		ug/l	3.0	--
Butyl benzyl phthalate	ND		ug/l	5.0	--
Di-n-butylphthalate	ND		ug/l	5.0	--
Di-n-octylphthalate	ND		ug/l	5.0	--
Diethyl phthalate	ND		ug/l	5.0	--
Dimethyl phthalate	ND		ug/l	5.0	--

Project Name: CVS WAKEFIELD

Lab Number: L1203775

Project Number: 101.01054

Report Date: 03/08/12

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270C
 Analytical Date: 03/07/12 12:57
 Analyst: RC

Extraction Method: EPA 3510C
 Extraction Date: 03/06/12 23:44

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG521721-1					
Benzo(a)anthracene	ND		ug/l	2.0	--
Benzo(a)pyrene	ND		ug/l	2.0	--
Benzo(b)fluoranthene	ND		ug/l	2.0	--
Benzo(k)fluoranthene	ND		ug/l	2.0	--
Chrysene	ND		ug/l	2.0	--
Acenaphthylene	ND		ug/l	2.0	--
Anthracene	ND		ug/l	2.0	--
Benzo(ghi)perylene	ND		ug/l	2.0	--
Fluorene	ND		ug/l	2.0	--
Phenanthrene	ND		ug/l	2.0	--
Dibenzo(a,h)anthracene	ND		ug/l	2.0	--
Indeno(1,2,3-cd)Pyrene	ND		ug/l	2.0	--
Pyrene	ND		ug/l	2.0	--
Aniline	ND		ug/l	2.0	--
4-Chloroaniline	ND		ug/l	5.0	--
1-Methylnaphthalene	ND		ug/l	2.0	--
2-Nitroaniline	ND		ug/l	5.0	--
3-Nitroaniline	ND		ug/l	5.0	--
4-Nitroaniline	ND		ug/l	5.0	--
Dibenzofuran	ND		ug/l	2.0	--
2-Methylnaphthalene	ND		ug/l	2.0	--
n-Nitrosodimethylamine	ND		ug/l	2.0	--
2,4,6-Trichlorophenol	ND		ug/l	5.0	--
P-Chloro-M-Cresol	ND		ug/l	2.0	--
2-Chlorophenol	ND		ug/l	2.0	--
2,4-Dichlorophenol	ND		ug/l	5.0	--
2,4-Dimethylphenol	ND		ug/l	5.0	--
2-Nitrophenol	ND		ug/l	10	--
4-Nitrophenol	ND		ug/l	10	--
2,4-Dinitrophenol	ND		ug/l	20	--
4,6-Dinitro-o-cresol	ND		ug/l	10	--

Project Name: CVS WAKEFIELD

Lab Number: L1203775

Project Number: 101.01054

Report Date: 03/08/12

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270C
 Analytical Date: 03/07/12 12:57
 Analyst: RC

Extraction Method: EPA 3510C
 Extraction Date: 03/06/12 23:44

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG521721-1					
Pentachlorophenol	ND		ug/l	10	--
Phenol	ND		ug/l	5.0	--
2-Methylphenol	ND		ug/l	5.0	--
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	--
2,4,5-Trichlorophenol	ND		ug/l	5.0	--
Benzoic Acid	ND		ug/l	50	--
Benzyl Alcohol	ND		ug/l	2.0	--
Carbazole	ND		ug/l	2.0	--
Pyridine	ND		ug/l	5.0	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	38		21-120
Phenol-d6	25		10-120
Nitrobenzene-d5	59		23-120
2-Fluorobiphenyl	60		15-120
2,4,6-Tribromophenol	71		10-120
4-Terphenyl-d14	71		41-149

Project Name: CVS WAKEFIELD

Lab Number: L1203775

Project Number: 101.01054

Report Date: 03/08/12

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270C-SIM
 Analytical Date: 03/07/12 16:28
 Analyst: AS

Extraction Method: EPA 3510C
 Extraction Date: 03/06/12 23:47

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01 Batch: WG521722-1					
Acenaphthene	ND		ug/l	0.20	--
2-Chloronaphthalene	ND		ug/l	0.20	--
Fluoranthene	ND		ug/l	0.20	--
Hexachlorobutadiene	ND		ug/l	0.50	--
Naphthalene	ND		ug/l	0.20	--
Benzo(a)anthracene	ND		ug/l	0.20	--
Benzo(a)pyrene	ND		ug/l	0.20	--
Benzo(b)fluoranthene	ND		ug/l	0.20	--
Benzo(k)fluoranthene	ND		ug/l	0.20	--
Chrysene	ND		ug/l	0.20	--
Acenaphthylene	ND		ug/l	0.20	--
Anthracene	ND		ug/l	0.20	--
Benzo(ghi)perylene	ND		ug/l	0.20	--
Fluorene	ND		ug/l	0.20	--
Phenanthrene	ND		ug/l	0.20	--
Dibenzo(a,h)anthracene	ND		ug/l	0.20	--
Indeno(1,2,3-cd)Pyrene	ND		ug/l	0.20	--
Pyrene	ND		ug/l	0.20	--
1-Methylnaphthalene	ND		ug/l	0.20	--
2-Methylnaphthalene	ND		ug/l	0.20	--
Pentachlorophenol	ND		ug/l	0.80	--
Hexachlorobenzene	ND		ug/l	0.80	--
Hexachloroethane	ND		ug/l	0.80	--

Project Name: CVS WAKEFIELD

Lab Number: L1203775

Project Number: 101.01054

Report Date: 03/08/12

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270C-SIM

Extraction Method: EPA 3510C

Analytical Date: 03/07/12 16:28

Extraction Date: 03/06/12 23:47

Analyst: AS

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01 Batch: WG521722-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	43		21-120
Phenol-d6	31		10-120
Nitrobenzene-d5	73		23-120
2-Fluorobiphenyl	67		15-120
2,4,6-Tribromophenol	48		10-120
4-Terphenyl-d14	75		41-149

Lab Control Sample Analysis

Batch Quality Control

Project Name: CVS WAKEFIELD

Project Number: 101.01054

Lab Number: L1203775

Report Date: 03/08/12

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG521721-2 WG521721-3								
Acenaphthene	67		71		37-111	6		30
Benzidine	21		18			15		30
1,2,4-Trichlorobenzene	66		68		39-98	3		30
Hexachlorobenzene	76		78		40-140	3		30
Bis(2-chloroethyl)ether	60		65		40-140	8		30
2-Chloronaphthalene	66		68		40-140	3		30
1,2-Dichlorobenzene	64		65		40-140	2		30
1,3-Dichlorobenzene	64		65		40-140	2		30
1,4-Dichlorobenzene	61		66		36-97	8		30
3,3'-Dichlorobenzidine	73		70		40-140	4		30
2,4-Dinitrotoluene	77		77		24-96	0		30
2,6-Dinitrotoluene	72		73		40-140	1		30
Azobenzene	72		75		40-140	4		30
Fluoranthene	78		76		40-140	3		30
4-Chlorophenyl phenyl ether	72		76		40-140	5		30
4-Bromophenyl phenyl ether	78		78		40-140	0		30
Bis(2-chloroisopropyl)ether	63		67		40-140	6		30
Bis(2-chloroethoxy)methane	63		64		40-140	2		30
Hexachlorobutadiene	65		67		40-140	3		30
Hexachlorocyclopentadiene	27	Q	29	Q	40-140	7		30
Hexachloroethane	63		67		40-140	6		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: CVS WAKEFIELD

Project Number: 101.01054

Lab Number: L1203775

Report Date: 03/08/12

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG521721-2 WG521721-3								
Isophorone	62		68		40-140	9		30
Naphthalene	64		67		40-140	5		30
Nitrobenzene	60		64		40-140	6		30
NitrosoDiPhenylAmine(NDPA)/DPA	74		74		40-140	0		30
Bis(2-Ethylhexyl)phthalate	80		78		40-140	3		30
Butyl benzyl phthalate	80		77		40-140	4		30
Di-n-butylphthalate	79		76		40-140	4		30
Di-n-octylphthalate	82		78		40-140	5		30
Diethyl phthalate	73		75		40-140	3		30
Dimethyl phthalate	70		73		40-140	4		30
Benzo(a)anthracene	79		75		40-140	5		30
Benzo(a)pyrene	77		74		40-140	4		30
Benzo(b)fluoranthene	80		77		40-140	4		30
Benzo(k)fluoranthene	74		73		40-140	1		30
Chrysene	74		75		40-140	1		30
Acenaphthylene	69		70		45-123	1		30
Anthracene	76		75		40-140	1		30
Benzo(ghi)perylene	77		75		40-140	3		30
Fluorene	73		75		40-140	3		30
Phenanthrene	74		73		40-140	1		30
Dibenzo(a,h)anthracene	82		80		40-140	2		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: CVS WAKEFIELD

Project Number: 101.01054

Lab Number: L1203775

Report Date: 03/08/12

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG521721-2 WG521721-3								
Indeno(1,2,3-cd)Pyrene	78		77		40-140	1		30
Pyrene	76		75		26-127	1		30
Aniline	34	Q	32	Q	40-140	6		30
4-Chloroaniline	68		61		40-140	11		30
1-Methylnaphthalene	63		67			6		30
2-Nitroaniline	74		76		52-143	3		30
3-Nitroaniline	61		64		25-145	5		30
4-Nitroaniline	71		77		51-143	8		30
Dibenzofuran	69		72		40-140	4		30
2-Methylnaphthalene	65		69		40-140	6		30
n-Nitrosodimethylamine	43		44			2		30
2,4,6-Trichlorophenol	69		71		30-130	3		30
P-Chloro-M-Cresol	70		71		23-97	1		30
2-Chlorophenol	63		67		27-123	6		30
2,4-Dichlorophenol	72		73		30-130	1		30
2,4-Dimethylphenol	62		66		30-130	6		30
2-Nitrophenol	64		71		30-130	10		30
4-Nitrophenol	23		29		10-80	23		30
2,4-Dinitrophenol	60		63		20-130	5		30
4,6-Dinitro-o-cresol	62		61		20-164	2		30
Pentachlorophenol	39		36		9-103	8		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: CVS WAKEFIELD

Project Number: 101.01054

Lab Number: L1203775

Report Date: 03/08/12

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG521721-2 WG521721-3								
Phenol	31		33		12-110	6		30
2-Methylphenol	62		63		30-130	2		30
3-Methylphenol/4-Methylphenol	55		61		30-130	10		30
2,4,5-Trichlorophenol	75		74		30-130	1		30
Benzoic Acid	27		28			4		30
Benzyl Alcohol	56		53			6		30
Carbazole	76		74		55-144	3		30
Pyridine	25		28		10-66	11		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	46		49		21-120
Phenol-d6	32		34		10-120
Nitrobenzene-d5	67		72		23-120
2-Fluorobiphenyl	68		70		15-120
2,4,6-Tribromophenol	84		85		10-120
4-Terphenyl-d14	79		78		41-149

Lab Control Sample Analysis Batch Quality Control

Project Name: CVS WAKEFIELD

Project Number: 101.01054

Lab Number: L1203775

Report Date: 03/08/12

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01 Batch: WG521722-2 WG521722-3								
Acenaphthene	66		68		37-111	3		40
2-Chloronaphthalene	72		78		40-140	8		40
Fluoranthene	90		95		40-140	5		40
Hexachlorobutadiene	67		74		40-140	10		40
Naphthalene	66		71		40-140	7		40
Benzo(a)anthracene	85		92		40-140	8		40
Benzo(a)pyrene	82		90		40-140	9		40
Benzo(b)fluoranthene	74		87		40-140	16		40
Benzo(k)fluoranthene	73		79		40-140	8		40
Chrysene	76		79		40-140	4		40
Acenaphthylene	72		78		40-140	8		40
Anthracene	81		88		40-140	8		40
Benzo(ghi)perylene	81		90		40-140	11		40
Fluorene	62		66		40-140	6		40
Phenanthrene	83		84		40-140	1		40
Dibenzo(a,h)anthracene	83		95		40-140	13		40
Indeno(1,2,3-cd)Pyrene	82		92		40-140	11		40
Pyrene	90		95		26-127	5		40
1-Methylnaphthalene	59		65		40-140	10		40
2-Methylnaphthalene	73		77		40-140	5		40
Pentachlorophenol	21		39		9-103	60	Q	40

Lab Control Sample Analysis

Batch Quality Control

Project Name: CVS WAKEFIELD

Project Number: 101.01054

Lab Number: L1203775

Report Date: 03/08/12

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01 Batch: WG521722-2 WG521722-3								
Hexachlorobenzene	78		80		40-140	3		40
Hexachloroethane	61		70		40-140	14		40

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	50		58		21-120
Phenol-d6	43		47		10-120
Nitrobenzene-d5	68		74		23-120
2-Fluorobiphenyl	69		74		15-120
2,4,6-Tribromophenol	60		65		10-120
4-Terphenyl-d14	94		94		41-149

PCBS

Project Name: CVS WAKEFIELD**Lab Number:** L1203775**Project Number:** 101.01054**Report Date:** 03/08/12**SAMPLE RESULTS**

Lab ID: L1203775-01
Client ID: GW1
Sample Location: WAKEFIELD, MA
Matrix: Water
Analytical Method: 5,608
Analytical Date: 03/07/12 10:41
Analyst: KB

Date Collected: 03/06/12 14:45
Date Received: 03/06/12
Field Prep: Not Specified
Extraction Method: EPA 608
Extraction Date: 03/06/12 23:39
Cleanup Method1: EPA 3665A
Cleanup Date1: 03/07/12
Cleanup Method2: EPA 3660B
Cleanup Date2: 03/07/12

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	55		30-150
Decachlorobiphenyl	48		30-150

Project Name: CVS WAKEFIELD**Lab Number:** L1203775**Project Number:** 101.01054**Report Date:** 03/08/12**Method Blank Analysis**
Batch Quality Control

Analytical Method: 5,608
Analytical Date: 03/07/12 09:48
Analyst: KB

Extraction Method: EPA 608
Extraction Date: 03/06/12 23:39
Cleanup Method1: EPA 3665A
Cleanup Date1: 03/07/12
Cleanup Method2: EPA 3660B
Cleanup Date2: 03/07/12

Parameter	Result	Qualifier	Units	RL	MDL
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 01 Batch: WG521719-1					
Aroclor 1016	ND		ug/l	0.250	--
Aroclor 1221	ND		ug/l	0.250	--
Aroclor 1232	ND		ug/l	0.250	--
Aroclor 1242	ND		ug/l	0.250	--
Aroclor 1248	ND		ug/l	0.250	--
Aroclor 1254	ND		ug/l	0.250	--
Aroclor 1260	ND		ug/l	0.250	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	67		30-150
Decachlorobiphenyl	77		30-150

Matrix Spike Analysis

Batch Quality Control

Project Name: CVS WAKEFIELD

Project Number: 101.01054

Lab Number: L1203775

Report Date: 03/08/12

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01 QC Batch ID: WG521719-3 QC Sample: L1203775-01 Client ID: GW1												
Aroclor 1016	ND	1	0.699	70		-	-		40-140	-		50
Aroclor 1260	ND	1	0.462	46		-	-		40-140	-		50

Surrogate	MS % Recovery	Qualifier	MSD % Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	58				30-150
Decachlorobiphenyl	55				30-150

Lab Control Sample Analysis Batch Quality Control

Project Name: CVS WAKEFIELD

Lab Number: L1203775

Project Number: 101.01054

Report Date: 03/08/12

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01 Batch: WG521719-2								
Aroclor 1016	51		-		40-140	-		50
Aroclor 1260	50		-		40-140	-		50

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	53				30-150
Decachlorobiphenyl	68				30-150

Lab Duplicate Analysis Batch Quality Control

Project Name: CVS WAKEFIELD

Project Number: 101.01054

Lab Number: L1203775

Report Date: 03/08/12

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01 QC Batch ID: WG521719-4 QC Sample: L1203719-08 Client ID: DUP Sample						
Aroclor 1016	ND	ND	ug/l	NC		50
Aroclor 1221	ND	ND	ug/l	NC		50
Aroclor 1232	ND	ND	ug/l	NC		50
Aroclor 1242	ND	ND	ug/l	NC		50
Aroclor 1248	ND	ND	ug/l	NC		50
Aroclor 1254	ND	ND	ug/l	NC		50
Aroclor 1260	ND	ND	ug/l	NC		50

Surrogate	%Recovery	Qualifier	%Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	75		61		30-150
Decachlorobiphenyl	82		66		30-150

METALS

Project Name: CVS WAKEFIELD

Lab Number: L1203775

Project Number: 101.01054

Report Date: 03/08/12

SAMPLE RESULTS

Lab ID: L1203775-01

Date Collected: 03/06/12 14:45

Client ID: GW1

Date Received: 03/06/12

Sample Location: WAKEFIELD, MA

Field Prep: Not Specified

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Westborough Lab											
Antimony, Total	0.0024		mg/l	0.0010	--	1	03/07/12 10:10	03/08/12 11:40	EPA 3005A	1,6020	AK
Arsenic, Total	0.0027		mg/l	0.0005	--	1	03/07/12 10:10	03/08/12 11:40	EPA 3005A	1,6020	AK
Cadmium, Total	0.0005		mg/l	0.0002	--	1	03/07/12 10:10	03/08/12 11:40	EPA 3005A	1,6020	AK
Chromium, Total	0.05		mg/l	0.01	--	1	03/07/12 10:10	03/08/12 07:37	EPA 3005A	19,200.7	AI
Copper, Total	0.0803		mg/l	0.0005	--	1	03/07/12 10:10	03/08/12 11:40	EPA 3005A	1,6020	AK
Iron, Total	1.4		mg/l	0.05	--	1	03/07/12 10:10	03/08/12 07:37	EPA 3005A	19,200.7	AI
Lead, Total	0.0092		mg/l	0.0005	--	1	03/07/12 10:10	03/08/12 11:40	EPA 3005A	1,6020	AK
Mercury, Total	0.0002		mg/l	0.0002	--	1	03/07/12 14:50	03/08/12 10:16	EPA 245.1	3,245.1	KL
Nickel, Total	0.0222		mg/l	0.0005	--	1	03/07/12 10:10	03/08/12 11:40	EPA 3005A	1,6020	AK
Selenium, Total	0.002		mg/l	0.001	--	1	03/07/12 10:10	03/08/12 11:40	EPA 3005A	1,6020	AK
Silver, Total	ND		mg/l	0.0004	--	1	03/07/12 10:10	03/08/12 11:40	EPA 3005A	1,6020	AK
Zinc, Total	0.2911		mg/l	0.0050	--	1	03/07/12 10:10	03/08/12 11:40	EPA 3005A	1,6020	AK



Project Name: CVS WAKEFIELD

Lab Number: L1203775

Project Number: 101.01054

Report Date: 03/08/12

Method Blank Analysis Batch Quality Control

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Westborough Lab for sample(s): 01 Batch: WG521774-1									
Antimony, Total	ND	mg/l	0.0010	--	1	03/07/12 10:10	03/08/12 11:30	1,6020	AK
Arsenic, Total	ND	mg/l	0.0005	--	1	03/07/12 10:10	03/08/12 11:30	1,6020	AK
Cadmium, Total	ND	mg/l	0.0002	--	1	03/07/12 10:10	03/08/12 11:30	1,6020	AK
Copper, Total	ND	mg/l	0.0005	--	1	03/07/12 10:10	03/08/12 11:30	1,6020	AK
Lead, Total	ND	mg/l	0.0005	--	1	03/07/12 10:10	03/08/12 11:30	1,6020	AK
Nickel, Total	ND	mg/l	0.0005	--	1	03/07/12 10:10	03/08/12 11:30	1,6020	AK
Selenium, Total	ND	mg/l	0.001	--	1	03/07/12 10:10	03/08/12 11:30	1,6020	AK
Silver, Total	ND	mg/l	0.0004	--	1	03/07/12 10:10	03/08/12 11:30	1,6020	AK
Zinc, Total	ND	mg/l	0.0050	--	1	03/07/12 10:10	03/08/12 11:30	1,6020	AK

Prep Information

Digestion Method: EPA 3005A

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Westborough Lab for sample(s): 01 Batch: WG521775-1									
Chromium, Total	ND	mg/l	0.01	--	1	03/07/12 10:10	03/08/12 07:31	19,200.7	AI
Iron, Total	ND	mg/l	0.05	--	1	03/07/12 10:10	03/08/12 07:31	19,200.7	AI

Prep Information

Digestion Method: EPA 3005A

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Westborough Lab for sample(s): 01 Batch: WG521786-1									
Mercury, Total	ND	mg/l	0.0002	--	1	03/07/12 14:50	03/08/12 09:51	3,245.1	KL

Prep Information

Digestion Method: EPA 245.1

Lab Control Sample Analysis

Batch Quality Control

Project Name: CVS WAKEFIELD

Project Number: 101.01054

Lab Number: L1203775

Report Date: 03/08/12

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01 Batch: WG521774-2								
Antimony, Total	88		-		80-120	-		
Arsenic, Total	108		-		80-120	-		
Cadmium, Total	112		-		80-120	-		
Copper, Total	103		-		80-120	-		
Lead, Total	113		-		80-120	-		
Nickel, Total	105		-		80-120	-		
Selenium, Total	112		-		80-120	-		
Silver, Total	108		-		80-120	-		
Zinc, Total	107		-		80-120	-		
Total Metals - Westborough Lab Associated sample(s): 01 Batch: WG521775-2								
Chromium, Total	105		-		85-115	-		
Iron, Total	100		-		85-115	-		
Total Metals - Westborough Lab Associated sample(s): 01 Batch: WG521786-2								
Mercury, Total	106		-		85-115	-		

Matrix Spike Analysis **Batch Quality Control**

Project Name: CVS WAKEFIELD

Project Number: 101.01054

Lab Number: L1203775

Report Date: 03/08/12

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG521774-4 QC Sample: L1203775-01 Client ID: GW1												
Antimony, Total	0.0024	0.5	0.5093	101		-	-		80-120	-		20
Arsenic, Total	0.0027	0.12	0.1340	109		-	-		80-120	-		20
Cadmium, Total	0.0005	0.051	0.0565	110		-	-		80-120	-		20
Copper, Total	0.0803	0.25	0.3446	106		-	-		80-120	-		20
Lead, Total	0.0092	0.51	0.5871	113		-	-		80-120	-		20
Nickel, Total	0.0222	0.5	0.5432	104		-	-		80-120	-		20
Selenium, Total	0.002	0.12	0.129	106		-	-		80-120	-		20
Silver, Total	ND	0.05	0.0538	108		-	-		80-120	-		20
Zinc, Total	0.2911	0.5	0.8645	115		-	-		80-120	-		20
Total Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG521775-4 QC Sample: L1203775-01 Client ID: GW1												
Chromium, Total	0.05	0.2	0.25	102		-	-		75-125	-		20
Iron, Total	1.4	1	2.4	100		-	-		75-125	-		20
Total Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG521786-4 QC Sample: L1203775-01 Client ID: GW1												
Mercury, Total	0.0002	0.001	0.0015	129		-	-		70-130	-		20

Lab Duplicate Analysis Batch Quality Control

Project Name: CVS WAKEFIELD

Project Number: 101.01054

Lab Number: L1203775

Report Date: 03/08/12

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG521774-3 QC Sample: L1203775-01 Client ID: GW1						
Antimony, Total	0.0024	0.0026B	mg/l	9		20
Arsenic, Total	0.0027	0.0027	mg/l	0		20
Cadmium, Total	0.0005	0.0005	mg/l	1		20
Copper, Total	0.0803	0.0791	mg/l	1		20
Lead, Total	0.0092	0.009	mg/l	2		20
Nickel, Total	0.0222	0.0217	mg/l	2		20
Selenium, Total	0.002	0.002	mg/l	5		20
Selenium, Total	0.002	0.002	mg/l	5		20
Silver, Total	ND	ND	mg/l	NC		20
Zinc, Total	0.2911	0.2839	mg/l	3		20
Total Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG521775-3 QC Sample: L1203775-01 Client ID: GW1						
Chromium, Total	0.05	0.04	mg/l	2		20
Iron, Total	1.4	1.4	mg/l	0		20
Total Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG521786-3 QC Sample: L1203775-01 Client ID: GW1						
Mercury, Total	0.0002	0.0002	mg/l	0		20

INORGANICS & MISCELLANEOUS

Project Name: CVS WAKEFIELD
Project Number: 101.01054

Lab Number: L1203775
Report Date: 03/08/12

SAMPLE RESULTS

Lab ID: L1203775-01
Client ID: GW1
Sample Location: WAKEFIELD, MA
Matrix: Water

Date Collected: 03/06/12 14:45
Date Received: 03/06/12
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total Suspended	47		mg/l	10	NA	2	-	03/07/12 17:15	30,2540D	DW
Cyanide, Total	ND		mg/l	0.0050	--	1	03/07/12 10:30	03/08/12 13:52	30,4500CN-CE	JO
Chlorine, Total Residual	ND		mg/l	0.02	--	1	-	03/07/12 01:40	30,4500CL-D	DE
TPH	ND		mg/l	4.00	--	1	03/07/12 13:00	03/08/12 13:30	74,1664A	JO
Phenolics, Total	0.05		mg/l	0.03	--	1	03/06/12 17:30	03/06/12 22:09	4,420.1	TP
Chromium, Hexavalent	0.045		mg/l	0.010	--	1	03/07/12 01:40	03/07/12 02:07	30,3500CR-D	JT
Anions by Ion Chromatography - Westborough Lab										
Chloride	360		mg/l	12	--	25	-	03/07/12 18:42	44,300.0	AU



Project Name: CVS WAKEFIELD

Lab Number: L1203775

Project Number: 101.01054

Report Date: 03/08/12

Method Blank Analysis Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG521697-1										
Phenolics, Total	ND		mg/l	0.03	--	1	03/06/12 17:30	03/06/12 22:00	4,420.1	TP
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG521718-1										
Chlorine, Total Residual	ND		mg/l	0.02	--	1	-	03/07/12 01:40	30,4500CL-D	DE
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG521741-1										
Chromium, Hexavalent	ND		mg/l	0.010	--	1	03/07/12 01:40	03/07/12 02:06	30,3500CR-D	JT
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG521756-1										
Solids, Total Suspended	ND		mg/l	5.0	NA	1	-	03/07/12 17:15	30,2540D	DW
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG521812-2										
Cyanide, Total	ND		mg/l	0.005	--	1	03/07/12 10:30	03/08/12 13:38	30,4500CN-CE	JO
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG521894-2										
TPH	ND		mg/l	4.00	--	1	03/07/12 13:00	03/08/12 13:30	74,1664A	JO
Anions by Ion Chromatography - Westborough Lab for sample(s): 01 Batch: WG521928-1										
Chloride	ND		mg/l	0.50	--	1	-	03/07/12 17:54	44,300.0	AU

Lab Control Sample Analysis

Batch Quality Control

Project Name: CVS WAKEFIELD

Project Number: 101.01054

Lab Number: L1203775

Report Date: 03/08/12

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG521697-2								
Phenolics, Total	105		-		82-111	-		12
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG521718-2								
Chlorine, Total Residual	105		-		90-110	-		
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG521741-2								
Chromium, Hexavalent	104		-		85-115	-		20
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG521812-1								
Cyanide, Total	99		-		90-110	-		
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG521894-1								
TPH	85		-		64-132	-		34
Anions by Ion Chromatography - Westborough Lab Associated sample(s): 01 Batch: WG521928-2								
Chloride	102		-		90-110	-		

Matrix Spike Analysis

Batch Quality Control

Project Name: CVS WAKEFIELD

Project Number: 101.01054

Lab Number: L1203775

Report Date: 03/08/12

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG521697-3 QC Sample: L1203607-04 Client ID: MS Sample												
Phenolics, Total	ND	0.8	0.72	90		-	-		77-124	-		12
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG521741-4 QC Sample: L1203775-01 Client ID: GW1												
Chromium, Hexavalent	0.045	0.1	0.151	106		-	-		85-115	-		20
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG521812-3 QC Sample: L1203541-02 Client ID: MS Sample												
Cyanide, Total	ND	0.2	0.229	114	Q	-	-		90-110	-		30
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG521894-3 QC Sample: L1203494-20 Client ID: MS Sample												
TPH	ND	21.7	17.7	81		-	-		64-132	-		34
Anions by Ion Chromatography - Westborough Lab Associated sample(s): 01 QC Batch ID: WG521928-3 QC Sample: L1203781-01 Client ID: MS Sample												
Chloride	46	4	50	100		-	-		40-151	-		18

Lab Duplicate Analysis Batch Quality Control

Project Name: CVS WAKEFIELD

Project Number: 101.01054

Lab Number: L1203775

Report Date: 03/08/12

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG521697-4 QC Sample: L1203607-02 Client ID: DUP Sample						
Phenolics, Total	0.03	0.03	mg/l	0		12
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG521718-3 QC Sample: L1203750-01 Client ID: DUP Sample						
Chlorine, Total Residual	ND	ND	mg/l	NC		20
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG521741-3 QC Sample: L1203775-01 Client ID: GW1						
Chromium, Hexavalent	0.045	0.043	mg/l	5		20
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG521756-2 QC Sample: L1203584-03 Client ID: DUP Sample						
Solids, Total Suspended	340	340	mg/l	0		20
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG521812-4 QC Sample: L1203751-02 Client ID: DUP Sample						
Cyanide, Total	ND	ND	mg/l	NC		30
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG521894-4 QC Sample: L1203775-01 Client ID: GW1						
TPH	ND	ND	mg/l	NC		34
Anions by Ion Chromatography - Westborough Lab Associated sample(s): 01 QC Batch ID: WG521928-4 QC Sample: L1203781-01 Client ID: DUP Sample						
Chloride	46	46	mg/l	0		18

Project Name: CVS WAKEFIELD

Project Number: 101.01054

Lab Number: L1203775

Report Date: 03/08/12

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Reagent H2O Preserved Vials Frozen on: NA

Cooler Information Custody Seal

Cooler

A Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1203775-01C	Vial Na2S2O3 preserved	A	N/A	3	Y	Absent	504(14)
L1203775-01D	Vial Na2S2O3 preserved	A	N/A	3	Y	Absent	504(14)
L1203775-01E	Amber 1000ml unpreserved	A	7	3	Y	Absent	8270TCL(7),8270TCL-SIM(7)
L1203775-01F	Amber 1000ml unpreserved	A	7	3	Y	Absent	8270TCL(7),8270TCL-SIM(7)
L1203775-01G	Amber 1000ml unpreserved	A	7	3	Y	Absent	8270TCL(7),8270TCL-SIM(7)
L1203775-01H	Amber 1000ml unpreserved	A	7	3	Y	Absent	8270TCL(7),8270TCL-SIM(7)
L1203775-01I	Amber 1000ml unpreserved	A	7	3	Y	Absent	PCB-608(7)
L1203775-01J	Amber 1000ml unpreserved	A	7	3	Y	Absent	PCB-608(7)
L1203775-01K	Amber 1000ml HCl preserved	A	N/A	3	Y	Absent	TPH-1664(28)
L1203775-01L	Amber 1000ml HCl preserved	A	N/A	3	Y	Absent	TPH-1664(28)
L1203775-01M	Amber 1000ml H2SO4 preserved	A	<2	3	Y	Absent	TPHENOL-420(28)
L1203775-01N	Plastic 1000ml unpreserved	A	7	3	Y	Absent	TSS-2540(7)
L1203775-01O	Plastic 500ml unpreserved	A	7	3	Y	Absent	HEXCR-3500(1),TRC-4500(1)
L1203775-01P	Plastic 500ml unpreserved	A	7	3	Y	Absent	CL-300(28)
L1203775-01Q	Plastic 250ml NaOH preserved	A	>12	3	Y	Absent	TCN-4500(14)
L1203775-01R	Plastic 250ml HNO3 preserved	A	<2	3	Y	Absent	SE-6020T(180),NI-6020T(180),CU-6020T(180),ZN-6020T(180),FE-UI(180),PB-6020T(180),HG-U(28),AS-6020T(180),SB-6020T(180),AG-6020T(180),CD-6020T(180),CR-UI(180)

Container Comments

L1203775-01R

*Values in parentheses indicate holding time in days

Project Name: CVS WAKEFIELD
Project Number: 101.01054

Lab Number: L1203775
Report Date: 03/08/12

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

Footnotes

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

Terms

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

Data Qualifiers

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

Report Format: Data Usability Report



Project Name: CVS WAKEFIELD**Lab Number:** L1203775**Project Number:** 101.01054**Report Date:** 03/08/12**Data Qualifiers**

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

Project Name: CVS WAKEFIELD
Project Number: 101.01054

Lab Number: L1203775
Report Date: 03/08/12

REFERENCES

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

LIMITATION OF LIABILITIES

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

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



Certificate/Approval Program Summary

Last revised January 30, 2012 - Westboro Facility

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

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

Drinking Water (Inorganic Parameters: Color, pH, Turbidity, Conductivity, Alkalinity, Chloride, Free Residual Chlorine, Fluoride, Calcium Hardness, Sulfate, Nitrate, Nitrite, Aluminum, Antimony, Arsenic, Barium, Beryllium, Cadmium, Calcium, Chromium, Copper, Iron, Lead, Magnesium, Manganese, Mercury, 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, 353.2, SM2130B, 2320B, 2540C, 4500Cl-D, 4500CN-C, 4500CN-E, 4500F-C, 4500H+B, 4500NO3-F, EPA 200.7, EPA 200.8, 245.1, EPA 300.0. Organic Parameters: 504.1, 524.2.)

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

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

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

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

Page 48 of 51
Non-Potable Water (Inorganic Parameters: (EPA 200.8 for: Al,Sb,As,Be,Cd,Cr,Cu,Pb,Mn,Ni,Se,Ag,Tl,Zn); (EPA 200.7 for: Al,Sb,As,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Mo,Ni,K,Se,Ag,Na,Sr,Ti,Tl,V,Zn); 245.1, SM4500H,B, EPA 120.1,

SM2510B, 2540C, 2340B, 2320B, 4500CL-E, 4500F-BC, 426C, SM4500NH3-BH, (EPA 350.1 for: Ammonia-N), LACHAT 10-107-06-1-B for Ammonia-N, SM4500NO3-F, 353.2 for Nitrate-N, SM4500NH3-BC-NES, EPA 351.1, SM4500P-E, 4500P-B,E, 5220D, EPA 410.4, SM 5210B, 5310C, 4500CL-D, EPA 1664, SM14 510AC, EPA 420.1, SM4500-CN-CE, SM2540D.

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

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

Drinking Water (Inorganic Parameters: SM 9222B, 9223B, 9215B, EPA 200.7, 200.8, 245.2, 300.0, SM4500CN-E, 4500H+B, 4500NO3-F, 2320B, 2510B, 2540C, 4500F-C, 5310C, 2120B, EPA 332.0. Organic Parameters: 504.1, 524.2.)

Non-Potable Water (Inorganic Parameters: SM9222D, 9221B, 9222B, 9221E-EC, EPA 3005A, 200.7, 200.8, 245.1, 245.2, SW-846 6010B, 6020, 7196A, 7470A, SM3500-CR-D, EPA 120.1, 300.0, 350.1, 350.2, 351.1, 353.2, 410.4, 420.1, 1664A, SW-846 9010, 9030, 9040B, SM426C, SM2120B, 2310B, 2320B, 2540B, 2540D, 4500H+B, 4500CL-E, 4500CN-E, 4500NH3-H, 4500NO3-F, 4500NO2-B, 4500P-E, 4500-S2-D, 5210B, 5220D, 2510B, 2540C, 4500F-C, 5310C, 5540C, LACHAT 10-204-00-1-A, LACHAT 10-107-06-2-D. Organic Parameters: SW-846 3510C, 3630C, 5030B, 8260B, 8270C, 8330, EPA 624, 625, 608, SW-846 8082, 8081A, 8151A.)

Solid & Chemical Materials (Inorganic Parameters: SW-846 6010B, 7196A, 7471A, 1010, 1030, 9010, 9012A, 9014, 9030B, 9040B, 9045C, 9050C, 9065,1311, 1312, 3005A, 3050B. Organic Parameters: SW-846 3540C, 3546, 3550B, 3580A, 3630C, 5030B, 5035, 8260B, 8270C, 8330, 8151A, 8015B, 8082, 8081A.)

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

Drinking Water (Inorganic Parameters: SM9222B, 9221E, 9223B, 9215B, 4500CN-CE, 4500NO3-F, 4500F-C, EPA 300.0, 200.7, 200.8, 245.2, 2540C, SM2120B, 2320B, 2510B, 5310C, SM4500H-B. Organic Parameters: EPA 332, 504.1, 524.2.)

Non-Potable Water (Inorganic Parameters: SM5210B, EPA 410.4, SM5220D, 4500CI-E, EPA 300.0, SM2120B, 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, SM510ABC, SM4500P-B5+E, 2540B, 2540C, 2540D, EPA 120.1, SM2510B, SM15 426C, 9222D, 9221B, 9221C, 9221E, 9222B, 9215B, 2310B, 2320B, 4500NH3-H, 4500-S D, EPA 350.1, 350.2, SW-846 1312, 6020, 6020A, 7470A, 5540C, 4500H-B, EPA 200.8, SM3500Cr-D, 4500CN-CE, EPA 245.1, 245.2, SW-846 9040B, 3005A, 3015, EPA 6010B, 6010C, 7196A, 3060A, SW-846 9010B, 9030B. Organic Parameters: SW-846 8260B, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 3510C, EPA 608, 624, 625, SW-846 3630C, 5030B, 8081A, 8081B, 8082, 8082A, 8151A, 8330, NJ OQA-QAM-025 Rev.7, NJ EPH.)

Solid & Chemical Materials (Inorganic Parameters: SW-846, 6010B, 6010C, 7196A, 3060A, 9010B, 9030B, 1010, 1030, 1311, 1312, 3005A, 3050B, 7471A, 7471B, 9014, 9012A, 9040B, 9045C, 9050A, 9065. Organic Parameters: SW-846 8015B, 8015C, 8081A, 8081B, 8082, 8082A, 8151A, 8330, 8260B, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 3540C, 3545, 3546, 3550B, 3580A, 3630C, 5030B, 5035L, 5035H, NJ OQA-QAM-025 Rev.7, NJ EPH.)

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

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

Non-Potable Water (Inorganic Parameters: SM9221E, 9222D, 9221B, 9222B, 9215B, 5210B, 5310C, EPA 410.4, SM5220D, 2310B-4a, 2320B, EPA 200.7, 300.0, SM4500CL-E, 4500F-C, SM15 426C, EPA 350.1, SM4500NH3-BH, EPA 351.1, LACHAT 10-107-06-2, EPA 353.2, LACHAT 10-107-04-1-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, LACHAT 10-204-00-1-A, EPA 9040B, SM4500-HB, EPA 1664A, EPA 420.1, SM14 510C, EPA 120.1, SM2510B, SM4500S-D, SM5540C, EPA 3005A, 9010B, 9030B.. Organic Parameters: EPA 624, 8260B, 8270C, 625, 608, 8081A, 8151A, 8330, 8082, EPA 3510C, 5030B.)

Solid & Hazardous Waste (Inorganic Parameters: 1010, 1030, EPA 6010B, 7196A, 7471A, 9012A, 9014, 9040B, 9045C, 9065, 9050, EPA 1311, 1312, 3005A, 3050B, 9010B, 9030B. Organic Parameters: EPA 8260B, 8270C, 8015B, 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.**
Drinking Water (Organic Parameters: EPA 524.2, 504.1)

Non-Potable Water (Inorganic Parameters: EPA 1312, 200.7, 410.4, 1664A, SM2540D, 5210B, 5220D, 4500-P, BE. Organic Parameters: EPA 3510C, 3005A, 3630C, 5030B, 625, 624, 608, 8081A, 8081B, 8082, 802A, 8151A, 8260B, 8270C, 8270D, 8330)

Solid & Hazardous Waste (Inorganic Parameters: EPA 350.1, 1010, 1030, 1311, 1312, 3050B, 3060A, 6010B, 6010C, 7196A, 7471A, 9010B, 9012A, 9014, 9040B, 9045C, 9050, 9065, SM 4500NH₃-H. Organic Parameters: 3540C, 3546, 3580A, 3630C, 5035, 8015B, 8015C, 8081A, 8081B, 8082, 8082A, 8151A, 8260B, 8270C, 8270D, 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 NJ-DEP Certificate for Potable and Non-Potable Water.

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

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

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

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

Non-Potable Water (Inorganic Parameters: EPA 3005A, 3015, 1312, 6010B, 6010C, SM4500S-D, SM4500-CN-CE, Lachat 10-204-00-1-X. Organic Parameters: EPA 8260B)

Solid & Hazardous Waste (Inorganic Parameters: EPA 3050B, 1311, 1312, 6010B, 6010C, 9030B, 9010B, 9012A, 9014. Organic Parameters: EPA 5035, 5030B, 8260B.)

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

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

Non-Potable Water (Inorganic Parameters: EPA 200.7, 200.8, 6010B, 6020, 245.1, 245.2, 7470A, 9040B, 300.0, 332.0, 6860, 353.2, 410.4, 9060, 1664A, SM 4500CN-E, 4500H-B, 4500NO₃-F, 5220D, 5310C, 2320B, 2540C, 3005A, 3015, 9010B, 9056. Organic Parameters: EPA 8260B, 8270C, 8330A, 625, 8082, 8081A, 3510C, 5030B, MassDEP EPH, MassDEP VPH.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 200.7, 6010B, 7471A, 9010, 9012A, 6860, 1311, 1312, 3050B, 7196A, 9010B, 3500-CR-D, 4500CN-CE, 2540G, Organic Parameters: EPA 8260B, 8270C, 8330A/B-prep, 8082, 8081A, 3540C, 3546, 3580A, 5035A, MassDEP EPH, MassDEP VPH.)

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

EPA 8260B: Freon-113, 1,2,4,5-Tetramethylbenzene, 4-Ethyltoluene. **EPA 8330A**: PETN, Picric Acid, Nitroglycerine, 2,6-DANT, 2,4-DANT. **EPA 8270C**: Methyl naphthalene, Dimethyl naphthalene, Total Methyl naphthalenes, Total Dimethyl naphthalenes, 1,4-Diphenylhydrazine (Azobenzene). **EPA 625**: 4-Chloroaniline, 4-Methylphenol. Total Phosphorus in a soil matrix, Chloride in a soil matrix, TKN in a soil matrix, NO₂ in a soil matrix, NO₃ in a soil matrix, SO₄ in a soil matrix.



ANALYTICAL REPORT

Lab Number:	L1119589
Client:	Lightship Engineering 39 Industrial Park Road Unit C Plymouth, MA 02360
ATTN:	Scott Kraihanzel
Phone:	(508) 830-3344
Project Name:	WAKEFIELD
Project Number:	532
Report Date:	12/01/11

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

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

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



Project Name: WAKEFIELD
Project Number: 532

Lab Number: L1119589
Report Date: 12/01/11

Alpha Sample ID	Client ID	Sample Location	Collection Date/Time
L1119589-01	LEMW-28	WAKEFIELD	11/21/11 08:10
L1119589-02	LEMW-29	WAKEFIELD	11/21/11 08:30
L1119589-03	LEMW-30	WAKEFIELD	11/21/11 08:20
L1119589-04	LEMW-31	WAKEFIELD	11/21/11 09:05
L1119589-05	LEMW-32	WAKEFIELD	11/21/11 09:10
L1119589-06	LEMW-33	WAKEFIELD	11/21/11 10:25
L1119589-07	LEMW-34	WAKEFIELD	11/21/11 09:35
L1119589-08	LEMW-35	WAKEFIELD	11/21/11 09:55
L1119589-09	LEMW-36	WAKEFIELD	11/21/11 10:40
L1119589-10	LEMW-37	WAKEFIELD	11/21/11 10:50
L1119589-11	LEMW-38	WAKEFIELD	11/21/11 10:15

Project Name: WAKEFIELD

Lab Number: L1119589

Project Number: 532

Report Date: 12/01/11

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).	YES
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: WAKEFIELD
Project Number: 532

Lab Number: L1119589
Report Date: 12/01/11

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

L1119589-02, -03, -10, and -11 have elevated detection limits due to the dilutions required by the elevated concentrations of target compounds in the samples.

L1119589-02 was re-analyzed on dilution in order to quantitate the sample within the calibration range. The result should be considered estimated, and is qualified with an E flag, for any compound that exceeded the calibration on the initial analysis. The re-analysis was performed only for the compound that exceeded the calibration range

L1119589-04 has elevated detection limits due to the dilution required by the elevated concentrations of non-target compounds in the sample.

L1119589-08 and -09 have elevated detection limits due to the dilutions required by the samples matrix.

In reference to question G:

Project Name: WAKEFIELD
Project Number: 532

Lab Number: L1119589
Report Date: 12/01/11

Case Narrative (continued)

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

In reference to question H:

The WG505314-1/-2 LCS/LCSD recoveries, associated with L1119589-02, are outside the acceptance criteria for several compounds but within the overall method allowances. The results of the associated sample are reported; however, all results are considered to have a potentially high bias for Trichlorofluoromethane (LCSD at 134%) and 1,2-Dichloroethane (LCSD at 133%) and a potentially low bias for trans-1,3-Dichloropropene (LCS at 64%).

The WG505314-1/-2 LCS/LCSD recoveries, associated with L1119589-02, 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 sample are reported; however, all results are considered to have a potentially high bias for Acetone (LCSD at 137%) and a potentially low bias for 2,2-Dichloropropane (57%/64%).

The WG505314-4/-5 LCS/LCSD recoveries, associated with L1119589-01, -02, -03, and -05, are below the individual acceptance criteria for trans-1,3-Dichloropropene (64%/69%) and 1,1,1,2-Tetrachloroethane (LCS at 67%), but within the overall method allowances. The results of the associated samples are reported; however, all results are considered to have a potentially low bias for these compounds.

The WG505314-4/-5 LCS/LCSD recoveries, associated with L1119589-01, -02, -03, and -05, are below the acceptance criteria for 2,2-Dichloropropane (65%/68%); however, it has been identified as a "difficult" analyte and is within the 40-160% acceptance limits. The results of the associated samples are reported; however, all results are considered to have a potentially low bias for this compound.

The WG505450-1/-2 LCS/LCSD recoveries, associated with L1119589-04 and -06 through -11, are below the acceptance criteria for Dichlorodifluoromethane (63%/67%), Carbon disulfide (LCSD at 68%), 2-Hexanone (LCSD at 66%), and 1,2-Dibromo-3-chloropropane (LCSD at 62%); 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 considered to have a potentially low bias for these compounds.

The WG505450-2 LCSD recovery, associated with L1119589-04 and -06 through -11, is below the individual acceptance criteria for Naphthalene (69%), but within the overall method allowances. The results of the associated samples are reported; however, all results are considered to have a potentially low bias for this

Project Name: WAKEFIELD
Project Number: 532

Lab Number: L1119589
Report Date: 12/01/11

Case Narrative (continued)

compound.

The WG505450-1/-2 LCS/LCSD RPDs, associated with L1119589-04 and -06 through -11, are above the acceptance criteria for Bromoform (22%), 1,1,2,2-Tetrachloroethane (21%), Acetone (32%), 2-Hexanone (24%), Tetrahydrofuran (25%), 1,2-Dibromo-3-chloropropane (52%), and Naphthalene (33%).

The initial calibration, associated with L1119589-01, -02, -03, and -05 did not meet the method required minimum response factors on the lowest calibration standards for Acetone (0.07253), 4-Methyl-2-pentanone (0.07748) and 1,4-Dioxane (0.00107), as well as the average response factor for Acetone, 2-Butanone, 4-Methyl-2-pentanone, and 1,4-Dioxane. In addition, a quadratic fit was utilized for Dibromochloromethane and Bromoform.

The initial calibration, associated with L1119589-04 and -06 through -11, did not meet the method required minimum response factors on the lowest calibration standards for 1,4-Dioxane (0.00304), as well as the average response factor for 1,4-Dioxane.

The continuing calibration standards, associated with L1119589-01 through -11, are outside the acceptance criteria for several compounds; however, they are within overall method allowances. Copies of the continuing calibration standards are included as an addendum to this report.

VPH

In reference to question I:

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

EPH

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 WG504267-2/-3 LCS/LCSD recoveries, associated with L1119589-04 through -08 and -11, were outside the acceptance criteria for Nonane (C9) (LCS at 29%) and Decane (C10) (35%/39%); however, the target carbon ranges and analytes were within overall method allowances. The results of the original analysis are reported.

Project Name: WAKEFIELD
Project Number: 532

Lab Number: L1119589
Report Date: 12/01/11

Case Narrative (continued)

The WG504267-2/-3 LCS/LCSD RPD associated with L1119589-04 through -08 and -11, is above the acceptance criteria for Hexatriacontane (C36) (28%).

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: 12/01/11

ORGANICS

VOLATILES

Project Name: WAKEFIELD**Lab Number:** L1119589**Project Number:** 532**Report Date:** 12/01/11**SAMPLE RESULTS**

Lab ID: L1119589-01
Client ID: LEMW-28
Sample Location: WAKEFIELD
Matrix: Water
Analytical Method: 97,8260B
Analytical Date: 12/01/11 08:02
Analyst: MM

Date Collected: 11/21/11 08:10
Date Received: 11/22/11
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	0.50	--	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	6.6		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	34		ug/l	1.0	--	1
1,2-Dichlorobenzene	ND		ug/l	1.0	--	1
1,3-Dichlorobenzene	ND		ug/l	1.0	--	1
1,4-Dichlorobenzene	ND		ug/l	1.0	--	1

Project Name: WAKEFIELD**Lab Number:** L1119589**Project Number:** 532**Report Date:** 12/01/11**SAMPLE RESULTS**

Lab ID: L1119589-01

Date Collected: 11/21/11 08:10

Client ID: LEMW-28

Date Received: 11/22/11

Sample Location: WAKEFIELD

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
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	77		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	5.0	--	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
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

Project Name: WAKEFIELD**Lab Number:** L1119589**Project Number:** 532**Report Date:** 12/01/11**SAMPLE RESULTS**

Lab ID: L1119589-01

Date Collected: 11/21/11 08:10

Client ID: LEMW-28

Date Received: 11/22/11

Sample Location: WAKEFIELD

Field Prep: Not Specified

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

MCP Volatile Organics - Westborough Lab

1,4-Dioxane	ND		ug/l	250	--	1
-------------	----	--	------	-----	----	---

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	108		70-130
Toluene-d8	95		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	102		70-130

Project Name: WAKEFIELD**Lab Number:** L1119589**Project Number:** 532**Report Date:** 12/01/11**SAMPLE RESULTS**

Lab ID: L1119589-02 D2
 Client ID: LEMW-29
 Sample Location: WAKEFIELD
 Matrix: Water
 Analytical Method: 97,8260B
 Analytical Date: 12/01/11 08:33
 Analyst: MM

Date Collected: 11/21/11 08:30
 Date Received: 11/22/11
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Chlorobenzene	4600		ug/l	100	--	100

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	107		70-130
Toluene-d8	94		70-130
4-Bromofluorobenzene	95		70-130
Dibromofluoromethane	101		70-130

Project Name: WAKEFIELD**Lab Number:** L1119589**Project Number:** 532**Report Date:** 12/01/11**SAMPLE RESULTS**

Lab ID: L1119589-02 D
 Client ID: LEMW-29
 Sample Location: WAKEFIELD
 Matrix: Water
 Analytical Method: 97,8260B
 Analytical Date: 11/30/11 21:16
 Analyst: MM

Date Collected: 11/21/11 08:30
 Date Received: 11/22/11
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Methylene chloride	ND		ug/l	20	--	10
1,1-Dichloroethane	ND		ug/l	10	--	10
Chloroform	ND		ug/l	10	--	10
Carbon tetrachloride	ND		ug/l	10	--	10
1,2-Dichloropropane	ND		ug/l	10	--	10
Dibromochloromethane	ND		ug/l	10	--	10
1,1,2-Trichloroethane	ND		ug/l	10	--	10
Tetrachloroethene	ND		ug/l	10	--	10
Chlorobenzene	4700	E	ug/l	10	--	10
Trichlorofluoromethane	ND		ug/l	20	--	10
1,2-Dichloroethane	ND		ug/l	10	--	10
1,1,1-Trichloroethane	ND		ug/l	10	--	10
Bromodichloromethane	ND		ug/l	10	--	10
trans-1,3-Dichloropropene	ND		ug/l	5.0	--	10
cis-1,3-Dichloropropene	ND		ug/l	5.0	--	10
1,1-Dichloropropene	ND		ug/l	20	--	10
Bromoform	ND		ug/l	20	--	10
1,1,2,2-Tetrachloroethane	ND		ug/l	10	--	10
Benzene	99		ug/l	5.0	--	10
Toluene	ND		ug/l	10	--	10
Ethylbenzene	ND		ug/l	10	--	10
Chloromethane	ND		ug/l	20	--	10
Bromomethane	ND		ug/l	20	--	10
Vinyl chloride	ND		ug/l	10	--	10
Chloroethane	ND		ug/l	20	--	10
1,1-Dichloroethene	ND		ug/l	10	--	10
trans-1,2-Dichloroethene	14		ug/l	10	--	10
Trichloroethene	45		ug/l	10	--	10
1,2-Dichlorobenzene	1300		ug/l	10	--	10
1,3-Dichlorobenzene	36		ug/l	10	--	10
1,4-Dichlorobenzene	250		ug/l	10	--	10

Project Name: WAKEFIELD**Lab Number:** L1119589**Project Number:** 532**Report Date:** 12/01/11**SAMPLE RESULTS**

Lab ID: L1119589-02 D

Date Collected: 11/21/11 08:30

Client ID: LEMW-29

Date Received: 11/22/11

Sample Location: WAKEFIELD

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Methyl tert butyl ether	ND		ug/l	20	--	10
p/m-Xylene	ND		ug/l	20	--	10
o-Xylene	ND		ug/l	10	--	10
cis-1,2-Dichloroethene	25		ug/l	10	--	10
Dibromomethane	ND		ug/l	20	--	10
1,2,3-Trichloropropane	ND		ug/l	20	--	10
Styrene	ND		ug/l	10	--	10
Dichlorodifluoromethane	ND		ug/l	20	--	10
Acetone	ND		ug/l	50	--	10
Carbon disulfide	ND		ug/l	20	--	10
2-Butanone	ND		ug/l	50	--	10
4-Methyl-2-pentanone	ND		ug/l	50	--	10
2-Hexanone	ND		ug/l	50	--	10
Bromochloromethane	ND		ug/l	20	--	10
Tetrahydrofuran	ND		ug/l	50	--	10
2,2-Dichloropropane	ND		ug/l	20	--	10
1,2-Dibromoethane	ND		ug/l	20	--	10
1,3-Dichloropropane	ND		ug/l	20	--	10
1,1,1,2-Tetrachloroethane	ND		ug/l	10	--	10
Bromobenzene	ND		ug/l	20	--	10
n-Butylbenzene	ND		ug/l	20	--	10
sec-Butylbenzene	ND		ug/l	20	--	10
tert-Butylbenzene	ND		ug/l	20	--	10
o-Chlorotoluene	ND		ug/l	20	--	10
p-Chlorotoluene	ND		ug/l	20	--	10
1,2-Dibromo-3-chloropropane	ND		ug/l	20	--	10
Hexachlorobutadiene	ND		ug/l	6.0	--	10
Isopropylbenzene	ND		ug/l	20	--	10
p-Isopropyltoluene	ND		ug/l	20	--	10
Naphthalene	ND		ug/l	20	--	10
n-Propylbenzene	ND		ug/l	20	--	10
1,2,3-Trichlorobenzene	ND		ug/l	20	--	10
1,2,4-Trichlorobenzene	ND		ug/l	20	--	10
1,3,5-Trimethylbenzene	ND		ug/l	20	--	10
1,2,4-Trimethylbenzene	ND		ug/l	20	--	10
Ethyl ether	ND		ug/l	20	--	10
Isopropyl Ether	ND		ug/l	20	--	10
Ethyl-Tert-Butyl-Ether	ND		ug/l	20	--	10
Tertiary-Amyl Methyl Ether	ND		ug/l	20	--	10

Project Name: WAKEFIELD**Lab Number:** L1119589**Project Number:** 532**Report Date:** 12/01/11**SAMPLE RESULTS**

Lab ID: L1119589-02 D

Date Collected: 11/21/11 08:30

Client ID: LEMW-29

Date Received: 11/22/11

Sample Location: WAKEFIELD

Field Prep: Not Specified

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

MCP Volatile Organics - Westborough Lab

1,4-Dioxane	ND		ug/l	2500	--	10
-------------	----	--	------	------	----	----

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	113		70-130
Toluene-d8	94		70-130
4-Bromofluorobenzene	93		70-130
Dibromofluoromethane	105		70-130

Project Name: WAKEFIELD**Lab Number:** L1119589**Project Number:** 532**Report Date:** 12/01/11**SAMPLE RESULTS**

Lab ID: L1119589-03 D
 Client ID: LEMW-30
 Sample Location: WAKEFIELD
 Matrix: Water
 Analytical Method: 97,8260B
 Analytical Date: 12/01/11 09:04
 Analyst: MM

Date Collected: 11/21/11 08:20
 Date Received: 11/22/11
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Methylene chloride	ND		ug/l	200	--	100
1,1-Dichloroethane	ND		ug/l	100	--	100
Chloroform	ND		ug/l	100	--	100
Carbon tetrachloride	ND		ug/l	100	--	100
1,2-Dichloropropane	ND		ug/l	100	--	100
Dibromochloromethane	ND		ug/l	100	--	100
1,1,2-Trichloroethane	ND		ug/l	100	--	100
Tetrachloroethene	ND		ug/l	100	--	100
Chlorobenzene	11000		ug/l	100	--	100
Trichlorofluoromethane	ND		ug/l	200	--	100
1,2-Dichloroethane	ND		ug/l	100	--	100
1,1,1-Trichloroethane	ND		ug/l	100	--	100
Bromodichloromethane	ND		ug/l	100	--	100
trans-1,3-Dichloropropene	ND		ug/l	50	--	100
cis-1,3-Dichloropropene	ND		ug/l	50	--	100
1,1-Dichloropropene	ND		ug/l	200	--	100
Bromoform	ND		ug/l	200	--	100
1,1,2,2-Tetrachloroethane	ND		ug/l	100	--	100
Benzene	240		ug/l	50	--	100
Toluene	ND		ug/l	100	--	100
Ethylbenzene	ND		ug/l	100	--	100
Chloromethane	ND		ug/l	200	--	100
Bromomethane	ND		ug/l	200	--	100
Vinyl chloride	ND		ug/l	100	--	100
Chloroethane	ND		ug/l	200	--	100
1,1-Dichloroethene	ND		ug/l	100	--	100
trans-1,2-Dichloroethene	ND		ug/l	100	--	100
Trichloroethene	180		ug/l	100	--	100
1,2-Dichlorobenzene	2500		ug/l	100	--	100
1,3-Dichlorobenzene	ND		ug/l	100	--	100
1,4-Dichlorobenzene	590		ug/l	100	--	100

Project Name: WAKEFIELD**Lab Number:** L1119589**Project Number:** 532**Report Date:** 12/01/11**SAMPLE RESULTS**

Lab ID: L1119589-03 D

Date Collected: 11/21/11 08:20

Client ID: LEMW-30

Date Received: 11/22/11

Sample Location: WAKEFIELD

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Methyl tert butyl ether	ND		ug/l	200	--	100
p/m-Xylene	ND		ug/l	200	--	100
o-Xylene	ND		ug/l	100	--	100
cis-1,2-Dichloroethene	ND		ug/l	100	--	100
Dibromomethane	ND		ug/l	200	--	100
1,2,3-Trichloropropane	ND		ug/l	200	--	100
Styrene	ND		ug/l	100	--	100
Dichlorodifluoromethane	ND		ug/l	200	--	100
Acetone	ND		ug/l	500	--	100
Carbon disulfide	ND		ug/l	200	--	100
2-Butanone	ND		ug/l	500	--	100
4-Methyl-2-pentanone	ND		ug/l	500	--	100
2-Hexanone	ND		ug/l	500	--	100
Bromochloromethane	ND		ug/l	200	--	100
Tetrahydrofuran	ND		ug/l	500	--	100
2,2-Dichloropropane	ND		ug/l	200	--	100
1,2-Dibromoethane	ND		ug/l	200	--	100
1,3-Dichloropropane	ND		ug/l	200	--	100
1,1,1,2-Tetrachloroethane	ND		ug/l	100	--	100
Bromobenzene	ND		ug/l	200	--	100
n-Butylbenzene	ND		ug/l	200	--	100
sec-Butylbenzene	ND		ug/l	200	--	100
tert-Butylbenzene	ND		ug/l	200	--	100
o-Chlorotoluene	ND		ug/l	200	--	100
p-Chlorotoluene	ND		ug/l	200	--	100
1,2-Dibromo-3-chloropropane	ND		ug/l	200	--	100
Hexachlorobutadiene	ND		ug/l	60	--	100
Isopropylbenzene	ND		ug/l	200	--	100
p-Isopropyltoluene	ND		ug/l	200	--	100
Naphthalene	ND		ug/l	200	--	100
n-Propylbenzene	ND		ug/l	200	--	100
1,2,3-Trichlorobenzene	ND		ug/l	200	--	100
1,2,4-Trichlorobenzene	ND		ug/l	200	--	100
1,3,5-Trimethylbenzene	ND		ug/l	200	--	100
1,2,4-Trimethylbenzene	ND		ug/l	200	--	100
Ethyl ether	ND		ug/l	200	--	100
Isopropyl Ether	ND		ug/l	200	--	100
Ethyl-Tert-Butyl-Ether	ND		ug/l	200	--	100
Tertiary-Amyl Methyl Ether	ND		ug/l	200	--	100

Project Name: WAKEFIELD**Lab Number:** L1119589**Project Number:** 532**Report Date:** 12/01/11**SAMPLE RESULTS**

Lab ID: L1119589-03 D

Date Collected: 11/21/11 08:20

Client ID: LEMW-30

Date Received: 11/22/11

Sample Location: WAKEFIELD

Field Prep: Not Specified

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

MCP Volatile Organics - Westborough Lab

1,4-Dioxane	ND		ug/l	25000	--	100
-------------	----	--	------	-------	----	-----

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	108		70-130
Toluene-d8	94		70-130
4-Bromofluorobenzene	95		70-130
Dibromofluoromethane	104		70-130

Project Name: WAKEFIELD**Lab Number:** L1119589**Project Number:** 532**Report Date:** 12/01/11**SAMPLE RESULTS**

Lab ID: L1119589-04 D
 Client ID: LEMW-31
 Sample Location: WAKEFIELD
 Matrix: Water
 Analytical Method: 97,8260B
 Analytical Date: 11/30/11 19:48
 Analyst: MM

Date Collected: 11/21/11 09:05
 Date Received: 11/22/11
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Methylene chloride	ND		ug/l	10	--	5
1,1-Dichloroethane	ND		ug/l	5.0	--	5
Chloroform	ND		ug/l	5.0	--	5
Carbon tetrachloride	ND		ug/l	5.0	--	5
1,2-Dichloropropane	ND		ug/l	5.0	--	5
Dibromochloromethane	ND		ug/l	5.0	--	5
1,1,2-Trichloroethane	ND		ug/l	5.0	--	5
Tetrachloroethene	ND		ug/l	5.0	--	5
Chlorobenzene	ND		ug/l	5.0	--	5
Trichlorofluoromethane	ND		ug/l	10	--	5
1,2-Dichloroethane	ND		ug/l	5.0	--	5
1,1,1-Trichloroethane	ND		ug/l	5.0	--	5
Bromodichloromethane	ND		ug/l	5.0	--	5
trans-1,3-Dichloropropene	ND		ug/l	2.5	--	5
cis-1,3-Dichloropropene	ND		ug/l	2.5	--	5
1,1-Dichloropropene	ND		ug/l	10	--	5
Bromoform	ND		ug/l	10	--	5
1,1,2,2-Tetrachloroethane	ND		ug/l	5.0	--	5
Benzene	ND		ug/l	2.5	--	5
Toluene	ND		ug/l	5.0	--	5
Ethylbenzene	ND		ug/l	5.0	--	5
Chloromethane	ND		ug/l	10	--	5
Bromomethane	ND		ug/l	10	--	5
Vinyl chloride	10		ug/l	5.0	--	5
Chloroethane	ND		ug/l	10	--	5
1,1-Dichloroethene	ND		ug/l	5.0	--	5
trans-1,2-Dichloroethene	ND		ug/l	5.0	--	5
Trichloroethene	13		ug/l	5.0	--	5
1,2-Dichlorobenzene	ND		ug/l	5.0	--	5
1,3-Dichlorobenzene	ND		ug/l	5.0	--	5
1,4-Dichlorobenzene	ND		ug/l	5.0	--	5

Project Name: WAKEFIELD**Lab Number:** L1119589**Project Number:** 532**Report Date:** 12/01/11**SAMPLE RESULTS**

Lab ID: L1119589-04 D

Date Collected: 11/21/11 09:05

Client ID: LEMW-31

Date Received: 11/22/11

Sample Location: WAKEFIELD

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Methyl tert butyl ether	ND		ug/l	10	--	5
p/m-Xylene	ND		ug/l	10	--	5
o-Xylene	ND		ug/l	5.0	--	5
cis-1,2-Dichloroethene	28		ug/l	5.0	--	5
Dibromomethane	ND		ug/l	10	--	5
1,2,3-Trichloropropane	ND		ug/l	10	--	5
Styrene	ND		ug/l	5.0	--	5
Dichlorodifluoromethane	ND		ug/l	10	--	5
Acetone	ND		ug/l	25	--	5
Carbon disulfide	ND		ug/l	10	--	5
2-Butanone	ND		ug/l	25	--	5
4-Methyl-2-pentanone	ND		ug/l	25	--	5
2-Hexanone	ND		ug/l	25	--	5
Bromochloromethane	ND		ug/l	10	--	5
Tetrahydrofuran	ND		ug/l	25	--	5
2,2-Dichloropropane	ND		ug/l	10	--	5
1,2-Dibromoethane	ND		ug/l	10	--	5
1,3-Dichloropropane	ND		ug/l	10	--	5
1,1,1,2-Tetrachloroethane	ND		ug/l	5.0	--	5
Bromobenzene	ND		ug/l	10	--	5
n-Butylbenzene	ND		ug/l	10	--	5
sec-Butylbenzene	ND		ug/l	10	--	5
tert-Butylbenzene	ND		ug/l	10	--	5
o-Chlorotoluene	ND		ug/l	10	--	5
p-Chlorotoluene	ND		ug/l	10	--	5
1,2-Dibromo-3-chloropropane	ND		ug/l	10	--	5
Hexachlorobutadiene	ND		ug/l	3.0	--	5
Isopropylbenzene	ND		ug/l	10	--	5
p-Isopropyltoluene	ND		ug/l	10	--	5
Naphthalene	ND		ug/l	10	--	5
n-Propylbenzene	ND		ug/l	10	--	5
1,2,3-Trichlorobenzene	ND		ug/l	10	--	5
1,2,4-Trichlorobenzene	ND		ug/l	10	--	5
1,3,5-Trimethylbenzene	ND		ug/l	10	--	5
1,2,4-Trimethylbenzene	ND		ug/l	10	--	5
Ethyl ether	ND		ug/l	10	--	5
Isopropyl Ether	ND		ug/l	10	--	5
Ethyl-Tert-Butyl-Ether	ND		ug/l	10	--	5
Tertiary-Amyl Methyl Ether	ND		ug/l	10	--	5

Project Name: WAKEFIELD**Lab Number:** L1119589**Project Number:** 532**Report Date:** 12/01/11**SAMPLE RESULTS**

Lab ID: L1119589-04 D

Date Collected: 11/21/11 09:05

Client ID: LEMW-31

Date Received: 11/22/11

Sample Location: WAKEFIELD

Field Prep: Not Specified

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

MCP Volatile Organics - Westborough Lab

1,4-Dioxane	ND		ug/l	1200	--	5
-------------	----	--	------	------	----	---

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	102		70-130
Toluene-d8	93		70-130
4-Bromofluorobenzene	104		70-130
Dibromofluoromethane	102		70-130

Project Name: WAKEFIELD**Lab Number:** L1119589**Project Number:** 532**Report Date:** 12/01/11**SAMPLE RESULTS**

Lab ID: L1119589-05
 Client ID: LEMW-32
 Sample Location: WAKEFIELD
 Matrix: Water
 Analytical Method: 97,8260B
 Analytical Date: 12/01/11 09:36
 Analyst: MM

Date Collected: 11/21/11 09:10
 Date Received: 11/22/11
 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	0.50	--	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	12		ug/l	1.0	--	1
1,2-Dichlorobenzene	ND		ug/l	1.0	--	1
1,3-Dichlorobenzene	ND		ug/l	1.0	--	1
1,4-Dichlorobenzene	ND		ug/l	1.0	--	1

Project Name: WAKEFIELD**Lab Number:** L1119589**Project Number:** 532**Report Date:** 12/01/11**SAMPLE RESULTS**

Lab ID: L1119589-05

Date Collected: 11/21/11 09:10

Client ID: LEMW-32

Date Received: 11/22/11

Sample Location: WAKEFIELD

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
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	93		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	20		ug/l	5.0	--	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
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

Project Name: WAKEFIELD**Lab Number:** L1119589**Project Number:** 532**Report Date:** 12/01/11**SAMPLE RESULTS**

Lab ID: L1119589-05

Date Collected: 11/21/11 09:10

Client ID: LEMW-32

Date Received: 11/22/11

Sample Location: WAKEFIELD

Field Prep: Not Specified

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

MCP Volatile Organics - Westborough Lab

1,4-Dioxane	ND		ug/l	250	--	1
-------------	----	--	------	-----	----	---

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	115		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	106		70-130
Dibromofluoromethane	103		70-130

Project Name: WAKEFIELD**Lab Number:** L1119589**Project Number:** 532**Report Date:** 12/01/11**SAMPLE RESULTS**

Lab ID: L1119589-06
 Client ID: LEMW-33
 Sample Location: WAKEFIELD
 Matrix: Water
 Analytical Method: 97,8260B
 Analytical Date: 11/30/11 20:53
 Analyst: MM

Date Collected: 11/21/11 10:25
 Date Received: 11/22/11
 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	0.50	--	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
1,4-Dichlorobenzene	ND		ug/l	1.0	--	1

Project Name: WAKEFIELD**Lab Number:** L1119589**Project Number:** 532**Report Date:** 12/01/11**SAMPLE RESULTS**

Lab ID: L1119589-06

Date Collected: 11/21/11 10:25

Client ID: LEMW-33

Date Received: 11/22/11

Sample Location: WAKEFIELD

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
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	5.0	--	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
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

Project Name: WAKEFIELD**Lab Number:** L1119589**Project Number:** 532**Report Date:** 12/01/11**SAMPLE RESULTS**

Lab ID: L1119589-06

Date Collected: 11/21/11 10:25

Client ID: LEMW-33

Date Received: 11/22/11

Sample Location: WAKEFIELD

Field Prep: Not Specified

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

MCP Volatile Organics - Westborough Lab

1,4-Dioxane	ND		ug/l	250	--	1
-------------	----	--	------	-----	----	---

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	108		70-130
Toluene-d8	89		70-130
4-Bromofluorobenzene	108		70-130
Dibromofluoromethane	105		70-130

Project Name: WAKEFIELD**Lab Number:** L1119589**Project Number:** 532**Report Date:** 12/01/11**SAMPLE RESULTS**

Lab ID: L1119589-07
 Client ID: LEMW-34
 Sample Location: WAKEFIELD
 Matrix: Water
 Analytical Method: 97,8260B
 Analytical Date: 11/30/11 21:26
 Analyst: MM

Date Collected: 11/21/11 09:35
 Date Received: 11/22/11
 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	0.50	--	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	2.6		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	7.4		ug/l	1.0	--	1
1,2-Dichlorobenzene	ND		ug/l	1.0	--	1
1,3-Dichlorobenzene	ND		ug/l	1.0	--	1
1,4-Dichlorobenzene	ND		ug/l	1.0	--	1

Project Name: WAKEFIELD**Lab Number:** L1119589**Project Number:** 532**Report Date:** 12/01/11**SAMPLE RESULTS**

Lab ID: L1119589-07

Date Collected: 11/21/11 09:35

Client ID: LEMW-34

Date Received: 11/22/11

Sample Location: WAKEFIELD

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
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	17		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	5.0	--	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
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

Project Name: WAKEFIELD**Lab Number:** L1119589**Project Number:** 532**Report Date:** 12/01/11**SAMPLE RESULTS**

Lab ID: L1119589-07

Date Collected: 11/21/11 09:35

Client ID: LEMW-34

Date Received: 11/22/11

Sample Location: WAKEFIELD

Field Prep: Not Specified

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

MCP Volatile Organics - Westborough Lab

1,4-Dioxane	ND		ug/l	250	--	1
-------------	----	--	------	-----	----	---

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	97		70-130
Toluene-d8	93		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	100		70-130

Project Name: WAKEFIELD**Lab Number:** L1119589**Project Number:** 532**Report Date:** 12/01/11**SAMPLE RESULTS**

Lab ID: L1119589-08 D
 Client ID: LEMW-35
 Sample Location: WAKEFIELD
 Matrix: Water
 Analytical Method: 97,8260B
 Analytical Date: 11/30/11 21:58
 Analyst: MM

Date Collected: 11/21/11 09:55
 Date Received: 11/22/11
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Methylene chloride	ND		ug/l	20	--	10
1,1-Dichloroethane	ND		ug/l	10	--	10
Chloroform	ND		ug/l	10	--	10
Carbon tetrachloride	ND		ug/l	10	--	10
1,2-Dichloropropane	ND		ug/l	10	--	10
Dibromochloromethane	ND		ug/l	10	--	10
1,1,2-Trichloroethane	ND		ug/l	10	--	10
Tetrachloroethene	ND		ug/l	10	--	10
Chlorobenzene	11		ug/l	10	--	10
Trichlorofluoromethane	ND		ug/l	20	--	10
1,2-Dichloroethane	ND		ug/l	10	--	10
1,1,1-Trichloroethane	ND		ug/l	10	--	10
Bromodichloromethane	ND		ug/l	10	--	10
trans-1,3-Dichloropropene	ND		ug/l	5.0	--	10
cis-1,3-Dichloropropene	ND		ug/l	5.0	--	10
1,1-Dichloropropene	ND		ug/l	20	--	10
Bromoform	ND		ug/l	20	--	10
1,1,2,2-Tetrachloroethane	ND		ug/l	10	--	10
Benzene	ND		ug/l	5.0	--	10
Toluene	ND		ug/l	10	--	10
Ethylbenzene	13		ug/l	10	--	10
Chloromethane	ND		ug/l	20	--	10
Bromomethane	ND		ug/l	20	--	10
Vinyl chloride	ND		ug/l	10	--	10
Chloroethane	ND		ug/l	20	--	10
1,1-Dichloroethene	ND		ug/l	10	--	10
trans-1,2-Dichloroethene	ND		ug/l	10	--	10
Trichloroethene	95		ug/l	10	--	10
1,2-Dichlorobenzene	ND		ug/l	10	--	10
1,3-Dichlorobenzene	ND		ug/l	10	--	10
1,4-Dichlorobenzene	ND		ug/l	10	--	10

Project Name: WAKEFIELD**Lab Number:** L1119589**Project Number:** 532**Report Date:** 12/01/11**SAMPLE RESULTS**

Lab ID: L1119589-08 D

Date Collected: 11/21/11 09:55

Client ID: LEMW-35

Date Received: 11/22/11

Sample Location: WAKEFIELD

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Methyl tert butyl ether	ND		ug/l	20	--	10
p/m-Xylene	ND		ug/l	20	--	10
o-Xylene	ND		ug/l	10	--	10
cis-1,2-Dichloroethene	100		ug/l	10	--	10
Dibromomethane	ND		ug/l	20	--	10
1,2,3-Trichloropropane	ND		ug/l	20	--	10
Styrene	ND		ug/l	10	--	10
Dichlorodifluoromethane	ND		ug/l	20	--	10
Acetone	ND		ug/l	50	--	10
Carbon disulfide	ND		ug/l	20	--	10
2-Butanone	ND		ug/l	50	--	10
4-Methyl-2-pentanone	ND		ug/l	50	--	10
2-Hexanone	ND		ug/l	50	--	10
Bromochloromethane	ND		ug/l	20	--	10
Tetrahydrofuran	ND		ug/l	50	--	10
2,2-Dichloropropane	ND		ug/l	20	--	10
1,2-Dibromoethane	ND		ug/l	20	--	10
1,3-Dichloropropane	ND		ug/l	20	--	10
1,1,1,2-Tetrachloroethane	ND		ug/l	10	--	10
Bromobenzene	ND		ug/l	20	--	10
n-Butylbenzene	ND		ug/l	20	--	10
sec-Butylbenzene	ND		ug/l	20	--	10
tert-Butylbenzene	ND		ug/l	20	--	10
o-Chlorotoluene	ND		ug/l	20	--	10
p-Chlorotoluene	ND		ug/l	20	--	10
1,2-Dibromo-3-chloropropane	ND		ug/l	20	--	10
Hexachlorobutadiene	ND		ug/l	6.0	--	10
Isopropylbenzene	ND		ug/l	20	--	10
p-Isopropyltoluene	ND		ug/l	20	--	10
Naphthalene	ND		ug/l	20	--	10
n-Propylbenzene	ND		ug/l	20	--	10
1,2,3-Trichlorobenzene	ND		ug/l	20	--	10
1,2,4-Trichlorobenzene	ND		ug/l	20	--	10
1,3,5-Trimethylbenzene	ND		ug/l	20	--	10
1,2,4-Trimethylbenzene	ND		ug/l	20	--	10
Ethyl ether	ND		ug/l	20	--	10
Isopropyl Ether	ND		ug/l	20	--	10
Ethyl-Tert-Butyl-Ether	ND		ug/l	20	--	10
Tertiary-Amyl Methyl Ether	ND		ug/l	20	--	10

Project Name: WAKEFIELD**Lab Number:** L1119589**Project Number:** 532**Report Date:** 12/01/11**SAMPLE RESULTS**

Lab ID: L1119589-08 D

Date Collected: 11/21/11 09:55

Client ID: LEMW-35

Date Received: 11/22/11

Sample Location: WAKEFIELD

Field Prep: Not Specified

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

MCP Volatile Organics - Westborough Lab

1,4-Dioxane	ND		ug/l	2500	--	10
-------------	----	--	------	------	----	----

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	100		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	105		70-130
Dibromofluoromethane	109		70-130

Project Name: WAKEFIELD**Lab Number:** L1119589**Project Number:** 532**Report Date:** 12/01/11**SAMPLE RESULTS**

Lab ID: L1119589-09 D
 Client ID: LEMW-36
 Sample Location: WAKEFIELD
 Matrix: Water
 Analytical Method: 97,8260B
 Analytical Date: 11/30/11 22:31
 Analyst: MM

Date Collected: 11/21/11 10:40
 Date Received: 11/22/11
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Methylene chloride	ND		ug/l	20	--	10
1,1-Dichloroethane	ND		ug/l	10	--	10
Chloroform	ND		ug/l	10	--	10
Carbon tetrachloride	ND		ug/l	10	--	10
1,2-Dichloropropane	ND		ug/l	10	--	10
Dibromochloromethane	ND		ug/l	10	--	10
1,1,2-Trichloroethane	ND		ug/l	10	--	10
Tetrachloroethene	ND		ug/l	10	--	10
Chlorobenzene	ND		ug/l	10	--	10
Trichlorofluoromethane	ND		ug/l	20	--	10
1,2-Dichloroethane	ND		ug/l	10	--	10
1,1,1-Trichloroethane	ND		ug/l	10	--	10
Bromodichloromethane	ND		ug/l	10	--	10
trans-1,3-Dichloropropene	ND		ug/l	5.0	--	10
cis-1,3-Dichloropropene	ND		ug/l	5.0	--	10
1,1-Dichloropropene	ND		ug/l	20	--	10
Bromoform	ND		ug/l	20	--	10
1,1,2,2-Tetrachloroethane	ND		ug/l	10	--	10
Benzene	ND		ug/l	5.0	--	10
Toluene	ND		ug/l	10	--	10
Ethylbenzene	ND		ug/l	10	--	10
Chloromethane	ND		ug/l	20	--	10
Bromomethane	ND		ug/l	20	--	10
Vinyl chloride	ND		ug/l	10	--	10
Chloroethane	ND		ug/l	20	--	10
1,1-Dichloroethene	ND		ug/l	10	--	10
trans-1,2-Dichloroethene	ND		ug/l	10	--	10
Trichloroethene	200		ug/l	10	--	10
1,2-Dichlorobenzene	ND		ug/l	10	--	10
1,3-Dichlorobenzene	ND		ug/l	10	--	10
1,4-Dichlorobenzene	ND		ug/l	10	--	10

Project Name: WAKEFIELD**Lab Number:** L1119589**Project Number:** 532**Report Date:** 12/01/11**SAMPLE RESULTS**

Lab ID: L1119589-09 D

Date Collected: 11/21/11 10:40

Client ID: LEMW-36

Date Received: 11/22/11

Sample Location: WAKEFIELD

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Methyl tert butyl ether	ND		ug/l	20	--	10
p/m-Xylene	ND		ug/l	20	--	10
o-Xylene	ND		ug/l	10	--	10
cis-1,2-Dichloroethene	37		ug/l	10	--	10
Dibromomethane	ND		ug/l	20	--	10
1,2,3-Trichloropropane	ND		ug/l	20	--	10
Styrene	ND		ug/l	10	--	10
Dichlorodifluoromethane	ND		ug/l	20	--	10
Acetone	ND		ug/l	50	--	10
Carbon disulfide	ND		ug/l	20	--	10
2-Butanone	ND		ug/l	50	--	10
4-Methyl-2-pentanone	ND		ug/l	50	--	10
2-Hexanone	ND		ug/l	50	--	10
Bromochloromethane	ND		ug/l	20	--	10
Tetrahydrofuran	ND		ug/l	50	--	10
2,2-Dichloropropane	ND		ug/l	20	--	10
1,2-Dibromoethane	ND		ug/l	20	--	10
1,3-Dichloropropane	ND		ug/l	20	--	10
1,1,1,2-Tetrachloroethane	ND		ug/l	10	--	10
Bromobenzene	ND		ug/l	20	--	10
n-Butylbenzene	ND		ug/l	20	--	10
sec-Butylbenzene	ND		ug/l	20	--	10
tert-Butylbenzene	ND		ug/l	20	--	10
o-Chlorotoluene	ND		ug/l	20	--	10
p-Chlorotoluene	ND		ug/l	20	--	10
1,2-Dibromo-3-chloropropane	ND		ug/l	20	--	10
Hexachlorobutadiene	ND		ug/l	6.0	--	10
Isopropylbenzene	ND		ug/l	20	--	10
p-Isopropyltoluene	ND		ug/l	20	--	10
Naphthalene	ND		ug/l	20	--	10
n-Propylbenzene	ND		ug/l	20	--	10
1,2,3-Trichlorobenzene	ND		ug/l	20	--	10
1,2,4-Trichlorobenzene	ND		ug/l	20	--	10
1,3,5-Trimethylbenzene	ND		ug/l	20	--	10
1,2,4-Trimethylbenzene	ND		ug/l	20	--	10
Ethyl ether	ND		ug/l	20	--	10
Isopropyl Ether	ND		ug/l	20	--	10
Ethyl-Tert-Butyl-Ether	ND		ug/l	20	--	10
Tertiary-Amyl Methyl Ether	ND		ug/l	20	--	10

Project Name: WAKEFIELD**Lab Number:** L1119589**Project Number:** 532**Report Date:** 12/01/11**SAMPLE RESULTS**

Lab ID: L1119589-09 D

Date Collected: 11/21/11 10:40

Client ID: LEMW-36

Date Received: 11/22/11

Sample Location: WAKEFIELD

Field Prep: Not Specified

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

MCP Volatile Organics - Westborough Lab

1,4-Dioxane	ND		ug/l	2500	--	10
-------------	----	--	------	------	----	----

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	104		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	104		70-130
Dibromofluoromethane	98		70-130

Project Name: WAKEFIELD**Lab Number:** L1119589**Project Number:** 532**Report Date:** 12/01/11**SAMPLE RESULTS**

Lab ID: L1119589-10 D
 Client ID: LEMW-37
 Sample Location: WAKEFIELD
 Matrix: Water
 Analytical Method: 97,8260B
 Analytical Date: 11/30/11 23:03
 Analyst: MM

Date Collected: 11/21/11 10:50
 Date Received: 11/22/11
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Methylene chloride	ND		ug/l	40	--	20
1,1-Dichloroethane	ND		ug/l	20	--	20
Chloroform	ND		ug/l	20	--	20
Carbon tetrachloride	ND		ug/l	20	--	20
1,2-Dichloropropane	ND		ug/l	20	--	20
Dibromochloromethane	ND		ug/l	20	--	20
1,1,2-Trichloroethane	ND		ug/l	20	--	20
Tetrachloroethene	ND		ug/l	20	--	20
Chlorobenzene	ND		ug/l	20	--	20
Trichlorofluoromethane	ND		ug/l	40	--	20
1,2-Dichloroethane	ND		ug/l	20	--	20
1,1,1-Trichloroethane	ND		ug/l	20	--	20
Bromodichloromethane	ND		ug/l	20	--	20
trans-1,3-Dichloropropene	ND		ug/l	10	--	20
cis-1,3-Dichloropropene	ND		ug/l	10	--	20
1,1-Dichloropropene	ND		ug/l	40	--	20
Bromoform	ND		ug/l	40	--	20
1,1,2,2-Tetrachloroethane	ND		ug/l	20	--	20
Benzene	ND		ug/l	10	--	20
Toluene	ND		ug/l	20	--	20
Ethylbenzene	ND		ug/l	20	--	20
Chloromethane	ND		ug/l	40	--	20
Bromomethane	ND		ug/l	40	--	20
Vinyl chloride	ND		ug/l	20	--	20
Chloroethane	ND		ug/l	40	--	20
1,1-Dichloroethene	ND		ug/l	20	--	20
trans-1,2-Dichloroethene	53		ug/l	20	--	20
Trichloroethene	2200		ug/l	20	--	20
1,2-Dichlorobenzene	ND		ug/l	20	--	20
1,3-Dichlorobenzene	ND		ug/l	20	--	20
1,4-Dichlorobenzene	ND		ug/l	20	--	20

Project Name: WAKEFIELD**Lab Number:** L1119589**Project Number:** 532**Report Date:** 12/01/11**SAMPLE RESULTS**

Lab ID: L1119589-10 D

Date Collected: 11/21/11 10:50

Client ID: LEMW-37

Date Received: 11/22/11

Sample Location: WAKEFIELD

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Methyl tert butyl ether	ND		ug/l	40	--	20
p/m-Xylene	ND		ug/l	40	--	20
o-Xylene	ND		ug/l	20	--	20
cis-1,2-Dichloroethene	1300		ug/l	20	--	20
Dibromomethane	ND		ug/l	40	--	20
1,2,3-Trichloropropane	ND		ug/l	40	--	20
Styrene	ND		ug/l	20	--	20
Dichlorodifluoromethane	ND		ug/l	40	--	20
Acetone	ND		ug/l	100	--	20
Carbon disulfide	ND		ug/l	40	--	20
2-Butanone	ND		ug/l	100	--	20
4-Methyl-2-pentanone	ND		ug/l	100	--	20
2-Hexanone	ND		ug/l	100	--	20
Bromochloromethane	ND		ug/l	40	--	20
Tetrahydrofuran	ND		ug/l	100	--	20
2,2-Dichloropropane	ND		ug/l	40	--	20
1,2-Dibromoethane	ND		ug/l	40	--	20
1,3-Dichloropropane	ND		ug/l	40	--	20
1,1,1,2-Tetrachloroethane	ND		ug/l	20	--	20
Bromobenzene	ND		ug/l	40	--	20
n-Butylbenzene	ND		ug/l	40	--	20
sec-Butylbenzene	ND		ug/l	40	--	20
tert-Butylbenzene	ND		ug/l	40	--	20
o-Chlorotoluene	ND		ug/l	40	--	20
p-Chlorotoluene	ND		ug/l	40	--	20
1,2-Dibromo-3-chloropropane	ND		ug/l	40	--	20
Hexachlorobutadiene	ND		ug/l	12	--	20
Isopropylbenzene	ND		ug/l	40	--	20
p-Isopropyltoluene	ND		ug/l	40	--	20
Naphthalene	ND		ug/l	40	--	20
n-Propylbenzene	ND		ug/l	40	--	20
1,2,3-Trichlorobenzene	ND		ug/l	40	--	20
1,2,4-Trichlorobenzene	ND		ug/l	40	--	20
1,3,5-Trimethylbenzene	ND		ug/l	40	--	20
1,2,4-Trimethylbenzene	ND		ug/l	40	--	20
Ethyl ether	ND		ug/l	40	--	20
Isopropyl Ether	ND		ug/l	40	--	20
Ethyl-Tert-Butyl-Ether	ND		ug/l	40	--	20
Tertiary-Amyl Methyl Ether	ND		ug/l	40	--	20

Project Name: WAKEFIELD**Lab Number:** L1119589**Project Number:** 532**Report Date:** 12/01/11**SAMPLE RESULTS**

Lab ID: L1119589-10 D

Date Collected: 11/21/11 10:50

Client ID: LEMW-37

Date Received: 11/22/11

Sample Location: WAKEFIELD

Field Prep: Not Specified

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

MCP Volatile Organics - Westborough Lab

1,4-Dioxane	ND		ug/l	5000	--	20
-------------	----	--	------	------	----	----

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	106		70-130
Toluene-d8	91		70-130
4-Bromofluorobenzene	105		70-130
Dibromofluoromethane	108		70-130

Project Name: WAKEFIELD**Lab Number:** L1119589**Project Number:** 532**Report Date:** 12/01/11**SAMPLE RESULTS**

Lab ID: L1119589-11 D
 Client ID: LEMW-38
 Sample Location: WAKEFIELD
 Matrix: Water
 Analytical Method: 97,8260B
 Analytical Date: 11/30/11 23:36
 Analyst: MM

Date Collected: 11/21/11 10:15
 Date Received: 11/22/11
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Methylene chloride	ND		ug/l	20	--	10
1,1-Dichloroethane	ND		ug/l	10	--	10
Chloroform	ND		ug/l	10	--	10
Carbon tetrachloride	ND		ug/l	10	--	10
1,2-Dichloropropane	ND		ug/l	10	--	10
Dibromochloromethane	ND		ug/l	10	--	10
1,1,2-Trichloroethane	ND		ug/l	10	--	10
Tetrachloroethene	ND		ug/l	10	--	10
Chlorobenzene	ND		ug/l	10	--	10
Trichlorofluoromethane	ND		ug/l	20	--	10
1,2-Dichloroethane	ND		ug/l	10	--	10
1,1,1-Trichloroethane	ND		ug/l	10	--	10
Bromodichloromethane	ND		ug/l	10	--	10
trans-1,3-Dichloropropene	ND		ug/l	5.0	--	10
cis-1,3-Dichloropropene	ND		ug/l	5.0	--	10
1,1-Dichloropropene	ND		ug/l	20	--	10
Bromoform	ND		ug/l	20	--	10
1,1,2,2-Tetrachloroethane	ND		ug/l	10	--	10
Benzene	ND		ug/l	5.0	--	10
Toluene	ND		ug/l	10	--	10
Ethylbenzene	ND		ug/l	10	--	10
Chloromethane	ND		ug/l	20	--	10
Bromomethane	ND		ug/l	20	--	10
Vinyl chloride	ND		ug/l	10	--	10
Chloroethane	ND		ug/l	20	--	10
1,1-Dichloroethene	ND		ug/l	10	--	10
trans-1,2-Dichloroethene	32		ug/l	10	--	10
Trichloroethene	1100		ug/l	10	--	10
1,2-Dichlorobenzene	ND		ug/l	10	--	10
1,3-Dichlorobenzene	ND		ug/l	10	--	10
1,4-Dichlorobenzene	ND		ug/l	10	--	10

Project Name: WAKEFIELD**Lab Number:** L1119589**Project Number:** 532**Report Date:** 12/01/11**SAMPLE RESULTS**

Lab ID: L1119589-11 D

Date Collected: 11/21/11 10:15

Client ID: LEMW-38

Date Received: 11/22/11

Sample Location: WAKEFIELD

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Methyl tert butyl ether	ND		ug/l	20	--	10
p/m-Xylene	ND		ug/l	20	--	10
o-Xylene	ND		ug/l	10	--	10
cis-1,2-Dichloroethene	680		ug/l	10	--	10
Dibromomethane	ND		ug/l	20	--	10
1,2,3-Trichloropropane	ND		ug/l	20	--	10
Styrene	ND		ug/l	10	--	10
Dichlorodifluoromethane	ND		ug/l	20	--	10
Acetone	ND		ug/l	50	--	10
Carbon disulfide	ND		ug/l	20	--	10
2-Butanone	ND		ug/l	50	--	10
4-Methyl-2-pentanone	ND		ug/l	50	--	10
2-Hexanone	ND		ug/l	50	--	10
Bromochloromethane	ND		ug/l	20	--	10
Tetrahydrofuran	ND		ug/l	50	--	10
2,2-Dichloropropane	ND		ug/l	20	--	10
1,2-Dibromoethane	ND		ug/l	20	--	10
1,3-Dichloropropane	ND		ug/l	20	--	10
1,1,1,2-Tetrachloroethane	ND		ug/l	10	--	10
Bromobenzene	ND		ug/l	20	--	10
n-Butylbenzene	ND		ug/l	20	--	10
sec-Butylbenzene	ND		ug/l	20	--	10
tert-Butylbenzene	ND		ug/l	20	--	10
o-Chlorotoluene	ND		ug/l	20	--	10
p-Chlorotoluene	ND		ug/l	20	--	10
1,2-Dibromo-3-chloropropane	ND		ug/l	20	--	10
Hexachlorobutadiene	ND		ug/l	6.0	--	10
Isopropylbenzene	ND		ug/l	20	--	10
p-Isopropyltoluene	ND		ug/l	20	--	10
Naphthalene	ND		ug/l	20	--	10
n-Propylbenzene	ND		ug/l	20	--	10
1,2,3-Trichlorobenzene	ND		ug/l	20	--	10
1,2,4-Trichlorobenzene	ND		ug/l	20	--	10
1,3,5-Trimethylbenzene	ND		ug/l	20	--	10
1,2,4-Trimethylbenzene	ND		ug/l	20	--	10
Ethyl ether	ND		ug/l	20	--	10
Isopropyl Ether	ND		ug/l	20	--	10
Ethyl-Tert-Butyl-Ether	ND		ug/l	20	--	10
Tertiary-Amyl Methyl Ether	ND		ug/l	20	--	10

Project Name: WAKEFIELD**Lab Number:** L1119589**Project Number:** 532**Report Date:** 12/01/11**SAMPLE RESULTS**

Lab ID: L1119589-11 D

Date Collected: 11/21/11 10:15

Client ID: LEMW-38

Date Received: 11/22/11

Sample Location: WAKEFIELD

Field Prep: Not Specified

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

MCP Volatile Organics - Westborough Lab

1,4-Dioxane	ND		ug/l	2500	--	10
-------------	----	--	------	------	----	----

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	105		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	105		70-130
Dibromofluoromethane	98		70-130

Project Name: WAKEFIELD

Lab Number: L1119589

Project Number: 532

Report Date: 12/01/11

Method Blank Analysis Batch Quality Control

Analytical Method: 97,8260B
 Analytical Date: 11/30/11 13:23
 Analyst: MM

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics - Westborough Lab for sample(s): 02 Batch: WG505314-3					
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	0.50	--
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: WAKEFIELD

Lab Number: L1119589

Project Number: 532

Report Date: 12/01/11

Method Blank Analysis Batch Quality Control

Analytical Method: 97,8260B
 Analytical Date: 11/30/11 13:23
 Analyst: MM

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics - Westborough Lab for sample(s): 02 Batch: WG505314-3					
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	5.0	--
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: WAKEFIELD

Lab Number: L1119589

Project Number: 532

Report Date: 12/01/11

Method Blank Analysis Batch Quality Control

Analytical Method: 97,8260B
 Analytical Date: 11/30/11 13:23
 Analyst: MM

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics - Westborough Lab for sample(s): 02 Batch: WG505314-3					
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	109		70-130
Toluene-d8	95		70-130
4-Bromofluorobenzene	97		70-130
Dibromofluoromethane	104		70-130

Project Name: WAKEFIELD

Lab Number: L1119589

Project Number: 532

Report Date: 12/01/11

Method Blank Analysis Batch Quality Control

Analytical Method: 97,8260B
 Analytical Date: 12/01/11 07:30
 Analyst: MM

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics - Westborough Lab for sample(s): 01-03,05 Batch: WG505314-6					
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	0.50	--
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: WAKEFIELD

Lab Number: L1119589

Project Number: 532

Report Date: 12/01/11

Method Blank Analysis Batch Quality Control

Analytical Method: 97,8260B
 Analytical Date: 12/01/11 07:30
 Analyst: MM

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics - Westborough Lab for sample(s): 01-03,05 Batch: WG505314-6					
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	5.0	--
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: WAKEFIELD

Lab Number: L1119589

Project Number: 532

Report Date: 12/01/11

Method Blank Analysis Batch Quality Control

Analytical Method: 97,8260B
 Analytical Date: 12/01/11 07:30
 Analyst: MM

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics - Westborough Lab for sample(s): 01-03,05 Batch: WG505314-6					
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	95		70-130
4-Bromofluorobenzene	97		70-130
Dibromofluoromethane	102		70-130

Project Name: WAKEFIELD

Lab Number: L1119589

Project Number: 532

Report Date: 12/01/11

Method Blank Analysis Batch Quality Control

Analytical Method: 97,8260B
 Analytical Date: 11/30/11 16:33
 Analyst: MM

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics - Westborough Lab for sample(s): 04,06-11 Batch: WG505450-3					
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	0.50	--
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: WAKEFIELD

Lab Number: L1119589

Project Number: 532

Report Date: 12/01/11

Method Blank Analysis Batch Quality Control

Analytical Method: 97,8260B
 Analytical Date: 11/30/11 16:33
 Analyst: MM

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics - Westborough Lab for sample(s): 04,06-11 Batch: WG505450-3					
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	5.0	--
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: WAKEFIELD

Lab Number: L1119589

Project Number: 532

Report Date: 12/01/11

Method Blank Analysis Batch Quality Control

Analytical Method: 97,8260B
 Analytical Date: 11/30/11 16:33
 Analyst: MM

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics - Westborough Lab for sample(s): 04,06-11 Batch: WG505450-3					
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	102		70-130
Toluene-d8	92		70-130
4-Bromofluorobenzene	112		70-130
Dibromofluoromethane	105		70-130

Lab Control Sample Analysis Batch Quality Control

Project Name: WAKEFIELD

Project Number: 532

Lab Number: L1119589

Report Date: 12/01/11

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 02 Batch: WG505314-1 WG505314-2								
Methylene chloride	100		109		70-130	9		20
1,1-Dichloroethane	105		117		70-130	11		20
Chloroform	114		121		70-130	6		20
Carbon tetrachloride	85		100		70-130	16		20
1,2-Dichloropropane	105		119		70-130	13		20
Dibromochloromethane	102		118		70-130	15		20
1,1,2-Trichloroethane	97		109		70-130	12		20
Tetrachloroethene	92		101		70-130	9		20
Chlorobenzene	86		99		70-130	14		20
Trichlorofluoromethane	118		134	Q	70-130	13		20
1,2-Dichloroethane	119		133	Q	70-130	11		20
1,1,1-Trichloroethane	89		103		70-130	15		20
Bromodichloromethane	111		125		70-130	12		20
trans-1,3-Dichloropropene	64	Q	75		70-130	16		20
cis-1,3-Dichloropropene	81		94		70-130	15		20
1,1-Dichloropropene	102		116		70-130	13		20
Bromoform	99		116		70-130	16		20
1,1,2,2-Tetrachloroethane	89		103		70-130	15		20
Benzene	104		116		70-130	11		20
Toluene	88		98		70-130	11		20
Ethylbenzene	92		104		70-130	12		20

Lab Control Sample Analysis Batch Quality Control

Project Name: WAKEFIELD

Project Number: 532

Lab Number: L1119589

Report Date: 12/01/11

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 02 Batch: WG505314-1 WG505314-2								
Chloromethane	111		128		70-130	14		20
Bromomethane	95		111		70-130	16		20
Vinyl chloride	109		126		70-130	14		20
Chloroethane	100		113		70-130	12		20
1,1-Dichloroethene	97		112		70-130	14		20
trans-1,2-Dichloroethene	100		113		70-130	12		20
Trichloroethene	100		114		70-130	13		20
1,2-Dichlorobenzene	82		95		70-130	15		20
1,3-Dichlorobenzene	82		95		70-130	15		20
1,4-Dichlorobenzene	83		94		70-130	12		20
Methyl tert butyl ether	81		87		70-130	7		20
p/m-Xylene	90		102		70-130	13		20
o-Xylene	88		97		70-130	10		20
cis-1,2-Dichloroethene	102		112		70-130	9		20
Dibromomethane	115		130		70-130	12		20
1,2,3-Trichloropropane	88		104		70-130	17		20
Styrene	89		99		70-130	11		20
Dichlorodifluoromethane	83		100		70-130	19		20
Acetone	127		137	Q	70-130	8		20
Carbon disulfide	71		85		70-130	18		20
2-Butanone	107		114		70-130	6		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: WAKEFIELD

Project Number: 532

Lab Number: L1119589

Report Date: 12/01/11

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 02 Batch: WG505314-1 WG505314-2								
4-Methyl-2-pentanone	92		109		70-130	17		20
2-Hexanone	87		97		70-130	11		20
Bromochloromethane	107		117		70-130	9		20
Tetrahydrofuran	107		125		70-130	16		20
2,2-Dichloropropane	57	Q	64	Q	70-130	12		20
1,2-Dibromoethane	86		98		70-130	13		20
1,3-Dichloropropane	94		105		70-130	11		20
1,1,1,2-Tetrachloroethane	77		91		70-130	17		20
Bromobenzene	84		98		70-130	15		20
n-Butylbenzene	83		96		70-130	15		20
sec-Butylbenzene	78		92		70-130	16		20
tert-Butylbenzene	79		92		70-130	15		20
o-Chlorotoluene	87		101		70-130	15		20
p-Chlorotoluene	84		97		70-130	14		20
1,2-Dibromo-3-chloropropane	89		91		70-130	2		20
Hexachlorobutadiene	75		88		70-130	16		20
Isopropylbenzene	86		99		70-130	14		20
p-Isopropyltoluene	83		96		70-130	15		20
Naphthalene	74		86		70-130	15		20
n-Propylbenzene	83		97		70-130	16		20
1,2,3-Trichlorobenzene	77		88		70-130	13		20

Lab Control Sample Analysis Batch Quality Control

Project Name: WAKEFIELD

Project Number: 532

Lab Number: L1119589

Report Date: 12/01/11

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 02 Batch: WG505314-1 WG505314-2								
1,2,4-Trichlorobenzene	79		88		70-130	11		20
1,3,5-Trimethylbenzene	83		96		70-130	15		20
1,2,4-Trimethylbenzene	86		99		70-130	14		20
Ethyl ether	111		121		70-130	9		20
Isopropyl Ether	106		116		70-130	9		20
Ethyl-Tert-Butyl-Ether	74		80		70-130	8		20
Tertiary-Amyl Methyl Ether	73		79		70-130	8		20
1,4-Dioxane	124		128		70-130	3		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	109		109		70-130
Toluene-d8	94		93		70-130
4-Bromofluorobenzene	96		97		70-130
Dibromofluoromethane	105		107		70-130

Lab Control Sample Analysis Batch Quality Control

Project Name: WAKEFIELD

Project Number: 532

Lab Number: L1119589

Report Date: 12/01/11

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 01-03,05 Batch: WG505314-4 WG505314-5								
Methylene chloride	103		106		70-130	3		20
1,1-Dichloroethane	110		115		70-130	4		20
Chloroform	109		115		70-130	5		20
Carbon tetrachloride	75		83		70-130	10		20
1,2-Dichloropropane	110		115		70-130	4		20
Dibromochloromethane	86		96		70-130	11		20
1,1,2-Trichloroethane	97		103		70-130	6		20
Tetrachloroethene	97		97		70-130	0		20
Chlorobenzene	92		95		70-130	3		20
Trichlorofluoromethane	122		129		70-130	6		20
1,2-Dichloroethane	120		126		70-130	5		20
1,1,1-Trichloroethane	89		96		70-130	8		20
Bromodichloromethane	100		108		70-130	8		20
trans-1,3-Dichloropropene	64	Q	69	Q	70-130	8		20
cis-1,3-Dichloropropene	80		87		70-130	8		20
1,1-Dichloropropene	109		112		70-130	3		20
Bromoform	80		90		70-130	12		20
1,1,2,2-Tetrachloroethane	88		91		70-130	3		20
Benzene	109		112		70-130	3		20
Toluene	95		97		70-130	2		20
Ethylbenzene	99		100		70-130	1		20

Lab Control Sample Analysis Batch Quality Control

Project Name: WAKEFIELD

Project Number: 532

Lab Number: L1119589

Report Date: 12/01/11

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 01-03,05 Batch: WG505314-4 WG505314-5								
Chloromethane	117		123		70-130	5		20
Bromomethane	102		108		70-130	6		20
Vinyl chloride	115		120		70-130	4		20
Chloroethane	106		113		70-130	6		20
1,1-Dichloroethene	102		106		70-130	4		20
trans-1,2-Dichloroethene	105		109		70-130	4		20
Trichloroethene	108		109		70-130	1		20
1,2-Dichlorobenzene	85		88		70-130	3		20
1,3-Dichlorobenzene	86		90		70-130	5		20
1,4-Dichlorobenzene	85		88		70-130	3		20
Methyl tert butyl ether	85		89		70-130	5		20
p/m-Xylene	96		98		70-130	2		20
o-Xylene	94		98		70-130	4		20
cis-1,2-Dichloroethene	105		110		70-130	5		20
Dibromomethane	115		120		70-130	4		20
1,2,3-Trichloropropane	90		94		70-130	4		20
Styrene	95		98		70-130	3		20
Dichlorodifluoromethane	88		91		70-130	3		20
Acetone	114		122		70-130	7		20
Carbon disulfide	75		78		70-130	4		20
2-Butanone	100		106		70-130	6		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: WAKEFIELD

Project Number: 532

Lab Number: L1119589

Report Date: 12/01/11

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 01-03,05 Batch: WG505314-4 WG505314-5								
4-Methyl-2-pentanone	89		98		70-130	10		20
2-Hexanone	82		87		70-130	6		20
Bromochloromethane	109		111		70-130	2		20
Tetrahydrofuran	106		113		70-130	6		20
2,2-Dichloropropane	65	Q	68	Q	70-130	5		20
1,2-Dibromoethane	84		91		70-130	8		20
1,3-Dichloropropane	98		101		70-130	3		20
1,1,1,2-Tetrachloroethane	67	Q	73		70-130	9		20
Bromobenzene	88		92		70-130	4		20
n-Butylbenzene	91		90		70-130	1		20
sec-Butylbenzene	88		88		70-130	0		20
tert-Butylbenzene	87		87		70-130	0		20
o-Chlorotoluene	93		88		70-130	6		20
p-Chlorotoluene	90		93		70-130	3		20
1,2-Dibromo-3-chloropropane	86		91		70-130	6		20
Hexachlorobutadiene	82		82		70-130	0		20
Isopropylbenzene	94		94		70-130	0		20
p-Isopropyltoluene	92		92		70-130	0		20
Naphthalene	71		74		70-130	4		20
n-Propylbenzene	92		92		70-130	0		20
1,2,3-Trichlorobenzene	72		75		70-130	4		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: WAKEFIELD

Project Number: 532

Lab Number: L1119589

Report Date: 12/01/11

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 01-03,05 Batch: WG505314-4 WG505314-5								
1,2,4-Trichlorobenzene	77		81		70-130	5		20
1,3,5-Trimethylbenzene	90		92		70-130	2		20
1,2,4-Trimethylbenzene	92		94		70-130	2		20
Ethyl ether	110		118		70-130	7		20
Isopropyl Ether	115		119		70-130	3		20
Ethyl-Tert-Butyl-Ether	88		92		70-130	4		20
Tertiary-Amyl Methyl Ether	82		86		70-130	5		20
1,4-Dioxane	100		108		70-130	8		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	107		107		70-130
Toluene-d8	95		93		70-130
4-Bromofluorobenzene	98		97		70-130
Dibromofluoromethane	103		104		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: WAKEFIELD

Project Number: 532

Lab Number: L1119589

Report Date: 12/01/11

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 04,06-11 Batch: WG505450-1 WG505450-2								
Methylene chloride	103		104		70-130	1		20
1,1-Dichloroethane	93		95		70-130	2		20
Chloroform	95		96		70-130	1		20
Carbon tetrachloride	99		101		70-130	2		20
1,2-Dichloropropane	98		98		70-130	0		20
Dibromochloromethane	96		81		70-130	17		20
1,1,2-Trichloroethane	97		83		70-130	16		20
Tetrachloroethene	101		98		70-130	3		20
Chlorobenzene	92		87		70-130	6		20
Trichlorofluoromethane	110		110		70-130	0		20
1,2-Dichloroethane	103		99		70-130	4		20
1,1,1-Trichloroethane	95		101		70-130	6		20
Bromodichloromethane	93		91		70-130	2		20
trans-1,3-Dichloropropene	89		82		70-130	8		20
cis-1,3-Dichloropropene	92		90		70-130	2		20
1,1-Dichloropropene	99		99		70-130	0		20
Bromoform	90		72		70-130	22	Q	20
1,1,2,2-Tetrachloroethane	93		75		70-130	21	Q	20
Benzene	94		100		70-130	6		20
Toluene	94		88		70-130	7		20
Ethylbenzene	92		89		70-130	3		20

Lab Control Sample Analysis Batch Quality Control

Project Name: WAKEFIELD

Project Number: 532

Lab Number: L1119589

Report Date: 12/01/11

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 04,06-11 Batch: WG505450-1 WG505450-2								
Chloromethane	73		76		70-130	4		20
Bromomethane	96		100		70-130	4		20
Vinyl chloride	82		78		70-130	5		20
Chloroethane	92		94		70-130	2		20
1,1-Dichloroethene	97		101		70-130	4		20
trans-1,2-Dichloroethene	94		97		70-130	3		20
Trichloroethene	95		98		70-130	3		20
1,2-Dichlorobenzene	97		92		70-130	5		20
1,3-Dichlorobenzene	101		93		70-130	8		20
1,4-Dichlorobenzene	97		92		70-130	5		20
Methyl tert butyl ether	99		88		70-130	12		20
p/m-Xylene	94		92		70-130	2		20
o-Xylene	99		91		70-130	8		20
cis-1,2-Dichloroethene	96		100		70-130	4		20
Dibromomethane	107		101		70-130	6		20
1,2,3-Trichloropropane	104		88		70-130	17		20
Styrene	99		88		70-130	12		20
Dichlorodifluoromethane	63	Q	67	Q	70-130	6		20
Acetone	108		78		70-130	32	Q	20
Carbon disulfide	71		68	Q	70-130	4		20
2-Butanone	97		84		70-130	14		20

Lab Control Sample Analysis Batch Quality Control

Project Name: WAKEFIELD

Project Number: 532

Lab Number: L1119589

Report Date: 12/01/11

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 04,06-11 Batch: WG505450-1 WG505450-2								
4-Methyl-2-pentanone	98		83		70-130	17		20
2-Hexanone	84		66	Q	70-130	24	Q	20
Bromochloromethane	103		101		70-130	2		20
Tetrahydrofuran	102		79		70-130	25	Q	20
2,2-Dichloropropane	101		104		70-130	3		20
1,2-Dibromoethane	107		102		70-130	5		20
1,3-Dichloropropane	96		86		70-130	11		20
1,1,1,2-Tetrachloroethane	100		91		70-130	9		20
Bromobenzene	99		94		70-130	5		20
n-Butylbenzene	101		92		70-130	9		20
sec-Butylbenzene	102		94		70-130	8		20
tert-Butylbenzene	105		96		70-130	9		20
o-Chlorotoluene	96		91		70-130	5		20
p-Chlorotoluene	96		89		70-130	8		20
1,2-Dibromo-3-chloropropane	106		62	Q	70-130	52	Q	20
Hexachlorobutadiene	104		117		70-130	12		20
Isopropylbenzene	101		91		70-130	10		20
p-Isopropyltoluene	106		95		70-130	11		20
Naphthalene	96		69	Q	70-130	33	Q	20
n-Propylbenzene	101		92		70-130	9		20
1,2,3-Trichlorobenzene	91		78		70-130	15		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: WAKEFIELD

Project Number: 532

Lab Number: L1119589

Report Date: 12/01/11

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 04,06-11 Batch: WG505450-1 WG505450-2								
1,2,4-Trichlorobenzene	99		86		70-130	14		20
1,3,5-Trimethylbenzene	96		90		70-130	6		20
1,2,4-Trimethylbenzene	96		89		70-130	8		20
Ethyl ether	101		100		70-130	1		20
Isopropyl Ether	90		91		70-130	1		20
Ethyl-Tert-Butyl-Ether	97		96		70-130	1		20
Tertiary-Amyl Methyl Ether	101		98		70-130	3		20
1,4-Dioxane	128		116		70-130	10		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	102		100		70-130
Toluene-d8	100		96		70-130
4-Bromofluorobenzene	102		99		70-130
Dibromofluoromethane	105		113		70-130

PETROLEUM HYDROCARBONS

Project Name: WAKEFIELD

Lab Number: L1119589

Project Number: 532

Report Date: 12/01/11

SAMPLE RESULTS

Lab ID: L1119589-04
 Client ID: LEMW-31
 Sample Location: WAKEFIELD
 Matrix: Water
 Analytical Method: 100, VPH-04-1.1
 Analytical Date: 11/29/11 18:47
 Analyst: TB

Date Collected: 11/21/11 09:05
 Date Received: 11/22/11
 Field Prep: Not Specified

Quality Control Information

Condition of sample received: Satisfactory
 Aqueous Preservative: Laboratory Provided Preserved Container
 Sample Temperature upon receipt: Received on Ice

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Petroleum Hydrocarbons - Westborough Lab						
C5-C8 Aliphatics	ND		ug/l	50.0	--	1
C9-C12 Aliphatics	637		ug/l	50.0	--	1
C9-C10 Aromatics	317		ug/l	50.0	--	1
C5-C8 Aliphatics, Adjusted	ND		ug/l	50.0	--	1
C9-C12 Aliphatics, Adjusted	318		ug/l	50.0	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,5-Dibromotoluene-PID	114		70-130
2,5-Dibromotoluene-FID	104		70-130

Project Name: WAKEFIELD

Lab Number: L1119589

Project Number: 532

Report Date: 12/01/11

SAMPLE RESULTS

Lab ID: L1119589-04
 Client ID: LEMW-31
 Sample Location: WAKEFIELD
 Matrix: Water
 Analytical Method: 98,EPH-04-1.1
 Analytical Date: 11/29/11 02:44
 Analyst: AS

Date Collected: 11/21/11 09:05
 Date Received: 11/22/11
 Field Prep: Not Specified
 Extraction Method: EPA 3510C
 Extraction Date: 11/23/11 15:23
 Cleanup Method1: EPH-04-1
 Cleanup Date1: 11/24/11

Quality Control Information

Condition of sample received: Satisfactory
 Aqueous Preservative: Laboratory Provided Preserved Container
 Sample Temperature upon receipt: Received on Ice
 Sample Extraction method: Extracted Per the Method

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Extractable Petroleum Hydrocarbons - Westborough Lab						
C9-C18 Aliphatics	5270		ug/l	100	--	1
C19-C36 Aliphatics	1940		ug/l	100	--	1
C11-C22 Aromatics	2540		ug/l	100	--	1
C11-C22 Aromatics, Adjusted	2530		ug/l	100	--	1
Naphthalene	ND		ug/l	10.9	--	1
2-Methylnaphthalene	17.5		ug/l	10.9	--	1
Acenaphthylene	ND		ug/l	10.9	--	1
Acenaphthene	ND		ug/l	10.9	--	1
Fluorene	ND		ug/l	10.9	--	1
Phenanthrene	ND		ug/l	10.9	--	1
Anthracene	ND		ug/l	10.9	--	1
Fluoranthene	ND		ug/l	10.9	--	1
Pyrene	ND		ug/l	10.9	--	1
Benzo(a)anthracene	ND		ug/l	10.9	--	1
Chrysene	ND		ug/l	10.9	--	1
Benzo(b)fluoranthene	ND		ug/l	10.9	--	1
Benzo(k)fluoranthene	ND		ug/l	10.9	--	1
Benzo(a)pyrene	ND		ug/l	10.9	--	1
Indeno(1,2,3-cd)Pyrene	ND		ug/l	10.9	--	1
Dibenzo(a,h)anthracene	ND		ug/l	10.9	--	1
Benzo(ghi)perylene	ND		ug/l	10.9	--	1

Project Name: WAKEFIELD**Lab Number:** L1119589**Project Number:** 532**Report Date:** 12/01/11**SAMPLE RESULTS**

Lab ID: L1119589-04

Date Collected: 11/21/11 09:05

Client ID: LEMW-31

Date Received: 11/22/11

Sample Location: WAKEFIELD

Field Prep: Not Specified

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

Extractable Petroleum Hydrocarbons - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Chloro-Octadecane	60		40-140
o-Terphenyl	84		40-140
2-Fluorobiphenyl	94		40-140
2-Bromonaphthalene	93		40-140

Project Name: WAKEFIELD

Lab Number: L1119589

Project Number: 532

Report Date: 12/01/11

SAMPLE RESULTS

Lab ID: L1119589-05
 Client ID: LEMW-32
 Sample Location: WAKEFIELD
 Matrix: Water
 Analytical Method: 100, VPH-04-1.1
 Analytical Date: 11/28/11 17:31
 Analyst: TB

Date Collected: 11/21/11 09:10
 Date Received: 11/22/11
 Field Prep: Not Specified

Quality Control Information

Condition of sample received:

Satisfactory

Aqueous Preservative:

Laboratory Provided Preserved
Container

Sample Temperature upon receipt:

Received on Ice

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Petroleum Hydrocarbons - Westborough Lab						
C5-C8 Aliphatics	569		ug/l	50.0	--	1
C9-C12 Aliphatics	202		ug/l	50.0	--	1
C9-C10 Aromatics	65.6		ug/l	50.0	--	1
C5-C8 Aliphatics, Adjusted	569		ug/l	50.0	--	1
C9-C12 Aliphatics, Adjusted	136		ug/l	50.0	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,5-Dibromotoluene-PID	84		70-130
2,5-Dibromotoluene-FID	83		70-130

Project Name: WAKEFIELD**Lab Number:** L1119589**Project Number:** 532**Report Date:** 12/01/11**SAMPLE RESULTS**

Lab ID: L1119589-05
Client ID: LEMW-32
Sample Location: WAKEFIELD
Matrix: Water
Analytical Method: 98,EPH-04-1.1
Analytical Date: 11/29/11 13:52
Analyst: AS

Date Collected: 11/21/11 09:10
Date Received: 11/22/11
Field Prep: Not Specified
Extraction Method: EPA 3510C
Extraction Date: 11/23/11 15:23
Cleanup Method1: EPH-04-1
Cleanup Date1: 11/29/11

Quality Control Information

Condition of sample received:	Satisfactory
Aqueous Preservative:	Laboratory Provided Preserved Container
Sample Temperature upon receipt:	Received on Ice
Sample Extraction method:	Extracted Per the Method

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Extractable Petroleum Hydrocarbons - Westborough Lab						
C9-C18 Aliphatics	355		ug/l	100	--	1
C19-C36 Aliphatics	ND		ug/l	100	--	1
C11-C22 Aromatics	ND		ug/l	100	--	1
C11-C22 Aromatics, Adjusted	ND		ug/l	100	--	1
Naphthalene	ND		ug/l	13.2	--	1
2-Methylnaphthalene	ND		ug/l	13.2	--	1
Acenaphthylene	ND		ug/l	13.2	--	1
Acenaphthene	ND		ug/l	13.2	--	1
Fluorene	ND		ug/l	13.2	--	1
Phenanthrene	ND		ug/l	13.2	--	1
Anthracene	ND		ug/l	13.2	--	1
Fluoranthene	ND		ug/l	13.2	--	1
Pyrene	ND		ug/l	13.2	--	1
Benzo(a)anthracene	ND		ug/l	13.2	--	1
Chrysene	ND		ug/l	13.2	--	1
Benzo(b)fluoranthene	ND		ug/l	13.2	--	1
Benzo(k)fluoranthene	ND		ug/l	13.2	--	1
Benzo(a)pyrene	ND		ug/l	13.2	--	1
Indeno(1,2,3-cd)Pyrene	ND		ug/l	13.2	--	1
Dibenzo(a,h)anthracene	ND		ug/l	13.2	--	1
Benzo(ghi)perylene	ND		ug/l	13.2	--	1

Project Name: WAKEFIELD**Lab Number:** L1119589**Project Number:** 532**Report Date:** 12/01/11**SAMPLE RESULTS**

Lab ID: L1119589-05

Date Collected: 11/21/11 09:10

Client ID: LEMW-32

Date Received: 11/22/11

Sample Location: WAKEFIELD

Field Prep: Not Specified

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

Extractable Petroleum Hydrocarbons - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Chloro-Octadecane	42		40-140
o-Terphenyl	61		40-140
2-Fluorobiphenyl	65		40-140
2-Bromonaphthalene	66		40-140

Project Name: WAKEFIELD

Lab Number: L1119589

Project Number: 532

Report Date: 12/01/11

SAMPLE RESULTS

Lab ID: L1119589-06
 Client ID: LEMW-33
 Sample Location: WAKEFIELD
 Matrix: Water
 Analytical Method: 100, VPH-04-1.1
 Analytical Date: 11/28/11 18:10
 Analyst: TB

Date Collected: 11/21/11 10:25
 Date Received: 11/22/11
 Field Prep: Not Specified

Quality Control Information

Condition of sample received:

Satisfactory

Aqueous Preservative:

Laboratory Provided Preserved
Container

Sample Temperature upon receipt:

Received on Ice

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Petroleum Hydrocarbons - Westborough Lab						
C5-C8 Aliphatics	ND		ug/l	50.0	--	1
C9-C12 Aliphatics	ND		ug/l	50.0	--	1
C9-C10 Aromatics	ND		ug/l	50.0	--	1
C5-C8 Aliphatics, Adjusted	ND		ug/l	50.0	--	1
C9-C12 Aliphatics, Adjusted	ND		ug/l	50.0	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,5-Dibromotoluene-PID	88		70-130
2,5-Dibromotoluene-FID	90		70-130

Project Name: WAKEFIELD**Lab Number:** L1119589**Project Number:** 532**Report Date:** 12/01/11**SAMPLE RESULTS**

Lab ID: L1119589-06
Client ID: LEMW-33
Sample Location: WAKEFIELD
Matrix: Water
Analytical Method: 98,EPH-04-1.1
Analytical Date: 11/29/11 04:13
Analyst: AS

Date Collected: 11/21/11 10:25
Date Received: 11/22/11
Field Prep: Not Specified
Extraction Method: EPA 3510C
Extraction Date: 11/23/11 15:23
Cleanup Method1: EPH-04-1
Cleanup Date1: 11/24/11

Quality Control Information

Condition of sample received:	Satisfactory
Aqueous Preservative:	Laboratory Provided Preserved Container
Sample Temperature upon receipt:	Received on Ice
Sample Extraction method:	Extracted Per the Method

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Extractable Petroleum Hydrocarbons - Westborough Lab						
C9-C18 Aliphatics	ND		ug/l	100	--	1
C19-C36 Aliphatics	ND		ug/l	100	--	1
C11-C22 Aromatics	ND		ug/l	100	--	1
C11-C22 Aromatics, Adjusted	ND		ug/l	100	--	1
Naphthalene	ND		ug/l	10.9	--	1
2-Methylnaphthalene	ND		ug/l	10.9	--	1
Acenaphthylene	ND		ug/l	10.9	--	1
Acenaphthene	ND		ug/l	10.9	--	1
Fluorene	ND		ug/l	10.9	--	1
Phenanthrene	ND		ug/l	10.9	--	1
Anthracene	ND		ug/l	10.9	--	1
Fluoranthene	ND		ug/l	10.9	--	1
Pyrene	ND		ug/l	10.9	--	1
Benzo(a)anthracene	ND		ug/l	10.9	--	1
Chrysene	ND		ug/l	10.9	--	1
Benzo(b)fluoranthene	ND		ug/l	10.9	--	1
Benzo(k)fluoranthene	ND		ug/l	10.9	--	1
Benzo(a)pyrene	ND		ug/l	10.9	--	1
Indeno(1,2,3-cd)Pyrene	ND		ug/l	10.9	--	1
Dibenzo(a,h)anthracene	ND		ug/l	10.9	--	1
Benzo(ghi)perylene	ND		ug/l	10.9	--	1

Project Name: WAKEFIELD

Lab Number: L1119589

Project Number: 532

Report Date: 12/01/11

SAMPLE RESULTS

Lab ID: L1119589-06

Date Collected: 11/21/11 10:25

Client ID: LEMW-33

Date Received: 11/22/11

Sample Location: WAKEFIELD

Field Prep: Not Specified

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

Extractable Petroleum Hydrocarbons - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Chloro-Octadecane	44		40-140
o-Terphenyl	76		40-140
2-Fluorobiphenyl	79		40-140
2-Bromonaphthalene	75		40-140

Project Name: WAKEFIELD

Lab Number: L1119589

Project Number: 532

Report Date: 12/01/11

SAMPLE RESULTS

Lab ID: L1119589-07
 Client ID: LEMW-34
 Sample Location: WAKEFIELD
 Matrix: Water
 Analytical Method: 100, VPH-04-1.1
 Analytical Date: 11/28/11 18:49
 Analyst: TB

Date Collected: 11/21/11 09:35
 Date Received: 11/22/11
 Field Prep: Not Specified

Quality Control Information

Condition of sample received:

Satisfactory

Aqueous Preservative:

Laboratory Provided Preserved
Container

Sample Temperature upon receipt:

Received on Ice

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Petroleum Hydrocarbons - Westborough Lab						
C5-C8 Aliphatics	ND		ug/l	50.0	--	1
C9-C12 Aliphatics	ND		ug/l	50.0	--	1
C9-C10 Aromatics	ND		ug/l	50.0	--	1
C5-C8 Aliphatics, Adjusted	ND		ug/l	50.0	--	1
C9-C12 Aliphatics, Adjusted	ND		ug/l	50.0	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,5-Dibromotoluene-PID	79		70-130
2,5-Dibromotoluene-FID	82		70-130

Project Name: WAKEFIELD**Lab Number:** L1119589**Project Number:** 532**Report Date:** 12/01/11**SAMPLE RESULTS**

Lab ID: L1119589-07
Client ID: LEMW-34
Sample Location: WAKEFIELD
Matrix: Water
Analytical Method: 98,EPH-04-1.1
Analytical Date: 11/29/11 04:57
Analyst: AS

Date Collected: 11/21/11 09:35
Date Received: 11/22/11
Field Prep: Not Specified
Extraction Method: EPA 3510C
Extraction Date: 11/23/11 15:23
Cleanup Method1: EPH-04-1
Cleanup Date1: 11/24/11

Quality Control Information

Condition of sample received:	Satisfactory
Aqueous Preservative:	Laboratory Provided Preserved Container
Sample Temperature upon receipt:	Received on Ice
Sample Extraction method:	Extracted Per the Method

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Extractable Petroleum Hydrocarbons - Westborough Lab						
C9-C18 Aliphatics	ND		ug/l	100	--	1
C19-C36 Aliphatics	ND		ug/l	100	--	1
C11-C22 Aromatics	ND		ug/l	100	--	1
C11-C22 Aromatics, Adjusted	ND		ug/l	100	--	1
Naphthalene	ND		ug/l	11.0	--	1
2-Methylnaphthalene	ND		ug/l	11.0	--	1
Acenaphthylene	ND		ug/l	11.0	--	1
Acenaphthene	ND		ug/l	11.0	--	1
Fluorene	ND		ug/l	11.0	--	1
Phenanthrene	ND		ug/l	11.0	--	1
Anthracene	ND		ug/l	11.0	--	1
Fluoranthene	ND		ug/l	11.0	--	1
Pyrene	ND		ug/l	11.0	--	1
Benzo(a)anthracene	ND		ug/l	11.0	--	1
Chrysene	ND		ug/l	11.0	--	1
Benzo(b)fluoranthene	ND		ug/l	11.0	--	1
Benzo(k)fluoranthene	ND		ug/l	11.0	--	1
Benzo(a)pyrene	ND		ug/l	11.0	--	1
Indeno(1,2,3-cd)Pyrene	ND		ug/l	11.0	--	1
Dibenzo(a,h)anthracene	ND		ug/l	11.0	--	1
Benzo(ghi)perylene	ND		ug/l	11.0	--	1

Project Name: WAKEFIELD**Lab Number:** L1119589**Project Number:** 532**Report Date:** 12/01/11**SAMPLE RESULTS**

Lab ID: L1119589-07

Date Collected: 11/21/11 09:35

Client ID: LEMW-34

Date Received: 11/22/11

Sample Location: WAKEFIELD

Field Prep: Not Specified

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

Extractable Petroleum Hydrocarbons - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Chloro-Octadecane	43		40-140
o-Terphenyl	71		40-140
2-Fluorobiphenyl	80		40-140
2-Bromonaphthalene	76		40-140

Project Name: WAKEFIELD

Lab Number: L1119589

Project Number: 532

Report Date: 12/01/11

SAMPLE RESULTS

Lab ID: L1119589-08
 Client ID: LEMW-35
 Sample Location: WAKEFIELD
 Matrix: Water
 Analytical Method: 100, VPH-04-1.1
 Analytical Date: 11/29/11 18:08
 Analyst: TB

Date Collected: 11/21/11 09:55
 Date Received: 11/22/11
 Field Prep: Not Specified

Quality Control Information

Condition of sample received:

Satisfactory

Aqueous Preservative:

Laboratory Provided Preserved
Container

Sample Temperature upon receipt:

Received on Ice

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

Volatile Petroleum Hydrocarbons - Westborough Lab

C5-C8 Aliphatics	324		ug/l	50.0	--	1
C9-C12 Aliphatics	643		ug/l	50.0	--	1
C9-C10 Aromatics	250		ug/l	50.0	--	1
C5-C8 Aliphatics, Adjusted	324		ug/l	50.0	--	1
C9-C12 Aliphatics, Adjusted	373		ug/l	50.0	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,5-Dibromotoluene-PID	113		70-130
2,5-Dibromotoluene-FID	122		70-130

Project Name: WAKEFIELD

Lab Number: L1119589

Project Number: 532

Report Date: 12/01/11

SAMPLE RESULTS

Lab ID: L1119589-08
 Client ID: LEMW-35
 Sample Location: WAKEFIELD
 Matrix: Water
 Analytical Method: 98,EPH-04-1.1
 Analytical Date: 11/29/11 05:42
 Analyst: AS

Date Collected: 11/21/11 09:55
 Date Received: 11/22/11
 Field Prep: Not Specified
 Extraction Method: EPA 3510C
 Extraction Date: 11/23/11 15:23
 Cleanup Method1: EPH-04-1
 Cleanup Date1: 11/24/11

Quality Control Information

Condition of sample received: Satisfactory
 Aqueous Preservative: Laboratory Provided Preserved Container
 Sample Temperature upon receipt: Received on Ice
 Sample Extraction method: Extracted Per the Method

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Extractable Petroleum Hydrocarbons - Westborough Lab						
C9-C18 Aliphatics	1290		ug/l	100	--	1
C19-C36 Aliphatics	620		ug/l	100	--	1
C11-C22 Aromatics	694		ug/l	100	--	1
C11-C22 Aromatics, Adjusted	680		ug/l	100	--	1
Naphthalene	ND		ug/l	10.8	--	1
2-Methylnaphthalene	13.9		ug/l	10.8	--	1
Acenaphthylene	ND		ug/l	10.8	--	1
Acenaphthene	ND		ug/l	10.8	--	1
Fluorene	ND		ug/l	10.8	--	1
Phenanthrene	ND		ug/l	10.8	--	1
Anthracene	ND		ug/l	10.8	--	1
Fluoranthene	ND		ug/l	10.8	--	1
Pyrene	ND		ug/l	10.8	--	1
Benzo(a)anthracene	ND		ug/l	10.8	--	1
Chrysene	ND		ug/l	10.8	--	1
Benzo(b)fluoranthene	ND		ug/l	10.8	--	1
Benzo(k)fluoranthene	ND		ug/l	10.8	--	1
Benzo(a)pyrene	ND		ug/l	10.8	--	1
Indeno(1,2,3-cd)Pyrene	ND		ug/l	10.8	--	1
Dibenzo(a,h)anthracene	ND		ug/l	10.8	--	1
Benzo(ghi)perylene	ND		ug/l	10.8	--	1

Project Name: WAKEFIELD**Lab Number:** L1119589**Project Number:** 532**Report Date:** 12/01/11**SAMPLE RESULTS**

Lab ID: L1119589-08

Date Collected: 11/21/11 09:55

Client ID: LEMW-35

Date Received: 11/22/11

Sample Location: WAKEFIELD

Field Prep: Not Specified

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

Extractable Petroleum Hydrocarbons - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Chloro-Octadecane	41		40-140
o-Terphenyl	59		40-140
2-Fluorobiphenyl	90		40-140
2-Bromonaphthalene	83		40-140

Project Name: WAKEFIELD

Lab Number: L1119589

Project Number: 532

Report Date: 12/01/11

SAMPLE RESULTS

Lab ID: L1119589-11
 Client ID: LEMW-38
 Sample Location: WAKEFIELD
 Matrix: Water
 Analytical Method: 100, VPH-04-1.1
 Analytical Date: 11/28/11 19:29
 Analyst: TB

Date Collected: 11/21/11 10:15
 Date Received: 11/22/11
 Field Prep: Not Specified

Quality Control Information

Condition of sample received:

Satisfactory

Aqueous Preservative:

Laboratory Provided Preserved
Container

Sample Temperature upon receipt:

Received on Ice

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Petroleum Hydrocarbons - Westborough Lab						
C5-C8 Aliphatics	661		ug/l	50.0	--	1
C9-C12 Aliphatics	ND		ug/l	50.0	--	1
C9-C10 Aromatics	ND		ug/l	50.0	--	1
C5-C8 Aliphatics, Adjusted	661		ug/l	50.0	--	1
C9-C12 Aliphatics, Adjusted	ND		ug/l	50.0	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,5-Dibromotoluene-PID	78		70-130
2,5-Dibromotoluene-FID	80		70-130

Project Name: WAKEFIELD

Lab Number: L1119589

Project Number: 532

Report Date: 12/01/11

SAMPLE RESULTS

Lab ID: L1119589-11
 Client ID: LEMW-38
 Sample Location: WAKEFIELD
 Matrix: Water
 Analytical Method: 98,EPH-04-1.1
 Analytical Date: 11/29/11 06:26
 Analyst: AS

Date Collected: 11/21/11 10:15
 Date Received: 11/22/11
 Field Prep: Not Specified
 Extraction Method: EPA 3510C
 Extraction Date: 11/23/11 15:24
 Cleanup Method1: EPH-04-1
 Cleanup Date1: 11/24/11

Quality Control Information

Condition of sample received: Satisfactory
 Aqueous Preservative: Laboratory Provided Preserved Container
 Sample Temperature upon receipt: Received on Ice
 Sample Extraction method: Extracted Per the Method

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Extractable Petroleum Hydrocarbons - Westborough Lab						
C9-C18 Aliphatics	ND		ug/l	100	--	1
C19-C36 Aliphatics	ND		ug/l	100	--	1
C11-C22 Aromatics	ND		ug/l	100	--	1
C11-C22 Aromatics, Adjusted	ND		ug/l	100	--	1
Naphthalene	ND		ug/l	11.2	--	1
2-Methylnaphthalene	ND		ug/l	11.2	--	1
Acenaphthylene	ND		ug/l	11.2	--	1
Acenaphthene	ND		ug/l	11.2	--	1
Fluorene	ND		ug/l	11.2	--	1
Phenanthrene	ND		ug/l	11.2	--	1
Anthracene	ND		ug/l	11.2	--	1
Fluoranthene	ND		ug/l	11.2	--	1
Pyrene	ND		ug/l	11.2	--	1
Benzo(a)anthracene	ND		ug/l	11.2	--	1
Chrysene	ND		ug/l	11.2	--	1
Benzo(b)fluoranthene	ND		ug/l	11.2	--	1
Benzo(k)fluoranthene	ND		ug/l	11.2	--	1
Benzo(a)pyrene	ND		ug/l	11.2	--	1
Indeno(1,2,3-cd)Pyrene	ND		ug/l	11.2	--	1
Dibenzo(a,h)anthracene	ND		ug/l	11.2	--	1
Benzo(ghi)perylene	ND		ug/l	11.2	--	1

Project Name: WAKEFIELD**Lab Number:** L1119589**Project Number:** 532**Report Date:** 12/01/11**SAMPLE RESULTS**

Lab ID: L1119589-11

Date Collected: 11/21/11 10:15

Client ID: LEMW-38

Date Received: 11/22/11

Sample Location: WAKEFIELD

Field Prep: Not Specified

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

Extractable Petroleum Hydrocarbons - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Chloro-Octadecane	50		40-140
o-Terphenyl	78		40-140
2-Fluorobiphenyl	84		40-140
2-Bromonaphthalene	80		40-140

Project Name: WAKEFIELD

Lab Number: L1119589

Project Number: 532

Report Date: 12/01/11

Method Blank Analysis Batch Quality Control

Analytical Method: 98,EPH-04-1.1

Extraction Method: EPA 3510C

Analytical Date: 11/27/11 16:05

Extraction Date: 11/23/11 15:23

Analyst: AS

Cleanup Method1: EPH-04-1

Cleanup Date1: 11/23/11

Parameter	Result	Qualifier	Units	RL	MDL
Extractable Petroleum Hydrocarbons - Westborough Lab for sample(s): 04-08,11 Batch: WG504267-1					
C9-C18 Aliphatics	ND		ug/l	100	--
C19-C36 Aliphatics	ND		ug/l	100	--
C11-C22 Aromatics	ND		ug/l	100	--
C11-C22 Aromatics, Adjusted	ND		ug/l	100	--
Naphthalene	ND		ug/l	10.0	--
2-Methylnaphthalene	ND		ug/l	10.0	--
Acenaphthylene	ND		ug/l	10.0	--
Acenaphthene	ND		ug/l	10.0	--
Fluorene	ND		ug/l	10.0	--
Phenanthrene	ND		ug/l	10.0	--
Anthracene	ND		ug/l	10.0	--
Fluoranthene	ND		ug/l	10.0	--
Pyrene	ND		ug/l	10.0	--
Benzo(a)anthracene	ND		ug/l	10.0	--
Chrysene	ND		ug/l	10.0	--
Benzo(b)fluoranthene	ND		ug/l	10.0	--
Benzo(k)fluoranthene	ND		ug/l	10.0	--
Benzo(a)pyrene	ND		ug/l	10.0	--
Indeno(1,2,3-cd)Pyrene	ND		ug/l	10.0	--
Dibenzo(a,h)anthracene	ND		ug/l	10.0	--
Benzo(ghi)perylene	ND		ug/l	10.0	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
Chloro-Octadecane	70		40-140
o-Terphenyl	77		40-140
2-Fluorobiphenyl	82		40-140
2-Bromonaphthalene	79		40-140

Project Name: WAKEFIELD

Lab Number: L1119589

Project Number: 532

Report Date: 12/01/11

Method Blank Analysis Batch Quality Control

Analytical Method: 100, VPH-04-1.1

Analytical Date: 11/28/11 14:42

Analyst: TB

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Petroleum Hydrocarbons - Westborough Lab for sample(s): 05-07,11 Batch: WG504732-3					
C5-C8 Aliphatics	ND		ug/l	50.0	--
C9-C12 Aliphatics	ND		ug/l	50.0	--
C9-C10 Aromatics	ND		ug/l	50.0	--
C5-C8 Aliphatics, Adjusted	ND		ug/l	50.0	--
C9-C12 Aliphatics, Adjusted	ND		ug/l	50.0	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2,5-Dibromotoluene-PID	86		70-130
2,5-Dibromotoluene-FID	88		70-130

Project Name: WAKEFIELD

Lab Number: L1119589

Project Number: 532

Report Date: 12/01/11

Method Blank Analysis Batch Quality Control

Analytical Method: 100, VPH-04-1.1

Analytical Date: 11/29/11 12:44

Analyst: TB

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Petroleum Hydrocarbons - Westborough Lab for sample(s): 04,08 Batch: WG504954-3					
C5-C8 Aliphatics	ND		ug/l	50.0	--
C9-C12 Aliphatics	ND		ug/l	50.0	--
C9-C10 Aromatics	ND		ug/l	50.0	--
C5-C8 Aliphatics, Adjusted	ND		ug/l	50.0	--
C9-C12 Aliphatics, Adjusted	ND		ug/l	50.0	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2,5-Dibromotoluene-PID	101		70-130
2,5-Dibromotoluene-FID	108		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: WAKEFIELD

Project Number: 532

Lab Number: L1119589

Report Date: 12/01/11

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Extractable Petroleum Hydrocarbons - Westborough Lab Associated sample(s): 04-08,11 Batch: WG504267-2 WG504267-3								
C9-C18 Aliphatics	47		55		40-140	16		25
C19-C36 Aliphatics	66		78		40-140	17		25
C11-C22 Aromatics	85		75		40-140	13		25
Naphthalene	74		70		40-140	6		25
2-Methylnaphthalene	81		75		40-140	8		25
Acenaphthylene	82		74		40-140	10		25
Acenaphthene	82		74		40-140	10		25
Fluorene	81		70		40-140	15		25
Phenanthrene	84		73		40-140	14		25
Anthracene	81		70		40-140	15		25
Fluoranthene	83		71		40-140	16		25
Pyrene	85		75		40-140	13		25
Benzo(a)anthracene	82		70		40-140	16		25
Chrysene	83		71		40-140	16		25
Benzo(b)fluoranthene	87		71		40-140	20		25
Benzo(k)fluoranthene	82		73		40-140	12		25
Benzo(a)pyrene	88		75		40-140	16		25
Indeno(1,2,3-cd)Pyrene	86		74		40-140	15		25
Dibenzo(a,h)anthracene	83		71		40-140	16		25
Benzo(ghi)perylene	86		74		40-140	15		25
Nonane (C9)	29	Q	32		30-140	10		25

Lab Control Sample Analysis

Batch Quality Control

Project Name: WAKEFIELD

Project Number: 532

Lab Number: L1119589

Report Date: 12/01/11

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Extractable Petroleum Hydrocarbons - Westborough Lab Associated sample(s): 04-08,11 Batch: WG504267-2 WG504267-3								
Decane (C10)	35	Q	39	Q	40-140	11		25
Dodecane (C12)	47		56		40-140	17		25
Tetradecane (C14)	56		67		40-140	18		25
Hexadecane (C16)	60		71		40-140	17		25
Octadecane (C18)	64		75		40-140	16		25
Nonadecane (C19)	65		75		40-140	14		25
Eicosane (C20)	66		76		40-140	14		25
Docosane (C22)	66		77		40-140	15		25
Tetracosane (C24)	67		78		40-140	15		25
Hexacosane (C26)	68		78		40-140	14		25
Octacosane (C28)	66		77		40-140	15		25
triacontane (C30)	67		79		40-140	16		25
Hexatriacontane (C36)	64		85		40-140	28	Q	25

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
Chloro-Octadecane	66		67		40-140
o-Terphenyl	87		70		40-140
2-Fluorobiphenyl	91		79		40-140
2-Bromonaphthalene	88		84		40-140
% Naphthalene Breakthrough	0		0		
% 2-Methylnaphthalene Breakthrough	0		0		

Lab Control Sample Analysis Batch Quality Control

Project Name: WAKEFIELD

Project Number: 532

Lab Number: L1119589

Report Date: 12/01/11

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Petroleum Hydrocarbons - Westborough Lab Associated sample(s): 05-07,11 Batch: WG504732-1 WG504732-2								
C5-C8 Aliphatics	97		92		70-130	5		25
C9-C12 Aliphatics	101		96		70-130	6		25
C9-C10 Aromatics	113		116		70-130	3		25
Benzene	106		108		70-130	2		25
Toluene	107		109		70-130	2		25
Ethylbenzene	107		110		70-130	3		25
p/m-Xylene	109		112		70-130	3		25
o-Xylene	105		108		70-130	3		25
Methyl tert butyl ether	102		110		70-130	8		25
Naphthalene	95		117		70-130	21		25
1,2,4-Trimethylbenzene	113		116		70-130	3		25
Pentane	89		80		70-130	10		25
2-Methylpentane	100		95		70-130	5		25
2,2,4-Trimethylpentane	102		99		70-130	3		25
n-Nonane	107		100		30-130	7		25
n-Decane	113		107		70-130	5		25
n-Butylcyclohexane	105		101		70-130	4		25

Lab Control Sample Analysis

Batch Quality Control

Project Name: WAKEFIELD

Project Number: 532

Lab Number: L1119589

Report Date: 12/01/11

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Petroleum Hydrocarbons - Westborough Lab Associated sample(s): 05-07,11 Batch: WG504732-1 WG504732-2								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2,5-Dibromotoluene-PID	90		105		70-130
2,5-Dibromotoluene-FID	89		103		70-130

Volatile Petroleum Hydrocarbons - Westborough Lab							Associated sample(s):	04,08	Batch:	WG504954-1	WG504954-2
C5-C8 Aliphatics	108		103		70-130	5		25			
C9-C12 Aliphatics	96		93		70-130	3		25			
C9-C10 Aromatics	108		103		70-130	5		25			
Benzene	111		104		70-130	7		25			
Toluene	110		104		70-130	6		25			
Ethylbenzene	105		101		70-130	4		25			
p/m-Xylene	108		103		70-130	5		25			
o-Xylene	105		100		70-130	5		25			
Methyl tert butyl ether	103		103		70-130	0		25			

Lab Control Sample Analysis Batch Quality Control

Project Name: WAKEFIELD

Project Number: 532

Lab Number: L1119589

Report Date: 12/01/11

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Petroleum Hydrocarbons - Westborough Lab Associated sample(s): 04,08 Batch: WG504954-1 WG504954-2								
Naphthalene	85		99		70-130	15		25
1,2,4-Trimethylbenzene	108		103		70-130	5		25
Pentane	104		99		70-130	5		25
2-Methylpentane	110		105		70-130	5		25
2,2,4-Trimethylpentane	116		110		70-130	5		25
n-Nonane	101		95		30-130	6		25
n-Decane	91		90		70-130	1		25
n-Butylcyclohexane	101		96		70-130	5		25

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2,5-Dibromotoluene-PID	94		97		70-130
2,5-Dibromotoluene-FID	99		103		70-130

Project Name: WAKEFIELD

Lab Number: L1119589

Project Number: 532

Report Date: 12/01/11

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

B Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1119589-01C	Vial HCl preserved	B	N/A	2	Y	Absent	MCP-8260-10(14)
L1119589-01D	Vial HCl preserved	B	N/A	2	Y	Absent	MCP-8260-10(14)
L1119589-02C	Vial HCl preserved	B	N/A	2	Y	Absent	MCP-8260-10(14)
L1119589-02D	Vial HCl preserved	B	N/A	2	Y	Absent	MCP-8260-10(14)
L1119589-03C	Vial HCl preserved	B	N/A	2	Y	Absent	MCP-8260-10(14)
L1119589-03D	Vial HCl preserved	B	N/A	2	Y	Absent	MCP-8260-10(14)
L1119589-04A	Amber 1000ml HCl preserved	A	<2	3	Y	Absent	EPH-DELUX-10(14)
L1119589-04B	Amber 1000ml HCl preserved	A	<2	3	Y	Absent	EPH-DELUX-10(14)
L1119589-04C	Vial HCl preserved	B	N/A	2	Y	Absent	MCP-8260-10(14)
L1119589-04D	Vial HCl preserved	B	N/A	2	Y	Absent	MCP-8260-10(14)
L1119589-04E	Vial HCl preserved	B	N/A	2	Y	Absent	VPH-10(14)
L1119589-04F	Vial HCl preserved	B	N/A	2	Y	Absent	VPH-10(14)
L1119589-05A	Amber 1000ml HCl preserved	A	<2	3	Y	Absent	EPH-DELUX-10(14)
L1119589-05B	Amber 1000ml HCl preserved	A	<2	3	Y	Absent	EPH-DELUX-10(14)
L1119589-05C	Vial HCl preserved	B	N/A	2	Y	Absent	MCP-8260-10(14)
L1119589-05D	Vial HCl preserved	B	N/A	2	Y	Absent	MCP-8260-10(14)
L1119589-05E	Vial HCl preserved	B	N/A	2	Y	Absent	VPH-10(14)
L1119589-05F	Vial HCl preserved	B	N/A	2	Y	Absent	VPH-10(14)
L1119589-06A	Amber 1000ml HCl preserved	A	<2	3	Y	Absent	EPH-DELUX-10(14)
L1119589-06B	Amber 1000ml HCl preserved	A	<2	3	Y	Absent	EPH-DELUX-10(14)
L1119589-06C	Vial HCl preserved	B	N/A	2	Y	Absent	MCP-8260-10(14)
L1119589-06D	Vial HCl preserved	B	N/A	2	Y	Absent	MCP-8260-10(14)
L1119589-06E	Vial HCl preserved	B	N/A	2	Y	Absent	VPH-10(14)
L1119589-06F	Vial HCl preserved	B	N/A	2	Y	Absent	VPH-10(14)
L1119589-07A	Amber 1000ml HCl preserved	A	<2	3	Y	Absent	EPH-DELUX-10(14)
L1119589-07B	Amber 1000ml HCl preserved	A	<2	3	Y	Absent	EPH-DELUX-10(14)

*Values in parentheses indicate holding time in days



Project Name: WAKEFIELD

Project Number: 532

Lab Number: L1119589

Report Date: 12/01/11

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1119589-07C	Vial HCl preserved	B	N/A	2	Y	Absent	MCP-8260-10(14)
L1119589-07D	Vial HCl preserved	B	N/A	2	Y	Absent	MCP-8260-10(14)
L1119589-07E	Vial HCl preserved	B	N/A	2	Y	Absent	VPH-10(14)
L1119589-07F	Vial HCl preserved	B	N/A	2	Y	Absent	VPH-10(14)
L1119589-08A	Amber 1000ml HCl preserved	A	<2	3	Y	Absent	EPH-DELUX-10(14)
L1119589-08B	Amber 1000ml HCl preserved	A	<2	3	Y	Absent	EPH-DELUX-10(14)
L1119589-08C	Vial HCl preserved	B	N/A	2	Y	Absent	MCP-8260-10(14)
L1119589-08D	Vial HCl preserved	B	N/A	2	Y	Absent	MCP-8260-10(14)
L1119589-08E	Vial HCl preserved	B	N/A	2	Y	Absent	VPH-10(14)
L1119589-08F	Vial HCl preserved	B	N/A	2	Y	Absent	VPH-10(14)
L1119589-09C	Vial HCl preserved	B	N/A	2	Y	Absent	MCP-8260-10(14)
L1119589-09D	Vial HCl preserved	B	N/A	2	Y	Absent	MCP-8260-10(14)
L1119589-10C	Vial HCl preserved	B	N/A	2	Y	Absent	MCP-8260-10(14)
L1119589-10D	Vial HCl preserved	B	N/A	2	Y	Absent	MCP-8260-10(14)
L1119589-11A	Amber 1000ml HCl preserved	A	<2	3	Y	Absent	EPH-DELUX-10(14)
L1119589-11B	Amber 1000ml HCl preserved	A	<2	3	Y	Absent	EPH-DELUX-10(14)
L1119589-11C	Vial HCl preserved	B	N/A	2	Y	Absent	MCP-8260-10(14)
L1119589-11D	Vial HCl preserved	B	N/A	2	Y	Absent	MCP-8260-10(14)
L1119589-11E	Vial HCl preserved	B	N/A	2	Y	Absent	VPH-10(14)
L1119589-11F	Vial HCl preserved	B	N/A	2	Y	Absent	VPH-10(14)

*Values in parentheses indicate holding time in days



Project Name: WAKEFIELD
Project Number: 532

Lab Number: L1119589
Report Date: 12/01/11

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

Footnotes

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

Terms

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

Data Qualifiers

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

Report Format: Data Usability Report



Project Name: WAKEFIELD**Lab Number:** L1119589**Project Number:** 532**Report Date:** 12/01/11**Data Qualifiers**

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

Project Name: WAKEFIELD
Project Number: 532

Lab Number: L1119589
Report Date: 12/01/11

REFERENCES

- 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.
- 98 Method for the Determination of Extractable Petroleum Hydrocarbons (EPH), MassDEP, May 2004, Revision 1.1 with QC Requirements & Performance Standards for the Analysis of EPH under the Massachusetts Contingency Plan, WSC-CAM-IVB, July 2010.
- 100 Method for the Determination of Volatile Petroleum Hydrocarbons (VPH), MassDEP, May 2004, Revision 1.1 with QC Requirements & Performance Standards for the Analysis of VPH under the Massachusetts Contingency Plan, WSC-CAM-IVA, 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 November 17, 2011 - 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, 353.2, SM2130B, 2320B, 2540C, 4500Cl-D, 4500CN-C, 4500CN-E, 4500F-C, 4500H+B, 4500NO3-F, EPA 200.7, EPA 200.8, 245.1, EPA 300.0. Organic Parameters: 504.1, 524.2.)

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

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

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

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

SM2510B, 2540C, 2340B, 2320B, 4500CL-E, 4500F-BC, 426C, SM4500NH3-BH, (EPA 350.1 for: Ammonia-N), LACHAT 10-107-06-1-B for Ammonia-N, SM4500NO3-F, 353.2 for Nitrate-N, SM4500NH3-BC-NES, EPA 351.1, SM4500P-E, 4500P-B,E, 5220D, EPA 410.4, SM 5210B, 5310C, 4500CL-D, EPA 1664, SM14 510AC, EPA 420.1, SM4500-CN-CE, SM2540D.

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

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

Drinking Water (Inorganic Parameters: SM 9222B, 9223B, 9215B, EPA 200.7, 200.8, 245.2, 300.0, SM4500CN-E, 4500H+B, 4500NO3-F, 2320B, 2510B, 2540C, 4500F-C, 5310C, 2120B, EPA 332.0. Organic Parameters: 504.1, 524.2.)

Non-Potable Water (Inorganic Parameters: SM9222D, 9221B, 9222B, 9221E-EC, EPA 3005A, 200.7, 200.8, 245.1, 245.2, SW-846 6010B, 6020, 7196A, 7470A, SM3500-CR-D, EPA 120.1, 300.0, 350.1, 350.2, 351.1, 353.2, 410.4, 420.1, 1664A, SW-846 9010, 9030, 9040B, SM426C, SM2120B, 2310B, 2320B, 2540B, 2540D, 4500H+B, 4500CL-E, 4500CN-E, 4500NH3-H, 4500NO3-F, 4500NO2-B, 4500P-E, 4500-S2-D, 5210B, 5220D, 2510B, 2540C, 4500F-C, 5310C, 5540C, LACHAT 10-204-00-1-A, LACHAT 10-107-06-2-D. Organic Parameters: SW-846 3510C, 3630C, 5030B, 8260B, 8270C, 8330, EPA 624, 625, 608, SW-846 8082, 8081A, 8151A.)

Solid & Chemical Materials (Inorganic Parameters: SW-846 6010B, 7196A, 7471A, 1010, 1030, 9010, 9012A, 9014, 9030B, 9040B, 9045C, 9050C, 9065,1311, 1312, 3005A, 3050B. Organic Parameters: SW-846 3540C, 3546, 3550B, 3580A, 3630C, 5030B, 5035, 8260B, 8270C, 8330, 8151A, 8015B, 8082, 8081A.)

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

Drinking Water (Inorganic Parameters: SM9222B, 9221E, 9223B, 9215B, 4500CN-CE, 4500NO3-F, 4500F-C, EPA 300.0, 200.7, 200.8, 245.2, 2540C, SM2120B, 2320B, 2510B, 5310C, SM4500H-B. Organic Parameters: EPA 332, 504.1, 524.2.)

Non-Potable Water (Inorganic Parameters: SM5210B, EPA 410.4, SM5220D, 4500CL-E, 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, SM510ABC, SM4500P-B5+E, 2540B, 2540C, 2540D, EPA 120.1, SM2510B, SM15 426C, 9222D, 9221B, 9221C, 9221E, 9222B, 9215B, 2310B, 2320B, 4500NH3-H, 4500-S D, EPA 350.1, 350.2, SW-846 1312, 6020, 6020A, 7470A, 5540C, 4500H-B, EPA 200.8, SM3500Cr-D, 4500CN-CE, EPA 245.1, 245.2, SW-846 9040B, 3005A, 3015, EPA 6010B, 6010C, 7196A, 3060A, SW-846 9010B, 9030B. Organic Parameters: SW-846 8260B, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 3510C, EPA 608, 624, 625, SW-846 3630C, 5030B, 8081A, 8081B, 8082, 8082A, 8151A, 8330, NJ OQA-QAM-025 Rev.7, NJ EPH.)

Solid & Chemical Materials (Inorganic Parameters: SW-846, 6010B, 6010C, 7196A, 3060A, 9010B, 9030B, 1010, 1030, 1311, 1312, 3005A, 3050B, 7471A, 7471B, 9014, 9012A, 9040B, 9045C, 9050A, 9065. Organic Parameters: SW-846 8015B, 8015C, 8081A, 8081B, 8082, 8082A, 8151A, 8330, 8260B, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 3540C, 3545, 3546, 3550B, 3580A, 3630C, 5030B, 5035L, 5035H, NJ OQA-QAM-025 Rev.7, NJ EPH.)

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

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

Non-Potable Water (Inorganic Parameters: SM9221E, 9222D, 9221B, 9222B, 9215B, 5210B, 5310C, EPA 410.4, SM5220D, 2310B-4a, 2320B, EPA 200.7, 300.0, SM4500CL-E, 4500F-C, SM15 426C, EPA 350.1, SM4500NH3-BH, EPA 351.1, LACHAT 10-107-06-2, EPA 353.2, LACHAT 10-107-04-1-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, LACHAT 10-204-00-1-A, EPA 9040B, SM4500-HB, EPA 1664A, EPA 420.1, SM14 510C, EPA 120.1, SM2510B, SM4500S-D, SM5540C, EPA 3005A, 9010B, 9030B.. Organic Parameters: EPA 624, 8260B, 8270C, 625, 608, 8081A, 8151A, 8330, 8082, EPA 3510C, 5030B.)

Solid & Hazardous Waste (Inorganic Parameters: 1010, 1030, EPA 6010B, 7196A, 7471A, 9012A, 9014, 9040B, 9045C, 9065, 9050, EPA 1311, 1312, 3005A, 3050B, 9010B, 9030B. Organic Parameters: EPA 8260B, 8270C, 8015B, 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.**
Drinking Water (Organic Parameters: EPA 524.2, 504.1)

Non-Potable Water (Inorganic Parameters: EPA 1312, 200.7, 410.4, 1664A, SM2540D, 5210B, 5220D, 4500-P, BE.
Organic Parameters: EPA 3510C, 3005A, 3630C, 5030B, 625, 624, 608, 8081A, 8082, 8151A, 8260B, 8270C, 8330)

Solid & Hazardous Waste (Inorganic Parameters: EPA 350.1, 1010, 1030, 1311, 1312, 3050B, 6010B, 7196A, 7471A, 9010B, 9012A, 9014, 9040B, 9045C, 9050, 9065, SM 4500NH₃-H. Organic Parameters: 3540C, 3545, 3546, 3550B, 3580A, 3630C, 5035, 8015B, 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 NJ-DEP Certificate for Potable and Non-Potable Water.

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

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

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

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, 332.0, 6860, 353.2, 410.4, 9060, 1664A, SM 4500CN-E, 4500H-B, 4500NO₃-F, 5220D, 5310C, 2320B, 2540C, 3005A, 3015, 9010B, 9056. Organic Parameters: EPA 8260B, 8270C, 8330A, 625, 8082, 8081A, 3510C, 5030B, MassDEP EPH, MassDEP VPH.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 200.7, 6010B, 7471A, 9010, 9012A, 6860, 1311, 1312, 3050B, 7196A, 9010B, 3500-CR-D, 4500CN-CE, 2540G, Organic Parameters: EPA 8260B, 8270C, 8330A/B-prep, 8082, 8081A, 3540C, 3546, 3580A, 5035A, MassDEP EPH, MassDEP VPH.)

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

EPA 8260B: Freon-113, 1,2,4,5-Tetramethylbenzene, 4-Ethyltoluene. **EPA 8330A:** PETN, Picric Acid, Nitroglycerine, 2,6-DANT, 2,4-DANT. **EPA 8270C:** Methyl naphthalene, Dimethyl naphthalene, Total Methyl naphthalenes, Total Dimethyl naphthalenes, 1,4-Diphenylhydrazine (Azobenzene). **EPA 625:** 4-Chloroaniline, 4-Methylphenol. Total Phosphorus in a soil matrix, Chloride in a soil matrix, TKN in a soil matrix, NO₂ in a soil matrix, NO₃ in a soil matrix, SO₄ in a soil matrix.



CHAIN OF CUSTODY

PAGE 1 OF 2

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

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

Client Information

Client: **LEIGHTON ENVIRONMENTAL**

Address: **39 INDUSTRIAL PARK RD**

PLYMOUTH MA 02360

Phone: **508-830-3344**

Fax: **508-830-3360**

Email: **SKRATIMAN@LEIGHTONENVIRONMENTAL.COM**

☐ These samples have been previously analyzed by Alpha

Other Project Specific Requirements/Comments/Detection Limits:

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

Project Information

Project Name: **WAKEFIELD**

Project Location: **WAKEFIELD**

Project #: **532**

Project Manager: **SUE KASZANIEC**

ALPHA Quote #:

Turn-Around Time

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

Date Due: **12/1/11** Time:

Date Rec'd in Lab:

11/22/11

ALPHA Job #:

1119589

Report Information - Data Deliverables

☐ FAX ☐ EMAIL

☒ ADDEX ☐ Add'l Deliverables

Billing Information

☒ Same as Client info

PO # **532**

Regulatory Requirements/Report Limits

State / Fed Program

Criteria

MA MCP PRESUMPTIVE CERTAINTY - CT REASONABLE CONFIDENCE PROTO

☒ Yes ☐ No Are MCP Analytical Methods Required?

☐ Yes ☐ No Is Matrix Spike (MS) Required on this SDG? (If yes see note in Comments)

☐ Yes ☐ No Are CT RCP (Reasonable Confidence Protocols) Required?

ANALYSIS
VOC (8260)
VPH CHLORIDES ONLY
EPH WITH PAHS

SAMPLE HANDLING

Filtration

☐ Done

☐ Not needed

☐ Lab to do

☐ Preservation

☐ Lab to do

(Please specify below)

Sample Specific Comments

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Time	Sample Matrix	Sampler's Initials
19589.1	LEMU-28	11/21/11	0810	GW	TR
2	LEMU-29		0830		
3	LEMU-30		0820		
4	LEMU-31		0905		
5	LEMU-32		0916		
6	LEMU-33		1625		
7	LEMU-34		0935		
8	LEMU-35		0955		
9	LEMU-36		1646		
10	LEMU-31		1656		

PLEASE ANSWER QUESTIONS ABOVE!

IS YOUR PROJECT
MAMCP or CT RCP?

FORM NO: 01-01 (rev. 18-Jan-2010)

Relinquished By:

Date/Time

Received By:

Date/Time

Container Type

Preservative

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

CHAIN OF CUSTODY

PAGE 1 OF 2



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

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

Client Information

Client: **LIGHTSPEED ENVIRONMENTAL**Address: **39 INDUSTRIAL PARK RD**

Plymouth MA 02360

Phone: **508-830-3344**Fax: **508-830-3360**Email: **SKRACHMAN@LIGHTSPEEDENVIRONMENTAL.COM**
☐ These samples have been previously analyzed by Alpha

Other Project Specific Requirements/Comments/Detection Limits:

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

Project Information

Project Name: **WAKEFIELD**Project Location: **WAKEFIELD**Project #: **532**Project Manager: **Scott KRACHMAN**

ALPHA Quote #:

Turn-Around Time

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

Date Due:

Time:

Date Rec'd in Lab:

11/23/11

Report Information - Data Deliverables

☐ FAX ☐ EMAIL

☒ INDEX ☐ Add'l Deliverables

Regulatory Requirements/Report Limits

State/Fed Program Criteria

MA MCP PRESUMPTIVE CERTAINTY - CT REASONABLE CONFIDENCE PROTO

☒ Yes ☐ No Are MCP Analytical Methods Required?

☐ Yes ☐ No Is Matrix Spike (MS) Required on this SDG? (If yes see note in Comments)

☐ Yes ☐ No Are CT RCP (Reasonable Confidence Protocols) Required?

Billing Information

☒ Same as Client Info PO #: **532**
ALPHA Job #: **L149589**

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection		Sample Matrix	Sampler's Initials
		Date	Time		

19589.1	LEMU-28	11/21/11	0810	GW	TR
2	LEMU-29		0830		
3	LEMU-30		0820		
4	LEMU-31		0905		
5	LEMU-32		0910		
6	LEMU-33		1025		
7	LEMU-34		0935		
8	LEMU-35		0955		
9	LEMU-36		1040		
10	LEMU-31		1050		

ANALYSIS	
VOC (8200)	
WPH CHAINS ONLY	
EPH WITH PAHs	
SAMPLE HANDLING	
Filtration	
Done	
Not needed	
Lab to do	
Preservation	
Lab to do	
Sample Specific Comments	

PLEASE ANSWER QUESTIONS ABOVE!

IS YOUR PROJECT
MAMCP or CT RCP?

Relinquished By:

Date/Time

Received By:

Date/Time

Container Type

Preservative

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

7A
Volatile CONTINUING CALIBRATION CHECK

Lab Name: Alpha Analytical Labs

SDG No.: L1119589

Instrument ID: Quimby.i Calibration Date: 30-NOV-2011 Time: 12:20

Lab File ID: 1130A05 Init. Calib. Date(s): 07-NOV-2 07-NOV-2

Sample No: wg505314-1,31,1 Init. Calib. Times : 09:14 12:55

Compound	RRF	RRF	MIN RRF	%D	MAX %D	
dichlorodifluoromethane	.51317	.42614	.1	17	20	
chloromethane	.56316	.62588	.1	-11	20	
vinyl chloride	.44518	.48711	.1	-9	20	
bromomethane	.25805	.24604	.1	5	20	
chloroethane	.32333	.32164	.1	1	20	
trichlorofluoromethane	.56764	.67293	.1	-19	20	
ethyl ether	.15396	.17086	.05	-11	20	
acetone	.06345	.08052	.1	-27	20	F
1,1,-dichloroethene	.35701	.34486	.1	3	20	
methylene chloride	.37804	.3795	.1	0	20	
carbon disulfide	.987	.70088	.1	29	20	F
methyl tert butyl ether	.71689	.5824	.1	19	20	
trans-1,2-dichloroethene	.3767	.37473	.1	1	20	
Diisopropyl Ether	1.2377	1.3193	.05	-7	20	
1,1-dichloroethane	.72554	.76008	.2	-5	20	
Ethyl-Tert-Butyl-Ether	1.0354	.76593	.05	26	20	F
2-butanone	.09408	.10047	.1	-7	20	F
2,2-dichloropropane	.58731	.33456	.05	43	20	F
cis-1,2-dichloroethene	.4041	.41336	.1	-2	20	
chloroform	.65423	.74526	.2	-14	20	
bromochloromethane	.14922	.15924	.05	-7	20	
tetrahydrofuran	.05367	.05769	.05	-7	20	
1,1,1-trichloroethane	.58007	.51726	.1	11	20	
1,1-dichloropropene	.54533	.55462	.05	-2	20	
carbontetrachloride	.4406	.37372	.1	15	20	
Tertiary-Amyl Methyl Ether	.74585	.54175	.05	27	20	F
1,2-dichloroethane	.3957	.47176	.1	-19	20	
benzene	1.5823	1.6433	.5	-4	20	
trichloroethene	.40462	.40327	.2	0	20	
1,2-dichloropropane	.38687	.40722	.1	-5	20	
bromodichloromethane	.38381	.42609	.2	-11	20	
1,4-dioxane	.00147	.00182	.05	-24	20	F
dibromomethane	.14706	.16961	.05	-15	20	
4-methyl-2-pentanone	.07932	.07283	.1	8	20	F
cis-1,3-dichloropropene	.50736	.41327	.2	19	20	
toluene	1.2809	1.1232	.4	12	20	
trans-1,3-dichloropropene	.48456	.30995	.1	36	20	F
1,1,2-trichloroethane	.22892	.22144	.1	3	20	

FORM VII MCP-8260-10

7A
CONTINUING CALIBRATION CHECK

Lab Name: Alpha Analytical Labs

SDG No.: L1119589

Instrument ID: Quimby.i Calibration Date: 30-NOV-2011 Time: 12:20

Lab File ID: 1130A05 Init. Calib. Date(s): 07-NOV-2 07-NOV-2

Sample No: wg505314-1,31,1 Init. Calib. Times : 09:14 12:55

Compound	RRF	RRF	MIN RRF	%D	MAX %D	
=====	=====	=====	=====	=====	=====	
2-hexanone	.18038	.15687	.1	13	20	
1,3-dichloropropane	.51026	.47857	.05	6	20	
tetrachloroethene	.48741	.45053	.2	8	20	
chlorodibromomethane	100	102	.1	-2	20	
1,2-dibromoethane	.26103	.22369	.1	14	20	
chlorobenzene	1.3719	1.1775	.5	14	20	
1,1,1,2-tetrachloroethane	.36221	.27949	.05	23	20	F
ethyl benzene	2.4622	2.2736	.1	8	20	
p/m xylene	.97516	.87657	.1	10	20	
o xylene	.96295	.84254	.3	13	20	
styrene	1.5520	1.3753	.31	11	20	
isopropylbenzene	2.4099	2.0665	.1	14	20	
bromoform	100	99	.1	1	20	
1,1,2,2,-tetrachloroethane	.53691	.48015	.3	11	20	
1,2,3-trichloropropane	.43117	.38014	.05	12	20	
n-propylbenzene	4.9091	4.0726	.05	17	20	
bromobenzene	.92615	.77878	.05	16	20	
1,3,5-trimethylbenzene	3.5195	2.9253	.05	17	20	
2-chlorotoluene	3.3104	2.866	.05	13	20	
4-chlorotoluene	3.2240	2.7099	.05	16	20	
tert-butylbenzene	2.8977	2.2769	.05	21	20	F
1,2,4-trimethylbenzene	3.5521	3.0563	.05	14	20	
sec-butylbenzene	3.8978	3.0522	.05	22	20	F
p-isopropyltoluene	3.2126	2.6535	.05	17	20	
1,3-dichlorobenzene	1.8184	1.4889	.6	18	20	
1,4-dichlorobenzene	1.8433	1.5286	.5	17	20	
n-butylbenzene	3.1846	2.6387	.05	17	20	
1,2-dichlorobenzene	1.6255	1.3390	.4	18	20	
1,2-dibromo-3-chloropropane	.17275	.15322	.05	11	20	
1,2,4-trichlorobenzene	.76275	.60187	.2	21	20	F
hexachlorobutadiene	.33238	.24907	.05	25	20	F
naphthalene	1.3192	.97743	.05	26	20	F
1,2,3-trichlorobenzene	.57375	.43972	.05	23	20	F
=====	=====	=====	=====	=====	=====	
dibromofluoromethane	.21774	.22779	.05	-5	20	
1,2-dichloroethane-d4	.21378	.2338	.05	-9	20	
toluene-d8	1.207	1.1340	.05	6	20	
4-bromofluorobenzene	.96537	.92865	.05	4	20	

FORM VII MCP-8260-10

7A
CONTINUING CALIBRATION CHECK

Lab Name: Alpha Analytical Labs

SDG No.: L1119589

Instrument ID: Jack.i Calibration Date: 30-NOV-2011 Time: 15:28

Lab File ID: 1130N03 Init. Calib. Date(s): 10-NOV-2 10-NOV-2

Sample No: 8260 CCAL Init. Calib. Times : 14:05 17:52

Compound	RRF	RRF	MIN RRF	%D	MAX %D	
=====	=====	=====	=====	=====	=====	
dichlorodifluoromethane	.63412	.40181	.1	37	20	F
chloromethane	.95786	.69961	.1	27	20	F
vinyl chloride	.74427	.60653	.1	19	20	
bromomethane	.39483	.37912	.1	4	20	
chloroethane	.39305	.36237	.1	8	20	
trichlorofluoromethane	.82135	.90837	.1	-11	20	
ethyl ether	.27366	.27557	.05	-1	20	
1,1,-dichloroethene	.52913	.51499	.1	3	20	
carbon disulfide	1.3417	.95756	.1	29	20	F
methylene chloride	.59325	.6098	.1	-3	20	
acetone	.17578	.18909	.1	-8	20	
trans-1,2-dichloroethene	.5946	.55785	.1	6	20	
methyl tert butyl ether	1.4467	1.4328	.1	1	20	
Ethyl-Tert-Butyl-Ether	1.8167	1.7652	.05	3	20	
Diisopropyl Ether	2.2812	2.0546	.01	10	20	
1,1-dichloroethane	1.1853	1.1049	.2	7	20	
cis-1,2-dichloroethene	.65975	.63296	.1	4	20	
2,2-dichloropropane	.8794	.88839	.05	-1	20	
bromochloromethane	.30073	.3106	.05	-3	20	
chloroform	1.1719	1.1097	.2	5	20	
carbontetrachloride	.75039	.74038	.1	1	20	
tetrahydrofuran	.19351	.19739	.05	-2	20	
1,1,1-trichloroethane	.93377	.88728	.1	5	20	
Tertiary-Amyl Methyl Ether	1.4357	1.4518	.05	-1	20	
1,1-dichloropropene	.86955	.86462	.05	1	20	
2-butanone	.27149	.2642	.1	3	20	
benzene	2.5011	2.3567	.5	6	20	
1,2-dichloroethane	.77064	.79472	.1	-3	20	
trichloroethene	.67819	.64586	.2	5	20	
dibromomethane	.28908	.31037	.05	-7	20	
1,2-dichloropropane	.60764	.59359	.1	2	20	
bromodichloromethane	.77452	.72192	.2	7	20	
1,4-dioxane	.00288	.0037	.05	-28	20	F
cis-1,3-dichloropropene	.84496	.77657	.2	8	20	
toluene	1.9564	1.8310	.4	6	20	
tetrachloroethene	.88552	.89298	.2	-1	20	
4-methyl-2-pentanone	.1822	.17771	.1	2	20	
trans-1,3-dichloropropene	.94644	.84316	.1	11	20	

FORM VII MCP-8260-10

7A
CONTINUING CALIBRATION CHECK

Lab Name: Alpha Analytical Labs

SDG No.: L1119589

Instrument ID: Jack.i Calibration Date: 30-NOV-2011 Time: 15:28

Lab File ID: 1130N03 Init. Calib. Date(s): 10-NOV-2 10-NOV-2

Sample No: 8260 CCAL Init. Calib. Times : 14:05 17:52

Compound	RRF	RRF	MIN RRF	%D	MAX %D
=====	=====	=====	=====	=====	=====
1,1,2-trichloroethane	.54839	.5311	.1	3	20
chlorodibromomethane	.7176	.69225	.1	4	20
1,3-dichloropropane	1.0278	.98821	.05	4	20
1,2-dibromoethane	.47291	.50431	.1	-7	20
2-hexanone	.51913	.43492	.1	16	20
chlorobenzene	2.1771	2.0025	.5	8	20
ethyl benzene	3.3045	3.0579	.1	7	20
1,1,1,2-tetrachloroethane	.78864	.79126	.05	0	20
p/m xylene	1.3059	1.2207	.1	7	20
o xylene	1.3257	1.3148	.3	1	20
styrene	2.0857	2.0726	.3	1	20
bromoform	.76614	.68839	.1	10	20
isopropylbenzene	2.8673	2.8934	.1	-1	20
bromobenzene	1.5900	1.5674	.05	1	20
n-propylbenzene	5.7418	5.8090	.05	-1	20
1,1,2,2,-tetrachloroethane	1.3867	1.2916	.3	7	20
2-chlorotoluene	4.4556	4.2725	.05	4	20
1,2,3-trichloropropane	1.0206	1.0595	.05	-4	20
1,3,5-trimethylbenzene	4.6142	4.4384	.05	4	20
4-chlorotoluene	4.0527	3.8997	.05	4	20
tert-butylbenzene	3.6802	3.8647	.05	-5	20
1,2,4-trimethylbenzene	4.7087	4.5290	.05	4	20
sec-butylbenzene	4.3264	4.4022	.01	-2	20
p-isopropyltoluene	3.8741	4.0902	.05	-6	20
1,3-dichlorobenzene	2.7407	2.7718	.6	-1	20
1,4-dichlorobenzene	2.7555	2.6847	.5	3	20
n-butylbenzene	2.8878	2.9178	.05	-1	20
1,2-dichlorobenzene	2.5971	2.5077	.4	3	20
1,2-dibromo-3-chloropropane	.15174	.1611	.05	-6	20
hexachlorobutadiene	.37941	.39507	.05	-4	20
1,2,4-trichlorobenzene	1.1923	1.1793	.2	1	20
naphthalene	2.7753	2.6670	.05	4	20
1,2,3-trichlorobenzene	.96796	.87733	.05	9	20
=====	=====	=====	=====	=====	=====
dibromofluoromethane	.24021	.25119	.05	-5	20
1,2-dichloroethane-d4	.26868	.27521	.05	-2	20
toluene-d8	1.2381	1.2356	.01	0	20
4-bromofluorobenzene	.85271	.868	.05	-2	20

FORM VII MCP-8260-10

7A
CONTINUING CALIBRATION CHECK

Lab Name: Alpha Analytical Labs

SDG No.: L1119589

Instrument ID: Quimby.i Calibration Date: 01-DEC-2011 Time: 05:56

Lab File ID: 1201A03 Init. Calib. Date(s): 07-NOV-2 07-NOV-2

Sample No: 8260 CCAL Init. Calib. Times : 09:14 12:55

Compound	RRF	RRF	MIN RRF	%D	MAX %D	
dichlorodifluoromethane	.51317	.44979	.1	12	20	
chloromethane	.56316	.66119	.1	-17	20	
vinyl chloride	.44518	.51229	.1	-15	20	
bromomethane	.25805	.26472	.1	-3	20	
chloroethane	.32333	.34274	.1	-6	20	
trichlorofluoromethane	.56764	.69587	.1	-23	20	F
ethyl ether	.15396	.16969	.05	-10	20	
acetone	.06345	.07224	.1	-14	20	F
1,1,-dichloroethene	.35701	.36574	.1	-2	20	
methylene chloride	.37804	.38833	.1	-3	20	
carbon disulfide	.987	.7433	.1	25	20	F
methyl tert butyl ether	.71689	.60908	.1	15	20	
trans-1,2-dichloroethene	.3767	.39547	.1	-5	20	
Diisopropyl Ether	1.2377	1.4226	.05	-15	20	
1,1-dichloroethane	.72554	.79951	.2	-10	20	
Ethyl-Tert-Butyl-Ether	1.0354	.91351	.05	12	20	
2-butanone	.09408	.09446	.1	0	20	F
2,2-dichloropropane	.58731	.38426	.05	35	20	F
cis-1,2-dichloroethene	.4041	.42622	.1	-5	20	
chloroform	.65423	.71587	.2	-9	20	
bromochloromethane	.14922	.16211	.05	-9	20	
tetrahydrofuran	.05367	.05718	.05	-7	20	
1,1,1-trichloroethane	.58007	.5149	.1	11	20	
1,1-dichloropropene	.54533	.59241	.05	-9	20	
carbontetrachloride	.4406	.33048	.1	25	20	F
Tertiary-Amyl Methyl Ether	.74585	.61205	.05	18	20	
1,2-dichloroethane	.3957	.47641	.1	-20	20	F
benzene	1.5823	1.7309	.5	-9	20	
trichloroethene	.40462	.43645	.2	-8	20	
1,2-dichloropropane	.38687	.42641	.1	-10	20	
bromodichloromethane	.38381	.38478	.2	0	20	
1,4-dioxane	.00147	.00147	.05	0	20	F
dibromomethane	.14706	.16932	.05	-15	20	
4-methyl-2-pentanone	.07932	.07053	.1	11	20	F
cis-1,3-dichloropropene	.50736	.40371	.2	20	20	F
toluene	1.2809	1.2141	.4	5	20	
trans-1,3-dichloropropene	.48456	.31124	.1	36	20	F
1,1,2-trichloroethane	.22892	.22298	.1	3	20	

FORM VII MCP-8260-10

7A
CONTINUING CALIBRATION CHECK

Lab Name: Alpha Analytical Labs

SDG No.: L1119589

Instrument ID: Quimby.i Calibration Date: 01-DEC-2011 Time: 05:56

Lab File ID: 1201A03 Init. Calib. Date(s): 07-NOV-2 07-NOV-2

Sample No: 8260 CCAL Init. Calib. Times : 09:14 12:55

Compound	RRF	RRF	MIN RRF	%D	MAX %D	
=====	=====	=====	=====	=====	=====	
2-hexanone	.18038	.14832	.1	18	20	
1,3-dichloropropane	.51026	.50245	.05	2	20	
tetrachloroethene	.48741	.47188	.2	3	20	
chlorodibromomethane	100	85.678	.1	14	20	
1,2-dibromoethane	.26103	.22055	.1	16	20	
chlorobenzene	1.3719	1.2661	.5	8	20	
1,1,1,2-tetrachloroethane	.36221	.24359	.05	33	20	F
ethyl benzene	2.4622	2.4433	.1	1	20	
p/m xylene	.97516	.93668	.1	4	20	
o xylene	.96295	.90575	.3	6	20	
styrene	1.5520	1.4784	.31	5	20	
isopropylbenzene	2.4099	2.2742	.1	6	20	
bromoform	100	80.321	.1	20	20	
1,1,2,2,-tetrachloroethane	.53691	.47085	.3	12	20	
1,2,3-trichloropropane	.43117	.38637	.05	10	20	
n-propylbenzene	4.9091	4.4990	.05	8	20	
bromobenzene	.92615	.81867	.05	12	20	
1,3,5-trimethylbenzene	3.5195	3.1639	.05	10	20	
2-chlorotoluene	3.3104	3.0921	.05	7	20	
4-chlorotoluene	3.2240	2.8946	.05	10	20	
tert-butylbenzene	2.8977	2.5238	.05	13	20	
1,2,4-trimethylbenzene	3.5521	3.2662	.05	8	20	
sec-butylbenzene	3.8978	3.4184	.05	12	20	
p-isopropyltoluene	3.2126	2.9384	.05	9	20	
1,3-dichlorobenzene	1.8184	1.5633	.6	14	20	
1,4-dichlorobenzene	1.8433	1.5741	.5	15	20	
n-butylbenzene	3.1846	2.8969	.05	9	20	
1,2-dichlorobenzene	1.6255	1.3853	.4	15	20	
1,2-dibromo-3-chloropropane	.17275	.14776	.05	14	20	
1,2,4-trichlorobenzene	.76275	.58723	.2	23	20	F
hexachlorobutadiene	.33238	.27081	.05	19	20	
naphthalene	1.3192	.94185	.05	29	20	F
1,2,3-trichlorobenzene	.57375	.41553	.05	28	20	F
=====	=====	=====	=====	=====	=====	
dibromofluoromethane	.21774	.22399	.05	-3	20	
1,2-dichloroethane-d4	.21378	.22833	.05	-7	20	
toluene-d8	1.207	1.1421	.05	5	20	
4-bromofluorobenzene	.96537	.94768	.05	2	20	

FORM VII MCP-8260-10



ANALYTICAL REPORT

Lab Number:	L1120563
Client:	Lightship Engineering 39 Industrial Park Road Unit C Plymouth, MA 02360
ATTN:	Scott Kraihanzel
Phone:	(508) 830-3344
Project Name:	WAKEFIELD
Project Number:	532
Report Date:	12/14/11

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

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

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



Project Name: WAKEFIELD
Project Number: 532

Lab Number: L1120563
Report Date: 12/14/11

Alpha Sample ID	Client ID	Sample Location	Collection Date/Time
L1120563-01	LEMW-39	WAKEFIELD	12/09/11 08:30
L1120563-02	LEMW-40	WAKEFIELD	12/09/11 08:40
L1120563-03	LEMW-41	WAKEFIELD	12/09/11 09:45

Project Name: WAKEFIELD

Lab Number: L1120563

Project Number: 532

Report Date: 12/14/11

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)?	YES
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: WAKEFIELD
Project Number: 532

Lab Number: L1120563
Report Date: 12/14/11

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

L1120563-01: The result for Trichloroethene should be considered estimated, and is qualified with an E flag, because it exceeded the calibration on the initial analysis. Re-analysis yielded results that differ between the A & B vials. The sample containers were verified as being labeled correctly by the laboratory, and the reported results were confirmed by the screen analysis results. The results of both analyses are reported.

L1120563-02 and -03 have elevated detection limits due to the dilutions required by the elevated concentrations of target compounds in the samples.

In reference to question G:

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

The WG508078-1 LCS recovery, associated with L1120563-01, -02, and -03, is above the acceptance criteria for Bromomethane (132%); however, it has been identified as a "difficult" analyte and is within the 40-

Project Name: WAKEFIELD
Project Number: 532

Lab Number: L1120563
Report Date: 12/14/11

Case Narrative (continued)

160% acceptance limits. The results of the associated samples are reported; however, all positive detects are considered to have a potentially high bias for this compound.

The WG508078-1/-2 LCS/LCSD RPD, associated with L1120563-01, -02, and -03, is above the acceptance criteria for 1,2-Dibromo-3-chloropropane (33%).

The WG508078-4/-5 LCS/LCSD recoveries, associated with L1120563-01R, are above the acceptance criteria for Bromomethane (132%/138%); however, it has been identified as a "difficult" analyte and is within the 40-160% acceptance limits. The results of the associated sample are reported; however, all positive detects are considered to have a potentially high bias for this compound.

The WG508078-4/-5 LCS/LCSD RPDs, associated with L1120563-01R, are above the acceptance criteria for Methylene chloride (22%), Acetone (24%), and 1,4-Dioxane (24%).

The initial calibration, associated with L1120563-01, -02, and -03, did not meet the method required minimum response factor on the lowest calibration standard for 1,4-Dioxane (0.00332), as well as the average response factor for 1,4-Dioxane. In addition, a quadratic fit was utilized for trans-1,2-Dichloroethene, cis-1,2-Dichloroethene, Acetone, and Bromochloromethane.

The continuing calibration standard, associated with L1120563-01, -02, and -03, 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.

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

Authorized Signature:  Cynthia McQueen

Title: Technical Director/Representative

Date: 12/14/11

ORGANICS

VOLATILES

Project Name: WAKEFIELD**Lab Number:** L1120563**Project Number:** 532**Report Date:** 12/14/11**SAMPLE RESULTS**

Lab ID: L1120563-01
 Client ID: LEMW-39
 Sample Location: WAKEFIELD
 Matrix: Water
 Analytical Method: 97,8260B
 Analytical Date: 12/14/11 12:20
 Analyst: MM

Date Collected: 12/09/11 08:30
 Date Received: 12/09/11
 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	1.5		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	1.2		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	0.50	--	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	1.4		ug/l	1.0	--	1
1,2-Dichlorobenzene	ND		ug/l	1.0	--	1
1,3-Dichlorobenzene	ND		ug/l	1.0	--	1
1,4-Dichlorobenzene	ND		ug/l	1.0	--	1

Project Name: WAKEFIELD**Lab Number:** L1120563**Project Number:** 532**Report Date:** 12/14/11**SAMPLE RESULTS**

Lab ID: L1120563-01

Date Collected: 12/09/11 08:30

Client ID: LEMW-39

Date Received: 12/09/11

Sample Location: WAKEFIELD

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
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	100		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	11		ug/l	5.0	--	1
2-Hexanone	ND		ug/l	5.0	--	1
Bromochloromethane	ND		ug/l	2.0	--	1
Tetrahydrofuran	ND		ug/l	5.0	--	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
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

Project Name: WAKEFIELD**Lab Number:** L1120563**Project Number:** 532**Report Date:** 12/14/11**SAMPLE RESULTS**

Lab ID: L1120563-01

Date Collected: 12/09/11 08:30

Client ID: LEMW-39

Date Received: 12/09/11

Sample Location: WAKEFIELD

Field Prep: Not Specified

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

MCP Volatile Organics - Westborough Lab

1,4-Dioxane	ND		ug/l	250	--	1
-------------	----	--	------	-----	----	---

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	106		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	96		70-130
Dibromofluoromethane	117		70-130

Project Name: WAKEFIELD**Lab Number:** L1120563**Project Number:** 532**Report Date:** 12/14/11**SAMPLE RESULTS**

Lab ID: L1120563-01 R
 Client ID: LEMW-39
 Sample Location: WAKEFIELD
 Matrix: Water
 Analytical Method: 97,8260B
 Analytical Date: 12/13/11 11:32
 Analyst: MM

Date Collected: 12/09/11 08:30
 Date Received: 12/09/11
 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	0.50	--	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	10		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	3000	E	ug/l	1.0	--	1
1,2-Dichlorobenzene	ND		ug/l	1.0	--	1
1,3-Dichlorobenzene	ND		ug/l	1.0	--	1
1,4-Dichlorobenzene	ND		ug/l	1.0	--	1

Project Name: WAKEFIELD**Lab Number:** L1120563**Project Number:** 532**Report Date:** 12/14/11**SAMPLE RESULTS**

Lab ID: L1120563-01 R

Date Collected: 12/09/11 08:30

Client ID: LEMW-39

Date Received: 12/09/11

Sample Location: WAKEFIELD

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
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	95		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	48		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	6.1		ug/l	5.0	--	1
Bromochloromethane	ND		ug/l	2.0	--	1
Tetrahydrofuran	ND		ug/l	5.0	--	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
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

Project Name: WAKEFIELD**Lab Number:** L1120563**Project Number:** 532**Report Date:** 12/14/11**SAMPLE RESULTS**

Lab ID: L1120563-01 R

Date Collected: 12/09/11 08:30

Client ID: LEMW-39

Date Received: 12/09/11

Sample Location: WAKEFIELD

Field Prep: Not Specified

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

MCP Volatile Organics - Westborough Lab

1,4-Dioxane	ND		ug/l	250	--	1
-------------	----	--	------	-----	----	---

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	97		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	98		70-130
Dibromofluoromethane	99		70-130

Project Name: WAKEFIELD**Lab Number:** L1120563**Project Number:** 532**Report Date:** 12/14/11**SAMPLE RESULTS**

Lab ID: L1120563-02 D
 Client ID: LEMW-40
 Sample Location: WAKEFIELD
 Matrix: Water
 Analytical Method: 97,8260B
 Analytical Date: 12/14/11 11:16
 Analyst: MM

Date Collected: 12/09/11 08:40
 Date Received: 12/09/11
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Methylene chloride	ND		ug/l	100	--	50
1,1-Dichloroethane	ND		ug/l	50	--	50
Chloroform	ND		ug/l	50	--	50
Carbon tetrachloride	ND		ug/l	50	--	50
1,2-Dichloropropane	ND		ug/l	50	--	50
Dibromochloromethane	ND		ug/l	50	--	50
1,1,2-Trichloroethane	ND		ug/l	50	--	50
Tetrachloroethene	ND		ug/l	50	--	50
Chlorobenzene	ND		ug/l	50	--	50
Trichlorofluoromethane	ND		ug/l	100	--	50
1,2-Dichloroethane	ND		ug/l	50	--	50
1,1,1-Trichloroethane	ND		ug/l	50	--	50
Bromodichloromethane	ND		ug/l	50	--	50
trans-1,3-Dichloropropene	ND		ug/l	25	--	50
cis-1,3-Dichloropropene	ND		ug/l	25	--	50
1,1-Dichloropropene	ND		ug/l	100	--	50
Bromoform	ND		ug/l	100	--	50
1,1,2,2-Tetrachloroethane	ND		ug/l	50	--	50
Benzene	ND		ug/l	25	--	50
Toluene	ND		ug/l	50	--	50
Ethylbenzene	ND		ug/l	50	--	50
Chloromethane	ND		ug/l	100	--	50
Bromomethane	ND		ug/l	100	--	50
Vinyl chloride	ND		ug/l	50	--	50
Chloroethane	ND		ug/l	100	--	50
1,1-Dichloroethene	ND		ug/l	50	--	50
trans-1,2-Dichloroethene	ND		ug/l	50	--	50
Trichloroethene	8900		ug/l	50	--	50
1,2-Dichlorobenzene	ND		ug/l	50	--	50
1,3-Dichlorobenzene	ND		ug/l	50	--	50
1,4-Dichlorobenzene	ND		ug/l	50	--	50

Project Name: WAKEFIELD**Lab Number:** L1120563**Project Number:** 532**Report Date:** 12/14/11**SAMPLE RESULTS**

Lab ID: L1120563-02 D

Date Collected: 12/09/11 08:40

Client ID: LEMW-40

Date Received: 12/09/11

Sample Location: WAKEFIELD

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Methyl tert butyl ether	ND		ug/l	100	--	50
p/m-Xylene	ND		ug/l	100	--	50
o-Xylene	ND		ug/l	50	--	50
cis-1,2-Dichloroethene	240		ug/l	50	--	50
Dibromomethane	ND		ug/l	100	--	50
1,2,3-Trichloropropane	ND		ug/l	100	--	50
Styrene	ND		ug/l	50	--	50
Dichlorodifluoromethane	ND		ug/l	100	--	50
Acetone	ND		ug/l	250	--	50
Carbon disulfide	ND		ug/l	100	--	50
2-Butanone	ND		ug/l	250	--	50
4-Methyl-2-pentanone	ND		ug/l	250	--	50
2-Hexanone	ND		ug/l	250	--	50
Bromochloromethane	ND		ug/l	100	--	50
Tetrahydrofuran	ND		ug/l	250	--	50
2,2-Dichloropropane	ND		ug/l	100	--	50
1,2-Dibromoethane	ND		ug/l	100	--	50
1,3-Dichloropropane	ND		ug/l	100	--	50
1,1,1,2-Tetrachloroethane	ND		ug/l	50	--	50
Bromobenzene	ND		ug/l	100	--	50
n-Butylbenzene	ND		ug/l	100	--	50
sec-Butylbenzene	ND		ug/l	100	--	50
tert-Butylbenzene	ND		ug/l	100	--	50
o-Chlorotoluene	ND		ug/l	100	--	50
p-Chlorotoluene	ND		ug/l	100	--	50
1,2-Dibromo-3-chloropropane	ND		ug/l	100	--	50
Hexachlorobutadiene	ND		ug/l	30	--	50
Isopropylbenzene	ND		ug/l	100	--	50
p-Isopropyltoluene	ND		ug/l	100	--	50
Naphthalene	ND		ug/l	100	--	50
n-Propylbenzene	ND		ug/l	100	--	50
1,2,3-Trichlorobenzene	ND		ug/l	100	--	50
1,2,4-Trichlorobenzene	ND		ug/l	100	--	50
1,3,5-Trimethylbenzene	ND		ug/l	100	--	50
1,2,4-Trimethylbenzene	ND		ug/l	100	--	50
Ethyl ether	ND		ug/l	100	--	50
Isopropyl Ether	ND		ug/l	100	--	50
Ethyl-Tert-Butyl-Ether	ND		ug/l	100	--	50
Tertiary-Amyl Methyl Ether	ND		ug/l	100	--	50

Project Name: WAKEFIELD**Lab Number:** L1120563**Project Number:** 532**Report Date:** 12/14/11**SAMPLE RESULTS**

Lab ID: L1120563-02 D

Date Collected: 12/09/11 08:40

Client ID: LEMW-40

Date Received: 12/09/11

Sample Location: WAKEFIELD

Field Prep: Not Specified

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

MCP Volatile Organics - Westborough Lab

1,4-Dioxane	ND		ug/l	12000	--	50
-------------	----	--	------	-------	----	----

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	110		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	94		70-130
Dibromofluoromethane	110		70-130

Project Name: WAKEFIELD**Lab Number:** L1120563**Project Number:** 532**Report Date:** 12/14/11**SAMPLE RESULTS**

Lab ID: L1120563-03 D
 Client ID: LEMW-41
 Sample Location: WAKEFIELD
 Matrix: Water
 Analytical Method: 97,8260B
 Analytical Date: 12/14/11 11:48
 Analyst: MM

Date Collected: 12/09/11 09:45
 Date Received: 12/09/11
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Methylene chloride	ND		ug/l	100	--	50
1,1-Dichloroethane	ND		ug/l	50	--	50
Chloroform	ND		ug/l	50	--	50
Carbon tetrachloride	ND		ug/l	50	--	50
1,2-Dichloropropane	ND		ug/l	50	--	50
Dibromochloromethane	ND		ug/l	50	--	50
1,1,2-Trichloroethane	ND		ug/l	50	--	50
Tetrachloroethene	ND		ug/l	50	--	50
Chlorobenzene	ND		ug/l	50	--	50
Trichlorofluoromethane	ND		ug/l	100	--	50
1,2-Dichloroethane	ND		ug/l	50	--	50
1,1,1-Trichloroethane	ND		ug/l	50	--	50
Bromodichloromethane	ND		ug/l	50	--	50
trans-1,3-Dichloropropene	ND		ug/l	25	--	50
cis-1,3-Dichloropropene	ND		ug/l	25	--	50
1,1-Dichloropropene	ND		ug/l	100	--	50
Bromoform	ND		ug/l	100	--	50
1,1,2,2-Tetrachloroethane	ND		ug/l	50	--	50
Benzene	ND		ug/l	25	--	50
Toluene	ND		ug/l	50	--	50
Ethylbenzene	ND		ug/l	50	--	50
Chloromethane	ND		ug/l	100	--	50
Bromomethane	ND		ug/l	100	--	50
Vinyl chloride	ND		ug/l	50	--	50
Chloroethane	ND		ug/l	100	--	50
1,1-Dichloroethene	ND		ug/l	50	--	50
trans-1,2-Dichloroethene	ND		ug/l	50	--	50
Trichloroethene	6700		ug/l	50	--	50
1,2-Dichlorobenzene	ND		ug/l	50	--	50
1,3-Dichlorobenzene	ND		ug/l	50	--	50
1,4-Dichlorobenzene	ND		ug/l	50	--	50

Project Name: WAKEFIELD**Lab Number:** L1120563**Project Number:** 532**Report Date:** 12/14/11**SAMPLE RESULTS**

Lab ID: L1120563-03 D

Date Collected: 12/09/11 09:45

Client ID: LEMW-41

Date Received: 12/09/11

Sample Location: WAKEFIELD

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Methyl tert butyl ether	ND		ug/l	100	--	50
p/m-Xylene	ND		ug/l	100	--	50
o-Xylene	ND		ug/l	50	--	50
cis-1,2-Dichloroethene	220		ug/l	50	--	50
Dibromomethane	ND		ug/l	100	--	50
1,2,3-Trichloropropane	ND		ug/l	100	--	50
Styrene	ND		ug/l	50	--	50
Dichlorodifluoromethane	ND		ug/l	100	--	50
Acetone	ND		ug/l	250	--	50
Carbon disulfide	ND		ug/l	100	--	50
2-Butanone	ND		ug/l	250	--	50
4-Methyl-2-pentanone	ND		ug/l	250	--	50
2-Hexanone	ND		ug/l	250	--	50
Bromochloromethane	ND		ug/l	100	--	50
Tetrahydrofuran	ND		ug/l	250	--	50
2,2-Dichloropropane	ND		ug/l	100	--	50
1,2-Dibromoethane	ND		ug/l	100	--	50
1,3-Dichloropropane	ND		ug/l	100	--	50
1,1,1,2-Tetrachloroethane	ND		ug/l	50	--	50
Bromobenzene	ND		ug/l	100	--	50
n-Butylbenzene	ND		ug/l	100	--	50
sec-Butylbenzene	ND		ug/l	100	--	50
tert-Butylbenzene	ND		ug/l	100	--	50
o-Chlorotoluene	ND		ug/l	100	--	50
p-Chlorotoluene	ND		ug/l	100	--	50
1,2-Dibromo-3-chloropropane	ND		ug/l	100	--	50
Hexachlorobutadiene	ND		ug/l	30	--	50
Isopropylbenzene	ND		ug/l	100	--	50
p-Isopropyltoluene	ND		ug/l	100	--	50
Naphthalene	ND		ug/l	100	--	50
n-Propylbenzene	ND		ug/l	100	--	50
1,2,3-Trichlorobenzene	ND		ug/l	100	--	50
1,2,4-Trichlorobenzene	ND		ug/l	100	--	50
1,3,5-Trimethylbenzene	ND		ug/l	100	--	50
1,2,4-Trimethylbenzene	ND		ug/l	100	--	50
Ethyl ether	ND		ug/l	100	--	50
Isopropyl Ether	ND		ug/l	100	--	50
Ethyl-Tert-Butyl-Ether	ND		ug/l	100	--	50
Tertiary-Amyl Methyl Ether	ND		ug/l	100	--	50

Project Name: WAKEFIELD**Lab Number:** L1120563**Project Number:** 532**Report Date:** 12/14/11**SAMPLE RESULTS**

Lab ID: L1120563-03 D

Date Collected: 12/09/11 09:45

Client ID: LEMW-41

Date Received: 12/09/11

Sample Location: WAKEFIELD

Field Prep: Not Specified

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

MCP Volatile Organics - Westborough Lab

1,4-Dioxane	ND		ug/l	12000	--	50
-------------	----	--	------	-------	----	----

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	99		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	102		70-130
Dibromofluoromethane	113		70-130

Project Name: WAKEFIELD

Lab Number: L1120563

Project Number: 532

Report Date: 12/14/11

Method Blank Analysis Batch Quality Control

Analytical Method: 97,8260B
 Analytical Date: 12/14/11 09:39
 Analyst: MM

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics - Westborough Lab for sample(s): 01-03 Batch: WG508078-3					
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	0.50	--
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: WAKEFIELD

Lab Number: L1120563

Project Number: 532

Report Date: 12/14/11

Method Blank Analysis Batch Quality Control

Analytical Method: 97,8260B
 Analytical Date: 12/14/11 09:39
 Analyst: MM

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics - Westborough Lab for sample(s): 01-03 Batch: WG508078-3					
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	5.0	--
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: WAKEFIELD

Lab Number: L1120563

Project Number: 532

Report Date: 12/14/11

Method Blank Analysis Batch Quality Control

Analytical Method: 97,8260B
 Analytical Date: 12/14/11 09:39
 Analyst: MM

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics - Westborough Lab for sample(s): 01-03 Batch: WG508078-3					
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	98		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	95		70-130
Dibromofluoromethane	113		70-130

Project Name: WAKEFIELD

Lab Number: L1120563

Project Number: 532

Report Date: 12/14/11

Method Blank Analysis Batch Quality Control

Analytical Method: 97,8260B
 Analytical Date: 12/13/11 09:23
 Analyst: MM

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics - Westborough Lab for sample(s): 01 Batch: WG508078-6					
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	0.50	--
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: WAKEFIELD

Lab Number: L1120563

Project Number: 532

Report Date: 12/14/11

Method Blank Analysis Batch Quality Control

Analytical Method: 97,8260B
 Analytical Date: 12/13/11 09:23
 Analyst: MM

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics - Westborough Lab for sample(s): 01 Batch: WG508078-6					
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	5.0	--
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: WAKEFIELD

Lab Number: L1120563

Project Number: 532

Report Date: 12/14/11

Method Blank Analysis Batch Quality Control

Analytical Method: 97,8260B
 Analytical Date: 12/13/11 09:23
 Analyst: MM

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics - Westborough Lab for sample(s): 01 Batch: WG508078-6					
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	93		70-130
Toluene-d8	103		70-130
4-Bromofluorobenzene	94		70-130
Dibromofluoromethane	113		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: WAKEFIELD

Project Number: 532

Lab Number: L1120563

Report Date: 12/14/11

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 01-03 Batch: WG508078-1 WG508078-2								
Methylene chloride	105		107		70-130	2		20
1,1-Dichloroethane	104		100		70-130	4		20
Chloroform	106		105		70-130	1		20
Carbon tetrachloride	114		119		70-130	4		20
1,2-Dichloropropane	93		93		70-130	0		20
Dibromochloromethane	84		81		70-130	4		20
1,1,2-Trichloroethane	88		88		70-130	0		20
Tetrachloroethene	110		109		70-130	1		20
Chlorobenzene	94		92		70-130	2		20
Trichlorofluoromethane	124		128		70-130	3		20
1,2-Dichloroethane	102		99		70-130	3		20
1,1,1-Trichloroethane	113		116		70-130	3		20
Bromodichloromethane	96		96		70-130	0		20
trans-1,3-Dichloropropene	82		84		70-130	2		20
cis-1,3-Dichloropropene	92		92		70-130	0		20
1,1-Dichloropropene	103		99		70-130	4		20
Bromoform	89		75		70-130	17		20
1,1,2,2-Tetrachloroethane	88		72		70-130	20		20
Benzene	102		100		70-130	2		20
Toluene	94		94		70-130	0		20
Ethylbenzene	99		98		70-130	1		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: WAKEFIELD

Project Number: 532

Lab Number: L1120563

Report Date: 12/14/11

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 01-03 Batch: WG508078-1 WG508078-2								
Chloromethane	100		100		70-130	0		20
Bromomethane	132	Q	121		70-130	9		20
Vinyl chloride	114		109		70-130	4		20
Chloroethane	119		106		70-130	12		20
1,1-Dichloroethene	121		123		70-130	2		20
trans-1,2-Dichloroethene	112		109		70-130	3		20
Trichloroethene	99		101		70-130	2		20
1,2-Dichlorobenzene	103		87		70-130	17		20
1,3-Dichlorobenzene	100		94		70-130	6		20
1,4-Dichlorobenzene	100		93		70-130	7		20
Methyl tert butyl ether	91		86		70-130	6		20
p/m-Xylene	103		100		70-130	3		20
o-Xylene	98		100		70-130	2		20
cis-1,2-Dichloroethene	106		102		70-130	4		20
Dibromomethane	106		100		70-130	6		20
1,2,3-Trichloropropane	94		78		70-130	19		20
Styrene	100		98		70-130	2		20
Dichlorodifluoromethane	98		88		70-130	11		20
Acetone	85		86		70-130	1		20
Carbon disulfide	99		103		70-130	4		20
2-Butanone	94		85		70-130	10		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: WAKEFIELD

Project Number: 532

Lab Number: L1120563

Report Date: 12/14/11

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 01-03 Batch: WG508078-1 WG508078-2								
4-Methyl-2-pentanone	88		84		70-130	5		20
2-Hexanone	81		76		70-130	6		20
Bromochloromethane	103		104		70-130	1		20
Tetrahydrofuran	87		85		70-130	2		20
2,2-Dichloropropane	116		118		70-130	2		20
1,2-Dibromoethane	91		89		70-130	2		20
1,3-Dichloropropane	88		80		70-130	10		20
1,1,1,2-Tetrachloroethane	97		92		70-130	5		20
Bromobenzene	96		91		70-130	5		20
n-Butylbenzene	108		96		70-130	12		20
sec-Butylbenzene	102		95		70-130	7		20
tert-Butylbenzene	109		98		70-130	11		20
o-Chlorotoluene	96		92		70-130	4		20
p-Chlorotoluene	91		83		70-130	9		20
1,2-Dibromo-3-chloropropane	100		72		70-130	33	Q	20
Hexachlorobutadiene	114		107		70-130	6		20
Isopropylbenzene	108		106		70-130	2		20
p-Isopropyltoluene	111		103		70-130	7		20
Naphthalene	85		70		70-130	19		20
n-Propylbenzene	101		93		70-130	8		20
1,2,3-Trichlorobenzene	94		85		70-130	10		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: WAKEFIELD

Project Number: 532

Lab Number: L1120563

Report Date: 12/14/11

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 01-03 Batch: WG508078-1 WG508078-2								
1,2,4-Trichlorobenzene	96		85		70-130	12		20
1,3,5-Trimethylbenzene	98		89		70-130	10		20
1,2,4-Trimethylbenzene	103		91		70-130	12		20
Ethyl ether	109		103		70-130	6		20
Isopropyl Ether	85		83		70-130	2		20
Ethyl-Tert-Butyl-Ether	89		87		70-130	2		20
Tertiary-Amyl Methyl Ether	96		93		70-130	3		20
1,4-Dioxane	84		85		70-130	1		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	99		105		70-130
Toluene-d8	95		95		70-130
4-Bromofluorobenzene	92		88		70-130
Dibromofluoromethane	106		115		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: WAKEFIELD

Project Number: 532

Lab Number: L1120563

Report Date: 12/14/11

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 01 Batch: WG508078-4 WG508078-5								
Methylene chloride	106		85		70-130	22	Q	20
1,1-Dichloroethane	96		99		70-130	3		20
Chloroform	106		104		70-130	2		20
Carbon tetrachloride	112		109		70-130	3		20
1,2-Dichloropropane	94		93		70-130	1		20
Dibromochloromethane	91		94		70-130	3		20
1,1,2-Trichloroethane	89		93		70-130	4		20
Tetrachloroethene	107		110		70-130	3		20
Chlorobenzene	91		98		70-130	7		20
Trichlorofluoromethane	119		124		70-130	4		20
1,2-Dichloroethane	102		100		70-130	2		20
1,1,1-Trichloroethane	108		104		70-130	4		20
Bromodichloromethane	97		98		70-130	1		20
trans-1,3-Dichloropropene	86		86		70-130	0		20
cis-1,3-Dichloropropene	93		91		70-130	2		20
1,1-Dichloropropene	99		95		70-130	4		20
Bromoform	88		89		70-130	1		20
1,1,2,2-Tetrachloroethane	96		83		70-130	15		20
Benzene	98		95		70-130	3		20
Toluene	91		96		70-130	5		20
Ethylbenzene	95		99		70-130	4		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: WAKEFIELD

Project Number: 532

Lab Number: L1120563

Report Date: 12/14/11

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 01 Batch: WG508078-4 WG508078-5								
Chloromethane	98		94		70-130	4		20
Bromomethane	132	Q	138	Q	70-130	4		20
Vinyl chloride	107		106		70-130	1		20
Chloroethane	106		110		70-130	4		20
1,1-Dichloroethene	108		114		70-130	5		20
trans-1,2-Dichloroethene	102		101		70-130	1		20
Trichloroethene	100		94		70-130	6		20
1,2-Dichlorobenzene	100		97		70-130	3		20
1,3-Dichlorobenzene	98		99		70-130	1		20
1,4-Dichlorobenzene	101		93		70-130	8		20
Methyl tert butyl ether	93		84		70-130	10		20
p/m-Xylene	98		103		70-130	5		20
o-Xylene	97		102		70-130	5		20
cis-1,2-Dichloroethene	102		103		70-130	1		20
Dibromomethane	107		102		70-130	5		20
1,2,3-Trichloropropane	101		88		70-130	14		20
Styrene	96		106		70-130	10		20
Dichlorodifluoromethane	107		113		70-130	5		20
Acetone	92		72		70-130	24	Q	20
Carbon disulfide	89		99		70-130	11		20
2-Butanone	104		91		70-130	13		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: WAKEFIELD

Project Number: 532

Lab Number: L1120563

Report Date: 12/14/11

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 01 Batch: WG508078-4 WG508078-5								
4-Methyl-2-pentanone	97		85		70-130	13		20
2-Hexanone	86		82		70-130	5		20
Bromochloromethane	107		102		70-130	5		20
Tetrahydrofuran	98		85		70-130	14		20
2,2-Dichloropropane	115		109		70-130	5		20
1,2-Dibromoethane	98		100		70-130	2		20
1,3-Dichloropropane	90		88		70-130	2		20
1,1,1,2-Tetrachloroethane	95		98		70-130	3		20
Bromobenzene	96		96		70-130	0		20
n-Butylbenzene	105		99		70-130	6		20
sec-Butylbenzene	101		94		70-130	7		20
tert-Butylbenzene	104		99		70-130	5		20
o-Chlorotoluene	96		94		70-130	2		20
p-Chlorotoluene	89		89		70-130	0		20
1,2-Dibromo-3-chloropropane	76		80		70-130	5		20
Hexachlorobutadiene	108		113		70-130	5		20
Isopropylbenzene	101		102		70-130	1		20
p-Isopropyltoluene	103		103		70-130	0		20
Naphthalene	96		81		70-130	17		20
n-Propylbenzene	101		95		70-130	6		20
1,2,3-Trichlorobenzene	109		93		70-130	16		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: WAKEFIELD

Project Number: 532

Lab Number: L1120563

Report Date: 12/14/11

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 01 Batch: WG508078-4 WG508078-5								
1,2,4-Trichlorobenzene	104		94		70-130	10		20
1,3,5-Trimethylbenzene	93		93		70-130	0		20
1,2,4-Trimethylbenzene	101		97		70-130	4		20
Ethyl ether	113		101		70-130	11		20
Isopropyl Ether	85		84		70-130	1		20
Ethyl-Tert-Butyl-Ether	91		88		70-130	3		20
Tertiary-Amyl Methyl Ether	100		96		70-130	4		20
1,4-Dioxane	117		92		70-130	24	Q	20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	106		100		70-130
Toluene-d8	95		101		70-130
4-Bromofluorobenzene	94		96		70-130
Dibromofluoromethane	110		110		70-130

Project Name: WAKEFIELD

Project Number: 532

Lab Number: L1120563

Report Date: 12/14/11

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(*)
L1120563-01A	Vial HCl preserved	A	N/A	2.3	Y	Absent	MCP-8260-10(14)
L1120563-01B	Vial HCl preserved	A	N/A	2.3	Y	Absent	MCP-8260-10(14)
L1120563-02A	Vial HCl preserved	A	N/A	2.3	Y	Absent	MCP-8260-10(14)
L1120563-02B	Vial HCl preserved	A	N/A	2.3	Y	Absent	MCP-8260-10(14)
L1120563-03A	Vial HCl preserved	A	N/A	2.3	Y	Absent	MCP-8260-10(14)
L1120563-03B	Vial HCl preserved	A	N/A	2.3	Y	Absent	MCP-8260-10(14)

*Values in parentheses indicate holding time in days

Project Name: WAKEFIELD
Project Number: 532

Lab Number: L1120563
Report Date: 12/14/11

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

Footnotes

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

Terms

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

Data Qualifiers

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

Report Format: Data Usability Report



Project Name: WAKEFIELD**Lab Number:** L1120563**Project Number:** 532**Report Date:** 12/14/11**Data Qualifiers**

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

Project Name: WAKEFIELD
Project Number: 532

Lab Number: L1120563
Report Date: 12/14/11

REFERENCES

- 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 December 9, 2011 - 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, 353.2, SM2130B, 2320B, 2540C, 4500Cl-D, 4500CN-C, 4500CN-E, 4500F-C, 4500H+B, 4500NO3-F, EPA 200.7, EPA 200.8, 245.1, EPA 300.0. Organic Parameters: 504.1, 524.2.)

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

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

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

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

SM2510B, 2540C, 2340B, 2320B, 4500CL-E, 4500F-BC, 426C, SM4500NH3-BH, (EPA 350.1 for: Ammonia-N), LACHAT 10-107-06-1-B for Ammonia-N, SM4500NO3-F, 353.2 for Nitrate-N, SM4500NH3-BC-NES, EPA 351.1, SM4500P-E, 4500P-B,E, 5220D, EPA 410.4, SM 5210B, 5310C, 4500CL-D, EPA 1664, SM14 510AC, EPA 420.1, SM4500-CN-CE, SM2540D.

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

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

Drinking Water (Inorganic Parameters: SM 9222B, 9223B, 9215B, EPA 200.7, 200.8, 245.2, 300.0, SM4500CN-E, 4500H+B, 4500NO3-F, 2320B, 2510B, 2540C, 4500F-C, 5310C, 2120B, EPA 332.0. Organic Parameters: 504.1, 524.2.)

Non-Potable Water (Inorganic Parameters: SM9222D, 9221B, 9222B, 9221E-EC, EPA 3005A, 200.7, 200.8, 245.1, 245.2, SW-846 6010B, 6020, 7196A, 7470A, SM3500-CR-D, EPA 120.1, 300.0, 350.1, 350.2, 351.1, 353.2, 410.4, 420.1, 1664A, SW-846 9010, 9030, 9040B, SM426C, SM2120B, 2310B, 2320B, 2540B, 2540D, 4500H+B, 4500CL-E, 4500CN-E, 4500NH3-H, 4500NO3-F, 4500NO2-B, 4500P-E, 4500-S2-D, 5210B, 5220D, 2510B, 2540C, 4500F-C, 5310C, 5540C, LACHAT 10-204-00-1-A, LACHAT 10-107-06-2-D. Organic Parameters: SW-846 3510C, 3630C, 5030B, 8260B, 8270C, 8330, EPA 624, 625, 608, SW-846 8082, 8081A, 8151A.)

Solid & Chemical Materials (Inorganic Parameters: SW-846 6010B, 7196A, 7471A, 1010, 1030, 9010, 9012A, 9014, 9030B, 9040B, 9045C, 9050C, 9065,1311, 1312, 3005A, 3050B. Organic Parameters: SW-846 3540C, 3546, 3550B, 3580A, 3630C, 5030B, 5035, 8260B, 8270C, 8330, 8151A, 8015B, 8082, 8081A.)

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

Drinking Water (Inorganic Parameters: SM9222B, 9221E, 9223B, 9215B, 4500CN-CE, 4500NO3-F, 4500F-C, EPA 300.0, 200.7, 200.8, 245.2, 2540C, SM2120B, 2320B, 2510B, 5310C, SM4500H-B. Organic Parameters: EPA 332, 504.1, 524.2.)

Non-Potable Water (Inorganic Parameters: SM5210B, EPA 410.4, SM5220D, 4500CL-E, 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, SM510ABC, SM4500P-B5+E, 2540B, 2540C, 2540D, EPA 120.1, SM2510B, SM15 426C, 9222D, 9221B, 9221C, 9221E, 9222B, 9215B, 2310B, 2320B, 4500NH3-H, 4500-S D, EPA 350.1, 350.2, SW-846 1312, 6020, 6020A, 7470A, 5540C, 4500H-B, EPA 200.8, SM3500Cr-D, 4500CN-CE, EPA 245.1, 245.2, SW-846 9040B, 3005A, 3015, EPA 6010B, 6010C, 7196A, 3060A, SW-846 9010B, 9030B. Organic Parameters: SW-846 8260B, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 3510C, EPA 608, 624, 625, SW-846 3630C, 5030B, 8081A, 8081B, 8082, 8082A, 8151A, 8330, NJ OQA-QAM-025 Rev.7, NJ EPH.)

Solid & Chemical Materials (Inorganic Parameters: SW-846, 6010B, 6010C, 7196A, 3060A, 9010B, 9030B, 1010, 1030, 1311, 1312, 3005A, 3050B, 7471A, 7471B, 9014, 9012A, 9040B, 9045C, 9050A, 9065. Organic Parameters: SW-846 8015B, 8015C, 8081A, 8081B, 8082, 8082A, 8151A, 8330, 8260B, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 3540C, 3545, 3546, 3550B, 3580A, 3630C, 5030B, 5035L, 5035H, NJ OQA-QAM-025 Rev.7, NJ EPH.)

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

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

Non-Potable Water (Inorganic Parameters: SM9221E, 9222D, 9221B, 9222B, 9215B, 5210B, 5310C, EPA 410.4, SM5220D, 2310B-4a, 2320B, EPA 200.7, 300.0, SM4500CL-E, 4500F-C, SM15 426C, EPA 350.1, SM4500NH3-BH, EPA 351.1, LACHAT 10-107-06-2, EPA 353.2, LACHAT 10-107-04-1-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, LACHAT 10-204-00-1-A, EPA 9040B, SM4500-HB, EPA 1664A, EPA 420.1, SM14 510C, EPA 120.1, SM2510B, SM4500S-D, SM5540C, EPA 3005A, 9010B, 9030B.. Organic Parameters: EPA 624, 8260B, 8270C, 625, 608, 8081A, 8151A, 8330, 8082, EPA 3510C, 5030B.)

Solid & Hazardous Waste (Inorganic Parameters: 1010, 1030, EPA 6010B, 7196A, 7471A, 9012A, 9014, 9040B, 9045C, 9065, 9050, EPA 1311, 1312, 3005A, 3050B, 9010B, 9030B. Organic Parameters: EPA 8260B, 8270C, 8015B, 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.**
Drinking Water (Organic Parameters: EPA 524.2, 504.1)

Non-Potable Water (Inorganic Parameters: EPA 1312, 200.7, 410.4, 1664A, SM2540D, 5210B, 5220D, 4500-P, BE. Organic Parameters: EPA 3510C, 3005A, 3630C, 5030B, 625, 624, 608, 8081A, 8081B, 8082, 802A, 8151A, 8260B, 8270C, 8270D, 8330)

Solid & Hazardous Waste (Inorganic Parameters: EPA 350.1, 1010, 1030, 1311, 1312, 3050B, 3060A, 6010B, 6010C, 7196A, 7471A, 9010B, 9012A, 9014, 9040B, 9045C, 9050, 9065, SM 4500NH₃-H. Organic Parameters: 3540C, 3546, 3580A, 3630C, 5035, 8015B, 8015C, 8081A, 8081B, 8082, 8082A, 8151A, 8260B, 8270C, 8270D, 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 NJ-DEP Certificate for Potable and Non-Potable Water.

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

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

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

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, 332.0, 6860, 353.2, 410.4, 9060, 1664A, SM 4500CN-E, 4500H-B, 4500NO₃-F, 5220D, 5310C, 2320B, 2540C, 3005A, 3015, 9010B, 9056. Organic Parameters: EPA 8260B, 8270C, 8330A, 625, 8082, 8081A, 3510C, 5030B, MassDEP EPH, MassDEP VPH.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 200.7, 6010B, 7471A, 9010, 9012A, 6860, 1311, 1312, 3050B, 7196A, 9010B, 3500-CR-D, 4500CN-CE, 2540G, Organic Parameters: EPA 8260B, 8270C, 8330A/B-prep, 8082, 8081A, 3540C, 3546, 3580A, 5035A, MassDEP EPH, MassDEP VPH.)

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

EPA 8260B: Freon-113, 1,2,4,5-Tetramethylbenzene, 4-Ethyltoluene. **EPA 8330A:** PETN, Picric Acid, Nitroglycerine, 2,6-DANT, 2,4-DANT. **EPA 8270C:** Methyl naphthalene, Dimethyl naphthalene, Total Methyl naphthalenes, Total Dimethyl naphthalenes, 1,4-Diphenylhydrazine (Azobenzene). **EPA 625:** 4-Chloroaniline, 4-Methylphenol. Total Phosphorus in a soil matrix, Chloride in a soil matrix, TKN in a soil matrix, NO₂ in a soil matrix, NO₃ in a soil matrix, SO₄ in a soil matrix.



CHAIN OF CUSTODY

PAGE 1 OF 1

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

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

Client Information

Project Name: **WAKEFIELD**
 Project Location: **WAKEFIELD**

Project #: **532**
 Project Manager: **SCOTT KRASHANZEL**

Address: **39 INDUSTRIAL PARK RD**
PLYMOUTH MA 02360
508-830-3344
508-830-3366

Turn-Around Time
☒ Standard ☐ RUSH (only confirmed if pre-approved)

Date Due: **12/11/11** Time: **12:00 PM**

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

ALPHA Lab ID
 (Lab Use Only)

Sample ID	Collection		Sample Matrix	Sampler's Initials
	Date	Time		
1	12/9/11	0830	GW	TR/KP
2	12/9/11	0846	GW	
3	12/9/11	0945	GW	
4	12/9/11		GW	
5	12/9/11		GW	

Date Rec'd in Lab: **12/9/11**

ALPHA Job #: **61180563**

Report Information - Data Deliverables
☐ FAX ☒ EMAIL
☒ ADEx ☐ Add'l Deliverables

Billing Information
☒ Same as Client Info PO #: **532**

Regulatory Requirements/Report Limits
 State / Fed Program Criteria

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

ANALYSIS
VOC (8260)

SAMPLE HANDLING
 Filtration _____
☐ Done
☐ Not needed
☐ Lab to do
☐ Preservation
☐ Lab to do
 (Please specify below)
 Sample Specific Comments

PLEASE ANSWER QUESTIONS ABOVE!

IS YOUR PROJECT
 MAMCP or CT RCP?

Relinquished By:

Date/Time

Received By:

Date/Time

Container Type
 Preservative

Don't know
12/9/11 10:31 AM

Don't know
12/9/11 10:31 AM

Don't know
12/9/11 10:31 AM

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

7A
Volatile CONTINUING CALIBRATION CHECK

Lab Name: Alpha Analytical Labs

SDG No.: L1120563

Instrument ID: Jack.i Calibration Date: 14-DEC-2011 Time: 08:02

Lab File ID: 1214B02 Init. Calib. Date(s): 10-NOV-2 10-NOV-2

Sample No: 8260 CCAL Init. Calib. Times : 14:21 21:23

Compound	RRF	RRF	MIN RRF	%D	MAX %D	
dichlorodifluoromethane	.54449	.53444	.1	2	20	
chloromethane	.78667	.79126	.1	-1	20	
vinyl chloride	.65073	.74146	.1	-14	20	
bromomethane	.25658	.33757	.1	-32	20	F
chloroethane	.34979	.41783	.1	-19	20	
trichlorofluoromethane	.79379	.98595	.1	-24	20	F
ethyl ether	.25455	.27682	.05	-9	20	
1,1,-dichloroethene	.50184	.60698	.1	-21	20	F
carbon disulfide	1.3580	1.3496	.05	1	20	
methylene chloride	.59628	.62879	.05	-5	20	
acetone	100	85.400	.1	15	20	
trans-1,2-dichloroethene	100	112	.1	-12	20	
methyl tert butyl ether	1.3218	1.2043	.1	9	20	
Ethyl-Tert-Butyl-Ether	1.6760	1.4927	.05	11	20	
Diisopropyl Ether	2.1385	1.8093	.05	15	20	
1,1-dichloroethane	1.1527	1.197	.2	-4	20	
cis-1,2-dichloroethene	100	106	.1	-6	20	
2,2-dichloropropane	.85191	.99245	.05	-16	20	
bromochloromethane	100	103	.05	-3	20	
chloroform	1.0755	1.1425	.2	-6	20	
carbontetrachloride	.76203	.87179	.1	-14	20	
tetrahydrofuran	.17502	.15204	.05	13	20	
1,1,1-trichloroethane	.91812	1.0366	.1	-13	20	
Tertiary-Amyl Methyl Ether	1.2683	1.2223	.05	4	20	
1,1-dichloropropene	.7968	.82297	.05	-3	20	
2-butanone	.22243	.20874	.1	6	20	
benzene	2.2903	2.3320	.5	-2	20	
1,2-dichloroethane	.75397	.76994	.1	-2	20	
trichloroethene	.63792	.62901	.2	1	20	
dibromomethane	.31609	.33418	.05	-6	20	
1,2-dichloropropane	.61333	.57079	.1	7	20	
bromodichloromethane	.74607	.71731	.2	4	20	
1,4-dioxane	.00319	.00267	.05	16	20	F
cis-1,3-dichloropropene	.87416	.80808	.2	8	20	
toluene	1.8157	1.7063	.4	6	20	
tetrachloroethene	.74796	.8253	.2	-10	20	
4-methyl-2-pentanone	.16749	.14728	.1	12	20	
trans-1,3-dichloropropene	.92796	.76304	.1	18	20	

FORM VII MCP-8260-10

7A
CONTINUING CALIBRATION CHECK

Lab Name: Alpha Analytical Labs

SDG No.: L1120563

Instrument ID: Jack.i Calibration Date: 14-DEC-2011 Time: 08:02

Lab File ID: 1214B02 Init. Calib. Date(s): 10-NOV-2 10-NOV-2

Sample No: 8260 CCAL Init. Calib. Times : 14:21 21:23

Compound	RRF	RRF	MIN RRF	%D	MAX %D
=====	=====	=====	=====	=====	=====
1,1,2-trichloroethane	.45137	.39602	.1	12	20
chlorodibromomethane	.64857	.5428	.1	16	20
1,3-dichloropropane	.93918	.8287	.05	12	20
1,2-dibromoethane	.54407	.49744	.1	9	20
2-hexanone	.4117	.33479	.1	19	20
chlorobenzene	2.0752	1.9397	.5	7	20
ethyl benzene	3.2981	3.2607	.1	1	20
1,1,1,2-tetrachloroethane	.69042	.66982	.05	3	20
p/m xylene	1.3257	1.3605	.1	-3	20
o xylene	1.3137	1.2871	.3	2	20
styrene	2.1822	2.1874	.3	0	20
bromoform	.64151	.57001	.1	11	20
isopropylbenzene	2.9459	3.1729	.1	-8	20
bromobenzene	1.6159	1.5572	.05	4	20
n-propylbenzene	5.8297	5.8881	.05	-1	20
1,1,2,2,-tetrachloroethane	1.1047	.97598	.3	12	20
2-chlorotoluene	4.3792	4.2210	.05	4	20
1,2,3-trichloropropane	.90969	.85724	.05	6	20
1,3,5-trimethylbenzene	4.4275	4.3272	.05	2	20
4-chlorotoluene	4.1184	3.7565	.05	9	20
tert-butylbenzene	3.4029	3.7198	.05	-9	20
1,2,4-trimethylbenzene	4.3644	4.5087	.05	-3	20
sec-butylbenzene	4.4185	4.5057	.05	-2	20
p-isopropyltoluene	3.8239	4.2307	.05	-11	20
1,3-dichlorobenzene	2.7419	2.7509	.6	0	20
1,4-dichlorobenzene	2.8112	2.8087	.5	0	20
n-butylbenzene	2.8295	3.0459	.05	-8	20
1,2-dichlorobenzene	2.5926	2.6737	.4	-3	20
1,2-dibromo-3-chloropropane	.15731	.1582	.05	-1	20
hexachlorobutadiene	.39755	.45417	.05	-14	20
1,2,4-trichlorobenzene	1.1345	1.0872	.2	4	20
naphthalene	2.4775	2.0997	.05	15	20
1,2,3-trichlorobenzene	.856	.80707	.05	6	20
=====	=====	=====	=====	=====	=====
dibromofluoromethane	.25814	.2737	.05	-6	20
1,2-dichloroethane-d4	.28047	.27756	.05	1	20
toluene-d8	1.2197	1.1605	.05	5	20
4-bromofluorobenzene	.87305	.80283	.05	8	20

FORM VII MCP-8260-10

7A
CONTINUING CALIBRATION CHECK

Lab Name: Alpha Analytical Labs

SDG No.: L1120563

Instrument ID: Jack.i Calibration Date: 13-DEC-2011 Time: 07:46

Lab File ID: 1213A02 Init. Calib. Date(s): 10-NOV-2 10-NOV-2

Sample No: 8260 CCAL Init. Calib. Times : 14:21 21:23

Compound	RRF	RRF	MIN RRF	%D	MAX %D	
=====	=====	=====	=====	=====	=====	
dichlorodifluoromethane	.54449	.5852	.1	-7	20	
chloromethane	.78667	.77124	.1	2	20	
vinyl chloride	.65073	.69747	.1	-7	20	
bromomethane	.25658	.33994	.1	-32	20	F
chloroethane	.34979	.37162	.1	-6	20	
trichlorofluoromethane	.79379	.94166	.1	-19	20	
ethyl ether	.25455	.28796	.05	-13	20	
1,1,-dichloroethene	.50184	.54005	.1	-8	20	
carbon disulfide	1.3580	1.2101	.05	11	20	
freon-113	.49381	.56551	.1	-15	20	
iodomethane	100	135	.05	-35	20	F
acrolin	.03688	.02649	.05	28	20	F
methylene chloride	.59628	.63355	.05	-6	20	
acetone	100	92.376	.1	8	20	
trans-1,2-dichloroethene	100	102	.1	-2	20	
methyl acetate	.45616	.43025	.1	6	20	
methyl tert butyl ether	1.3218	1.2342	.1	7	20	
Diisopropyl Ether	2.1385	1.8193	.05	15	20	
tert butyl alcohol	.04307	.03853	.05	11	20	F
1,1-dichloroethane	1.1527	1.1034	.2	4	20	
acrylonitrile	.18254	.18917	.05	-4	20	
halothane	.42213	.51075	.05	-21	20	F
Ethyl-Tert-Butyl-Ether	1.6760	1.5326	.05	9	20	
vinyl acetate	100	107	.05	-7	20	
cis-1,2-dichloroethene	100	102	.1	-2	20	
2,2-dichloropropane	.85191	.9821	.05	-15	20	
cyclohexane	.96745	1.0902	.01	-13	30	
bromochloromethane	100	107	.05	-7	20	
chloroform	1.0755	1.1398	.2	-6	20	
carbontetrachloride	.76203	.8556	.1	-12	20	
ethyl acetate	.5139	.4822	.05	6	20	
tetrahydrofuran	.17502	.17074	.05	2	20	
1,1,1-trichloroethane	.91812	.99339	.1	-8	20	
1,1-dichloropropene	.7968	.78774	.05	1	20	
2-butanone	.22243	.23258	.1	-5	20	
benzene	2.2903	2.2380	.5	2	20	
Tertiary-Amyl Methyl Ether	1.2683	1.2749	.05	-1	20	
1,2-dichloroethane	.75397	.77266	.1	-2	20	

FORM VII MCP-8260-10

7A
CONTINUING CALIBRATION CHECK

Lab Name: Alpha Analytical Labs

SDG No.: L1120563

Instrument ID: Jack.i Calibration Date: 13-DEC-2011 Time: 07:46

Lab File ID: 1213A02 Init. Calib. Date(s): 10-NOV-2 10-NOV-2

Sample No: 8260 CCAL Init. Calib. Times : 14:21 21:23

Compound	RRF	RRF	MIN RRF	%D	MAX %D
methy1 cyclohexane	.6603	.8299	.01	-26	30
trichloroethene	.63792	.64028	.2	0	20
dibromomethane	.31609	.33793	.05	-7	20
1,2-dichloropropane	.61333	.57663	.1	6	20
bromodichloromethane	.74607	.72477	.2	3	20
1,4-dioxane	.00319	.00374	.05	-17	20
2-chloroethylvinyl ether	.19429	.20215	.05	-4	20
cis-1,3-dichloropropene	.87416	.81614	.2	7	20
toluene	1.8157	1.6442	.4	9	20
tetrachloroethene	.74796	.80039	.2	-7	20
4-methyl-2-pentanone	.16749	.16303	.1	3	20
trans-1,3-dichloropropene	.92796	.79977	.1	14	20
1,1,2-trichloroethane	.45137	.40253	.1	11	20
ethyl-methacrylate	.73884	.66837	.01	10	30
chlorodibromomethane	.64857	.58969	.1	9	20
1,3-dichloropropane	.93918	.8408	.05	10	20
1,2-dibromoethane	.54407	.5355	.1	2	20
2-hexanone	.4117	.35287	.1	14	20
chlorobenzene	2.0752	1.8870	.5	9	20
ethyl benzene	3.2981	3.1462	.1	5	20
1,1,1,2-tetrachloroethane	.69042	.65866	.05	5	20
p/m xylene	1.3257	1.3039	.1	2	20
o xylene	1.3137	1.2797	.3	3	20
bromoform	.64151	.56608	.1	12	20
styrene	2.1822	2.0892	.3	4	20
isopropylbenzene	2.9459	2.9774	.1	-1	20
bromobenzene	1.6159	1.5503	.05	4	20
n-propylbenzene	5.8297	5.8757	.05	-1	20
1,4-dichloro-2-butane	1.9496	1.7082	.01	12	20
1,1,2,2,-tetrachloroethane	1.1047	1.0645	.3	4	20
4-ethyltoluene	5.3350	4.8352	.05	9	20
2-chlorotoluene	4.3792	4.2063	.05	4	20
1,2,3-trichloropropane	.90969	.91911	.05	-1	20
1,3,5-trimethybenzene	4.4275	4.1320	.05	7	20
trans-1,4-dichloro-2-butene	.37547	.33511	.05	11	20
4-chorotoluene	4.1184	3.6701	.05	11	20
tert-butylbenzene	3.4029	3.5424	.05	-4	20
1,2,4-trimethylbenzene	4.3644	4.3906	.05	-1	20

F

FORM VII MCP-8260-10



ANALYTICAL REPORT

Lab Number:	L1120809
Client:	Lightship Engineering 39 Industrial Park Road Unit C Plymouth, MA 02360
ATTN:	Scott Kraihanzel
Phone:	(508) 830-3344
Project Name:	WAKEFIELD
Project Number:	532
Report Date:	12/16/11

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

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

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



Project Name: WAKEFIELD
Project Number: 532

Lab Number: L1120809
Report Date: 12/16/11

Alpha Sample ID	Client ID	Sample Location	Collection Date/Time
L1120809-01	LEMW-43	WAKEFIELD	12/13/11 10:15

Project Name: WAKEFIELD

Lab Number: L1120809

Project Number: 532

Report Date: 12/16/11

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)?	YES
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: WAKEFIELD
Project Number: 532

Lab Number: L1120809
Report Date: 12/16/11

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

L1120809-01 has elevated detection limits due to the dilution required by the elevated concentrations of target compounds in the sample.

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 WG508439-1 LCS recoveries, associated with L1120809-01, are below the acceptance criteria for 2-Butanone (66%) and 2-Hexanone (58%); however, they have been identified as "difficult" analytes and are within the 40-160% acceptance limits. The results of the associated sample are reported; however, all results are considered to have a potentially low bias for these compounds.

The WG508439-1 LCS recoveries, associated with L1120809-01, are outside the individual acceptance

Project Name: WAKEFIELD
Project Number: 532

Lab Number: L1120809
Report Date: 12/16/11

Case Narrative (continued)

criteria for several compounds, but within the overall method allowances. The results of the associated sample are reported; however, all results are considered to have a potentially high bias for Hexachlorobutadiene (132%) and a potentially low bias for Tetrahydrofuran (68%) and Naphthalene (68%).

The WG508439-1/-2 LCS/LCSD RPD, associated with L1120809-01, is above the acceptance criteria for 2-Butanone (24%).

The initial calibration, associated with L1120809-01, did not meet the method required minimum response factors on the lowest calibration standards for 1,4-Dioxane (0.00304), as well as the average response factor for 1,4-Dioxane.

The continuing calibration standard, associated with L1120809-01, 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.

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

Authorized Signature:  Cynthia McQueen

Title: Technical Director/Representative

Date: 12/16/11

ORGANICS

VOLATILES

Project Name: WAKEFIELD**Lab Number:** L1120809**Project Number:** 532**Report Date:** 12/16/11**SAMPLE RESULTS**

Lab ID: L1120809-01 D
 Client ID: LEMW-43
 Sample Location: WAKEFIELD
 Matrix: Water
 Analytical Method: 97,8260B
 Analytical Date: 12/15/11 11:47
 Analyst: MM

Date Collected: 12/13/11 10:15
 Date Received: 12/13/11
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Methylene chloride	ND		ug/l	80	--	40
1,1-Dichloroethane	ND		ug/l	40	--	40
Chloroform	ND		ug/l	40	--	40
Carbon tetrachloride	ND		ug/l	40	--	40
1,2-Dichloropropane	ND		ug/l	40	--	40
Dibromochloromethane	ND		ug/l	40	--	40
1,1,2-Trichloroethane	ND		ug/l	40	--	40
Tetrachloroethene	ND		ug/l	40	--	40
Chlorobenzene	ND		ug/l	40	--	40
Trichlorofluoromethane	ND		ug/l	80	--	40
1,2-Dichloroethane	ND		ug/l	40	--	40
1,1,1-Trichloroethane	ND		ug/l	40	--	40
Bromodichloromethane	ND		ug/l	40	--	40
trans-1,3-Dichloropropene	ND		ug/l	20	--	40
cis-1,3-Dichloropropene	ND		ug/l	20	--	40
1,1-Dichloropropene	ND		ug/l	80	--	40
Bromoform	ND		ug/l	80	--	40
1,1,2,2-Tetrachloroethane	ND		ug/l	40	--	40
Benzene	ND		ug/l	20	--	40
Toluene	ND		ug/l	40	--	40
Ethylbenzene	ND		ug/l	40	--	40
Chloromethane	ND		ug/l	80	--	40
Bromomethane	ND		ug/l	80	--	40
Vinyl chloride	ND		ug/l	40	--	40
Chloroethane	ND		ug/l	80	--	40
1,1-Dichloroethene	ND		ug/l	40	--	40
trans-1,2-Dichloroethene	ND		ug/l	40	--	40
Trichloroethene	4100		ug/l	40	--	40
1,2-Dichlorobenzene	ND		ug/l	40	--	40
1,3-Dichlorobenzene	ND		ug/l	40	--	40
1,4-Dichlorobenzene	ND		ug/l	40	--	40

Project Name: WAKEFIELD**Lab Number:** L1120809**Project Number:** 532**Report Date:** 12/16/11**SAMPLE RESULTS**

Lab ID: L1120809-01 D

Date Collected: 12/13/11 10:15

Client ID: LEMW-43

Date Received: 12/13/11

Sample Location: WAKEFIELD

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Methyl tert butyl ether	ND		ug/l	80	--	40
p/m-Xylene	ND		ug/l	80	--	40
o-Xylene	ND		ug/l	40	--	40
cis-1,2-Dichloroethene	ND		ug/l	40	--	40
Dibromomethane	ND		ug/l	80	--	40
1,2,3-Trichloropropane	ND		ug/l	80	--	40
Styrene	ND		ug/l	40	--	40
Dichlorodifluoromethane	ND		ug/l	80	--	40
Acetone	ND		ug/l	200	--	40
Carbon disulfide	ND		ug/l	80	--	40
2-Butanone	ND		ug/l	200	--	40
4-Methyl-2-pentanone	ND		ug/l	200	--	40
2-Hexanone	ND		ug/l	200	--	40
Bromochloromethane	ND		ug/l	80	--	40
Tetrahydrofuran	ND		ug/l	200	--	40
2,2-Dichloropropane	ND		ug/l	80	--	40
1,2-Dibromoethane	ND		ug/l	80	--	40
1,3-Dichloropropane	ND		ug/l	80	--	40
1,1,1,2-Tetrachloroethane	ND		ug/l	40	--	40
Bromobenzene	ND		ug/l	80	--	40
n-Butylbenzene	ND		ug/l	80	--	40
sec-Butylbenzene	ND		ug/l	80	--	40
tert-Butylbenzene	ND		ug/l	80	--	40
o-Chlorotoluene	ND		ug/l	80	--	40
p-Chlorotoluene	ND		ug/l	80	--	40
1,2-Dibromo-3-chloropropane	ND		ug/l	80	--	40
Hexachlorobutadiene	ND		ug/l	24	--	40
Isopropylbenzene	ND		ug/l	80	--	40
p-Isopropyltoluene	ND		ug/l	80	--	40
Naphthalene	ND		ug/l	80	--	40
n-Propylbenzene	ND		ug/l	80	--	40
1,2,3-Trichlorobenzene	ND		ug/l	80	--	40
1,2,4-Trichlorobenzene	ND		ug/l	80	--	40
1,3,5-Trimethylbenzene	ND		ug/l	80	--	40
1,2,4-Trimethylbenzene	ND		ug/l	80	--	40
Ethyl ether	ND		ug/l	80	--	40
Isopropyl Ether	ND		ug/l	80	--	40
Ethyl-Tert-Butyl-Ether	ND		ug/l	80	--	40
Tertiary-Amyl Methyl Ether	ND		ug/l	80	--	40

Project Name: WAKEFIELD**Lab Number:** L1120809**Project Number:** 532**Report Date:** 12/16/11**SAMPLE RESULTS**

Lab ID: L1120809-01 D

Date Collected: 12/13/11 10:15

Client ID: LEMW-43

Date Received: 12/13/11

Sample Location: WAKEFIELD

Field Prep: Not Specified

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

MCP Volatile Organics - Westborough Lab

1,4-Dioxane	ND		ug/l	10000	--	40
-------------	----	--	------	-------	----	----

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	104		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	107		70-130

Project Name: WAKEFIELD

Lab Number: L1120809

Project Number: 532

Report Date: 12/16/11

Method Blank Analysis Batch Quality Control

Analytical Method: 97,8260B
 Analytical Date: 12/15/11 10:09
 Analyst: MM

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics - Westborough Lab for sample(s): 01 Batch: WG508439-3					
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	0.50	--
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: WAKEFIELD

Lab Number: L1120809

Project Number: 532

Report Date: 12/16/11

Method Blank Analysis Batch Quality Control

Analytical Method: 97,8260B
 Analytical Date: 12/15/11 10:09
 Analyst: MM

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics - Westborough Lab for sample(s): 01 Batch: WG508439-3					
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	5.0	--
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: WAKEFIELD

Lab Number: L1120809

Project Number: 532

Report Date: 12/16/11

Method Blank Analysis Batch Quality Control

Analytical Method: 97,8260B
 Analytical Date: 12/15/11 10:09
 Analyst: MM

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics - Westborough Lab for sample(s): 01 Batch: WG508439-3					
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	96		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	111		70-130
Dibromofluoromethane	101		70-130

Lab Control Sample Analysis Batch Quality Control

Project Name: WAKEFIELD

Project Number: 532

Lab Number: L1120809

Report Date: 12/16/11

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 01 Batch: WG508439-1 WG508439-2								
Methylene chloride	94		99		70-130	5		20
1,1-Dichloroethane	92		94		70-130	2		20
Chloroform	86		94		70-130	9		20
Carbon tetrachloride	102		107		70-130	5		20
1,2-Dichloropropane	96		102		70-130	6		20
Dibromochloromethane	90		96		70-130	6		20
1,1,2-Trichloroethane	94		93		70-130	1		20
Tetrachloroethene	108		103		70-130	5		20
Chlorobenzene	94		99		70-130	5		20
Trichlorofluoromethane	112		117		70-130	4		20
1,2-Dichloroethane	90		99		70-130	10		20
1,1,1-Trichloroethane	102		106		70-130	4		20
Bromodichloromethane	88		94		70-130	7		20
trans-1,3-Dichloropropene	86		94		70-130	9		20
cis-1,3-Dichloropropene	88		92		70-130	4		20
1,1-Dichloropropene	95		102		70-130	7		20
Bromoform	76		80		70-130	5		20
1,1,2,2-Tetrachloroethane	73		76		70-130	4		20
Benzene	92		99		70-130	7		20
Toluene	96		101		70-130	5		20
Ethylbenzene	99		105		70-130	6		20

Lab Control Sample Analysis Batch Quality Control

Project Name: WAKEFIELD

Project Number: 532

Lab Number: L1120809

Report Date: 12/16/11

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 01 Batch: WG508439-1 WG508439-2								
Chloromethane	82		82		70-130	0		20
Bromomethane	86		95		70-130	10		20
Vinyl chloride	88		89		70-130	1		20
Chloroethane	96		97		70-130	1		20
1,1-Dichloroethene	102		103		70-130	1		20
trans-1,2-Dichloroethene	98		100		70-130	2		20
Trichloroethene	96		100		70-130	4		20
1,2-Dichlorobenzene	98		97		70-130	1		20
1,3-Dichlorobenzene	101		100		70-130	1		20
1,4-Dichlorobenzene	102		99		70-130	3		20
Methyl tert butyl ether	80		84		70-130	5		20
p/m-Xylene	102		101		70-130	1		20
o-Xylene	100		103		70-130	3		20
cis-1,2-Dichloroethene	98		102		70-130	4		20
Dibromomethane	96		105		70-130	9		20
1,2,3-Trichloropropane	80		88		70-130	10		20
Styrene	102		104		70-130	2		20
Dichlorodifluoromethane	88		90		70-130	2		20
Acetone	83		97		70-130	16		20
Carbon disulfide	93		90		70-130	3		20
2-Butanone	66	Q	84		70-130	24	Q	20

Lab Control Sample Analysis Batch Quality Control

Project Name: WAKEFIELD

Project Number: 532

Lab Number: L1120809

Report Date: 12/16/11

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 01 Batch: WG508439-1 WG508439-2								
4-Methyl-2-pentanone	75		91		70-130	19		20
2-Hexanone	58	Q	70		70-130	19		20
Bromochloromethane	102		102		70-130	0		20
Tetrahydrofuran	68	Q	77		70-130	12		20
2,2-Dichloropropane	98		103		70-130	5		20
1,2-Dibromoethane	93		103		70-130	10		20
1,3-Dichloropropane	85		98		70-130	14		20
1,1,1,2-Tetrachloroethane	100		103		70-130	3		20
Bromobenzene	101		98		70-130	3		20
n-Butylbenzene	107		102		70-130	5		20
sec-Butylbenzene	109		108		70-130	1		20
tert-Butylbenzene	106		103		70-130	3		20
o-Chlorotoluene	96		94		70-130	2		20
p-Chlorotoluene	96		95		70-130	1		20
1,2-Dibromo-3-chloropropane	80		93		70-130	15		20
Hexachlorobutadiene	132	Q	116		70-130	13		20
Isopropylbenzene	107		117		70-130	9		20
p-Isopropyltoluene	113		107		70-130	5		20
Naphthalene	68	Q	76		70-130	11		20
n-Propylbenzene	104		101		70-130	3		20
1,2,3-Trichlorobenzene	77		82		70-130	6		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: WAKEFIELD

Project Number: 532

Lab Number: L1120809

Report Date: 12/16/11

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 01 Batch: WG508439-1 WG508439-2								
1,2,4-Trichlorobenzene	90		95		70-130	5		20
1,3,5-Trimethylbenzene	96		95		70-130	1		20
1,2,4-Trimethylbenzene	98		98		70-130	0		20
Ethyl ether	90		93		70-130	3		20
Isopropyl Ether	78		78		70-130	0		20
Ethyl-Tert-Butyl-Ether	86		86		70-130	0		20
Tertiary-Amyl Methyl Ether	90		89		70-130	1		20
1,4-Dioxane	93		105		70-130	12		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	93		93		70-130
Toluene-d8	102		99		70-130
4-Bromofluorobenzene	92		89		70-130
Dibromofluoromethane	106		104		70-130

Project Name: WAKEFIELD**Project Number:** 532**Lab Number:** L1120809**Report Date:** 12/16/11**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(*)
L1120809-01A	Vial HCl preserved	A	N/A	3.4	Y	Absent	MCP-8260-10(14)
L1120809-01B	Vial HCl preserved	A	N/A	3.4	Y	Absent	MCP-8260-10(14)

*Values in parentheses indicate holding time in days

Project Name: WAKEFIELD
Project Number: 532

Lab Number: L1120809
Report Date: 12/16/11

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

Footnotes

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

Terms

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

Data Qualifiers

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

Report Format: Data Usability Report



Project Name: WAKEFIELD**Lab Number:** L1120809**Project Number:** 532**Report Date:** 12/16/11**Data Qualifiers**

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

Project Name: WAKEFIELD
Project Number: 532

Lab Number: L1120809
Report Date: 12/16/11

REFERENCES

- 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 December 9, 2011 - 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, 353.2, SM2130B, 2320B, 2540C, 4500Cl-D, 4500CN-C, 4500CN-E, 4500F-C, 4500H+B, 4500NO3-F, EPA 200.7, EPA 200.8, 245.1, EPA 300.0. Organic Parameters: 504.1, 524.2.)

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

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

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

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

Page 22 of 21
Non-Potable Water (Inorganic Parameters: (EPA 200.8 for: Al,Sb,As,Be,Cd,Cr,Cu,Pb,Mn,Ni,Se,Ag,Tl,Zn); (EPA 200.7 for: Al,Sb,As,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Mo,Ni,K,Se,Ag,Na,Sr,Ti,Tl,V,Zn); 245.1, SM4500H,B, EPA 120.1,

SM2510B, 2540C, 2340B, 2320B, 4500CL-E, 4500F-BC, 426C, SM4500NH3-BH, (EPA 350.1 for: Ammonia-N), LACHAT 10-107-06-1-B for Ammonia-N, SM4500NO3-F, 353.2 for Nitrate-N, SM4500NH3-BC-NES, EPA 351.1, SM4500P-E, 4500P-B,E, 5220D, EPA 410.4, SM 5210B, 5310C, 4500CL-D, EPA 1664, SM14 510AC, EPA 420.1, SM4500-CN-CE, SM2540D.

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

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

Drinking Water (Inorganic Parameters: SM 9222B, 9223B, 9215B, EPA 200.7, 200.8, 245.2, 300.0, SM4500CN-E, 4500H+B, 4500NO3-F, 2320B, 2510B, 2540C, 4500F-C, 5310C, 2120B, EPA 332.0. Organic Parameters: 504.1, 524.2.)

Non-Potable Water (Inorganic Parameters: SM9222D, 9221B, 9222B, 9221E-EC, EPA 3005A, 200.7, 200.8, 245.1, 245.2, SW-846 6010B, 6020, 7196A, 7470A, SM3500-CR-D, EPA 120.1, 300.0, 350.1, 350.2, 351.1, 353.2, 410.4, 420.1, 1664A, SW-846 9010, 9030, 9040B, SM426C, SM2120B, 2310B, 2320B, 2540B, 2540D, 4500H+B, 4500CL-E, 4500CN-E, 4500NH3-H, 4500NO3-F, 4500NO2-B, 4500P-E, 4500-S2-D, 5210B, 5220D, 2510B, 2540C, 4500F-C, 5310C, 5540C, LACHAT 10-204-00-1-A, LACHAT 10-107-06-2-D. Organic Parameters: SW-846 3510C, 3630C, 5030B, 8260B, 8270C, 8330, EPA 624, 625, 608, SW-846 8082, 8081A, 8151A.)

Solid & Chemical Materials (Inorganic Parameters: SW-846 6010B, 7196A, 7471A, 1010, 1030, 9010, 9012A, 9014, 9030B, 9040B, 9045C, 9050C, 9065,1311, 1312, 3005A, 3050B. Organic Parameters: SW-846 3540C, 3546, 3550B, 3580A, 3630C, 5030B, 5035, 8260B, 8270C, 8330, 8151A, 8015B, 8082, 8081A.)

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

Drinking Water (Inorganic Parameters: SM9222B, 9221E, 9223B, 9215B, 4500CN-CE, 4500NO3-F, 4500F-C, EPA 300.0, 200.7, 200.8, 245.2, 2540C, SM2120B, 2320B, 2510B, 5310C, SM4500H-B. Organic Parameters: EPA 332, 504.1, 524.2.)

Non-Potable Water (Inorganic Parameters: SM5210B, EPA 410.4, SM5220D, 4500CI-E, EPA 300.0, SM2120B, 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, SM510ABC, SM4500P-B5+E, 2540B, 2540C, 2540D, EPA 120.1, SM2510B, SM15 426C, 9222D, 9221B, 9221C, 9221E, 9222B, 9215B, 2310B, 2320B, 4500NH3-H, 4500-S D, EPA 350.1, 350.2, SW-846 1312, 6020, 6020A, 7470A, 5540C, 4500H-B, EPA 200.8, SM3500Cr-D, 4500CN-CE, EPA 245.1, 245.2, SW-846 9040B, 3005A, 3015, EPA 6010B, 6010C, 7196A, 3060A, SW-846 9010B, 9030B. Organic Parameters: SW-846 8260B, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 3510C, EPA 608, 624, 625, SW-846 3630C, 5030B, 8081A, 8081B, 8082, 8082A, 8151A, 8330, NJ OQA-QAM-025 Rev.7, NJ EPH.)

Solid & Chemical Materials (Inorganic Parameters: SW-846, 6010B, 6010C, 7196A, 3060A, 9010B, 9030B, 1010, 1030, 1311, 1312, 3005A, 3050B, 7471A, 7471B, 9014, 9012A, 9040B, 9045C, 9050A, 9065. Organic Parameters: SW-846 8015B, 8015C, 8081A, 8081B, 8082, 8082A, 8151A, 8330, 8260B, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 3540C, 3545, 3546, 3550B, 3580A, 3630C, 5030B, 5035L, 5035H, NJ OQA-QAM-025 Rev.7, NJ EPH.)

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

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

Non-Potable Water (Inorganic Parameters: SM9221E, 9222D, 9221B, 9222B, 9215B, 5210B, 5310C, EPA 410.4, SM5220D, 2310B-4a, 2320B, EPA 200.7, 300.0, SM4500CL-E, 4500F-C, SM15 426C, EPA 350.1, SM4500NH3-BH, EPA 351.1, LACHAT 10-107-06-2, EPA 353.2, LACHAT 10-107-04-1-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, LACHAT 10-204-00-1-A, EPA 9040B, SM4500-HB, EPA 1664A, EPA 420.1, SM14 510C, EPA 120.1, SM2510B, SM4500S-D, SM5540C, EPA 3005A, 9010B, 9030B.. Organic Parameters: EPA 624, 8260B, 8270C, 625, 608, 8081A, 8151A, 8330, 8082, EPA 3510C, 5030B.)

Solid & Hazardous Waste (Inorganic Parameters: 1010, 1030, EPA 6010B, 7196A, 7471A, 9012A, 9014, 9040B, 9045C, 9065, 9050, EPA 1311, 1312, 3005A, 3050B, 9010B, 9030B. Organic Parameters: EPA 8260B, 8270C, 8015B, 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.**
Drinking Water (Organic Parameters: EPA 524.2, 504.1)

Non-Potable Water (Inorganic Parameters: EPA 1312, 200.7, 410.4, 1664A, SM2540D, 5210B, 5220D, 4500-P, BE. Organic Parameters: EPA 3510C, 3005A, 3630C, 5030B, 625, 624, 608, 8081A, 8081B, 8082, 802A, 8151A, 8260B, 8270C, 8270D, 8330)

Solid & Hazardous Waste (Inorganic Parameters: EPA 350.1, 1010, 1030, 1311, 1312, 3050B, 3060A, 6010B, 6010C, 7196A, 7471A, 9010B, 9012A, 9014, 9040B, 9045C, 9050, 9065, SM 4500NH₃-H. Organic Parameters: 3540C, 3546, 3580A, 3630C, 5035, 8015B, 8015C, 8081A, 8081B, 8082, 8082A, 8151A, 8260B, 8270C, 8270D, 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 NJ-DEP Certificate for Potable and Non-Potable Water.

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

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

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

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, 332.0, 6860, 353.2, 410.4, 9060, 1664A, SM 4500CN-E, 4500H-B, 4500NO₃-F, 5220D, 5310C, 2320B, 2540C, 3005A, 3015, 9010B, 9056. Organic Parameters: EPA 8260B, 8270C, 8330A, 625, 8082, 8081A, 3510C, 5030B, MassDEP EPH, MassDEP VPH.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 200.7, 6010B, 7471A, 9010, 9012A, 6860, 1311, 1312, 3050B, 7196A, 9010B, 3500-CR-D, 4500CN-CE, 2540G, Organic Parameters: EPA 8260B, 8270C, 8330A/B-prep, 8082, 8081A, 3540C, 3546, 3580A, 5035A, MassDEP EPH, MassDEP VPH.)

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

EPA 8260B: Freon-113, 1,2,4,5-Tetramethylbenzene, 4-Ethyltoluene. **EPA 8330A:** PETN, Picric Acid, Nitroglycerine, 2,6-DANT, 2,4-DANT. **EPA 8270C:** Methyl naphthalene, Dimethyl naphthalene, Total Methyl naphthalenes, Total Dimethyl naphthalenes, 1,4-Diphenylhydrazine (Azobenzene). **EPA 625:** 4-Chloroaniline, 4-Methylphenol. Total Phosphorus in a soil matrix, Chloride in a soil matrix, TKN in a soil matrix, NO₂ in a soil matrix, NO₃ in a soil matrix, SO₄ in a soil matrix.



CHAIN OF CUSTODY

PAGE 1 OF 1

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

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

Client Information

Client: **LTICORP ENVIRONMENTAL**

Address: **39 INDEPENDENCE PARK RD**

PLYMOUTH MA 03366

Phone: **508-830-3344**

Fax: **508-830-3366**

Email: **SKAIZHAWER@LTICORPENVIRONMENTAL.COM**

☐ These samples have been previously analyzed by Alpha

Other Project Specific Requirements/Comments/Detection Limits:

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

Project Information

Project Name: **WAKEFIELD**

Project Location: **WAKEFIELD**

Project #: **532**

Project Manager: **SCOTT KRAZIMIR**

ALPHA Quote #:

Turn-Around Time

12 HOUR

STANDARD

☐ RUSH (only confirmed if pre-approved)

Date Due: **12/16/11**

Time:

Date Rec'd in Lab:

12/13/11

Report Information - Data Deliverables

☐ FAX ☒ EMAIL

☒ SD/EX ☐ Add'l Deliverables

Regulatory Requirements/Report Limits

State / Fed Program Criteria

MA MCP PRESUMPTIVE CERTAINTY --- CT REASONABLE CONFIDENCE PROTO

☒ Yes ☐ No Are MCP Analytical Methods Required?

☐ Yes ☐ No Is Matrix Spike (MS) Required on this SDG? (If yes see note in Comments)

☐ Yes ☐ No Are CT RCP (Reasonable Confidence Protocols) Required?

ALPHA Job #:

11120809

Billing Information

Same as Client Info

PO #: **532**

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection		Sample Matrix	Sampler's Initials
		Date	Time		

20809	1	CEM-43	12/13/11	1015	6w	TR	X
-------	---	--------	----------	------	----	----	---

ANALYSIS

VOC (8260)

SAMPLE HANDLING

Filtration ☐ Done
☐ Not needed
☐ Lab to do
Preservation ☐ Lab to do
(Please specify below)

Sample Specific Comments

2

PLEASE ANSWER QUESTIONS ABOVE!

IS YOUR PROJECT
MAMCP or CT RCP?

Relinquished By:

Date/Time

Received By:

Date/Time

Container Type

Preservative

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

7A
Volatile CONTINUING CALIBRATION CHECK

Lab Name: Alpha Analytical Labs

SDG No.: L1120809

Instrument ID: Jack.i Calibration Date: 15-DEC-2011 Time: 08:32

Lab File ID: 1215B03 Init. Calib. Date(s): 10-NOV-2 10-NOV-2

Sample No: 8260 ccal Init. Calib. Times : 14:05 17:52

Compound	RRF	RRF	MIN RRF	%D	MAX %D	
dichlorodifluoromethane	.63412	.56139	.1	11	20	
chloromethane	.95786	.78903	.1	18	20	
vinyl chloride	.74427	.65722	.1	12	20	
bromomethane	.39483	.33798	.1	14	20	
chloroethane	.39305	.37745	.1	4	20	
trichlorofluoromethane	.82135	.92284	.1	-12	20	
ethyl ether	.27366	.24515	.05	10	20	
1,1,-dichloroethene	.52913	.54244	.1	-3	20	
carbon disulfide	1.3417	1.2471	.1	7	20	
methylene chloride	.59325	.55624	.1	6	20	
acetone	.17578	.14636	.1	17	20	
trans-1,2-dichloroethene	.5946	.58434	.1	2	20	
methyl tert butyl ether	1.4467	1.1534	.1	20	20	F
Ethyl-Tert-Butyl-Ether	1.8167	1.5612	.05	14	20	
Diisopropyl Ether	2.2812	1.7748	.01	22	20	F
1,1-dichloroethane	1.1853	1.0955	.2	8	20	
cis-1,2-dichloroethene	.65975	.64469	.1	2	20	
2,2-dichloropropane	.8794	.86429	.05	2	20	
bromochloromethane	.30073	.30566	.05	-2	20	
chloroform	1.1719	1.0133	.2	14	20	
carbontetrachloride	.75039	.76399	.1	-2	20	
tetrahydrofuran	.19351	.13245	.05	32	20	F
1,1,1-trichloroethane	.93377	.95381	.1	-2	20	
Tertiary-Amyl Methyl Ether	1.4357	1.2941	.05	10	20	
1,1-dichloropropene	.86955	.82995	.05	5	20	
2-butanone	.27149	.17823	.1	34	20	F
benzene	2.5011	2.3054	.5	8	20	
1,2-dichloroethane	.77064	.692	.1	10	20	
trichloroethene	.67819	.65065	.2	4	20	
dibromomethane	.28908	.27618	.05	4	20	
1,2-dichloropropane	.60764	.58613	.1	4	20	
bromodichloromethane	.77452	.68376	.2	12	20	
1,4-dioxane	.00288	.00267	.05	7	20	F
cis-1,3-dichloropropene	.84496	.74639	.2	12	20	
toluene	1.9564	1.8681	.4	5	20	
tetrachloroethene	.88552	.95667	.2	-8	20	
4-methyl-2-pentanone	.1822	.13685	.1	25	20	F
trans-1,3-dichloropropene	.94644	.81532	.1	14	20	

FORM VII MCP-8260-10

7A
CONTINUING CALIBRATION CHECK

Lab Name: Alpha Analytical Labs

SDG No.: L1120809

Instrument ID: Jack.i Calibration Date: 15-DEC-2011 Time: 08:32

Lab File ID: 1215B03 Init. Calib. Date(s): 10-NOV-2 10-NOV-2

Sample No: 8260 ccal Init. Calib. Times : 14:05 17:52

Compound	RRF	RRF	MIN RRF	%D	MAX %D	
=====	=====	=====	=====	=====	=====	
1,1,2-trichloroethane	.54839	.51571	.1	6	20	
chlorodibromomethane	.7176	.64278	.1	10	20	
1,3-dichloropropane	1.0278	.86931	.05	15	20	
1,2-dibromoethane	.47291	.43849	.1	7	20	
2-hexanone	.51913	.30225	.1	42	20	F
chlorobenzene	2.1771	2.0432	.5	6	20	
ethyl benzene	3.3045	3.2672	.1	1	20	
1,1,1,2-tetrachloroethane	.78864	.78726	.05	0	20	
p/m xylene	1.3059	1.3396	.1	-3	20	
o xylene	1.3257	1.3258	.3	0	20	
styrene	2.0857	2.1311	.3	-2	20	
bromoform	.76614	.58648	.1	23	20	F
isopropylbenzene	2.8673	3.0617	.1	-7	20	
bromobenzene	1.5900	1.6014	.05	-1	20	
n-propylbenzene	5.7418	5.9444	.05	-4	20	
1,1,2,2,-tetrachloroethane	1.3867	1.0131	.3	27	20	F
2-chlorotoluene	4.4556	4.2973	.05	4	20	
1,2,3-trichloropropane	1.0206	.81876	.05	20	20	
1,3,5-trimethylbenzene	4.6142	4.4507	.05	4	20	
4-chlorotoluene	4.0527	3.8959	.05	4	20	
tert-butylbenzene	3.6802	3.8869	.05	-6	20	
1,2,4-trimethylbenzene	4.7087	4.5965	.05	2	20	
sec-butylbenzene	4.3264	4.7216	.01	-9	20	
p-isopropyltoluene	3.8741	4.3728	.05	-13	20	
1,3-dichlorobenzene	2.7407	2.7720	.6	-1	20	
1,4-dichlorobenzene	2.7555	2.7992	.5	-2	20	
n-butylbenzene	2.8878	3.101	.05	-7	20	
1,2-dichlorobenzene	2.5971	2.5508	.4	2	20	
1,2-dibromo-3-chloropropane	.15174	.12213	.05	20	20	
hexachlorobutadiene	.37941	.50044	.05	-32	20	F
1,2,4-trichlorobenzene	1.1923	1.0668	.2	11	20	
naphthalene	2.7753	1.8894	.05	32	20	F
1,2,3-trichlorobenzene	.96796	.74814	.05	23	20	F
=====	=====	=====	=====	=====	=====	
dibromofluoromethane	.24021	.2556	.05	-6	20	
1,2-dichloroethane-d4	.26868	.25094	.05	7	20	
toluene-d8	1.2381	1.2678	.01	-2	20	
4-bromofluorobenzene	.85271	.78638	.05	8	20	

FORM VII MCP-8260-10