UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region 1
5 Post Office Square, Suite 100
BOSTON, MA 02109-3912

CERTIFIED MAIL

December 28, 2010

Thomas Williamson Jr., President
Williamson Environmental LLC
Two Shaker Road, Building A
Shirley, MA 01464

Re: Authorization to discharge under the Remediation General Permit (RGP) – 910000. Honey Farms, Inc., Store No. 88 site located at 36-38 Worcester Road in Charlton, MA 01507 Worcester County, Authorization # MAG910410 – Reissuance

Dear Mr. Williamson:

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

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

In addition, based on an aerial view of the site, EPA determined that the treatment trailer where the discharge occurs is located near a wetland with limited dilution. Areas with limited dilution have one to five (1-5) Dilution Rate Concentration (DRC). Please see Attachment IV of the RGP for more information regarding the DRC. Therefore, the compliance limits for nickel of 29ug/L, zinc of 66.6ug/L and iron of 1,000ug/L are based on 1-5 DRC.

In addition, the list of pollutants attached to this authorization is subject to a recertification if the operations at the site result in a discharge lasting longer than six

months. Recertifications 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. The termination date reported for this site is June 15, 2015. 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

Summary of Monitoring Parameters[1]

NPDES Permit Number:	**MAG 910410- Reissuance**
Date Permit Issued:	December 2010
Facility/Site Name:	Honey Farms Inc. Store No. 88
Facility/Site Address:	36-38 Worcester Road, Charlton, MA 01507, Worcester County
	Email address of owner; Not reported; Phone n:508.248.4864
Legal Name of operator:	Williamson Environmental LLC
Operator contact name, title, and Address:	Thomas Williamson Jr. President, 2 shaker Road, Building A, Shirley, MA 01464
	Email: JOER@WILLIAMSONENV.COM
Estimated Date of Completion:	06/15/2015
Category and Sub-Category:	Category I- Petroleum Related Site Remediation, Sub-category A. Gasoline Only Sites
Receiving Water:	Wetlands to Cady Brook

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

	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)
√	1. Total Suspended Solids (TSS)	30 milligrams/liter (mg/l) **, 50 mg/l for hydrostatic testing **, Me#60.2/5mL
	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/5.0mg/LmL
	4. Cyanide (CN) [2, 3]	Freshwater = 5.2 ug/l ** Saltwater = 1.0 ug/l **/ Me#335.4/ML 5ug/L
	5. Benzene (B)	5ug/L /50.0 ug/l for hydrostatic testing only/ Me#8260C/ML 2 ug/L
	6. Toluene (T)	(limited as ug/L total BTEX)/ Me#8260C/ ML 2ug/L
	7. Ethylbenzene (E)	(limited as ug/L total BTEX))/ Me#8260C/ ML 2ug/L
	8. (m,p,o) Xylenes (X)	(limited as ug/L total BTEX))/ Me#8260C/ ML 2ug/L
	9. Total Benzene, Toluene, Ethyl Benzene, and Xylenes (BTEX) [4]	100 ug/l)/ Me#8260C/ ML 2ug/L
	10. Ethylene Dibromide (EDB) (1,2- Dibromoethane)	0.05 ug/l/ Me#8260C/ ML 10ug/L
√	11. Methyl-tert-Butyl Ether (MtBE)	70.0 ug/l /Me#8260C/ ML 10ug/L
	12.tert-Butyl Alcohol (TBA) (TertiaryButanol)	Monitor Only (ug/L)/ Me#8260C/ ML 10ug/L
	13. tert-Amyl Methyl Ether	Monitor Only (ug/L) /Me#8260C/ ML

	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)
	(TAME)	10ug/L
	14. Naphthalene [5]	20 ug/l /Me#8260C/ ML 2ug/L
	15. Carbon Tetrachloride	4.4 ug/l /Me#8260C/ ML 5ug/L
	16. 1,2 Dichlorobenzene (o-DCB)	600 ug/l /Me#8260C/ ML 5ug/L
	17. 1,3 Dichlorobenzene (m-DCB)	320 ug/l /Me#8260C/ ML 5ug/L
	18. 1,4 Dichlorobenzene (p-DCB)	5.0 ug/l /Me#8260C/ ML 5ug/L
	18a. Total dichlorobenzene	763 ug/l - NH only /Me#8260C/ ML5ug/L
	19. 1,1 Dichloroethane (DCA)	70 ug/l /Me#8260C/ ML 5ug/L
	20. 1,2 Dichloroethane (DCA)	5.0 ug/l /Me#8260C/ ML 5ug/L
	21. 1,1 Dichloroethene (DCE)	3.2 ug/l/Me#8260C/ ML 5ug/L
	22. cis-1,2 Dichloroethene (DCE)	70 ug/l /Me#8260C/ ML 5ug/L
	23. Methylene Chloride	4.6 ug/l/Me#8260C/ ML 5ug/L
	24. Tetrachloroethene (PCE)	5.0 ug/l /Me#8260C/ ML 5ug/L
	25. 1,1,1 Trichloro-ethane (TCA)	200 ug/l/Me#8260C/ ML 5ug/L
	26. 1,1,2 Trichloro-ethane (TCA)	5.0 ug/l /Me#8260C/ ML 5ug/L
	27. Trichloroethene (TCE)	5.0 ug/l /Me#8260C/ ML 5ug/L
	28. Vinyl Chloride (Chloroethene)	2.0 ug/l /Me#8260C/ ML 5ug/L
	29. Acetone	Monitor Only (ug/L) /Me#8260C/ ML 50ug/L
	30. 1,4 Dioxane	Monitor Only /Me#1624C/ML50 ug/L
	31. Total Phenols	300 ug/l Me#420.1&420.2/ML 2 ug/L/ Me# 420.4 /ML50 ug/L
	32. Pentachlorophenol (PCP)	1.0 ug/l /Me#8270D/ML5ug/L,Me#604 &625/ML10ug/L
	33. Total Phthalates (Phthalate esters) [6]	3.0 ug/L ** /Me#8270D/ML5ug/L,Me#606/ML10ug/L& Me#625/ML5ug/L
	34. Bis (2-Ethylhexyl) Phthalate [Di- (ethylhexyl) Phthalate]	6.0 ug/l /Me#8270D/ML5ug/L,Me#606/ML10ug/L& Me#625/ML5ug/L
	35. Total Group I Polycyclic Aromatic Hydrocarbons (PAH)	10.0 ug/l
	a. Benzo(a) Anthracene [7]	0.0038 ug/l /Me#8270D/ ML5ug/L, Me#610/ML5ug/L& Me#625/ML5ug/L
	b. Benzo(a) Pyrene [7]	0.0038 ug/l /Me#8270D/ ML5ug/L, Me#610/ML5ug/L& Me#625/ML5ug/L
	c. Benzo(b)Fluoranthene [7]	0.0038 ug/l /Me#8270D/ ML5ug/L, Me#610/ML5ug/L& Me#625/ML5ug/L
	d. Benzo(k)Fluoranthene [7]	0.0038 ug/l /Me#8270D/ ML5ug/L,

	Parameter	Effluent Limit/Method#/ML (All Effluent Limits are shown as Daily Maximum Limit, unless denoted by a **, in that case it will be a Monthly Average Limit)
		Me#610/ML5ug/L& Me#625/ML5ug/L
	e. Chrysene [7]	0.0038 ug/l /Me#8270D/ ML5ug/L, Me#610/ML5ug/L& Me#625/ML5ug/L
	f. Dibenzo(a,h)anthracene [7]	0.0038 ug/l /Me#8270D/ ML5ug/L, Me#610/ML5ug/L& Me#625/ML5ug/L
	g. Indeno(1,2,3-cd) Pyrene [7]	0.0038 ug/l /Me#8270D/ ML5ug/L, Me#610/ML5ug/L& Me#625/ML5ug/L
	36. Total Group II Polycyclic Aromatic Hydrocarbons (PAH)	100 ug/l
	h. Acenaphthene	X/Me#8270D/ML5ug/L,Me#610/ML5ug /L & Me#625/ML5ug/L
	i. Acenaphthylene	X/Me#8270D/ML5ug/L,Me#610/ML5ug/L & Me#625/ML5ug/L
	j. Anthracene	X/Me#8270D/ML5ug/L,Me#610/ML5ug/L & Me#625/ML5ug/L
	k. Benzo(ghi) Perylene	X/Me#8270D/ML5ug/L,Me#610/ML5ug/L & Me#625/ML5ug/L
	l. Fluoranthene	X/Me#8270D/ML5ug/L,Me#610/ML5ug/L & Me#625/ML5ug/L
	m. Fluorene	X/Me#8270D/ML5ug/L,Me#610/ML5ug/L & Me#625/ML5ug/L
	n. Naphthalene [5]	20 ug/l / Me#8270D/ ML5ug/L, Me#610/ML5ug/L & Me#625/ML5ug/L
	o. Phenanthrene	X/Me#8270D/ML5ug/L,Me#610/ML5ug/L & Me#625/ML5ug/L
	p. Pyrene	X/Me#8270D/ML5ug/L,Me#610/ML5ug/L & Me#625/ML5ug/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

	Metal parameter	Total Recoverable Metal Limit @ H [10]= 50 mg/l CaCO3 for discharges in Massachusetts (ug/l) [11]			
		Freshwater	Saltwater		
	39. Antimony	5.6/10mL			
	40. Arsenic **	10/20mL	36/20mL		
	41. Cadmium **	0.2/10ml	8.9/10mL		
	42. Chromium III (trivalent) **	48.8/15mL	100/15mL		
	43. Chromium VI (hexavalent) **	11.4/10mL	50.3/10mL		
	44. Copper **	5.2/15mL	3.7/15mL		

	Metal parameter	Total Recoverable Metal Limit @ H [10]= 50 mg/l CaCO3 for discharges in Massachusetts (ug/l) [11]			
		Freshwater	Saltwater		
	45. Lead **	1.3/20mL	8.5/20mL		
	46. Mercury **	0.9/0.2mL	1.1/0.2mL		
√	47. Nickel **	29/20mL	8.2/20mL		
	48. Selenium **	5/20mL	71/20mL		
	49. Silver	1.2/10mL	2.2/10mL		
√	50. Zinc **	66.6/15mL	85.6/15mL		
√	51. Iron	1,000/20mL			

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

Footnotes:

[1] Although the maximum values for TRC are 11ug/l and 7.5 ug/l for freshwater, and saltwater respectively, the compliance limits are equal to the minimum level (ML) of the test method used as listed in Appendix VI (i.e., Method 330.5, 20 ug/l).
[2] Limits for cyanide are based on EPA's water quality criteria expressed as micrograms per liter. There is currently no EPA approved test method for free cyanide. Therefore, total cyanide must be reported.
[3] Although the maximum values for cyanide are 5.2 ug/l and 1.0 ug/l for freshwater and saltwater, respectively, the compliance limits are equal to the minimum level (ML) of the Method 335.4 as listed in Appendix VI (i.e., 10 ug/l).
[4] BTEX = sum of Benzene, Toluene, Ethylbenzene, and total Xylenes.
[5] Naphthalene can be reported as both a purgeable (VOC) and extractable (SVOC) organic compound. If both VOC and SVOC are analyzed, the highest value must be used unless the QC criteria for one of the analyses is not met. In such cases, the value from the analysis meeting the QC criteria must be used.
[6] The sum of individual phthalate compounds(not including the #34, Bis (2-Ethylhexyl) Phthalate . The compliance limits are equal to the minimum level (ML) of the test method used as listed in Appendix VI.
Total values calculated for reporting on NOIs and discharge monitoring reports shall be calculated by adding the measured concentration of each constituent. If the measurement of a constituent is less than the ML, the permittee shall use a value of zero for that constituent. For each test, the permittee shall also attach the raw data for each constituent to the discharge monitoring report, including the minimum level and minimum detection level for the analysis.
[7] Although the maximum value for the individual PAH compounds is 0.0038 ug/l, the compliance limits are equal to the minimum level (ML) of the test method used as listed in Appendix VI.
[8] In the November 2002 WQC, EPA has revised the definition of Total PCBs for aquatic life as total PCBs is the sum of all homologue, all isomer, all congener, or all "Oroclor analyses."Total values calculated for reporting on NOIs and discharge monitoring reports shall be calculated by adding the measured concentration of each constituent. If the measure of a constituent is less than the ML, the permittee shall use a value of zero for that constituent. For each test, the permittee shall also attach the raw data for each constituent to the discharge monitoring report, including the minimum level and minimum detection level for the analysis.
[9]Although the maximum value for total PCBs is 0.000064 ug/l, the compliance limit is equal to the minimum level (ML) of the test method used as listed in Appendix VI (i.e., 0.5 ug/l for Method 608 or 0.00005 ug/l when Method 1668a is approved).
[10] Hardness. Cadmium, Chromium III, Copper, Lead, Nickel, Silver, and Zinc are Hardness Dependent.
[11] For a Dilution Factor (DF) from 1 to 5, metals limits are calculated using DF times the base limit for the metal. See Appendix IV. For example, iron limits are calculated using DF x 1,000ug/L (the iron base limit). Therefore DF is 1.5, the iron limit will be 1,500 ug/L; DF 2, then iron limit =1,000 x 2 =2,000 ug/L., etc. not to exceed the DF=5.
[12] Minimum Level (ML) is the lowest level at which the analytical system gives a recognizable signal and acceptable calibration point for the analyte. The ML represents the lowest concentration at which an analyte can be measured with a known level of confidence. The ML is calculated by multiplying the laboratory-determined method detection limit by 3.18 (see 40 CFR Part 136, Appendix B).
[13] pH sampling for compliance with permit limits may be performed using field methods as provided for in EPA test Method 150.1.
[14] Temperature sampling per Method 170.1

Williamson
Environmental LLC

Two Shaker Road, Building A, Shirley, MA 01464 • Office: (978) 425-6600 • Fax: (978) 425-6650

November 29, 2010

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

Re: Notice of Intent for Remediation General Permit (RGP)
Authorization No. MAG910410
Honey Farms, Inc. Store No. 88
36 – 38 Worcester Road
Charlton, MA
MA DEP RTN 2-15122

Mr. Alvarez:

On behalf of Honey Farms Inc., Williamson Environmental LLC (Williamson Environmental) has prepared this Notice of Intent for RGP Authorization No. MAG910410. RGP Authorization No. MAG910410 was issued on April 16, 2009 for the discharge of ground water from a remediation system operated under the Massachusetts Contingency Plan (MCP).

The RGP Activity Category and Sub-Category are I-A. The discharge is not within an area designated as outstanding resource waters, Areas of Critical Environmental Concern, Endangered and Threatened Species and/or Critical Habitat or properties listed or eligible for listing under the National Historic Preservation Act.

Should you have questions or require additional information, please contact the undersigned.

Sincerely,
Williamson Environmental LLC

Thomas Williamson, Jr.
President

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**: HONEY FARMS, INC. STORE NO. 88		**Facility/site** mailing address:		
Location of **facility/site**: longitude: 71.99 latitude: 42.15	Facility SIC code(s): 5541	Street: 36-38 WORCESTER ROAD		
b) Name of **facility/site owner:**		Town: CHARLTON		
Email address of facility/site owner:		State: MA	Zip: 01507	County: WORCESTER
Telephone no. of facility/site **owner**: 508/248-4864				
Fax no. of facility/site **owner**:		**Owner** is (check one): 1. Federal ○ 2. State/Tribal ○ 3. Private ◉ 4. Other ○ if so, describe:		
Address of **owner** (if different from site):				
Street: 505 PLEASANT STREET				
Town: WORCESTER	State: MA	Zip: 01609	County: WORCESTER	
c) Legal name of **operator**:		**Operator** telephone no: 978/425-6600		
WILLIAMSON ENVIRONMENTAL LLC		**Operator** fax no.: 978/425-6650	**Operator** email: JOER@WILLIAMSONENV.COM	
Operator contact name and title: THOMAS WILLIAMSON JR., President				
Address of **operator** (if different from owner):	Street: TWO SHAKER ROAD, BUILDING A			
Town: SHIRLEY	State: MA	Zip: 01464	County: WORCESTER	

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: MAG910410
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: RTN 2-15122
2. permit or license # assigned: W060758
3. state agency contact information: name, location, and telephone number:

MA DEP CERO WORCESTER, MA 508/792-7650

f) Is the site/facility covered by any other EPA permit, including:
1. Multi-Sector General Permit? Y ○ N ◉,
if Y, number:
2. Final Dewatering General Permit? Y ○ N ◉,
if Y, number:
3. EPA Construction General Permit? Y ○ N ◉,
if Y, number:
4. Individual NPDES permit? Y ○ N ◉,
if Y, number:
5. any other water quality related individual or general permit? Y ○ N ◉, if Y, number:

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

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

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

IV - Miscellaneous Related Discharges	A. Aquifer Pump Testing to Evaluate Formerly Contaminated Sites ☐ B. Well Development/Rehabilitation at Contaminated/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:

PROJECT INVOLVES AN ACTIVE GROUND WATER EXTRACTION/PUMP AND TREAT SYSTEM AT THE SITE RELATED TO RTN 2-15122.

b) Provide the following information about each discharge:

1) Number of discharge points: 1

2) What is the **maximum** and **average flow rate** of discharge (in cubic feet per second, ft^3/s)?
Max. flow: 0.01 Is maximum flow a **design value**? Y ○ N ◉
Average flow (include units): 0.01 FT3/S Is average flow a design value or estimate? ESTIMATE

3) Latitude and longitude of each discharge within 100 feet:
pt.1: lat. 71.99 long. 42.15 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 06/15/2005 end 06/15/2015

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.

Parameter *	CAS Number	Believed Absent	Believed Present	# of Samples	Sample Type (e.g., grab)	Analytical Method Used (method #)	Minimum Level (ML) of Test Method	Maximum daily value		Average daily value	
								concentration (ug/l)	mass (kg)	concentration (ug/l)	mass (kg)
1. Total Suspended Solids (TSS)		☒	☐	1	grab	SM2540D	5000 ug/L				
2. Total Residual Chlorine (TRC)		☒	☐	1	grab	Hach 8167	20 ug/L				
3. Total Petroleum Hydrocarbons (TPH)		☒	☐	1	grab	EPA 1664 Rev	1000 ug/L				
4. Cyanide (CN)	57125	☒	☐	1	grab	EPA 335.4/sw846 90	5 ug/L				
5. Benzene (B)	71432	☒	☐	1	grab	SW846 8260B/C	1 ug/L				
6. Toluene (T)	108883	☒	☐	1	grab	SW846 8260B/C	1 ug/L				
7. Ethylbenzene (E)	100414	☒	☐	1	grab	SW846 8260B/C	1 ug/L				
8. (m,p,o) Xylenes (X)	108883; 106423; 95476; 1330207	☒	☐	1	grab	SW846 8260B	3 ug/L				
9. Total BTEX [2]	n/a	☒	☐	1	grab	SW846 8260B/C	6 ug/L				
10. Ethylene Dibromide (EDB) (1,2-Dibromoethane) [3]	106934	☒	☐	1	grab	SW846 8260B	0.5 ug/L				
11. Methyl-tert-Butyl Ether (MtBE)	1634044	☒	☐	1	grab	SW846 8260B	1ug/L				
12. tert-Butyl Alcohol (TBA) (Tertiary-Butanol)	75650	☒	☐	1	grab	SW846 8260B	10 ug/L				

***** 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.

Parameter *	CAS Number	Believed Absent	Believed Present	# of Samples	Sample Type (e.g., grab)	Analytical Method Used (method #)	Minimum Level (ML) of Test Method	Maximum daily value		Average daily value	
								concentration (ug/l)	mass (kg)	concentration (ug/l)	mass (kg)
13. tert-Amyl Methyl Ether (TAME)	9940508	☒	☐	1	grab	SW846 8270C	1 ug/L				
14. Naphthalene	91203	☒	☐	1	grab	SW846 8270C/D	6 ug/L				
15. Carbon Tetrachloride	56235	☒	☐	1	grab	SW846 8270C	1 ug/L				
16. 1,2 Dichlorobenzene (o-DCB)	95501	☒	☐	1	grab	SW846 8270C	6 ug/L				
17. 1,3 Dichlorobenzene (m-DCB)	541731	☒	☐	1	grab	SW846 8270C	6 ug/L				
18. 1,4 Dichlorobenzene (p-DCB)	106467	☒	☐	1	grab	SW846 8270C	6 ug/L				
18a. Total dichlorobenzene		☒	☐	1	grab	SW846 8270C	18 ug/L				
19. 1,1 Dichloroethane (DCA)	75343	☒	☐	1	grab	SW846 8270C	1 ug/L				
20. 1,2 Dichloroethane (DCA)	107062	☒	☐	1	grab	SW846 8270C	1 ug/L				
21. 1,1 Dichloroethene (DCE)	75354	☒	☐	1	grab	SW846 8270C	1 ug/L				
22. cis-1,2 Dichloroethene (DCE)	156592	☒	☐	1	grab	SW846 8270C	1 ug/L				
23. Methylene Chloride	75092	☒	☐	1	grab	SW846 8270C/D	2 ug/L				
24. Tetrachloroethene (PCE)	127184	☒	☐	1	grab	SW846 8270C	1 ug/L				
25. 1,1,1 Trichloro-ethane (TCA)	71556	☒	☐	1	grab	SW846 8270C	1 ug/L				
26. 1,1,2 Trichloro-ethane (TCA)	79005	☒	☐	1	grab	SW846 8270C	1 ug/L				
27. Trichloroethene (TCE)	79016	☒	☐	1	grab	SW846 8270C	1 ug/L				

Parameter *	CAS Number	Believed Absent	Believed Present	# of Samples	Sample Type (e.g., grab)	Analytical Method Used (method #)	Minimum Level (ML) of Test Method	Maximum daily value		Average daily value	
								concentration (ug/l)	mass (kg)	concentration (ug/l)	mass (kg)
28. Vinyl Chloride (Chloroethene)	75014	☒	☐	1	grab	SW846 8270C	1 ug/L				
29. Acetone	67641	☒	☐	1	grab	SW846 8270C/D	10 ug/L				
30. 1,4 Dioxane	123911	☒	☐	1	grab	SW846 8270C/D	20 ug/L				
31. Total Phenols	108952	☒	☐	1	grab	SW846 8270C/D					
32. Pentachlorophenol (PCP)	87865	☒	☐	1	grab	SW846 8270C	22 ug/L				
33. Total Phthalates (Phthalate esters) [4]		☒	☐	1	grab	SW846 8270C	24 ug/L				
34. Bis (2-Ethylhexyl) Phthalate [Di-(ethylhexyl) Phthalate]	117817	☒	☐	1	grab	SW846 8270C	6 ug/L				
35. Total Group I Polycyclic Aromatic Hydrocarbons (PAH)		☒	☐	1	grab	SW846 8270C					
a. Benzo(a) Anthracene	56553	☒	☐	1	grab	SW846 8270C/D	6 ug/L				
b. Benzo(a) Pyrene	50328	☒	☐	1	grab	SW846 8270C/D	6 ug/L				
c. Benzo(b)Fluoranthene	205992	☒	☐	1	grab	SW846 8270C	6 ug/L				
d. Benzo(k)Fluoranthene	207089	☒	☐	1	grab	SW846 8270C	6 ug/L				
e. Chrysene	21801	☒	☐	1	grab	SW846 8270C/D	6 ug/L				
f. Dibenzo(a,h)anthracene	53703	☒	☐	1	grab	SW846 8270C	6 ug/L				
g. Indeno(1,2,3-cd) Pyrene	193395	☒	☐	1	grab	SW846 8270C	6 ug/L				
36. Total Group II Polycyclic Aromatic Hydrocarbons (PAH)		☒	☐	1	grab	SW846 8270C					

[4] The sum of individual phthalate compounds.

Parameter *	CAS Number	Believed Absent	Believed Present	# of Samples	Sample Type (e.g., grab)	Analytical Method Used (method #)	Minimum Level (ML) of Test Method	Maximum daily value		Average daily value	
								concentration (ug/l)	mass (kg)	concentration (ug/l)	mass (kg)
h. Acenaphthene	83329	☒	☐	1	grab	SW846 8270C/D	6 ug/L				
i. Acenaphthylene	208968	☒	☐	1	grab	SW846 8270C/D	6 ug/L				
j. Anthracene	120127	☒	☐	1	grab	SW846 8270C/D	6 ug/L				
k. Benzo(ghi) Perylene	191242	☒	☐	1	grab	SW846 8270C/D	6 ug/L				
l. Fluoranthene	206440	☒	☐	1	grab	SW846 8270C/D	6 ug/L				
m. Fluorene	86737	☒	☐	1	grab	SW846 8270C/D	6 ug/L				
n. Naphthalene	91203	☒	☐	1	grab	SW846 8270C/D	6 ug/L				
o. Phenanthrene	85018	☒	☐	1	grab	SW846 8270C/D	6 ug/L				
p. Pyrene	129000	☒	☐	1	grab	SW846 8270C/D	6 ug/L				
37. Total Polychlorinated Biphenyls (PCBs)	85687; 84742; 117840; 84662; 131113; 117817.	☒	☐	1	grab	EPA 608	0.065				
38. Chloride	16887006	☐	☒	1	grab	EPA 300.0	10,000	580,000		580,000	
39. Antimony	7440360	☒	☐	1	grab	PA 200.7	6 ug/L				
40. Arsenic	7440382	☒	☐	1	grab	EPA 200.7	4 ug/L				
41. Cadmium	7440439	☒	☐	1	grab	EPA 200.7	2.5 ug/L				
42. Chromium III (trivalent)	16065831	☒	☐	1	grab	EPA 200.7	5 ug/L				
43. Chromium VI (hexavalent)	18540299	☒	☐	1	grab	SW846 7196A	5 ug/L				
44. Copper	7440508	☒	☐	1	grab	EPA 200.7	5 ug/L				
45. Lead	7439921	☒	☐	1	grab	EPA 200.7	8 ug/L				
46. Mercury	7439976	☒	☐	1	grab	PA 245.1/7470A	0.2 ug/L				
47. Nickel	7440020	☐	☒	1	grab	EPA 200.7	5 ug/L	8.7		8.7	
48. Selenium	7782492	☒	☐	1	grab	EPA 200.7	15 ug/L				
49. Silver	7440224	☒	☐	1	grab	EPA 200.7	5 ug/L				
50. Zinc	7440666	☐	☒	1	grab	EPA 200.7	5 ug/L	39		39	
51. Iron	7439896	☐	☒	1	grab	EPA 200.7	250 ug/L	264		264	
Other (describe):		☐	☐								

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

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

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

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

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

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 1 gpm Maximum flow rate of treatment system 5 gpm
Design flow rate of treatment system 5 gpm

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

NA

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:
Storm drain/catch basin discharges to oil water separator which then discharges to drainage basin then to wetlands/Cady Brook

c) Attach a detailed map(s) indicating the site location and location of the outfall to the receiving water:
1. For multiple discharges, number the discharges sequentially.
2. For indirect 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 B

e) Provide the reported or calculated seven day-ten year low flow (7Q10) of the receiving water no info 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.

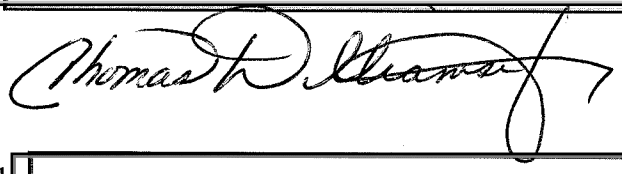
Please provide any supplemental information. Attach any analytical data used to support the application. Attach any certification(s) required by the general permit.

The remedial system has operated since 2005 and operated under MAG910410 (issued April 6, 2009) through September 9, 2010. MTBE concentrations in the influent have attenuated in the past year as indicated on the attached Table 1.

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:

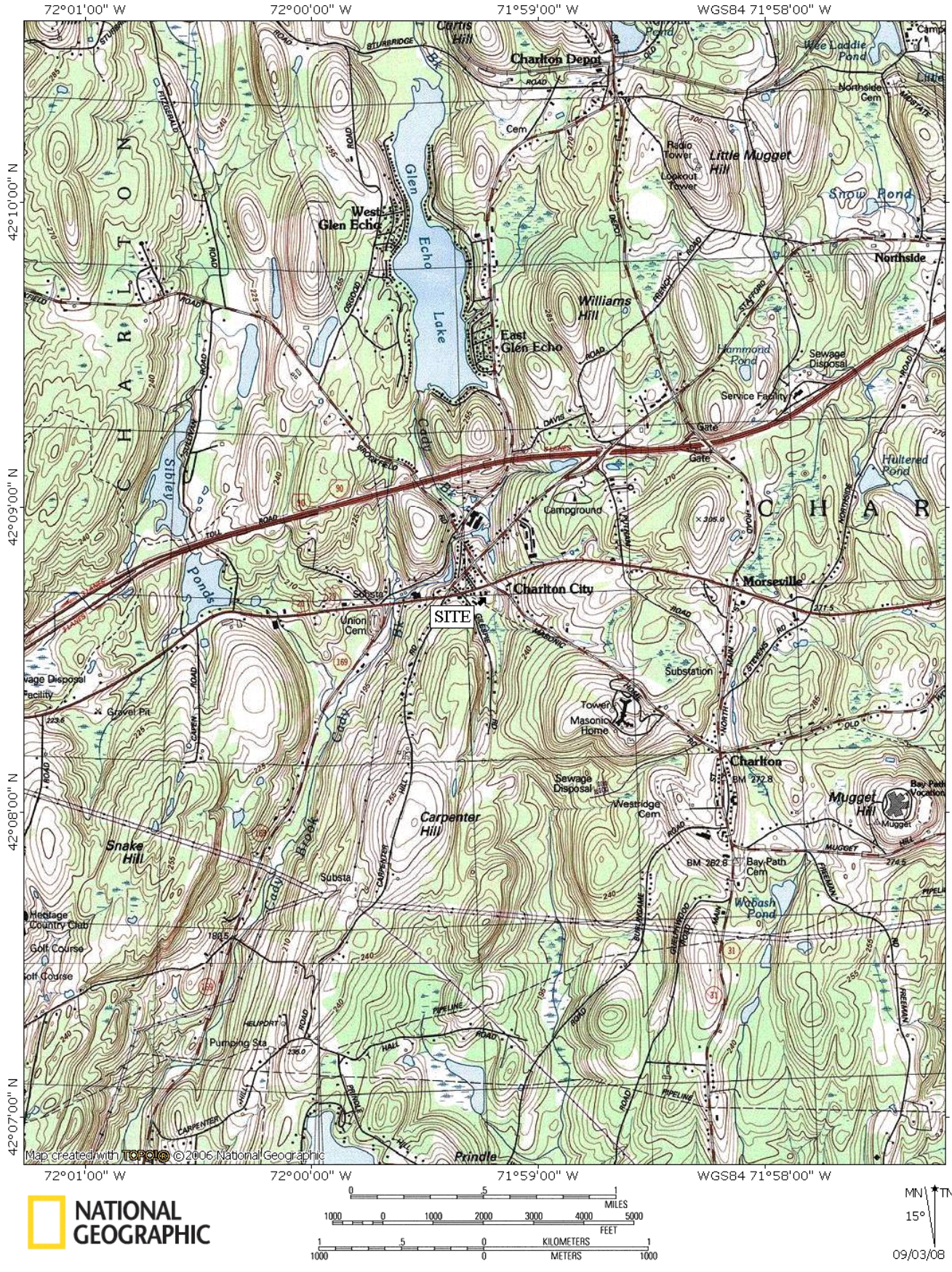
I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage 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: HONEY FARMS, INC. STORE 88

Operator signature: 

Printed Name &Title: THOMAS WILLIAMSON, JR., President of Williamson Environmental LLC

Date: 11/29/2010



NATIONAL GEOGRAPHIC

FIGURE 1	PROPERTY	Williamson Environmental LLC
SITE LOCUS	36 – 38 WORCESTER ROAD	
SCALE: SEE ABOVE	CHARLTON, MASSACHUSETTS	

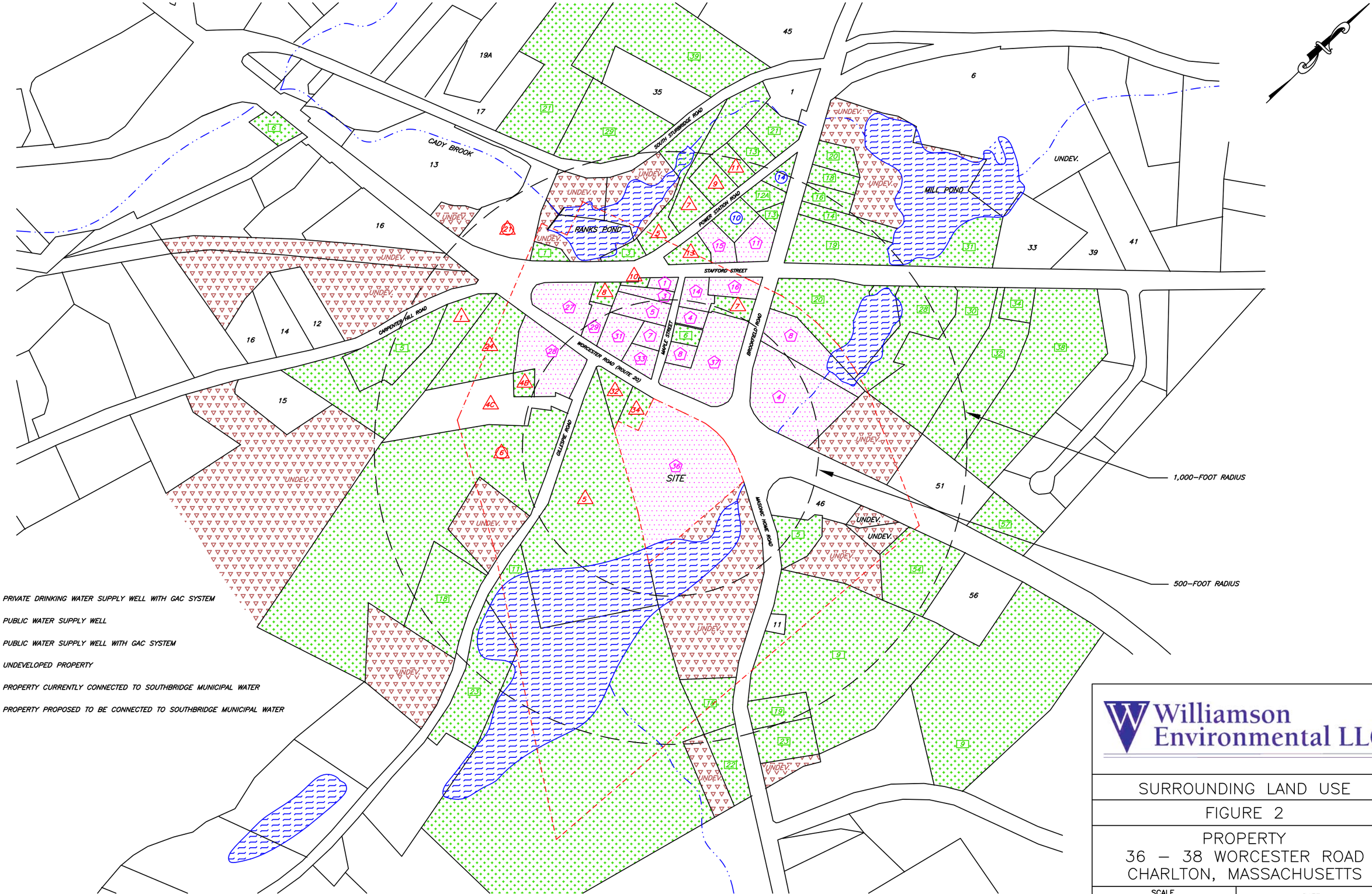


FIGURE CREATED FROM PORTIONS OF THE TOWN OF CHARLTON ASSESSORS' MAPS NOs. 26A, 26B, 27, 27A, 27B, 27C, 33, 34, & 34A.

Williamson Environmental LLC

SURROUNDING LAND USE

FIGURE 2

PROPERTY
36 – 38 WORCESTER ROAD
CHARLTON, MASSACHUSETTS

SCALE
0' 150' 300'

DATE
11/24/09

DISPENSER ISLAND
ELECTRIC TRANSFORMER
PRIVATE DRINKING WATER SUPPLY WELL
IRRIGATION WATER SUPPLY WELL
MANHOLE
CATCH BASIN
UTILITY POLE
WASH WATER HOLDING TANK (2,000-GALLON)
OIL/WATER SEPERATOR (1,000-GALLON)
GROUND WATER MONITORING WELL
DESTROYED/DECOMMISIONED GROUND WATER MONITORING WELL
SOIL BORING
PROPERTY LINE (APPROX.)
TREATMENT SYSTEM INFLUENT PIPING (u/g)
TREATMENT SYSTEM DISCHARGE PIPING (u/g)

WORCESTER ROAD
MASONIC HOME ROAD
GILLESPIE ROAD
34 WORCESTER ROAD
32 WORCESTER ROAD
36 - 38 WORCESTER ROAD
5 GILLESPIE ROAD
UNDER-GROUND ROOF DRAIN RECHARGE AREA
DETENTION BASIN
DETENTION BASIN
TREATMENT TRAILER
UNNAMED BROOK
20,000
10,000
6,000
B-115
B-/MW-116
EN-7
EN-2
B-/MW-118
B-117
B-113
EN-3
EN-6
B-104
B-106
B-119
B-114
EN-8
B-/MW-112
B-/MW-111
EN-1
EN-11
B-/MW-110
B-103
EN-12
B-109
B-/MW-108
B-/MW-107
B-105
B-/MW-102
EN-5
EN-5D
IW
WW-1
EN-10
B-/MW-120
B-/MW-121
EN-9
B-/MW-122
B-/MW-123
EN-4
B-/MW-101

FIGURE CREATED FROM MHF DESIGN CONSULTANTS, INC. "SITE PLAN", DATED MARCH 4, 2002

Williamson Environmental LLC

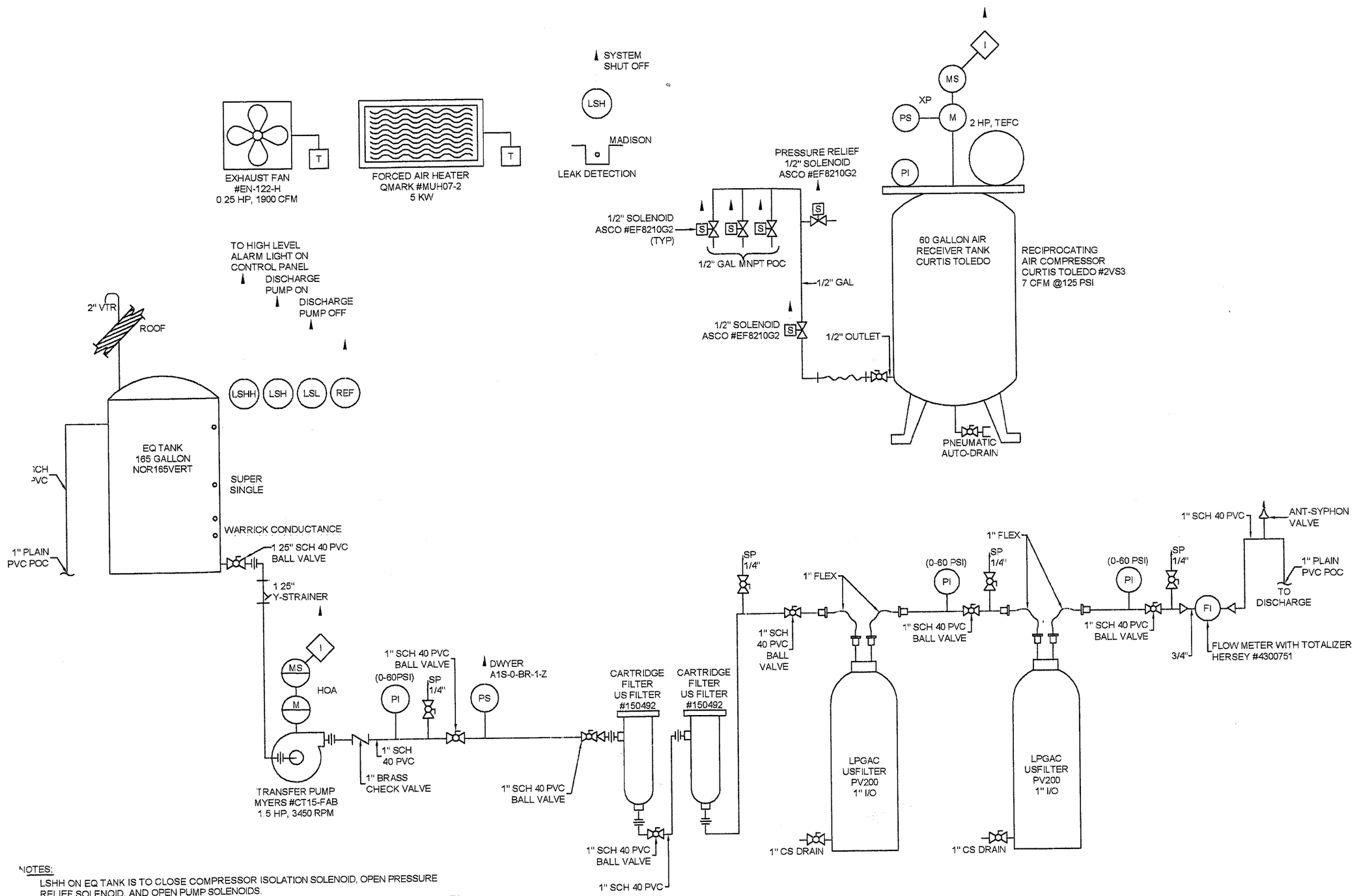
SITE PLAN

FIGURE 3

PROPERTY
36 - 38 WORCESTER ROAD
CHARLTON, MASSACHUSETTS

SCALE
0' 25' 50'

DATE
9/9/10



NOTES:

1. LSHH ON EQ TANK IS TO CLOSE COMPRESSOR ISOLATION SOLENOID, OPEN PRESSURE RELIEF SOLENOID, AND OPEN PUMP SOLENOIDS.
2. PUMP SOLENOIDS ARE TO BE SET ON ADJUSTABLE TIMERS FOR UP TO EIGHT HOUR CYCLES CYCLES MAY OVERLAP
3. TRAILER IS RATED CLASS 1, DIVISION 2, GROUP D EXPLOSION PROOF

SENECA
ENVIRONMENTAL SERVICES
DES MOINES, IA 50313 (800) 369-3500

JOB DESCRIPTION:
ENSTRAT - HONEY FARMS
38 WORCESTER ROAD
CHARLTON, MASSACHUSETTS

SHEET TITLE:
PROCESS AND INSTRUMENTATION DIAGRAM

DATE:	4/15/05
DRAWN BY:	DARRICK WORRALL
CHECKED BY:	DAN WILLERS
SCALE:	NO SCALE
FILENAME:	6269705S03
PROJECT NO:	6269705
SHEET NO:	3 OF 12

TABLE 1
SUMMARY OF ON-SITE GROUND WATER TREATMENT SYSTEM ANALYTICAL DATA - RGP

Honey Farms
36 - 38 Worcester Road
Charlton, Massachusetts

	INFLUENT																		
Sample Date	TSS (mg/L)	TPH (mg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl benzene (µg/L)	Xylene (ug/L)	Total BTEX (ug/L)	MTBE (ug/L)	TBA (ug/L)	DCE (ug/L)	Benzo (a) Anthra-cene (ug/L)	Benzo (a) Pyrene (ug/L)	Benzo (b) Fluor-anthene (ug/L)	Benzo (k) Fluor-anthene (ug/L)	Chrysene (ug/L)	Dibenzo (a,h) An-thracene (ug/L)	Indeno (1,2,3-cd) Pyrene (ug/L)	Total Group I PAH (ug/L)	Total Zinc (mg/L)	pH
5/15/2009	5	<1	<1	<1	<1	<3	ND	32	<10	<1	<6	<6	<6	<6	<6	<6	<6	ND	0.05	7.5
6/12/2009	20	<1	<1	<1	<1	<3	ND	19	<10	<1	<6	<6	<6	<6	<6	<6	<6	ND	0.04	6.9
7/17/2009	<5	<1	<1	<1	<1	<3	ND	13	<10	<1	<6	<6	<6	<6	<6	<6	<6	ND	<0.05	7.1
8/28/2009	7	<1	<1	<1	<1	<3	ND	1.7	<10	<1	<6	<6	<6	<6	<6	<6	<6	ND	0.04	7.4
9/17/2009	15	<1	<1	<1	<1	<3	ND	4.7	<10	<1	<6	<6	<6	<6	<6	<6	<6	ND	0.03	7.1
10/15/2009	12	<1	<1	<1	<1	<3	ND	3.5	<10	<1	<6	<6	<6	<6	<6	<6	<6	ND	0.04	7.2
11/20/2009	288	<1	<1	<1	<1	<3	ND	13	<10	<1	<6	<6	<6	<6	<6	<6	<6	ND	0.13	6.9
12/18/2009	<5	<1	<1	<1	<1	<3	ND	<1	<10	<1	<6	<6	<6	<6	<6	<6	<6	ND	0.04	7.4
1/21/2010	<5	<1	<1	<1	<1	<3	ND	8	<10	<1	<6	<6	<6	<6	<6	<6	<6	ND	0.03	7.0
2/19/2010	<5	<1	<1	<1	<1	<3	ND	4.7	<10	<1	<6	<6	<6	<6	<6	<6	<6	ND	0.19	6.8
3/19/2010	<5	<1	<1	<1	<1	<3	ND	4.2	<10	<1	<6	<6	<6	<6	<6	<6	<6	ND	0.09	6.8
4/16/2010	10	<1	<1	<1	<1	<3	ND	2.8	<10	<1	<6	<6	<6	<6	<6	<6	<6	ND	0.15	6.7
5/19/2010	8	<1	<1	<1	<1	<3	ND	5.4	<10	<1	<6	<6	<6	<6	<6	<6	<6	ND	0.42	6.8
6/18/2010	<5	<1	<1	<1	<1	<3	ND	4.1	<10	<1	<6	<6	<6	<6	<6	<6	<6	ND	0.09	7.2
7/16/2010	11	<1	<1	<1	<1	<3	ND	<1	<10	<1	<6	<6	<6	<6	<6	<6	<6	ND	0.04	7.2
8/20/2010	6	<1	<1	<1	<1	<3	ND	<1	<10	<1	<6	<6	<6	<6	<6	<6	<6	ND	0.06	6.8
9/17/2010	<5	<1	<1	<1	<1	<3	ND	<1	<10	<1	<6	<6	<6	<6	<6	<6	<6	ND	0.02	6.7
10/15/2010	<5	<1	<1	<1	<1	<3	ND	<1	<10	<1	<6	<6	<6	<6	<6	<6	<6	ND	0.02	6.9

Notes:
ug/L is micrograms per liter.
mg/L is milligrams per liter.
ND is not detected.
NA is not applicable.
TSS is total suspended solids.
TPH is total petroleum hydrocarbons.
Concentrations in effluent sample above RGP Permit Limits are in bold and highlighted in yellow

BTEX is benzene, toluene, ethyl benzene, and xylene.
MTBE is methyl tertiary butyl ether.
TBA is tert butyl alcohol.
DCE is 1,1 dichloroethylene.
PAH is polycyclic aromatic hydrocarbons.

Williamson Environmental LLC

Report Date:
21-Oct-10 15:03

☐ Final Report
☐ Re-Issued Report
☑ Revised Report

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

Laboratory Report

Williamson Environmental, LLC
2 Shaker Road, Building A
Shirley, MA 01464
Attn: Joe Resca

Project: Honey Farms - Charlton, MA
Project #: [none]

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
SB18811-01	TS-INF	Ground Water	28-Sep-10 16:00	29-Sep-10 08:00
SB18811-02	TB	Deionized Water	28-Sep-10 00:00	29-Sep-10 08:00

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. These results relate only to the sample(s) as received.
All applicable NELAC requirements have been met.

Massachusetts # M-MA138/MA1110
Connecticut # PH-0777
Florida # E87600/E87936
Maine # MA138
New Hampshire # 2538
New Jersey # MA011/MA012
New York # 11393/11840
Pennsylvania # 68-04426/68-02924
Rhode Island # 98
USDA # S-51435

Authorized by:

Hanibal C. Tayeh, Ph.D.
President/Laboratory Director

Technical Reviewer's Initial:

Spectrum Analytical holds certification in the State of Massachusetts for the analytes as indicated with an X in the "Cert." column within this report. Please note that the State of Massachusetts does not offer certification for all analytes.
Please note that this report contains 39 pages of analytical data plus Chain of Custody document(s). When the Laboratory Report is indicated as revised, this report supersedes any previously dated reports for the laboratory ID(s) referenced above. Where this report identifies subcontracted analyses, copies of the subcontractor's test report are available upon request. This report may not be reproduced, except in full, without written approval from Spectrum Analytical, Inc.

Spectrum Analytical, Inc. is a NELAC accredited laboratory organization and meets NELAC testing standards. Use of the NELAC logo however does not insure that Spectrum is currently accredited for the specific method or analyte indicated. Please refer to our "Quality" web page at www.spectrum-analytical.com for a full listing of our current certifications and fields of accreditation. States in which Spectrum Analytical, Inc. holds NELAC certification are New York, New Hampshire, New Jersey and Florida. All analytical work for Volatile Organic and Air analysis are transferred to and conducted at our 830 Silver Street location (NY-11840, FL-E87936 and NJ-MA012).

CASE NARRATIVE:

The samples were received 5.1 degrees Celsius, please refer to the Chain of Custody for details specific to temperature upon receipt. An infrared thermometer with a tolerance of +/- 2.0 degrees Celsius was used immediately upon receipt of the samples.

If a Matrix Spike (MS), Matrix Spike Duplicate (MSD) or Duplicate (DUP) was not requested on the Chain of Custody, method criteria may have been fulfilled with a source sample not of this Sample Delivery Group.

MADEP has published a list of analytical methods (CAM) which provides a series of recommended protocols for the acquisition, analysis and reporting of analytical data in support of MCP decisions. "Presumptive Certainty" can be established only for those methods published by the MADEP in the MCP CAM. The compounds and/or elements reported were specifically requested by the client on the Chain of Custody and in some cases may not include the full analyte list as defined in the method.

According to WSC-CAM 5/2009 Rev.1, Table 11 A-1, recovery for some VOC analytes have been deemed potentially difficult. Although they may still be within the recommended recovery range, a range has been set based on historical control limits.

Some target analytes which are not listed as exceptions in the Summary of CAM Reporting Limits may exceed the recommended RL based on sample initial volume or weight provided, % moisture content, or responsiveness of a particular analyte to purge and trap instrumentation.

SW846 8260 Revision Case Narrative:

Per client request, this revision lists the all compounds normally reported for this analysis. Please review the attached data.

See below for any non-conformances and issues relating to quality control samples and/or sample analysis/matrix.

EPA 608

Laboratory Control Samples:

1020527 BS/BSD

Aroclor-1016 (1) [2C] percent recoveries (65/118) are outside individual acceptance criteria (50-114), but within overall method allowances. All reported results of the following samples are considered to have a potentially high bias:

TS-INF

Aroclor-1016 (1) percent recoveries (70/121) are outside individual acceptance criteria (50-114), but within overall method allowances. All reported results of the following samples are considered to have a potentially high bias:

TS-INF

Aroclor-1016 (2) [2C] percent recoveries (66/118) are outside individual acceptance criteria (50-114), but within overall method allowances. All reported results of the following samples are considered to have a potentially high bias:

TS-INF

Aroclor-1016 (3) [2C] percent recoveries (69/121) are outside individual acceptance criteria (50-114), but within overall method allowances. All reported results of the following samples are considered to have a potentially high bias:

TS-INF

Aroclor-1016 (4) [2C] percent recoveries (68/121) are outside individual acceptance criteria (50-114), but within overall method allowances. All reported results of the following samples are considered to have a potentially high bias:

TS-INF

Aroclor-1016 (5) [2C] percent recoveries (76/133) are outside individual acceptance criteria (50-114), but within overall method allowances. All reported results of the following samples are considered to have a potentially high bias:

TS-INF

EPA 608

Laboratory Control Samples:

1020527 BS/BSD

Aroclor-1016 (5) percent recoveries (65/121) are outside individual acceptance criteria (50-114), but within overall method allowances. All reported results of the following samples are considered to have a potentially high bias:

TS-INF

Aroclor-1260 (1) percent recoveries (76/142) are outside individual acceptance criteria (40-127), but within overall method allowances. All reported results of the following samples are considered to have a potentially high bias:

TS-INF

Aroclor-1260 (3) percent recoveries (72/137) are outside individual acceptance criteria (40-127), but within overall method allowances. All reported results of the following samples are considered to have a potentially high bias:

TS-INF

1020527 BSD

Aroclor-1016 RPD 58% (20%) is outside individual acceptance criteria, but within overall method allowances.

Aroclor-1260 RPD 57% (20%) is outside individual acceptance criteria, but within overall method allowances.

1020527-BSD1

The RPD result exceeded the QC control limits; however, both percent recoveries were acceptable. Sample results for the QC batch were accepted based on percent recoveries and completeness of QC data.

Aroclor-1016
Aroclor-1260
Aroclor-1260 [2C]

Hach 8167

Samples:

SB18811-01 *TS-INF*

This sample was received outside the EPA recommended holding time for the analysis specified.

Total Residual Chlorine

SW846 8260B/C

Calibration:

S008736-ICV1

Analyte percent recovery is outside individual acceptance criteria (70-130).

2,2-Dichloropropane (65%)
Methyl tert-butyl ether (137%)
Tetrahydrofuran (169%)

This affected the following samples:

1020730-BLK1
1020730-BS1
1020730-BSD1
S008966-CCV1
TB

S008997-ICV1

SW846 8260B/C

Calibration:

S008997-ICV1

Analyte percent recovery is outside individual acceptance criteria (70-130).

Methyl tert-butyl ether (136%)

This affected the following samples:

1020835-BLK1
1020835-BS1
1020835-BSD1
1020835-MS1
1020835-MSD1
S009020-CCV1
TS-INF

Laboratory Control Samples:

1020730 BS/BSD

Dichlorodifluoromethane (Freon12) percent recoveries (135/140) are outside individual acceptance criteria (70-130), but within overall method allowances. All reported results of the following samples are considered to have a potentially high bias:

TB

Trichlorofluoromethane (Freon 11) percent recoveries (126/132) are outside individual acceptance criteria (70-130), but within overall method allowances. All reported results of the following samples are considered to have a potentially high bias:

TB

Spikes:

1020835-MS1 *Source: SB18811-01*

The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.

1,4-Dioxane
Hexachlorobutadiene
n-Butylbenzene
Tert-Butanol / butyl alcohol

1020835-MSD1 *Source: SB18811-01*

The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.

1,4-Dioxane
Hexachlorobutadiene
n-Butylbenzene
sec-Butylbenzene
Tert-Butanol / butyl alcohol

Samples:

S008966-CCV1

Analyte percent difference is outside individual acceptance criteria (20), but within overall method allowances.

1,1,2-Trichlorotrifluoroethane (Freon 113) (23.3%)
2-Butanone (MEK) (22.4%)
Dichlorodifluoromethane (Freon12) (35.2%)
Trichlorofluoromethane (Freon 11) (25.8%)

SW846 8260B/C

Samples:

S008966-CCV1

Analyte percent drift is outside individual acceptance criteria (20), but within overall method allowances.

Tetrahydrofuran (23.9%)

This affected the following samples:

1020730-BLK1
1020730-BS1
1020730-BSD1
TB

SW846 8270C/D

Calibration:

1009027

Analyte quantified by quadratic equation type calibration.

4,6-Dinitro-2-methylphenol
Benzoic acid

This affected the following samples:

1020609-BLK1
1020609-BS1
1020609-BSD1
S008844-ICV1
S008989-CCV1
S009048-CCV1
TS-INF

Laboratory Control Samples:

1020609 BS/BSD

2,4-Dinitrophenol percent recoveries (32/35) are outside individual acceptance criteria (40-130), but within overall method allowances. All reported results of the following samples are considered to have a potentially low bias:

TS-INF

4-Nitrophenol percent recoveries (34/35) are outside individual acceptance criteria (40-130), but within overall method allowances. All reported results of the following samples are considered to have a potentially low bias:

TS-INF

Benzidine percent recoveries (14/38) are outside individual acceptance criteria (40-140), but within overall method allowances. All reported results of the following samples are considered to have a potentially low bias:

TS-INF

Benzo (g,h,i) perylene percent recoveries (41/39) are outside individual acceptance criteria (40-130), but within overall method allowances. All reported results of the following samples are considered to have a potentially low bias:

TS-INF

Hexachlorocyclopentadiene percent recoveries (34/34) are outside individual acceptance criteria (40-130), but within overall method allowances. All reported results of the following samples are considered to have a potentially low bias:

TS-INF

SW846 8270C/D

Laboratory Control Samples:

1020609 BS/BSD

N-Nitrosodimethylamine percent recoveries (38/37) are outside individual acceptance criteria (40-130), but within overall method allowances. All reported results of the following samples are considered to have a potentially low bias:

TS-INF

Phenol percent recoveries (27/27) are outside individual acceptance criteria (40-130), but within overall method allowances. All reported results of the following samples are considered to have a potentially low bias:

TS-INF

Pyridine percent recoveries (20/31) are outside individual acceptance criteria (40-140), but within overall method allowances. All reported results of the following samples are considered to have a potentially low bias:

TS-INF

1020609 BSD

Benzidine RPD 92% (20%) is outside individual acceptance criteria, but within overall method allowances.

Bis(2-ethylhexyl)phthalate RPD 39% (20%) is outside individual acceptance criteria, but within overall method allowances.

Pyridine RPD 43% (20%) is outside individual acceptance criteria, but within overall method allowances.

Samples:

S008989-CCV1

Analyte percent difference is outside individual acceptance criteria (20), but within overall method allowances.

2-Nitrophenol (36.9%)
3-Nitroaniline (32.8%)
4-Nitroaniline (34.0%)
4-Nitrophenol (-57.8%)
Pentachloronitrobenzene (27.2%)

Analyte percent drift is outside individual acceptance criteria (20), but within overall method allowances.

2,4-Dinitrophenol (96.8%)
2,4-Dinitrotoluene (33.3%)
2,6-Dinitrotoluene (36.6%)
2-Nitroaniline (28.4%)
4,6-Dinitro-2-methylphenol (88.6%)
Benzoic acid (77.8%)
Pentachlorophenol (35.6%)

This affected the following samples:

1020609-BLK1
1020609-BS1
1020609-BSD1

S009048-CCV1

Analyte percent difference is outside individual acceptance criteria (20), but within overall method allowances.

2,4,6-Trichlorophenol (24.1%)
2-Nitrophenol (50.8%)
3,3´-Dichlorobenzidine (21.8%)
3-Nitroaniline (42.0%)
Benzo (b) fluoranthene (27.5%)
Benzo (k) fluoranthene (-25.2%)

SW846 8270C/D

Samples:

S009048-CCV1

Analyte percent drift is outside individual acceptance criteria (20), but within overall method allowances.

2,4-Dinitrophenol (140%)
2,4-Dinitrotoluene (37.7%)
2,6-Dinitrotoluene (40.1%)
2-Nitroaniline (33.5%)
4,6-Dinitro-2-methylphenol (106%)
Benzoic acid (98.7%)
Pentachlorophenol (38.4%)

This affected the following samples:

TS-INF

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
TS-INF	[none]	Ground Water	28-Sep-10 16:00	29-Sep-10
SB18811-01				

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Analyst*	*Batch*	*Cert.*
Volatile Organic Compounds												
Volatile Organic Compounds Prepared by method SW846 5030 Water MS												
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	BRL		µg/l	1.0	1	SW846 8260B/C	05-Oct-10	05-Oct-10	JLG	1020835	
67-64-1	Acetone	BRL		µg/l	10.0	1	"	"	"	"	"	
107-13-1	Acrylonitrile	BRL		µg/l	0.5	1	"	"	"	"	"	
71-43-2	Benzene	BRL		µg/l	1.0	1	"	"	"	"	"	
108-86-1	Bromobenzene	BRL		µg/l	1.0	1	"	"	"	"	"	
74-97-5	Bromochloromethane	BRL		µg/l	1.0	1	"	"	"	"	"	
75-27-4	Bromodichloromethane	BRL		µg/l	0.5	1	"	"	"	"	"	
75-25-2	Bromoform	BRL		µg/l	1.0	1	"	"	"	"	"	
74-83-9	Bromomethane	BRL		µg/l	2.0	1	"	"	"	"	"	
78-93-3	2-Butanone (MEK)	BRL		µg/l	10.0	1	"	"	"	"	"	
104-51-8	n-Butylbenzene	BRL		µg/l	1.0	1	"	"	"	"	"	
135-98-8	sec-Butylbenzene	BRL		µg/l	1.0	1	"	"	"	"	"	
98-06-6	tert-Butylbenzene	BRL		µg/l	1.0	1	"	"	"	"	"	
75-15-0	Carbon disulfide	BRL		µg/l	2.0	1	"	"	"	"	"	
56-23-5	Carbon tetrachloride	BRL		µg/l	1.0	1	"	"	"	"	"	
108-90-7	Chlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	"	
75-00-3	Chloroethane	BRL		µg/l	2.0	1	"	"	"	"	"	
67-66-3	Chloroform	BRL		µg/l	1.0	1	"	"	"	"	"	
74-87-3	Chloromethane	BRL		µg/l	2.0	1	"	"	"	"	"	
95-49-8	2-Chlorotoluene	BRL		µg/l	1.0	1	"	"	"	"	"	
106-43-4	4-Chlorotoluene	BRL		µg/l	1.0	1	"	"	"	"	"	
96-12-8	1,2-Dibromo-3-chloropropane	BRL		µg/l	2.0	1	"	"	"	"	"	
124-48-1	Dibromochloromethane	BRL		µg/l	0.5	1	"	"	"	"	"	
106-93-4	1,2-Dibromoethane (EDB)	BRL		µg/l	0.5	1	"	"	"	"	"	
74-95-3	Dibromomethane	BRL		µg/l	1.0	1	"	"	"	"	"	
95-50-1	1,2-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	"	
541-73-1	1,3-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	"	
106-46-7	1,4-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	"	
75-71-8	Dichlorodifluoromethane (Freon12)	BRL		µg/l	2.0	1	"	"	"	"	"	
75-34-3	1,1-Dichloroethane	BRL		µg/l	1.0	1	"	"	"	"	"	
107-06-2	1,2-Dichloroethane	BRL		µg/l	1.0	1	"	"	"	"	"	
75-35-4	1,1-Dichloroethene	BRL		µg/l	1.0	1	"	"	"	"	"	
156-59-2	cis-1,2-Dichloroethene	BRL		µg/l	1.0	1	"	"	"	"	"	
156-60-5	trans-1,2-Dichloroethene	BRL		µg/l	1.0	1	"	"	"	"	"	
78-87-5	1,2-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	"	
142-28-9	1,3-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	"	
594-20-7	2,2-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	"	
563-58-6	1,1-Dichloropropene	BRL		µg/l	1.0	1	"	"	"	"	"	
10061-01-5	cis-1,3-Dichloropropene	BRL		µg/l	0.5	1	"	"	"	"	"	
10061-02-6	trans-1,3-Dichloropropene	BRL		µg/l	0.5	1	"	"	"	"	"	
100-41-4	Ethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	"	
87-68-3	Hexachlorobutadiene	BRL		µg/l	0.5	1	"	"	"	"	"	
591-78-6	2-Hexanone (MBK)	BRL		µg/l	10.0	1	"	"	"	"	"	
98-82-8	Isopropylbenzene	BRL		µg/l	1.0	1	"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
TS-INF	[none]	Ground Water	28-Sep-10 16:00	29-Sep-10
SB18811-01				

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Analyst*	*Batch*	*Cert.*
Volatile Organic Compounds												
Volatile Organic Compounds Prepared by method SW846 5030 Water MS												
99-87-6	4-Isopropyltoluene	BRL		µg/l	1.0	1	SW846 8260B/C	05-Oct-10	05-Oct-10	JLG	1020835	
1634-04-4	Methyl tert-butyl ether	BRL		µg/l	1.0	1	"	"	"	"	"	
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL		µg/l	10.0	1	"	"	"	"	"	
75-09-2	Methylene chloride	BRL		µg/l	2.0	1	"	"	"	"	"	
91-20-3	Naphthalene	BRL		µg/l	1.0	1	"	"	"	"	"	
103-65-1	n-Propylbenzene	BRL		µg/l	1.0	1	"	"	"	"	"	
100-42-5	Styrene	BRL		µg/l	1.0	1	"	"	"	"	"	
630-20-6	1,1,1,2-Tetrachloroethane	BRL		µg/l	1.0	1	"	"	"	"	"	
79-34-5	1,1,2,2-Tetrachloroethane	BRL		µg/l	0.5	1	"	"	"	"	"	
127-18-4	Tetrachloroethene	BRL		µg/l	1.0	1	"	"	"	"	"	
108-88-3	Toluene	BRL		µg/l	1.0	1	"	"	"	"	"	
87-61-6	1,2,3-Trichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	"	
120-82-1	1,2,4-Trichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	"	
108-70-3	1,3,5-Trichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	"	
71-55-6	1,1,1-Trichloroethane	BRL		µg/l	1.0	1	"	"	"	"	"	
79-00-5	1,1,2-Trichloroethane	BRL		µg/l	1.0	1	"	"	"	"	"	
79-01-6	Trichloroethene	BRL		µg/l	1.0	1	"	"	"	"	"	
75-69-4	Trichlorofluoromethane (Freon 11)	BRL		µg/l	1.0	1	"	"	"	"	"	
96-18-4	1,2,3-Trichloropropane	BRL		µg/l	1.0	1	"	"	"	"	"	
95-63-6	1,2,4-Trimethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	"	
108-67-8	1,3,5-Trimethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	"	
75-01-4	Vinyl chloride	BRL		µg/l	1.0	1	"	"	"	"	"	
179601-23-1	m,p-Xylene	BRL		µg/l	2.0	1	"	"	"	"	"	
95-47-6	o-Xylene	BRL		µg/l	1.0	1	"	"	"	"	"	
109-99-9	Tetrahydrofuran	BRL		µg/l	2.0	1	"	"	"	"	"	
60-29-7	Ethyl ether	BRL		µg/l	1.0	1	"	"	"	"	"	
994-05-8	Tert-amyl methyl ether	BRL		µg/l	1.0	1	"	"	"	"	"	
637-92-3	Ethyl tert-butyl ether	BRL		µg/l	1.0	1	"	"	"	"	"	
108-20-3	Di-isopropyl ether	BRL		µg/l	1.0	1	"	"	"	"	"	
75-65-0	Tert-Butanol / butyl alcohol	BRL		µg/l	10.0	1	"	"	"	"	"	
123-91-1	1,4-Dioxane	BRL		µg/l	20.0	1	"	"	"	"	"	
110-57-6	trans-1,4-Dichloro-2-butene	BRL		µg/l	5.0	1	"	"	"	"	"	
64-17-5	Ethanol	BRL		µg/l	400	1	"	"	"	"	"	
Surrogate recoveries:												
460-00-4	*4-Bromofluorobenzene*	*99*			*70-130 %*		"	"	"	"	"	
2037-26-5	*Toluene-d8*	*100*			*70-130 %*		"	"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*104*			*70-130 %*		"	"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*102*			*70-130 %*		"	"	"	"	"	
Semivolatile Organic Compounds by GCMS												
Semivolatile Organic Compounds by SW846 8270C Prepared by method SW846 3510C												
83-32-9	Acenaphthene	BRL		µg/l	5.56	1	SW846 8270C/D	01-Oct-10	05-Oct-10	MSL	1020609	
208-96-8	Acenaphthylene	BRL		µg/l	5.56	1	"	"	"	"	"	
62-53-3	Aniline	BRL		µg/l	5.56	1	"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
TS-INF	[none]	Ground Water	28-Sep-10 16:00	29-Sep-10
SB18811-01				

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Analyst*	*Batch*	*Cert.*
Semivolatile Organic Compounds by GCMS												
Semivolatile Organic Compounds by SW846 8270C Prepared by method SW846 3510C												
120-12-7	Anthracene	BRL		µg/l	5.56	1	SW846 8270C/D	01-Oct-10	05-Oct-10	MSL	1020609	
103-33-3	Azobenzene/Diphenyldiazine	BRL		µg/l	5.56	1	"	"	"	"	"	
92-87-5	Benzidine	BRL		µg/l	5.56	1	"	"	"	"	"	
56-55-3	Benzo (a) anthracene	BRL		µg/l	5.56	1	"	"	"	"	"	
50-32-8	Benzo (a) pyrene	BRL		µg/l	5.56	1	"	"	"	"	"	
205-99-2	Benzo (b) fluoranthene	BRL		µg/l	5.56	1	"	"	"	"	"	
191-24-2	Benzo (g,h,i) perylene	BRL		µg/l	5.56	1	"	"	"	"	"	
207-08-9	Benzo (k) fluoranthene	BRL		µg/l	5.56	1	"	"	"	"	"	
65-85-0	Benzoic acid	BRL		µg/l	5.56	1	"	"	"	"	"	
100-51-6	Benzyl alcohol	BRL		µg/l	5.56	1	"	"	"	"	"	
111-91-1	Bis(2-chloroethoxy)methane	BRL		µg/l	5.56	1	"	"	"	"	"	
111-44-4	Bis(2-chloroethyl)ether	BRL		µg/l	5.56	1	"	"	"	"	"	
108-60-1	Bis(2-chloroisopropyl)ether	BRL		µg/l	5.56	1	"	"	"	"	"	
117-81-7	Bis(2-ethylhexyl)phthalate	BRL		µg/l	5.56	1	"	"	"	"	"	
101-55-3	4-Bromophenyl phenyl ether	BRL		µg/l	5.56	1	"	"	"	"	"	
85-68-7	Butyl benzyl phthalate	BRL		µg/l	5.56	1	"	"	"	"	"	
86-74-8	Carbazole	BRL		µg/l	5.56	1	"	"	"	"	"	
59-50-7	4-Chloro-3-methylphenol	BRL		µg/l	5.56	1	"	"	"	"	"	
106-47-8	4-Chloroaniline	BRL		µg/l	5.56	1	"	"	"	"	"	
91-58-7	2-Chloronaphthalene	BRL		µg/l	5.56	1	"	"	"	"	"	
95-57-8	2-Chlorophenol	BRL		µg/l	5.56	1	"	"	"	"	"	
7005-72-3	4-Chlorophenyl phenyl ether	BRL		µg/l	5.56	1	"	"	"	"	"	
218-01-9	Chrysene	BRL		µg/l	5.56	1	"	"	"	"	"	
53-70-3	Dibenzo (a,h) anthracene	BRL		µg/l	5.56	1	"	"	"	"	"	
132-64-9	Dibenzofuran	BRL		µg/l	5.56	1	"	"	"	"	"	
95-50-1	1,2-Dichlorobenzene	BRL		µg/l	5.56	1	"	"	"	"	"	
541-73-1	1,3-Dichlorobenzene	BRL		µg/l	5.56	1	"	"	"	"	"	
106-46-7	1,4-Dichlorobenzene	BRL		µg/l	5.56	1	"	"	"	"	"	
91-94-1	3,3´-Dichlorobenzidine	BRL		µg/l	5.56	1	"	"	"	"	"	
120-83-2	2,4-Dichlorophenol	BRL		µg/l	5.56	1	"	"	"	"	"	
84-66-2	Diethyl phthalate	BRL		µg/l	5.56	1	"	"	"	"	"	
131-11-3	Dimethyl phthalate	BRL		µg/l	5.56	1	"	"	"	"	"	
105-67-9	2,4-Dimethylphenol	BRL		µg/l	5.56	1	"	"	"	"	"	
84-74-2	Di-n-butyl phthalate	BRL		µg/l	5.56	1	"	"	"	"	"	
534-52-1	4,6-Dinitro-2-methylphenol	BRL		µg/l	5.56	1	"	"	"	"	"	
51-28-5	2,4-Dinitrophenol	BRL		µg/l	5.56	1	"	"	"	"	"	
121-14-2	2,4-Dinitrotoluene	BRL		µg/l	5.56	1	"	"	"	"	"	
606-20-2	2,6-Dinitrotoluene	BRL		µg/l	5.56	1	"	"	"	"	"	
117-84-0	Di-n-octyl phthalate	BRL		µg/l	5.56	1	"	"	"	"	"	
206-44-0	Fluoranthene	BRL		µg/l	5.56	1	"	"	"	"	"	
86-73-7	Fluorene	BRL		µg/l	5.56	1	"	"	"	"	"	
118-74-1	Hexachlorobenzene	BRL		µg/l	5.56	1	"	"	"	"	"	
87-68-3	Hexachlorobutadiene	BRL		µg/l	5.56	1	"	"	"	"	"	
77-47-4	Hexachlorocyclopentadiene	BRL		µg/l	5.56	1	"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
TS-INF	[none]	Ground Water	28-Sep-10 16:00	29-Sep-10
SB18811-01				

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolatile Organic Compounds by GCMS												
Semivolatile Organic Compounds by SW846 8270C Prepared by method SW846 3510C												
67-72-1	Hexachloroethane	BRL		µg/l	5.56	1	SW846 8270C/D	01-Oct-10	05-Oct-10	MSL	1020609	
193-39-5	Indeno (1,2,3-cd) pyrene	BRL		µg/l	5.56	1	"	"	"	"	"	
78-59-1	Isophorone	BRL		µg/l	5.56	1	"	"	"	"	"	
91-57-6	2-Methylnaphthalene	BRL		µg/l	5.56	1	"	"	"	"	"	
95-48-7	2-Methylphenol	BRL		µg/l	5.56	1	"	"	"	"	"	
108-39-4, 106-44-5	3 & 4-Methylphenol	BRL		µg/l	11.1	1	"	"	"	"	"	
91-20-3	Naphthalene	BRL		µg/l	5.56	1	"	"	"	"	"	
88-74-4	2-Nitroaniline	BRL		µg/l	5.56	1	"	"	"	"	"	
99-09-2	3-Nitroaniline	BRL		µg/l	5.56	1	"	"	"	"	"	
100-01-6	4-Nitroaniline	BRL		µg/l	22.2	1	"	"	"	"	"	
98-95-3	Nitrobenzene	BRL		µg/l	5.56	1	"	"	"	"	"	
88-75-5	2-Nitrophenol	BRL		µg/l	5.56	1	"	"	"	"	"	
100-02-7	4-Nitrophenol	BRL		µg/l	22.2	1	"	"	"	"	"	
62-75-9	N-Nitrosodimethylamine	BRL		µg/l	5.56	1	"	"	"	"	"	
621-64-7	N-Nitrosodi-n-propylamine	BRL		µg/l	5.56	1	"	"	"	"	"	
86-30-6	N-Nitrosodiphenylamine	BRL		µg/l	5.56	1	"	"	"	"	"	
87-86-5	Pentachlorophenol	BRL		µg/l	22.2	1	"	"	"	"	"	
85-01-8	Phenanthrene	BRL		µg/l	5.56	1	"	"	"	"	"	
108-95-2	Phenol	BRL		µg/l	5.56	1	"	"	"	"	"	
129-00-0	Pyrene	BRL		µg/l	5.56	1	"	"	"	"	"	
110-86-1	Pyridine	BRL		µg/l	5.56	1	"	"	"	"	"	
120-82-1	1,2,4-Trichlorobenzene	BRL		µg/l	5.56	1	"	"	"	"	"	
90-12-0	1-Methylnaphthalene	BRL		µg/l	5.56	1	"	"	"	"	"	
95-95-4	2,4,5-Trichlorophenol	BRL		µg/l	5.56	1	"	"	"	"	"	
88-06-2	2,4,6-Trichlorophenol	BRL		µg/l	5.56	1	"	"	"	"	"	
82-68-8	Pentachloronitrobenzene	BRL		µg/l	5.56	1	"	"	"	"	"	
95-94-3	1,2,4,5-Tetrachlorobenzene	BRL		µg/l	5.56	1	"	"	"	"	"	
Surrogate recoveries:												
321-60-8	*2-Fluorobiphenyl*	*52*			*30-130 %*		"	"	"	"	"	
367-12-4	*2-Fluorophenol*	*42*			*15-110 %*		"	"	"	"	"	
4165-60-0	*Nitrobenzene-d5*	*66*			*30-130 %*		"	"	"	"	"	
4165-62-2	*Phenol-d5*	*30*			*15-110 %*		"	"	"	"	"	
1718-51-0	*Terphenyl-dl4*	*49*			*30-130 %*		"	"	"	"	"	
118-79-6	*2,4,6-Tribromophenol*	*77*			*15-110 %*		"	"	"	"	"	
Semivolatile Organic Compounds by GC												
Polychlorinated Biphenyls by EPA 608 Prepared by method SW846 3510C												
12674-11-2	Aroclor-1016	BRL		µg/l	0.0650	1	EPA 608	30-Sep-10	30-Sep-10	DS	1020527	X
11104-28-2	Aroclor-1221	BRL		µg/l	0.0650	1	"	"	"	"	"	X
11141-16-5	Aroclor-1232	BRL		µg/l	0.0650	1	"	"	"	"	"	X
53469-21-9	Aroclor-1242	BRL		µg/l	0.0650	1	"	"	"	"	"	X
12672-29-6	Aroclor-1248	BRL		µg/l	0.0650	1	"	"	"	"	"	X
11097-69-1	Aroclor-1254	BRL		µg/l	0.0650	1	"	"	"	"	"	X
11096-82-5	Aroclor-1260	BRL		µg/l	0.0650	1	"	"	"	"	"	X

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
TS-INF	[none]	Ground Water	28-Sep-10 16:00	29-Sep-10
SB18811-01				

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Analyst*	*Batch*	*Cert.*
Semivolatile Organic Compounds by GC												
Polychlorinated Biphenyls by EPA 608 Prepared by method SW846 3510C												
37324-23-5	Aroclor-1262	BRL		µg/l	0.0650	1	EPA 608	30-Sep-10	30-Sep-10	DS	1020527	
11100-14-4	Aroclor-1268	BRL		µg/l	0.0650	1	"	"	"	"	"	
Surrogate recoveries:												
10386-84-2	*4,4-DB-Octafluorobiphenyl (Sr)*	*35*			*30-150 %*		"	"	"	"	"	
10386-84-2	*4,4-DB-Octafluorobiphenyl (Sr) [2C]*	*45*			*30-150 %*		"	"	"	"	"	
2051-24-3	*Decachlorobiphenyl (Sr)*	*40*			*30-150 %*		"	"	"	"	"	
2051-24-3	*Decachlorobiphenyl (Sr) [2C]*	*40*			*30-150 %*		"	"	"	"	"	
Extractable Petroleum Hydrocarbons												
	Non-polar material (SGT-HEM)	BRL		mg/l	1.0	1	EPA 1664 Rev. A	01-Oct-10	04-Oct-10	JK	1020616	
Total Metals by EPA 200/6000 Series Methods												
	Preservation	Field Preservec		N/A		1	EPA 200/6000 methods	29-Sep-10	29-Sep-10	JS	1020509	
Total Metals by EPA 200 Series Methods												
7440-22-4	Silver	BRL		mg/l	0.0050	1	EPA 200.7	08-Oct-10	08-Oct-10	JB	1020965	X
7440-38-2	Arsenic	BRL		mg/l	0.0040	1	"	"	08-Oct-10	"	"	X
7440-43-9	Cadmium	BRL		mg/l	0.0025	1	"	"	08-Oct-10	"	"	X
7440-47-3	Chromium	BRL		mg/l	0.0050	1	"	"	"	"	"	X
7440-50-8	Copper	BRL		mg/l	0.0050	1	"	"	"	"	"	X
7439-89-6	Iron	0.264		mg/l	0.250	1	"	"	"	"	"	X
7439-97-6	Mercury	BRL		mg/l	0.00020	1	EPA 245.1/7470A	"	13-Oct-10	HB	1020966	X
7440-02-0	Nickel	0.0087		mg/l	0.0050	1	EPA 200.7	"	08-Oct-10	JB	1020965	X
7439-92-1	Lead	BRL		mg/l	0.0075	1	"	"	"	"	"	X
7440-36-0	Antimony	BRL		mg/l	0.0060	1	"	"	"	"	"	X
7782-49-2	Selenium	BRL		mg/l	0.0150	1	"	"	"	"	"	X
7440-66-6	Zinc	0.0386		mg/l	0.0050	1	"	"	08-Oct-10	"	"	X
General Chemistry Parameters												
18540-29-9	Hexavalent Chromium	BRL		mg/l	0.005	1	SW846 7196A/SM3500CrD	29-Sep-10 15:00	29-Sep-10 15:00	TDD	1020517	
57-12-5	Cyanide (total)	BRL		mg/l	0.00500	1	EPA 335.4 / SW846 9012A	30-Sep-10	30-Sep-10	eemon	1020542	X
7782-50-5	Total Residual Chlorine	BRL	HT2,CIH T	mg/l	0.020	1	Hach 8167	29-Sep-10 15:00	29-Sep-10 15:00	TDD	1020699	X
	Total Suspended Solids	BRL		mg/l	5.00	1	SM2540D	04-Oct-10	04-Oct-10	BD	1020778	X

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
TB	[none]	Deionized Water	28-Sep-10 00:00	29-Sep-10
SB18811-02				

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Analyst*	*Batch*	*Cert.*
Volatile Organic Compounds												
Volatile Organic Compounds Prepared by method SW846 5030 Water MS												
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	BRL		µg/l	1.0	1	SW846 8260B/C	01-Oct-10	04-Oct-10	eq	1020730	
67-64-1	Acetone	BRL		µg/l	10.0	1	"	"	"	"	"	
107-13-1	Acrylonitrile	BRL		µg/l	0.5	1	"	"	"	"	"	
71-43-2	Benzene	BRL		µg/l	1.0	1	"	"	"	"	"	
108-86-1	Bromobenzene	BRL		µg/l	1.0	1	"	"	"	"	"	
74-97-5	Bromochloromethane	BRL		µg/l	1.0	1	"	"	"	"	"	
75-27-4	Bromodichloromethane	BRL		µg/l	0.5	1	"	"	"	"	"	
75-25-2	Bromoform	BRL		µg/l	1.0	1	"	"	"	"	"	
74-83-9	Bromomethane	BRL		µg/l	2.0	1	"	"	"	"	"	
78-93-3	2-Butanone (MEK)	BRL		µg/l	10.0	1	"	"	"	"	"	
104-51-8	n-Butylbenzene	BRL		µg/l	1.0	1	"	"	"	"	"	
135-98-8	sec-Butylbenzene	BRL		µg/l	1.0	1	"	"	"	"	"	
98-06-6	tert-Butylbenzene	BRL		µg/l	1.0	1	"	"	"	"	"	
75-15-0	Carbon disulfide	BRL		µg/l	2.0	1	"	"	"	"	"	
56-23-5	Carbon tetrachloride	BRL		µg/l	1.0	1	"	"	"	"	"	
108-90-7	Chlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	"	
75-00-3	Chloroethane	BRL		µg/l	2.0	1	"	"	"	"	"	
67-66-3	Chloroform	BRL		µg/l	1.0	1	"	"	"	"	"	
74-87-3	Chloromethane	BRL		µg/l	2.0	1	"	"	"	"	"	
95-49-8	2-Chlorotoluene	BRL		µg/l	1.0	1	"	"	"	"	"	
106-43-4	4-Chlorotoluene	BRL		µg/l	1.0	1	"	"	"	"	"	
96-12-8	1,2-Dibromo-3-chloropropane	BRL		µg/l	2.0	1	"	"	"	"	"	
124-48-1	Dibromochloromethane	BRL		µg/l	0.5	1	"	"	"	"	"	
106-93-4	1,2-Dibromoethane (EDB)	BRL		µg/l	0.5	1	"	"	"	"	"	
74-95-3	Dibromomethane	BRL		µg/l	1.0	1	"	"	"	"	"	
95-50-1	1,2-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	"	
541-73-1	1,3-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	"	
106-46-7	1,4-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	"	
75-71-8	Dichlorodifluoromethane (Freon12)	BRL		µg/l	2.0	1	"	"	"	"	"	
75-34-3	1,1-Dichloroethane	BRL		µg/l	1.0	1	"	"	"	"	"	
107-06-2	1,2-Dichloroethane	BRL		µg/l	1.0	1	"	"	"	"	"	
75-35-4	1,1-Dichloroethene	BRL		µg/l	1.0	1	"	"	"	"	"	
156-59-2	cis-1,2-Dichloroethene	BRL		µg/l	1.0	1	"	"	"	"	"	
156-60-5	trans-1,2-Dichloroethene	BRL		µg/l	1.0	1	"	"	"	"	"	
78-87-5	1,2-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	"	
142-28-9	1,3-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	"	
594-20-7	2,2-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	"	
563-58-6	1,1-Dichloropropene	BRL		µg/l	1.0	1	"	"	"	"	"	
10061-01-5	cis-1,3-Dichloropropene	BRL		µg/l	0.5	1	"	"	"	"	"	
10061-02-6	trans-1,3-Dichloropropene	BRL		µg/l	0.5	1	"	"	"	"	"	
100-41-4	Ethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	"	
87-68-3	Hexachlorobutadiene	BRL		µg/l	0.5	1	"	"	"	"	"	
591-78-6	2-Hexanone (MBK)	BRL		µg/l	10.0	1	"	"	"	"	"	
98-82-8	Isopropylbenzene	BRL		µg/l	1.0	1	"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
TB	[none]	Deionized Water	28-Sep-10 00:00	29-Sep-10
SB18811-02				

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Analyst*	*Batch*	*Cert.*
Volatile Organic Compounds												
Volatile Organic Compounds Prepared by method SW846 5030 Water MS												
99-87-6	4-Isopropyltoluene	BRL		µg/l	1.0	1	SW846 8260B/C	01-Oct-10	04-Oct-10	eq	1020730	
1634-04-4	Methyl tert-butyl ether	BRL		µg/l	1.0	1	"	"	"	"	"	
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL		µg/l	10.0	1	"	"	"	"	"	
75-09-2	Methylene chloride	BRL		µg/l	2.0	1	"	"	"	"	"	
91-20-3	Naphthalene	BRL		µg/l	1.0	1	"	"	"	"	"	
103-65-1	n-Propylbenzene	BRL		µg/l	1.0	1	"	"	"	"	"	
100-42-5	Styrene	BRL		µg/l	1.0	1	"	"	"	"	"	
630-20-6	1,1,1,2-Tetrachloroethane	BRL		µg/l	1.0	1	"	"	"	"	"	
79-34-5	1,1,2,2-Tetrachloroethane	BRL		µg/l	0.5	1	"	"	"	"	"	
127-18-4	Tetrachloroethene	BRL		µg/l	1.0	1	"	"	"	"	"	
108-88-3	Toluene	BRL		µg/l	1.0	1	"	"	"	"	"	
87-61-6	1,2,3-Trichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	"	
120-82-1	1,2,4-Trichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	"	
108-70-3	1,3,5-Trichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	"	
71-55-6	1,1,1-Trichloroethane	BRL		µg/l	1.0	1	"	"	"	"	"	
79-00-5	1,1,2-Trichloroethane	BRL		µg/l	1.0	1	"	"	"	"	"	
79-01-6	Trichloroethene	BRL		µg/l	1.0	1	"	"	"	"	"	
75-69-4	Trichlorofluoromethane (Freon 11)	BRL		µg/l	1.0	1	"	"	"	"	"	
96-18-4	1,2,3-Trichloropropane	BRL		µg/l	1.0	1	"	"	"	"	"	
95-63-6	1,2,4-Trimethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	"	
108-67-8	1,3,5-Trimethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	"	
75-01-4	Vinyl chloride	BRL		µg/l	1.0	1	"	"	"	"	"	
179601-23-1	m,p-Xylene	BRL		µg/l	2.0	1	"	"	"	"	"	
95-47-6	o-Xylene	BRL		µg/l	1.0	1	"	"	"	"	"	
109-99-9	Tetrahydrofuran	BRL		µg/l	2.0	1	"	"	"	"	"	
60-29-7	Ethyl ether	BRL		µg/l	1.0	1	"	"	"	"	"	
994-05-8	Tert-amyl methyl ether	BRL		µg/l	1.0	1	"	"	"	"	"	
637-92-3	Ethyl tert-butyl ether	BRL		µg/l	1.0	1	"	"	"	"	"	
108-20-3	Di-isopropyl ether	BRL		µg/l	1.0	1	"	"	"	"	"	
75-65-0	Tert-Butanol / butyl alcohol	BRL		µg/l	10.0	1	"	"	"	"	"	
123-91-1	1,4-Dioxane	BRL		µg/l	20.0	1	"	"	"	"	"	
110-57-6	trans-1,4-Dichloro-2-butene	BRL		µg/l	5.0	1	"	"	"	"	"	
64-17-5	Ethanol	BRL		µg/l	400	1	"	"	"	"	"	
Surrogate recoveries:												
460-00-4	*4-Bromofluorobenzene*	*98*			*70-130 %*		"	"	"	"	"	
2037-26-5	*Toluene-d8*	*97*			*70-130 %*		"	"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*114*			*70-130 %*		"	"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*116*			*70-130 %*		"	"	"	"	"	

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1020730 - SW846 5030 Water MS										
Blank (1020730-BLK1)						Prepared & Analyzed: 04-Oct-10				
1,1,2-Trichlorotrifluoroethane (Freon 113)	BRL		µg/l	1.0						
Acetone	BRL		µg/l	10.0						
Acrylonitrile	BRL		µg/l	0.5						
Benzene	BRL		µg/l	1.0						
Bromobenzene	BRL		µg/l	1.0						
Bromochloromethane	BRL		µg/l	1.0						
Bromodichloromethane	BRL		µg/l	0.5						
Bromoform	BRL		µg/l	1.0						
Bromomethane	BRL		µg/l	2.0						
2-Butanone (MEK)	BRL		µg/l	10.0						
n-Butylbenzene	BRL		µg/l	1.0						
sec-Butylbenzene	BRL		µg/l	1.0						
tert-Butylbenzene	BRL		µg/l	1.0						
Carbon disulfide	BRL		µg/l	2.0						
Carbon tetrachloride	BRL		µg/l	1.0						
Chlorobenzene	BRL		µg/l	1.0						
Chloroethane	BRL		µg/l	2.0						
Chloroform	BRL		µg/l	1.0						
Chloromethane	BRL		µg/l	2.0						
2-Chlorotoluene	BRL		µg/l	1.0						
4-Chlorotoluene	BRL		µg/l	1.0						
1,2-Dibromo-3-chloropropane	BRL		µg/l	2.0						
Dibromochloromethane	BRL		µg/l	0.5						
1,2-Dibromoethane (EDB)	BRL		µg/l	0.5						
Dibromomethane	BRL		µg/l	1.0						
1,2-Dichlorobenzene	BRL		µg/l	1.0						
1,3-Dichlorobenzene	BRL		µg/l	1.0						
1,4-Dichlorobenzene	BRL		µg/l	1.0						
Dichlorodifluoromethane (Freon12)	BRL		µg/l	2.0						
1,1-Dichloroethane	BRL		µg/l	1.0						
1,2-Dichloroethane	BRL		µg/l	1.0						
1,1-Dichloroethene	BRL		µg/l	1.0						
cis-1,2-Dichloroethene	BRL		µg/l	1.0						
trans-1,2-Dichloroethene	BRL		µg/l	1.0						
1,2-Dichloropropane	BRL		µg/l	1.0						
1,3-Dichloropropane	BRL		µg/l	1.0						
2,2-Dichloropropane	BRL		µg/l	1.0						
1,1-Dichloropropene	BRL		µg/l	1.0						
cis-1,3-Dichloropropene	BRL		µg/l	0.5						
trans-1,3-Dichloropropene	BRL		µg/l	0.5						
Ethylbenzene	BRL		µg/l	1.0						
Hexachlorobutadiene	BRL		µg/l	0.5						
2-Hexanone (MBK)	BRL		µg/l	10.0						
Isopropylbenzene	BRL		µg/l	1.0						
4-Isopropyltoluene	BRL		µg/l	1.0						
Methyl tert-butyl ether	BRL		µg/l	1.0						
4-Methyl-2-pentanone (MIBK)	BRL		µg/l	10.0						
Methylene chloride	BRL		µg/l	2.0						
Naphthalene	BRL		µg/l	1.0						
n-Propylbenzene	BRL		µg/l	1.0						
Styrene	BRL		µg/l	1.0						
1,1,1,2-Tetrachloroethane	BRL		µg/l	1.0						

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1020730 - SW846 5030 Water MS										
Blank (1020730-BLK1)					Prepared & Analyzed: 04-Oct-10					
1,1,2,2-Tetrachloroethane	BRL		µg/l	0.5						
Tetrachloroethene	BRL		µg/l	1.0						
Toluene	BRL		µg/l	1.0						
1,2,3-Trichlorobenzene	BRL		µg/l	1.0						
1,2,4-Trichlorobenzene	BRL		µg/l	1.0						
1,3,5-Trichlorobenzene	BRL		µg/l	1.0						
1,1,1-Trichloroethane	BRL		µg/l	1.0						
1,1,2-Trichloroethane	BRL		µg/l	1.0						
Trichloroethene	BRL		µg/l	1.0						
Trichlorofluoromethane (Freon 11)	BRL		µg/l	1.0						
1,2,3-Trichloropropane	BRL		µg/l	1.0						
1,2,4-Trimethylbenzene	BRL		µg/l	1.0						
1,3,5-Trimethylbenzene	BRL		µg/l	1.0						
Vinyl chloride	BRL		µg/l	1.0						
m,p-Xylene	BRL		µg/l	2.0						
o-Xylene	BRL		µg/l	1.0						
Tetrahydrofuran	BRL		µg/l	2.0						
Ethyl ether	BRL		µg/l	1.0						
Tert-amyl methyl ether	BRL		µg/l	1.0						
Ethyl tert-butyl ether	BRL		µg/l	1.0						
Di-isopropyl ether	BRL		µg/l	1.0						
Tert-Butanol / butyl alcohol	BRL		µg/l	10.0						
1,4-Dioxane	BRL		µg/l	20.0						
trans-1,4-Dichloro-2-butene	BRL		µg/l	5.0						
Ethanol	BRL		µg/l	400						
Surrogate: 4-Bromofluorobenzene	*29.5*		µg/l		*30.0*		*98*	*70-130*		
Surrogate: Toluene-d8	*29.5*		µg/l		*30.0*		*98*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*30.8*		µg/l		*30.0*		*103*	*70-130*		
Surrogate: Dibromofluoromethane	*34.5*		µg/l		*30.0*		*115*	*70-130*		
LCS (1020730-BS1)					Prepared & Analyzed: 04-Oct-10					
1,1,2-Trichlorotrifluoroethane (Freon 113)	24.7		µg/l		20.0		123	70-130		25
Acetone	22.5		µg/l		20.0		113	70-130		50
Acrylonitrile	23.6		µg/l		20.0		118	70-130		25
Benzene	20.5		µg/l		20.0		102	70-130		25
Bromobenzene	19.0		µg/l		20.0		95	70-130		25
Bromochloromethane	22.6		µg/l		20.0		113	70-130		25
Bromodichloromethane	21.2		µg/l		20.0		106	70-130		25
Bromoform	20.4		µg/l		20.0		102	70-130		25
Bromomethane	16.4		µg/l		20.0		82	70-130		50
2-Butanone (MEK)	24.5		µg/l		20.0		122	70-130		50
n-Butylbenzene	22.5		µg/l		20.0		112	70-130		25
sec-Butylbenzene	21.6		µg/l		20.0		108	70-130		25
tert-Butylbenzene	21.4		µg/l		20.0		107	70-130		25
Carbon disulfide	21.5		µg/l		20.0		108	70-130		25
Carbon tetrachloride	19.0		µg/l		20.0		95	70-130		25
Chlorobenzene	20.3		µg/l		20.0		101	70-130		25
Chloroethane	22.3		µg/l		20.0		112	70-130		50
Chloroform	23.0		µg/l		20.0		115	70-130		25
Chloromethane	21.5		µg/l		20.0		108	70-130		25
2-Chlorotoluene	20.8		µg/l		20.0		104	70-130		25
4-Chlorotoluene	20.4		µg/l		20.0		102	70-130		25

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1020730 - SW846 5030 Water MS										
LCS (1020730-BS1)					Prepared & Analyzed: 04-Oct-10					
1,2-Dibromo-3-chloropropane	22.5		µg/l		20.0		112	70-130		25
Dibromochloromethane	20.9		µg/l		20.0		105	70-130		50
1,2-Dibromoethane (EDB)	21.2		µg/l		20.0		106	70-130		25
Dibromomethane	21.0		µg/l		20.0		105	70-130		25
1,2-Dichlorobenzene	21.0		µg/l		20.0		105	70-130		25
1,3-Dichlorobenzene	20.2		µg/l		20.0		101	70-130		25
1,4-Dichlorobenzene	21.1		µg/l		20.0		105	70-130		25
Dichlorodifluoromethane (Freon12)	27.0		µg/l		20.0		135	70-130		50
1,1-Dichloroethane	22.2		µg/l		20.0		111	70-130		25
1,2-Dichloroethane	22.6		µg/l		20.0		113	70-130		25
1,1-Dichloroethene	23.2		µg/l		20.0		116	70-130		25
cis-1,2-Dichloroethene	21.9		µg/l		20.0		109	70-130		25
trans-1,2-Dichloroethene	21.6		µg/l		20.0		108	70-130		25
1,2-Dichloropropane	19.9		µg/l		20.0		100	70-130		25
1,3-Dichloropropane	21.6		µg/l		20.0		108	70-130		25
2,2-Dichloropropane	20.3		µg/l		20.0		102	70-130		25
1,1-Dichloropropene	21.4		µg/l		20.0		107	70-130		25
cis-1,3-Dichloropropene	19.8		µg/l		20.0		99	70-130		25
trans-1,3-Dichloropropene	19.5		µg/l		20.0		97	70-130		25
Ethylbenzene	20.6		µg/l		20.0		103	70-130		25
Hexachlorobutadiene	20.0		µg/l		20.0		100	70-130		50
2-Hexanone (MBK)	22.9		µg/l		20.0		114	70-130		25
Isopropylbenzene	21.3		µg/l		20.0		106	70-130		25
4-Isopropyltoluene	22.4		µg/l		20.0		112	70-130		25
Methyl tert-butyl ether	21.2		µg/l		20.0		106	70-130		25
4-Methyl-2-pentanone (MIBK)	19.0		µg/l		20.0		95	70-130		50
Methylene chloride	21.4		µg/l		20.0		107	70-130		25
Naphthalene	22.6		µg/l		20.0		113	70-130		25
n-Propylbenzene	21.7		µg/l		20.0		108	70-130		25
Styrene	20.5		µg/l		20.0		103	70-130		25
1,1,1,2-Tetrachloroethane	18.6		µg/l		20.0		93	70-130		25
1,1,2,2-Tetrachloroethane	22.0		µg/l		20.0		110	70-130		25
Tetrachloroethene	19.8		µg/l		20.0		99	70-130		25
Toluene	20.0		µg/l		20.0		100	70-130		25
1,2,3-Trichlorobenzene	20.2		µg/l		20.0		101	70-130		25
1,2,4-Trichlorobenzene	19.5		µg/l		20.0		98	70-130		25
1,3,5-Trichlorobenzene	19.6		µg/l		20.0		98	70-130		25
1,1,1-Trichloroethane	20.5		µg/l		20.0		102	70-130		25
1,1,2-Trichloroethane	21.4		µg/l		20.0		107	70-130		25
Trichloroethene	20.4		µg/l		20.0		102	70-130		25
Trichlorofluoromethane (Freon 11)	25.2		µg/l		20.0		126	70-130		50
1,2,3-Trichloropropane	20.8		µg/l		20.0		104	70-130		25
1,2,4-Trimethylbenzene	20.9		µg/l		20.0		105	70-130		25
1,3,5-Trimethylbenzene	21.0		µg/l		20.0		105	70-130		25
Vinyl chloride	21.7		µg/l		20.0		108	70-130		25
m,p-Xylene	42.0		µg/l		40.0		105	70-130		25
o-Xylene	20.5		µg/l		20.0		102	70-130		25
Tetrahydrofuran	24.8		µg/l		20.0		124	70-130		25
Ethyl ether	20.6		µg/l		20.0		103	70-130		50
Tert-amyl methyl ether	19.9		µg/l		20.0		99	70-130		25
Ethyl tert-butyl ether	21.1		µg/l		20.0		106	70-130		25
Di-isopropyl ether	19.9		µg/l		20.0		100	70-130		25

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1020730 - SW846 5030 Water MS										
LCS (1020730-BS1)					Prepared & Analyzed: 04-Oct-10					
Tert-Butanol / butyl alcohol	228		µg/l		200		114	70-130		25
1,4-Dioxane	231		µg/l		200		115	70-130		25
trans-1,4-Dichloro-2-butene	19.6		µg/l		20.0		98	70-130		25
Ethanol	479		µg/l		400		120	70-130		30
Surrogate: 4-Bromofluorobenzene	*29.1*		µg/l		*30.0*		*97*	*70-130*		
Surrogate: Toluene-d8	*29.6*		µg/l		*30.0*		*99*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*33.9*		µg/l		*30.0*		*113*	*70-130*		
Surrogate: Dibromofluoromethane	*32.7*		µg/l		*30.0*		*109*	*70-130*		
LCS Dup (1020730-BSD1)					Prepared & Analyzed: 04-Oct-10					
1,1,2-Trichlorotrifluoroethane (Freon 113)	26.0		µg/l		20.0		130	70-130	5	25
Acetone	22.5		µg/l		20.0		112	70-130	0.3	50
Acrylonitrile	24.3		µg/l		20.0		122	70-130	3	25
Benzene	21.4		µg/l		20.0		107	70-130	4	25
Bromobenzene	19.5		µg/l		20.0		98	70-130	3	25
Bromochloromethane	22.7		µg/l		20.0		113	70-130	0.1	25
Bromodichloromethane	22.2		µg/l		20.0		111	70-130	5	25
Bromoform	21.1		µg/l		20.0		105	70-130	3	25
Bromomethane	18.6		µg/l		20.0		93	70-130	12	50
2-Butanone (MEK)	23.5		µg/l		20.0		118	70-130	4	50
n-Butylbenzene	22.6		µg/l		20.0		113	70-130	0.7	25
sec-Butylbenzene	21.8		µg/l		20.0		109	70-130	0.6	25
tert-Butylbenzene	21.4		µg/l		20.0		107	70-130	0.09	25
Carbon disulfide	23.0		µg/l		20.0		115	70-130	7	25
Carbon tetrachloride	19.2		µg/l		20.0		96	70-130	0.6	25
Chlorobenzene	20.8		µg/l		20.0		104	70-130	2	25
Chloroethane	23.8		µg/l		20.0		119	70-130	6	50
Chloroform	24.8		µg/l		20.0		124	70-130	8	25
Chloromethane	24.0		µg/l		20.0		120	70-130	11	25
2-Chlorotoluene	21.3		µg/l		20.0		106	70-130	3	25
4-Chlorotoluene	21.4		µg/l		20.0		107	70-130	5	25
1,2-Dibromo-3-chloropropane	22.1		µg/l		20.0		110	70-130	2	25
Dibromochloromethane	21.7		µg/l		20.0		108	70-130	4	50
1,2-Dibromoethane (EDB)	21.9		µg/l		20.0		109	70-130	3	25
Dibromomethane	22.1		µg/l		20.0		111	70-130	5	25
1,2-Dichlorobenzene	21.2		µg/l		20.0		106	70-130	1	25
1,3-Dichlorobenzene	20.7		µg/l		20.0		104	70-130	3	25
1,4-Dichlorobenzene	21.5		µg/l		20.0		108	70-130	2	25
Dichlorodifluoromethane (Freon12)	27.9		µg/l		20.0		140	70-130	3	50
1,1-Dichloroethane	23.6		µg/l		20.0		118	70-130	6	25
1,2-Dichloroethane	20.8		µg/l		20.0		104	70-130	8	25
1,1-Dichloroethene	24.2		µg/l		20.0		121	70-130	4	25
cis-1,2-Dichloroethene	24.2		µg/l		20.0		121	70-130	10	25
trans-1,2-Dichloroethene	23.5		µg/l		20.0		117	70-130	8	25
1,2-Dichloropropane	21.0		µg/l		20.0		105	70-130	5	25
1,3-Dichloropropane	22.3		µg/l		20.0		112	70-130	3	25
2,2-Dichloropropane	22.2		µg/l		20.0		111	70-130	9	25
1,1-Dichloropropene	22.5		µg/l		20.0		113	70-130	5	25
cis-1,3-Dichloropropene	20.0		µg/l		20.0		100	70-130	1	25
trans-1,3-Dichloropropene	20.1		µg/l		20.0		100	70-130	3	25
Ethylbenzene	21.4		µg/l		20.0		107	70-130	4	25
Hexachlorobutadiene	18.1		µg/l		20.0		90	70-130	10	50

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1020730 - SW846 5030 Water MS										
LCS Dup (1020730-BSD1)					Prepared & Analyzed: 04-Oct-10					
2-Hexanone (MBK)	22.8		µg/l		20.0		114	70-130	0.3	25
Isopropylbenzene	21.7		µg/l		20.0		108	70-130	2	25
4-Isopropyltoluene	22.2		µg/l		20.0		111	70-130	0.7	25
Methyl tert-butyl ether	22.9		µg/l		20.0		114	70-130	7	25
4-Methyl-2-pentanone (MIBK)	18.5		µg/l		20.0		92	70-130	3	50
Methylene chloride	22.6		µg/l		20.0		113	70-130	5	25
Naphthalene	21.2		µg/l		20.0		106	70-130	6	25
n-Propylbenzene	21.7		µg/l		20.0		109	70-130	0.3	25
Styrene	21.1		µg/l		20.0		106	70-130	3	25
1,1,1,2-Tetrachloroethane	18.4		µg/l		20.0		92	70-130	0.9	25
1,1,2,2-Tetrachloroethane	22.3		µg/l		20.0		111	70-130	1	25
Tetrachloroethene	21.3		µg/l		20.0		107	70-130	7	25
Toluene	21.3		µg/l		20.0		106	70-130	6	25
1,2,3-Trichlorobenzene	19.4		µg/l		20.0		97	70-130	4	25
1,2,4-Trichlorobenzene	19.4		µg/l		20.0		97	70-130	0.3	25
1,3,5-Trichlorobenzene	19.5		µg/l		20.0		97	70-130	0.5	25
1,1,1-Trichloroethane	19.8		µg/l		20.0		99	70-130	4	25
1,1,2-Trichloroethane	21.6		µg/l		20.0		108	70-130	0.9	25
Trichloroethene	22.1		µg/l		20.0		110	70-130	8	25
Trichlorofluoromethane (Freon 11)	26.3	QM9	µg/l		20.0		132	70-130	5	50
1,2,3-Trichloropropane	21.5		µg/l		20.0		107	70-130	3	25
1,2,4-Trimethylbenzene	21.1		µg/l		20.0		106	70-130	1	25
1,3,5-Trimethylbenzene	21.6		µg/l		20.0		108	70-130	3	25
Vinyl chloride	24.3		µg/l		20.0		121	70-130	11	25
m,p-Xylene	42.2		µg/l		40.0		106	70-130	0.7	25
o-Xylene	20.6		µg/l		20.0		103	70-130	0.5	25
Tetrahydrofuran	22.5		µg/l		20.0		112	70-130	10	25
Ethyl ether	22.3		µg/l		20.0		112	70-130	8	50
Tert-amyl methyl ether	20.8		µg/l		20.0		104	70-130	5	25
Ethyl tert-butyl ether	22.9		µg/l		20.0		115	70-130	8	25
Di-isopropyl ether	22.4		µg/l		20.0		112	70-130	11	25
Tert-Butanol / butyl alcohol	235		µg/l		200		117	70-130	3	25
1,4-Dioxane	250		µg/l		200		125	70-130	8	25
trans-1,4-Dichloro-2-butene	20.9		µg/l		20.0		105	70-130	7	25
Ethanol	466		µg/l		400		117	70-130	3	30
Surrogate: 4-Bromofluorobenzene	*29.2*		µg/l		*30.0*		*97*	*70-130*		
Surrogate: Toluene-d8	*29.2*		µg/l		*30.0*		*97*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*30.2*		µg/l		*30.0*		*101*	*70-130*		
Surrogate: Dibromofluoromethane	*34.9*		µg/l		*30.0*		*116*	*70-130*		
Batch 1020835 - SW846 5030 Water MS										
Blank (1020835-BLK1)					Prepared & Analyzed: 05-Oct-10					
1,1,2-Trichlorotrifluoroethane (Freon 113)	BRL		µg/l	1.0						
Acetone	BRL		µg/l	10.0						
Acrylonitrile	BRL		µg/l	0.5						
Benzene	BRL		µg/l	1.0						
Bromobenzene	BRL		µg/l	1.0						
Bromochloromethane	BRL		µg/l	1.0						
Bromodichloromethane	BRL		µg/l	0.5						
Bromoform	BRL		µg/l	1.0						
Bromomethane	BRL		µg/l	2.0						
2-Butanone (MEK)	BRL		µg/l	10.0						

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1020835 - SW846 5030 Water MS										
Blank (1020835-BLK1)					Prepared & Analyzed: 05-Oct-10					
n-Butylbenzene	BRL		µg/l	1.0						
sec-Butylbenzene	BRL		µg/l	1.0						
tert-Butylbenzene	BRL		µg/l	1.0						
Carbon disulfide	BRL		µg/l	2.0						
Carbon tetrachloride	BRL		µg/l	1.0						
Chlorobenzene	BRL		µg/l	1.0						
Chloroethane	BRL		µg/l	2.0						
Chloroform	BRL		µg/l	1.0						
Chloromethane	BRL		µg/l	2.0						
2-Chlorotoluene	BRL		µg/l	1.0						
4-Chlorotoluene	BRL		µg/l	1.0						
1,2-Dibromo-3-chloropropane	BRL		µg/l	2.0						
Dibromochloromethane	BRL		µg/l	0.5						
1,2-Dibromoethane (EDB)	BRL		µg/l	0.5						
Dibromomethane	BRL		µg/l	1.0						
1,2-Dichlorobenzene	BRL		µg/l	1.0						
1,3-Dichlorobenzene	BRL		µg/l	1.0						
1,4-Dichlorobenzene	BRL		µg/l	1.0						
Dichlorodifluoromethane (Freon12)	BRL		µg/l	2.0						
1,1-Dichloroethane	BRL		µg/l	1.0						
1,2-Dichloroethane	BRL		µg/l	1.0						
1,1-Dichloroethene	BRL		µg/l	1.0						
cis-1,2-Dichloroethene	BRL		µg/l	1.0						
trans-1,2-Dichloroethene	BRL		µg/l	1.0						
1,2-Dichloropropane	BRL		µg/l	1.0						
1,3-Dichloropropane	BRL		µg/l	1.0						
2,2-Dichloropropane	BRL		µg/l	1.0						
1,1-Dichloropropene	BRL		µg/l	1.0						
cis-1,3-Dichloropropene	BRL		µg/l	0.5						
trans-1,3-Dichloropropene	BRL		µg/l	0.5						
Ethylbenzene	BRL		µg/l	1.0						
Hexachlorobutadiene	BRL		µg/l	0.5						
2-Hexanone (MBK)	BRL		µg/l	10.0						
Isopropylbenzene	BRL		µg/l	1.0						
4-Isopropyltoluene	BRL		µg/l	1.0						
Methyl tert-butyl ether	BRL		µg/l	1.0						
4-Methyl-2-pentanone (MIBK)	BRL		µg/l	10.0						
Methylene chloride	BRL		µg/l	2.0						
Naphthalene	BRL		µg/l	1.0						
n-Propylbenzene	BRL		µg/l	1.0						
Styrene	BRL		µg/l	1.0						
1,1,1,2-Tetrachloroethane	BRL		µg/l	1.0						
1,1,2,2-Tetrachloroethane	BRL		µg/l	0.5						
Tetrachloroethene	BRL		µg/l	1.0						
Toluene	BRL		µg/l	1.0						
1,2,3-Trichlorobenzene	BRL		µg/l	1.0						
1,2,4-Trichlorobenzene	BRL		µg/l	1.0						
1,3,5-Trichlorobenzene	BRL		µg/l	1.0						
1,1,1-Trichloroethane	BRL		µg/l	1.0						
1,1,2-Trichloroethane	BRL		µg/l	1.0						
Trichloroethene	BRL		µg/l	1.0						
Trichlorofluoromethane (Freon 11)	BRL		µg/l	1.0						

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1020835 - SW846 5030 Water MS										
Blank (1020835-BLK1)					Prepared & Analyzed: 05-Oct-10					
1,2,3-Trichloropropane	BRL		µg/l	1.0						
1,2,4-Trimethylbenzene	BRL		µg/l	1.0						
1,3,5-Trimethylbenzene	BRL		µg/l	1.0						
Vinyl chloride	BRL		µg/l	1.0						
m,p-Xylene	BRL		µg/l	2.0						
o-Xylene	BRL		µg/l	1.0						
Tetrahydrofuran	BRL		µg/l	2.0						
Ethyl ether	BRL		µg/l	1.0						
Tert-amyl methyl ether	BRL		µg/l	1.0						
Ethyl tert-butyl ether	BRL		µg/l	1.0						
Di-isopropyl ether	BRL		µg/l	1.0						
Tert-Butanol / butyl alcohol	BRL		µg/l	10.0						
1,4-Dioxane	BRL		µg/l	20.0						
trans-1,4-Dichloro-2-butene	BRL		µg/l	5.0						
Ethanol	BRL		µg/l	400						
Surrogate: 4-Bromofluorobenzene	*49.3*		µg/l		*50.0*		*99*	*70-130*		
Surrogate: Toluene-d8	*49.8*		µg/l		*50.0*		*100*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*50.5*		µg/l		*50.0*		*101*	*70-130*		
Surrogate: Dibromofluoromethane	*51.5*		µg/l		*50.0*		*103*	*70-130*		
LCS (1020835-BS1)					Prepared & Analyzed: 05-Oct-10					
1,1,2-Trichlorotrifluoroethane (Freon 113)	21.1		µg/l		20.0		105	70-130		25
Acetone	24.3		µg/l		20.0		121	70-130		50
Acrylonitrile	21.3		µg/l		20.0		106	70-130		25
Benzene	19.8		µg/l		20.0		99	70-130		25
Bromobenzene	19.3		µg/l		20.0		97	70-130		25
Bromochloromethane	20.5		µg/l		20.0		102	70-130		25
Bromodichloromethane	21.2		µg/l		20.0		106	70-130		25
Bromoform	22.5		µg/l		20.0		113	70-130		25
Bromomethane	21.9		µg/l		20.0		110	70-130		50
2-Butanone (MEK)	20.5		µg/l		20.0		103	70-130		50
n-Butylbenzene	20.1		µg/l		20.0		101	70-130		25
sec-Butylbenzene	20.8		µg/l		20.0		104	70-130		25
tert-Butylbenzene	21.2		µg/l		20.0		106	70-130		25
Carbon disulfide	20.2		µg/l		20.0		101	70-130		25
Carbon tetrachloride	23.4		µg/l		20.0		117	70-130		25
Chlorobenzene	18.6		µg/l		20.0		93	70-130		25
Chloroethane	19.7		µg/l		20.0		98	70-130		50
Chloroform	22.1		µg/l		20.0		110	70-130		25
Chloromethane	22.7		µg/l		20.0		113	70-130		25
2-Chlorotoluene	20.4		µg/l		20.0		102	70-130		25
4-Chlorotoluene	19.8		µg/l		20.0		99	70-130		25
1,2-Dibromo-3-chloropropane	21.8		µg/l		20.0		109	70-130		25
Dibromochloromethane	21.7		µg/l		20.0		109	70-130		50
1,2-Dibromoethane (EDB)	20.4		µg/l		20.0		102	70-130		25
Dibromomethane	19.5		µg/l		20.0		98	70-130		25
1,2-Dichlorobenzene	19.4		µg/l		20.0		97	70-130		25
1,3-Dichlorobenzene	19.6		µg/l		20.0		98	70-130		25
1,4-Dichlorobenzene	17.9		µg/l		20.0		90	70-130		25
Dichlorodifluoromethane (Freon12)	21.7		µg/l		20.0		108	70-130		50
1,1-Dichloroethane	19.8		µg/l		20.0		99	70-130		25
1,2-Dichloroethane	19.8		µg/l		20.0		99	70-130		25

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1020835 - SW846 5030 Water MS										
LCS (1020835-BS1)					Prepared & Analyzed: 05-Oct-10					
1,1-Dichloroethene	20.7		µg/l		20.0		104	70-130		25
cis-1,2-Dichloroethene	19.9		µg/l		20.0		100	70-130		25
trans-1,2-Dichloroethene	19.5		µg/l		20.0		97	70-130		25
1,2-Dichloropropane	18.6		µg/l		20.0		93	70-130		25
1,3-Dichloropropane	18.4		µg/l		20.0		92	70-130		25
2,2-Dichloropropane	21.8		µg/l		20.0		109	70-130		25
1,1-Dichloropropene	21.0		µg/l		20.0		105	70-130		25
cis-1,3-Dichloropropene	20.5		µg/l		20.0		102	70-130		25
trans-1,3-Dichloropropene	20.6		µg/l		20.0		103	70-130		25
Ethylbenzene	19.8		µg/l		20.0		99	70-130		25
Hexachlorobutadiene	20.6		µg/l		20.0		103	70-130		50
2-Hexanone (MBK)	20.3		µg/l		20.0		102	70-130		25
Isopropylbenzene	20.1		µg/l		20.0		100	70-130		25
4-Isopropyltoluene	20.3		µg/l		20.0		101	70-130		25
Methyl tert-butyl ether	19.1		µg/l		20.0		95	70-130		25
4-Methyl-2-pentanone (MIBK)	19.5		µg/l		20.0		97	70-130		50
Methylene chloride	22.4		µg/l		20.0		112	70-130		25
Naphthalene	21.1		µg/l		20.0		105	70-130		25
n-Propylbenzene	20.1		µg/l		20.0		100	70-130		25
Styrene	20.4		µg/l		20.0		102	70-130		25
1,1,1,2-Tetrachloroethane	21.1		µg/l		20.0		106	70-130		25
1,1,2,2-Tetrachloroethane	18.6		µg/l		20.0		93	70-130		25
Tetrachloroethene	20.3		µg/l		20.0		101	70-130		25
Toluene	19.3		µg/l		20.0		96	70-130		25
1,2,3-Trichlorobenzene	19.5		µg/l		20.0		98	70-130		25
1,2,4-Trichlorobenzene	19.0		µg/l		20.0		95	70-130		25
1,3,5-Trichlorobenzene	19.4		µg/l		20.0		97	70-130		25
1,1,1-Trichloroethane	21.9		µg/l		20.0		109	70-130		25
1,1,2-Trichloroethane	19.5		µg/l		20.0		97	70-130		25
Trichloroethene	20.4		µg/l		20.0		102	70-130		25
Trichlorofluoromethane (Freon 11)	22.5		µg/l		20.0		113	70-130		50
1,2,3-Trichloropropane	19.0		µg/l		20.0		95	70-130		25
1,2,4-Trimethylbenzene	20.2		µg/l		20.0		101	70-130		25
1,3,5-Trimethylbenzene	20.9		µg/l		20.0		104	70-130		25
Vinyl chloride	20.3		µg/l		20.0		102	70-130		25
m,p-Xylene	40.2		µg/l		40.0		100	70-130		25
o-Xylene	20.0		µg/l		20.0		100	70-130		25
Tetrahydrofuran	19.1		µg/l		20.0		95	70-130		25
Ethyl ether	19.7		µg/l		20.0		98	70-130		50
Tert-amyl methyl ether	22.1		µg/l		20.0		110	70-130		25
Ethyl tert-butyl ether	19.2		µg/l		20.0		96	70-130		25
Di-isopropyl ether	19.5		µg/l		20.0		98	70-130		25
Tert-Butanol / butyl alcohol	184		µg/l		200		92	70-130		25
1,4-Dioxane	206		µg/l		200		103	70-130		25
trans-1,4-Dichloro-2-butene	19.5		µg/l		20.0		97	70-130		25
Ethanol	446		µg/l		400		111	70-130		30
Surrogate: 4-Bromofluorobenzene	*50.1*		µg/l		*50.0*		*100*	*70-130*		
Surrogate: Toluene-d8	*50.3*		µg/l		*50.0*		*101*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*51.6*		µg/l		*50.0*		*103*	*70-130*		
Surrogate: Dibromofluoromethane	*51.7*		µg/l		*50.0*		*103*	*70-130*		
LCS Dup (1020835-BSD1)					Prepared & Analyzed: 05-Oct-10					

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1020835 - SW846 5030 Water MS										
LCS Dup (1020835-BSD1)					Prepared & Analyzed: 05-Oct-10					
1,1,2-Trichlorotrifluoroethane (Freon 113)	20.0		µg/l		20.0		100	70-130	5	25
Acetone	24.0		µg/l		20.0		120	70-130	1	50
Acrylonitrile	20.3		µg/l		20.0		101	70-130	5	25
Benzene	18.5		µg/l		20.0		93	70-130	7	25
Bromobenzene	19.9		µg/l		20.0		100	70-130	3	25
Bromochloromethane	19.2		µg/l		20.0		96	70-130	7	25
Bromodichloromethane	20.0		µg/l		20.0		100	70-130	6	25
Bromoform	23.7		µg/l		20.0		118	70-130	5	25
Bromomethane	20.8		µg/l		20.0		104	70-130	5	50
2-Butanone (MEK)	18.7		µg/l		20.0		93	70-130	9	50
n-Butylbenzene	19.0		µg/l		20.0		95	70-130	6	25
sec-Butylbenzene	21.3		µg/l		20.0		107	70-130	2	25
tert-Butylbenzene	21.5		µg/l		20.0		107	70-130	1	25
Carbon disulfide	18.8		µg/l		20.0		94	70-130	7	25
Carbon tetrachloride	21.6		µg/l		20.0		108	70-130	8	25
Chlorobenzene	19.1		µg/l		20.0		95	70-130	2	25
Chloroethane	17.9		µg/l		20.0		90	70-130	9	50
Chloroform	21.1		µg/l		20.0		105	70-130	5	25
Chloromethane	21.4		µg/l		20.0		107	70-130	5	25
2-Chlorotoluene	21.4		µg/l		20.0		107	70-130	5	25
4-Chlorotoluene	20.2		µg/l		20.0		101	70-130	2	25
1,2-Dibromo-3-chloropropane	21.5		µg/l		20.0		108	70-130	1	25
Dibromochloromethane	21.2		µg/l		20.0		106	70-130	3	50
1,2-Dibromoethane (EDB)	19.8		µg/l		20.0		99	70-130	3	25
Dibromomethane	19.1		µg/l		20.0		96	70-130	2	25
1,2-Dichlorobenzene	18.6		µg/l		20.0		93	70-130	4	25
1,3-Dichlorobenzene	19.6		µg/l		20.0		98	70-130	0.2	25
1,4-Dichlorobenzene	17.9		µg/l		20.0		90	70-130	0	25
Dichlorodifluoromethane (Freon12)	20.3		µg/l		20.0		102	70-130	6	50
1,1-Dichloroethane	18.7		µg/l		20.0		93	70-130	6	25
1,2-Dichloroethane	18.7		µg/l		20.0		94	70-130	6	25
1,1-Dichloroethene	19.3		µg/l		20.0		96	70-130	7	25
cis-1,2-Dichloroethene	18.8		µg/l		20.0		94	70-130	6	25
trans-1,2-Dichloroethene	18.6		µg/l		20.0		93	70-130	5	25
1,2-Dichloropropane	18.4		µg/l		20.0		92	70-130	0.9	25
1,3-Dichloropropane	18.2		µg/l		20.0		91	70-130	1	25
2,2-Dichloropropane	20.0		µg/l		20.0		100	70-130	9	25
1,1-Dichloropropene	20.0		µg/l		20.0		100	70-130	5	25
cis-1,3-Dichloropropene	19.1		µg/l		20.0		96	70-130	7	25
trans-1,3-Dichloropropene	20.1		µg/l		20.0		100	70-130	3	25
Ethylbenzene	20.2		µg/l		20.0		101	70-130	2	25
Hexachlorobutadiene	19.2		µg/l		20.0		96	70-130	7	50
2-Hexanone (MBK)	19.0		µg/l		20.0		95	70-130	7	25
Isopropylbenzene	20.7		µg/l		20.0		104	70-130	3	25
4-Isopropyltoluene	19.3		µg/l		20.0		96	70-130	5	25
Methyl tert-butyl ether	18.6		µg/l		20.0		93	70-130	2	25
4-Methyl-2-pentanone (MIBK)	18.8		µg/l		20.0		94	70-130	3	50
Methylene chloride	21.2		µg/l		20.0		106	70-130	5	25
Naphthalene	19.8		µg/l		20.0		99	70-130	6	25
n-Propylbenzene	20.3		µg/l		20.0		101	70-130	1	25
Styrene	21.0		µg/l		20.0		105	70-130	3	25
1,1,1,2-Tetrachloroethane	22.5		µg/l		20.0		113	70-130	6	25

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1020835 - SW846 5030 Water MS										
LCS Dup (1020835-BSD1)					Prepared & Analyzed: 05-Oct-10					
1,1,2,2-Tetrachloroethane	19.8		µg/l		20.0		99	70-130	6	25
Tetrachloroethene	19.2		µg/l		20.0		96	70-130	5	25
Toluene	17.6		µg/l		20.0		88	70-130	9	25
1,2,3-Trichlorobenzene	18.8		µg/l		20.0		94	70-130	4	25
1,2,4-Trichlorobenzene	19.0		µg/l		20.0		95	70-130	0.2	25
1,3,5-Trichlorobenzene	18.2		µg/l		20.0		91	70-130	7	25
1,1,1-Trichloroethane	20.4		µg/l		20.0		102	70-130	7	25
1,1,2-Trichloroethane	19.2		µg/l		20.0		96	70-130	1	25
Trichloroethene	19.1		µg/l		20.0		96	70-130	6	25
Trichlorofluoromethane (Freon 11)	21.4		µg/l		20.0		107	70-130	5	50
1,2,3-Trichloropropane	19.8		µg/l		20.0		99	70-130	4	25
1,2,4-Trimethylbenzene	20.5		µg/l		20.0		102	70-130	1	25
1,3,5-Trimethylbenzene	21.3		µg/l		20.0		107	70-130	2	25
Vinyl chloride	18.9		µg/l		20.0		94	70-130	7	25
m,p-Xylene	41.0		µg/l		40.0		102	70-130	2	25
o-Xylene	21.3		µg/l		20.0		107	70-130	7	25
Tetrahydrofuran	19.0		µg/l		20.0		95	70-130	0.3	25
Ethyl ether	19.1		µg/l		20.0		95	70-130	3	50
Tert-amyl methyl ether	21.6		µg/l		20.0		108	70-130	2	25
Ethyl tert-butyl ether	18.9		µg/l		20.0		95	70-130	1	25
Di-isopropyl ether	19.0		µg/l		20.0		95	70-130	2	25
Tert-Butanol / butyl alcohol	182		µg/l		200		91	70-130	0.9	25
1,4-Dioxane	197		µg/l		200		99	70-130	5	25
trans-1,4-Dichloro-2-butene	18.6		µg/l		20.0		93	70-130	5	25
Ethanol	443		µg/l		400		111	70-130	0.7	30
Surrogate: 4-Bromofluorobenzene	*54.1*		µg/l		*50.0*		*108*	*70-130*		
Surrogate: Toluene-d8	*49.8*		µg/l		*50.0*		*100*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*50.8*		µg/l		*50.0*		*102*	*70-130*		
Surrogate: Dibromofluoromethane	*51.3*		µg/l		*50.0*		*103*	*70-130*		
Matrix Spike (1020835-MS1)			**Source: SB18811-01**		Prepared & Analyzed: 05-Oct-10					
1,1,2-Trichlorotrifluoroethane (Freon 113)	23.3		µg/l		20.0	BRL	117	70-130		30
Acetone	18.5		µg/l		20.0	BRL	92	70-130		30
Acrylonitrile	17.7		µg/l		20.0	BRL	89	70-130		30
Benzene	18.1		µg/l		20.0	BRL	91	70-130		30
Bromobenzene	20.0		µg/l		20.0	BRL	100	70-130		30
Bromochloromethane	17.7		µg/l		20.0	BRL	88	70-130		30
Bromodichloromethane	18.4		µg/l		20.0	BRL	92	70-130		30
Bromoform	19.5		µg/l		20.0	BRL	98	70-130		30
Bromomethane	15.0		µg/l		20.0	BRL	75	70-130		30
2-Butanone (MEK)	15.0		µg/l		20.0	BRL	75	70-130		30
n-Butylbenzene	26.6	QM7	µg/l		20.0	BRL	133	70-130		30
sec-Butylbenzene	25.3		µg/l		20.0	BRL	126	70-130		30
tert-Butylbenzene	24.2		µg/l		20.0	BRL	121	70-130		30
Carbon disulfide	16.4		µg/l		20.0	BRL	82	70-130		30
Carbon tetrachloride	21.6		µg/l		20.0	BRL	108	70-130		30
Chlorobenzene	19.0		µg/l		20.0	BRL	95	70-130		30
Chloroethane	17.5		µg/l		20.0	BRL	87	70-130		30
Chloroform	19.5		µg/l		20.0	BRL	98	70-130		30
Chloromethane	17.8		µg/l		20.0	BRL	89	70-130		30
2-Chlorotoluene	22.6		µg/l		20.0	BRL	113	70-130		30
4-Chlorotoluene	22.2		µg/l		20.0	BRL	111	70-130		30

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1020835 - SW846 5030 Water MS										
Matrix Spike (1020835-MS1)			**Source: SB18811-01**		Prepared & Analyzed: 05-Oct-10					
1,2-Dibromo-3-chloropropane	20.1		µg/l		20.0	BRL	101	70-130		30
Dibromochloromethane	19.1		µg/l		20.0	BRL	96	70-130		30
1,2-Dibromoethane (EDB)	18.0		µg/l		20.0	BRL	90	70-130		30
Dibromomethane	16.8		µg/l		20.0	BRL	84	70-130		30
1,2-Dichlorobenzene	21.7		µg/l		20.0	BRL	108	70-130		30
1,3-Dichlorobenzene	22.0		µg/l		20.0	BRL	110	70-130		30
1,4-Dichlorobenzene	21.4		µg/l		20.0	BRL	107	70-130		30
Dichlorodifluoromethane (Freon12)	19.3		µg/l		20.0	BRL	97	70-130		30
1,1-Dichloroethane	17.6		µg/l		20.0	BRL	88	70-130		30
1,2-Dichloroethane	16.8		µg/l		20.0	BRL	84	70-130		30
1,1-Dichloroethene	19.2		µg/l		20.0	BRL	96	70-130		30
cis-1,2-Dichloroethene	17.6		µg/l		20.0	BRL	88	70-130		30
trans-1,2-Dichloroethene	18.0		µg/l		20.0	BRL	90	70-130		30
1,2-Dichloropropane	16.8		µg/l		20.0	BRL	84	70-130		30
1,3-Dichloropropane	17.2		µg/l		20.0	BRL	86	70-130		30
2,2-Dichloropropane	21.1		µg/l		20.0	BRL	106	70-130		30
1,1-Dichloropropene	20.6		µg/l		20.0	BRL	103	70-130		30
cis-1,3-Dichloropropene	17.5		µg/l		20.0	BRL	88	70-130		30
trans-1,3-Dichloropropene	18.1		µg/l		20.0	BRL	91	70-130		30
Ethylbenzene	20.8		µg/l		20.0	BRL	104	70-130		30
Hexachlorobutadiene	29.0	QM7	µg/l		20.0	BRL	145	70-130		30
2-Hexanone (MBK)	15.8		µg/l		20.0	BRL	79	70-130		30
Isopropylbenzene	22.2		µg/l		20.0	BRL	111	70-130		30
4-Isopropyltoluene	24.6		µg/l		20.0	BRL	123	70-130		30
Methyl tert-butyl ether	16.2		µg/l		20.0	BRL	81	70-130		30
4-Methyl-2-pentanone (MIBK)	15.5		µg/l		20.0	BRL	77	70-130		30
Methylene chloride	19.1		µg/l		20.0	BRL	96	70-130		30
Naphthalene	22.2		µg/l		20.0	BRL	111	70-130		30
n-Propylbenzene	23.5		µg/l		20.0	BRL	118	70-130		30
Styrene	21.1		µg/l		20.0	BRL	105	70-130		30
1,1,1,2-Tetrachloroethane	19.9		µg/l		20.0	BRL	99	70-130		30
1,1,2,2-Tetrachloroethane	17.8		µg/l		20.0	BRL	89	70-130		30
Tetrachloroethene	22.2		µg/l		20.0	BRL	111	70-130		30
Toluene	18.6		µg/l		20.0	BRL	93	70-130		30
1,2,3-Trichlorobenzene	24.7		µg/l		20.0	BRL	123	70-130		30
1,2,4-Trichlorobenzene	24.1		µg/l		20.0	BRL	120	70-130		30
1,3,5-Trichlorobenzene	24.2		µg/l		20.0	BRL	121	70-130		30
1,1,1-Trichloroethane	20.0		µg/l		20.0	BRL	100	70-130		30
1,1,2-Trichloroethane	17.8		µg/l		20.0	BRL	89	70-130		30
Trichloroethene	20.3		µg/l		20.0	BRL	101	70-130		30
Trichlorofluoromethane (Freon 11)	22.0		µg/l		20.0	BRL	110	70-130		30
1,2,3-Trichloropropane	17.5		µg/l		20.0	BRL	88	70-130		30
1,2,4-Trimethylbenzene	22.9		µg/l		20.0	BRL	114	70-130		30
1,3,5-Trimethylbenzene	23.4		µg/l		20.0	BRL	117	70-130		30
Vinyl chloride	14.5		µg/l		20.0	BRL	73	70-130		30
m,p-Xylene	42.4		µg/l		40.0	BRL	106	70-130		30
o-Xylene	21.0		µg/l		20.0	BRL	105	70-130		30
Tetrahydrofuran	14.4		µg/l		20.0	BRL	72	70-130		30
Ethyl ether	17.2		µg/l		20.0	BRL	86	70-130		30
Tert-amyl methyl ether	19.8		µg/l		20.0	BRL	99	70-130		30
Ethyl tert-butyl ether	16.3		µg/l		20.0	BRL	82	70-130		30
Di-isopropyl ether	16.7		µg/l		20.0	BRL	84	70-130		30

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1020835 - SW846 5030 Water MS										
Matrix Spike (1020835-MS1)			**Source: SB18811-01**		Prepared & Analyzed: 05-Oct-10					
Tert-Butanol / butyl alcohol	134	QM7	µg/l		200	BRL	67	70-130		30
1,4-Dioxane	128	QM7	µg/l		200	BRL	64	70-130		30
trans-1,4-Dichloro-2-butene	15.2		µg/l		20.0	BRL	76	70-130		30
Ethanol	327		µg/l		400	BRL	82	70-130		30
Surrogate: 4-Bromofluorobenzene	*50.6*		µg/l		*50.0*		*101*	*70-130*		
Surrogate: Toluene-d8	*50.5*		µg/l		*50.0*		*101*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*51.8*		µg/l		*50.0*		*104*	*70-130*		
Surrogate: Dibromofluoromethane	*51.4*		µg/l		*50.0*		*103*	*70-130*		
Matrix Spike Dup (1020835-MSD1)			**Source: SB18811-01**		Prepared & Analyzed: 05-Oct-10					
1,1,2-Trichlorotrifluoroethane (Freon 113)	23.2		µg/l		20.0	BRL	116	70-130	0.4	30
Acetone	17.4		µg/l		20.0	BRL	87	70-130	6	30
Acrylonitrile	18.2		µg/l		20.0	BRL	91	70-130	3	30
Benzene	18.0		µg/l		20.0	BRL	90	70-130	0.9	30
Bromobenzene	21.2		µg/l		20.0	BRL	106	70-130	6	30
Bromochloromethane	17.3		µg/l		20.0	BRL	86	70-130	2	30
Bromodichloromethane	18.2		µg/l		20.0	BRL	91	70-130	0.7	30
Bromoform	20.9		µg/l		20.0	BRL	104	70-130	7	30
Bromomethane	15.8		µg/l		20.0	BRL	79	70-130	5	30
2-Butanone (MEK)	15.3		µg/l		20.0	BRL	76	70-130	2	30
n-Butylbenzene	27.0	QM7	µg/l		20.0	BRL	135	70-130	2	30
sec-Butylbenzene	26.5	QM7	µg/l		20.0	BRL	132	70-130	5	30
tert-Butylbenzene	25.6		µg/l		20.0	BRL	128	70-130	6	30
Carbon disulfide	16.6		µg/l		20.0	BRL	83	70-130	1	30
Carbon tetrachloride	21.7		µg/l		20.0	BRL	109	70-130	0.7	30
Chlorobenzene	19.8		µg/l		20.0	BRL	99	70-130	4	30
Chloroethane	17.0		µg/l		20.0	BRL	85	70-130	3	30
Chloroform	19.2		µg/l		20.0	BRL	96	70-130	2	30
Chloromethane	18.3		µg/l		20.0	BRL	92	70-130	3	30
2-Chlorotoluene	24.0		µg/l		20.0	BRL	120	70-130	6	30
4-Chlorotoluene	23.6		µg/l		20.0	BRL	118	70-130	6	30
1,2-Dibromo-3-chloropropane	19.4		µg/l		20.0	BRL	97	70-130	3	30
Dibromochloromethane	20.0		µg/l		20.0	BRL	100	70-130	4	30
1,2-Dibromoethane (EDB)	17.3		µg/l		20.0	BRL	86	70-130	4	30
Dibromomethane	17.2		µg/l		20.0	BRL	86	70-130	2	30
1,2-Dichlorobenzene	21.5		µg/l		20.0	BRL	108	70-130	0.7	30
1,3-Dichlorobenzene	23.1		µg/l		20.0	BRL	116	70-130	5	30
1,4-Dichlorobenzene	21.2		µg/l		20.0	BRL	106	70-130	0.9	30
Dichlorodifluoromethane (Freon12)	18.4		µg/l		20.0	BRL	92	70-130	5	30
1,1-Dichloroethane	17.6		µg/l		20.0	BRL	88	70-130	0.2	30
1,2-Dichloroethane	16.8		µg/l		20.0	BRL	84	70-130	0.2	30
1,1-Dichloroethene	19.2		µg/l		20.0	BRL	96	70-130	0.2	30
cis-1,2-Dichloroethene	17.9		µg/l		20.0	BRL	90	70-130	2	30
trans-1,2-Dichloroethene	18.4		µg/l		20.0	BRL	92	70-130	2	30
1,2-Dichloropropane	17.0		µg/l		20.0	BRL	85	70-130	1	30
1,3-Dichloropropane	16.8		µg/l		20.0	BRL	84	70-130	2	30
2,2-Dichloropropane	21.5		µg/l		20.0	BRL	108	70-130	2	30
1,1-Dichloropropene	21.2		µg/l		20.0	BRL	106	70-130	3	30
cis-1,3-Dichloropropene	17.7		µg/l		20.0	BRL	89	70-130	1	30
trans-1,3-Dichloropropene	18.1		µg/l		20.0	BRL	90	70-130	0.2	30
Ethylbenzene	21.9		µg/l		20.0	BRL	110	70-130	5	30
Hexachlorobutadiene	29.0	QM7	µg/l		20.0	BRL	145	70-130	0.1	30

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1020835 - SW846 5030 Water MS										
Matrix Spike Dup (1020835-MSD1)			**Source: SB18811-01**		Prepared & Analyzed: 05-Oct-10					
2-Hexanone (MBK)	16.0		µg/l		20.0	BRL	80	70-130	1	30
Isopropylbenzene	23.6		µg/l		20.0	BRL	118	70-130	6	30
4-Isopropyltoluene	24.4		µg/l		20.0	BRL	122	70-130	0.8	30
Methyl tert-butyl ether	16.5		µg/l		20.0	BRL	82	70-130	2	30
4-Methyl-2-pentanone (MIBK)	15.8		µg/l		20.0	BRL	79	70-130	2	30
Methylene chloride	19.2		µg/l		20.0	BRL	96	70-130	0.3	30
Naphthalene	23.5		µg/l		20.0	BRL	117	70-130	6	30
n-Propylbenzene	24.9		µg/l		20.0	BRL	124	70-130	6	30
Styrene	22.4		µg/l		20.0	BRL	112	70-130	6	30
1,1,1,2-Tetrachloroethane	20.8		µg/l		20.0	BRL	104	70-130	4	30
1,1,2,2-Tetrachloroethane	18.6		µg/l		20.0	BRL	93	70-130	4	30
Tetrachloroethene	22.8		µg/l		20.0	BRL	114	70-130	2	30
Toluene	18.8		µg/l		20.0	BRL	94	70-130	1	30
1,2,3-Trichlorobenzene	25.3		µg/l		20.0	BRL	126	70-130	3	30
1,2,4-Trichlorobenzene	24.5		µg/l		20.0	BRL	122	70-130	2	30
1,3,5-Trichlorobenzene	24.5		µg/l		20.0	BRL	123	70-130	2	30
1,1,1-Trichloroethane	20.2		µg/l		20.0	BRL	101	70-130	1	30
1,1,2-Trichloroethane	17.2		µg/l		20.0	BRL	86	70-130	4	30
Trichloroethene	20.3		µg/l		20.0	BRL	102	70-130	0.1	30
Trichlorofluoromethane (Freon 11)	21.6		µg/l		20.0	BRL	108	70-130	1	30
1,2,3-Trichloropropane	18.1		µg/l		20.0	BRL	91	70-130	3	30
1,2,4-Trimethylbenzene	24.4		µg/l		20.0	BRL	122	70-130	6	30
1,3,5-Trimethylbenzene	24.9		µg/l		20.0	BRL	124	70-130	6	30
Vinyl chloride	14.1		µg/l		20.0	BRL	70	70-130	3	30
m,p-Xylene	45.0		µg/l		40.0	BRL	112	70-130	6	30
o-Xylene	22.5		µg/l		20.0	BRL	112	70-130	7	30
Tetrahydrofuran	15.9		µg/l		20.0	BRL	80	70-130	10	30
Ethyl ether	16.8		µg/l		20.0	BRL	84	70-130	2	30
Tert-amyl methyl ether	19.6		µg/l		20.0	BRL	98	70-130	1	30
Ethyl tert-butyl ether	16.5		µg/l		20.0	BRL	82	70-130	1	30
Di-isopropyl ether	16.8		µg/l		20.0	BRL	84	70-130	0.2	30
Tert-Butanol / butyl alcohol	134	QM7	µg/l		200	BRL	67	70-130	0.01	30
1,4-Dioxane	134	QM7	µg/l		200	BRL	67	70-130	5	30
trans-1,4-Dichloro-2-butene	15.7		µg/l		20.0	BRL	78	70-130	3	30
Ethanol	318		µg/l		400	BRL	80	70-130	3	30
Surrogate: 4-Bromofluorobenzene	*52.4*		µg/l		*50.0*		*105*	*70-130*		
Surrogate: Toluene-d8	*49.6*		µg/l		*50.0*		*99*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*51.6*		µg/l		*50.0*		*103*	*70-130*		
Surrogate: Dibromofluoromethane	*50.9*		µg/l		*50.0*		*102*	*70-130*		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1020609 - SW846 3510C										
Blank (1020609-BLK1)					Prepared: 01-Oct-10 Analyzed: 04-Oct-10					
Acenaphthene	BRL		µg/l	5.00						
Acenaphthylene	BRL		µg/l	5.00						
Aniline	BRL		µg/l	5.00						
Anthracene	BRL		µg/l	5.00						
Azobenzene/Diphenyldiazine	BRL		µg/l	5.00						
Benzidine	BRL		µg/l	5.00						
Benzo (a) anthracene	BRL		µg/l	5.00						
Benzo (a) pyrene	BRL		µg/l	5.00						
Benzo (b) fluoranthene	BRL		µg/l	5.00						
Benzo (g,h,i) perylene	BRL		µg/l	5.00						
Benzo (k) fluoranthene	BRL		µg/l	5.00						
Benzoic acid	BRL		µg/l	5.00						
Benzyl alcohol	BRL		µg/l	5.00						
Bis(2-chloroethoxy)methane	BRL		µg/l	5.00						
Bis(2-chloroethyl)ether	BRL		µg/l	5.00						
Bis(2-chloroisopropyl)ether	BRL		µg/l	5.00						
Bis(2-ethylhexyl)phthalate	BRL		µg/l	5.00						
4-Bromophenyl phenyl ether	BRL		µg/l	5.00						
Butyl benzyl phthalate	BRL		µg/l	5.00						
Carbazole	BRL		µg/l	5.00						
4-Chloro-3-methylphenol	BRL		µg/l	5.00						
4-Chloroaniline	BRL		µg/l	5.00						
2-Chloronaphthalene	BRL		µg/l	5.00						
2-Chlorophenol	BRL		µg/l	5.00						
4-Chlorophenyl phenyl ether	BRL		µg/l	5.00						
Chrysene	BRL		µg/l	5.00						
Dibenzo (a,h) anthracene	BRL		µg/l	5.00						
Dibenzofuran	BRL		µg/l	5.00						
1,2-Dichlorobenzene	BRL		µg/l	5.00						
1,3-Dichlorobenzene	BRL		µg/l	5.00						
1,4-Dichlorobenzene	BRL		µg/l	5.00						
3,3´-Dichlorobenzidine	BRL		µg/l	5.00						
2,4-Dichlorophenol	BRL		µg/l	5.00						
Diethyl phthalate	BRL		µg/l	5.00						
Dimethyl phthalate	BRL		µg/l	5.00						
2,4-Dimethylphenol	BRL		µg/l	5.00						
Di-n-butyl phthalate	BRL		µg/l	5.00						
4,6-Dinitro-2-methylphenol	BRL		µg/l	5.00						
2,4-Dinitrophenol	BRL		µg/l	5.00						
2,4-Dinitrotoluene	BRL		µg/l	5.00						
2,6-Dinitrotoluene	BRL		µg/l	5.00						
Di-n-octyl phthalate	BRL		µg/l	5.00						
Fluoranthene	BRL		µg/l	5.00						
Fluorene	BRL		µg/l	5.00						
Hexachlorobenzene	BRL		µg/l	5.00						
Hexachlorobutadiene	BRL		µg/l	5.00						
Hexachlorocyclopentadiene	BRL		µg/l	5.00						
Hexachloroethane	BRL		µg/l	5.00						
Indeno (1,2,3-cd) pyrene	BRL		µg/l	5.00						
Isophorone	BRL		µg/l	5.00						
2-Methylnaphthalene	BRL		µg/l	5.00						
2-Methylphenol	BRL		µg/l	5.00						

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1020609 - SW846 3510C										
Blank (1020609-BLK1)					Prepared: 01-Oct-10 Analyzed: 04-Oct-10					
3 & 4-Methylphenol	BRL		µg/l	10.0						
Naphthalene	BRL		µg/l	5.00						
2-Nitroaniline	BRL		µg/l	5.00						
3-Nitroaniline	BRL		µg/l	5.00						
4-Nitroaniline	BRL		µg/l	20.0						
Nitrobenzene	BRL		µg/l	5.00						
2-Nitrophenol	BRL		µg/l	5.00						
4-Nitrophenol	BRL		µg/l	20.0						
N-Nitrosodimethylamine	BRL		µg/l	5.00						
N-Nitrosodi-n-propylamine	BRL		µg/l	5.00						
N-Nitrosodiphenylamine	BRL		µg/l	5.00						
Pentachlorophenol	BRL		µg/l	20.0						
Phenanthrene	BRL		µg/l	5.00						
Phenol	BRL		µg/l	5.00						
Pyrene	BRL		µg/l	5.00						
Pyridine	BRL		µg/l	5.00						
1-Methylnaphthalene	BRL		µg/l	5.00						
1,2,4-Trichlorobenzene	BRL		µg/l	5.00						
2,4,5-Trichlorophenol	BRL		µg/l	5.00						
2,4,6-Trichlorophenol	BRL		µg/l	5.00						
Pentachloronitrobenzene	BRL		µg/l	5.00						
1,2,4,5-Tetrachlorobenzene	BRL		µg/l	5.00						
Surrogate: 2-Fluorobiphenyl	*21.8*		µg/l		*50.0*		*44*	*30-130*		
Surrogate: 2-Fluorophenol	*19.4*		µg/l		*50.0*		*39*	*15-110*		
Surrogate: Nitrobenzene-d5	*26.3*		µg/l		*50.0*		*53*	*30-130*		
Surrogate: Phenol-d5	*13.6*		µg/l		*50.0*		*27*	*15-110*		
Surrogate: Terphenyl-dl4	*23.8*		µg/l		*50.0*		*48*	*30-130*		
Surrogate: 2,4,6-Tribromophenol	*35.6*		µg/l		*50.0*		*71*	*15-110*		
LCS (1020609-BS1)					Prepared: 01-Oct-10 Analyzed: 04-Oct-10					
Acenaphthene	24.8		µg/l	5.00	50.0		50	40-130		
Acenaphthylene	24.8		µg/l	5.00	50.0		50	40-130		
Aniline	28.2		µg/l	5.00	50.0		56	40-130		
Anthracene	25.1		µg/l	5.00	50.0		50	40-130		
Azobenzene/Diphenyldiazine	24.4		µg/l	5.00	50.0		49	40-130		
Benzidine	6.99	QC2	µg/l	5.00	50.0		14	40-140		
Benzo (a) anthracene	26.7		µg/l	5.00	50.0		53	40-130		
Benzo (a) pyrene	26.5		µg/l	5.00	50.0		53	40-130		
Benzo (b) fluoranthene	26.9		µg/l	5.00	50.0		54	40-130		
Benzo (g,h,i) perylene	20.7		µg/l	5.00	50.0		41	40-130		
Benzo (k) fluoranthene	27.2		µg/l	5.00	50.0		54	40-130		
Benzoic acid	39.9		µg/l	5.00	50.0		80	40-130		
Benzyl alcohol	26.6		µg/l	5.00	50.0		53	40-130		
Bis(2-chloroethoxy)methane	20.9		µg/l	5.00	50.0		42	40-130		
Bis(2-chloroethyl)ether	21.7		µg/l	5.00	50.0		43	40-130		
Bis(2-chloroisopropyl)ether	23.2		µg/l	5.00	50.0		46	40-130		
Bis(2-ethylhexyl)phthalate	40.0		µg/l	5.00	50.0		80	40-130		
4-Bromophenyl phenyl ether	25.0		µg/l	5.00	50.0		50	40-130		
Butyl benzyl phthalate	27.2		µg/l	5.00	50.0		54	40-130		
Carbazole	29.9		µg/l	5.00	50.0		60	40-130		
4-Chloro-3-methylphenol	25.7		µg/l	5.00	50.0		51	40-130		
4-Chloroaniline	31.3		µg/l	5.00	50.0		63	40-130		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1020609 - SW846 3510C										
LCS (1020609-BS1)					Prepared: 01-Oct-10 Analyzed: 04-Oct-10					
2-Chloronaphthalene	23.7		µg/l	5.00	50.0		47	40-130		
2-Chlorophenol	23.1		µg/l	5.00	50.0		46	40-130		
4-Chlorophenyl phenyl ether	25.6		µg/l	5.00	50.0		51	40-130		
Chrysene	26.1		µg/l	5.00	50.0		52	40-130		
Dibenzo (a,h) anthracene	23.5		µg/l	5.00	50.0		47	40-130		
Dibenzofuran	25.7		µg/l	5.00	50.0		51	40-130		
1,2-Dichlorobenzene	22.8		µg/l	5.00	50.0		46	40-130		
1,3-Dichlorobenzene	21.9		µg/l	5.00	50.0		44	40-130		
1,4-Dichlorobenzene	22.4		µg/l	5.00	50.0		45	40-130		
3,3´-Dichlorobenzidine	20.6		µg/l	5.00	50.0		41	40-130		
2,4-Dichlorophenol	24.0		µg/l	5.00	50.0		48	40-130		
Diethyl phthalate	25.1		µg/l	5.00	50.0		50	40-130		
Dimethyl phthalate	24.2		µg/l	5.00	50.0		48	40-130		
2,4-Dimethylphenol	23.1		µg/l	5.00	50.0		46	40-130		
Di-n-butyl phthalate	25.7		µg/l	5.00	50.0		51	40-130		
4,6-Dinitro-2-methylphenol	21.3		µg/l	5.00	50.0		43	40-130		
2,4-Dinitrophenol	16.2	QC2	µg/l	5.00	50.0		32	40-130		
2,4-Dinitrotoluene	35.8		µg/l	5.00	50.0		72	40-130		
2,6-Dinitrotoluene	37.2		µg/l	5.00	50.0		74	40-130		
Di-n-octyl phthalate	31.7		µg/l	5.00	50.0		63	40-130		
Fluoranthene	26.0		µg/l	5.00	50.0		52	40-130		
Fluorene	25.0		µg/l	5.00	50.0		50	40-130		
Hexachlorobenzene	26.5		µg/l	5.00	50.0		53	40-130		
Hexachlorobutadiene	19.9		µg/l	5.00	50.0		40	40-130		
Hexachlorocyclopentadiene	17.0	QC2	µg/l	5.00	50.0		34	40-130		
Hexachloroethane	21.8		µg/l	5.00	50.0		44	40-130		
Indeno (1,2,3-cd) pyrene	22.4		µg/l	5.00	50.0		45	40-130		
Isophorone	23.2		µg/l	5.00	50.0		46	40-130		
2-Methylnaphthalene	24.4		µg/l	5.00	50.0		49	40-130		
2-Methylphenol	23.2		µg/l	5.00	50.0		46	40-130		
3 & 4-Methylphenol	23.4		µg/l	10.0	50.0		47	40-130		
Naphthalene	22.9		µg/l	5.00	50.0		46	40-130		
2-Nitroaniline	34.1		µg/l	5.00	50.0		68	40-130		
3-Nitroaniline	37.5		µg/l	5.00	50.0		75	40-130		
4-Nitroaniline	36.6		µg/l	20.0	50.0		73	40-130		
Nitrobenzene	26.7		µg/l	5.00	50.0		53	40-130		
2-Nitrophenol	30.9		µg/l	5.00	50.0		62	40-130		
4-Nitrophenol	16.8	QC2	µg/l	20.0	50.0		34	40-130		
N-Nitrosodimethylamine	18.8	QC2	µg/l	5.00	50.0		38	40-130		
N-Nitrosodi-n-propylamine	23.5		µg/l	5.00	50.0		47	40-130		
N-Nitrosodiphenylamine	21.8		µg/l	5.00	50.0		44	40-130		
Pentachlorophenol	34.3		µg/l	20.0	50.0		69	40-130		
Phenanthrene	24.9		µg/l	5.00	50.0		50	40-130		
Phenol	13.6	QC2	µg/l	5.00	50.0		27	40-130		
Pyrene	25.8		µg/l	5.00	50.0		52	40-130		
Pyridine	10.1	QC2	µg/l	5.00	50.0		20	40-140		
1,2,4-Trichlorobenzene	22.4		µg/l	5.00	50.0		45	40-130		
1-Methylnaphthalene	24.1		µg/l	5.00	50.0		48	40-140		
2,4,5-Trichlorophenol	26.3		µg/l	5.00	50.0		53	40-130		
2,4,6-Trichlorophenol	24.4		µg/l	5.00	50.0		49	40-130		
Pentachloronitrobenzene	33.5		µg/l	5.00	50.0		67	40-140		
1,2,4,5-Tetrachlorobenzene	24.1		µg/l	5.00	50.0		48	40-140		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1020609 - SW846 3510C										
LCS (1020609-BS1)					Prepared: 01-Oct-10 Analyzed: 04-Oct-10					
Surrogate: 2-Fluorobiphenyl	*17.3*		µg/l		*50.0*		*35*	*30-130*		
Surrogate: 2-Fluorophenol	*14.2*		µg/l		*50.0*		*28*	*15-110*		
Surrogate: Nitrobenzene-d5	*21.7*		µg/l		*50.0*		*43*	*30-130*		
Surrogate: Phenol-d5	*10.5*		µg/l		*50.0*		*21*	*15-110*		
Surrogate: Terphenyl-dl4	*19.0*		µg/l		*50.0*		*38*	*30-130*		
Surrogate: 2,4,6-Tribromophenol	*27.1*		µg/l		*50.0*		*54*	*15-110*		
LCS Dup (1020609-BSD1)					Prepared: 01-Oct-10 Analyzed: 04-Oct-10					
Acenaphthene	24.6		µg/l	5.00	50.0		49	40-130	0.6	20
Acenaphthylene	25.0		µg/l	5.00	50.0		50	40-130	0.5	20
Aniline	30.1		µg/l	5.00	50.0		60	40-130	7	20
Anthracene	24.5		µg/l	5.00	50.0		49	40-130	2	20
Azobenzene/Diphenyldiazine	23.6		µg/l	5.00	50.0		47	40-130	3	20
Benzidine	18.9	QC2, QR5	µg/l	5.00	50.0		38	40-140	92	20
Benzo (a) anthracene	25.5		µg/l	5.00	50.0		51	40-130	4	20
Benzo (a) pyrene	25.6		µg/l	5.00	50.0		51	40-130	4	20
Benzo (b) fluoranthene	24.6		µg/l	5.00	50.0		49	40-130	9	20
Benzo (g,h,i) perylene	19.6	QM9	µg/l	5.00	50.0		39	40-130	5	20
Benzo (k) fluoranthene	27.8		µg/l	5.00	50.0		56	40-130	2	20
Benzoic acid	39.2		µg/l	5.00	50.0		78	40-130	2	20
Benzyl alcohol	25.9		µg/l	5.00	50.0		52	40-130	3	20
Bis(2-chloroethoxy)methane	20.8		µg/l	5.00	50.0		42	40-130	0.4	20
Bis(2-chloroethyl)ether	21.6		µg/l	5.00	50.0		43	40-130	0.1	20
Bis(2-chloroisopropyl)ether	23.4		µg/l	5.00	50.0		47	40-130	0.9	20
Bis(2-ethylhexyl)phthalate	27.0	QR5	µg/l	5.00	50.0		54	40-130	39	20
4-Bromophenyl phenyl ether	23.9		µg/l	5.00	50.0		48	40-130	4	20
Butyl benzyl phthalate	26.2		µg/l	5.00	50.0		52	40-130	3	20
Carbazole	29.3		µg/l	5.00	50.0		59	40-130	2	20
4-Chloro-3-methylphenol	25.6		µg/l	5.00	50.0		51	40-130	0.4	20
4-Chloroaniline	29.6		µg/l	5.00	50.0		59	40-130	6	20
2-Chloronaphthalene	24.6		µg/l	5.00	50.0		49	40-130	4	20
2-Chlorophenol	23.0		µg/l	5.00	50.0		46	40-130	0.3	20
4-Chlorophenyl phenyl ether	25.9		µg/l	5.00	50.0		52	40-130	1	20
Chrysene	25.0		µg/l	5.00	50.0		50	40-130	5	20
Dibenzo (a,h) anthracene	23.0		µg/l	5.00	50.0		46	40-130	2	20
Dibenzofuran	26.0		µg/l	5.00	50.0		52	40-130	0.9	20
1,2-Dichlorobenzene	22.3		µg/l	5.00	50.0		45	40-130	2	20
1,3-Dichlorobenzene	21.9		µg/l	5.00	50.0		44	40-130	0.3	20
1,4-Dichlorobenzene	22.1		µg/l	5.00	50.0		44	40-130	2	20
3,3´-Dichlorobenzidine	21.1		µg/l	5.00	50.0		42	40-130	2	20
2,4-Dichlorophenol	24.3		µg/l	5.00	50.0		49	40-130	1	20
Diethyl phthalate	25.4		µg/l	5.00	50.0		51	40-130	1	20
Dimethyl phthalate	24.3		µg/l	5.00	50.0		49	40-130	0.5	20
2,4-Dimethylphenol	22.6		µg/l	5.00	50.0		45	40-130	2	20
Di-n-butyl phthalate	25.2		µg/l	5.00	50.0		50	40-130	2	20
4,6-Dinitro-2-methylphenol	24.3		µg/l	5.00	50.0		49	40-130	13	20
2,4-Dinitrophenol	17.5	QC2	µg/l	5.00	50.0		35	40-130	8	20
2,4-Dinitrotoluene	36.8		µg/l	5.00	50.0		74	40-130	3	20
2,6-Dinitrotoluene	37.2		µg/l	5.00	50.0		74	40-130	0.03	20
Di-n-octyl phthalate	30.4		µg/l	5.00	50.0		61	40-130	4	20
Fluoranthene	24.6		µg/l	5.00	50.0		49	40-130	5	20
Fluorene	25.6		µg/l	5.00	50.0		51	40-130	2	20

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1020609 - SW846 3510C										
LCS Dup (1020609-BSD1)					Prepared: 01-Oct-10 Analyzed: 04-Oct-10					
Hexachlorobenzene	25.5		µg/l	5.00	50.0		51	40-130	4	20
Hexachlorobutadiene	20.2		µg/l	5.00	50.0		40	40-130	2	20
Hexachlorocyclopentadiene	16.8	QC2	µg/l	5.00	50.0		34	40-130	0.7	20
Hexachloroethane	21.7		µg/l	5.00	50.0		43	40-130	0.3	20
Indeno (1,2,3-cd) pyrene	21.4		µg/l	5.00	50.0		43	40-130	4	20
Isophorone	23.1		µg/l	5.00	50.0		46	40-130	0.3	20
2-Methylnaphthalene	24.5		µg/l	5.00	50.0		49	40-130	0.5	20
2-Methylphenol	22.8		µg/l	5.00	50.0		46	40-130	2	20
3 & 4-Methylphenol	23.0		µg/l	10.0	50.0		46	40-130	2	20
Naphthalene	22.9		µg/l	5.00	50.0		46	40-130	0.09	20
2-Nitroaniline	35.0		µg/l	5.00	50.0		70	40-130	3	20
3-Nitroaniline	35.9		µg/l	5.00	50.0		72	40-130	4	20
4-Nitroaniline	37.3		µg/l	20.0	50.0		75	40-130	2	20
Nitrobenzene	26.8		µg/l	5.00	50.0		54	40-130	0.6	20
2-Nitrophenol	31.5		µg/l	5.00	50.0		63	40-130	2	20
4-Nitrophenol	17.5	QC2	µg/l	20.0	50.0		35	40-130	5	20
N-Nitrosodimethylamine	18.3	QC2	µg/l	5.00	50.0		37	40-130	3	20
N-Nitrosodi-n-propylamine	22.9		µg/l	5.00	50.0		46	40-130	3	20
N-Nitrosodiphenylamine	22.2		µg/l	5.00	50.0		44	40-130	2	20
Pentachlorophenol	33.6		µg/l	20.0	50.0		67	40-130	2	20
Phenanthrene	24.1		µg/l	5.00	50.0		48	40-130	3	20
Phenol	13.6	QC2	µg/l	5.00	50.0		27	40-130	0.7	20
Pyrene	25.0		µg/l	5.00	50.0		50	40-130	3	20
Pyridine	15.6	QC2, QR5	µg/l	5.00	50.0		31	40-140	43	20
1,2,4-Trichlorobenzene	22.0		µg/l	5.00	50.0		44	40-130	2	20
1-Methylnaphthalene	24.6		µg/l	5.00	50.0		49	40-140	2	20
2,4,5-Trichlorophenol	27.0		µg/l	5.00	50.0		54	40-130	2	20
2,4,6-Trichlorophenol	24.6		µg/l	5.00	50.0		49	40-130	0.9	20
Pentachloronitrobenzene	32.5		µg/l	5.00	50.0		65	40-140	3	20
1,2,4,5-Tetrachlorobenzene	24.9		µg/l	5.00	50.0		50	40-140	3	20
Surrogate: 2-Fluorobiphenyl	*20.2*		µg/l		*50.0*		*40*	*30-130*		
Surrogate: 2-Fluorophenol	*15.9*		µg/l		*50.0*		*32*	*15-110*		
Surrogate: Nitrobenzene-d5	*25.0*		µg/l		*50.0*		*50*	*30-130*		
Surrogate: Phenol-d5	*11.4*		µg/l		*50.0*		*23*	*15-110*		
Surrogate: Terphenyl-dl4	*20.2*		µg/l		*50.0*		*40*	*30-130*		
Surrogate: 2,4,6-Tribromophenol	*30.6*		µg/l		*50.0*		*61*	*15-110*		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1020527 - SW846 3510C										
Blank (1020527-BLK1)					Prepared & Analyzed: 30-Sep-10					
Aroclor-1016	BRL		µg/l	0.200						
Aroclor-1016 [2C]	BRL		µg/l	0.200						
Aroclor-1221	BRL		µg/l	0.200						
Aroclor-1221 [2C]	BRL		µg/l	0.200						
Aroclor-1232	BRL		µg/l	0.200						
Aroclor-1232 [2C]	BRL		µg/l	0.200						
Aroclor-1242	BRL		µg/l	0.200						
Aroclor-1242 [2C]	BRL		µg/l	0.200						
Aroclor-1248	BRL		µg/l	0.200						
Aroclor-1248 [2C]	BRL		µg/l	0.200						
Aroclor-1254	BRL		µg/l	0.200						
Aroclor-1254 [2C]	BRL		µg/l	0.200						
Aroclor-1260	BRL		µg/l	0.200						
Aroclor-1260 [2C]	BRL		µg/l	0.200						
Aroclor-1262	BRL		µg/l	0.200						
Aroclor-1262 [2C]	BRL		µg/l	0.200						
Aroclor-1268	BRL		µg/l	0.200						
Aroclor-1268 [2C]	BRL		µg/l	0.200						
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr)	*0.0900*		µg/l		*0.200*		*45*	*30-150*		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr) [2C]	*0.100*		µg/l		*0.200*		*50*	*30-150*		
Surrogate: Decachlorobiphenyl (Sr)	*0.120*		µg/l		*0.200*		*60*	*30-150*		
Surrogate: Decachlorobiphenyl (Sr) [2C]	*0.110*		µg/l		*0.200*		*55*	*30-150*		
LCS (1020527-BS1)					Prepared & Analyzed: 30-Sep-10					
Aroclor-1016	1.54		µg/l	0.200	2.50		62	50-114		
Aroclor-1016 [2C]	1.72		µg/l	0.200	2.50		69	50-114		
Aroclor-1260	1.74		µg/l	0.200	2.50		69	40-127		
Aroclor-1260 [2C]	1.70		µg/l	0.200	2.50		68	40-127		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr)	*0.110*		µg/l		*0.200*		*55*	*30-150*		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr) [2C]	*0.110*		µg/l		*0.200*		*55*	*30-150*		
Surrogate: Decachlorobiphenyl (Sr)	*0.140*		µg/l		*0.200*		*70*	*30-150*		
Surrogate: Decachlorobiphenyl (Sr) [2C]	*0.130*		µg/l		*0.200*		*65*	*30-150*		
LCS Dup (1020527-BSD1)					Prepared & Analyzed: 30-Sep-10					
Aroclor-1016	2.79	QR2	µg/l	0.200	2.50		112	50-114	58	20
Aroclor-1016 [2C]	3.06	QC2, QR5	µg/l	0.200	2.50		122	50-114	56	20
Aroclor-1260	3.13	QR2	µg/l	0.200	2.50		125	40-127	57	20
Aroclor-1260 [2C]	2.63	QR2	µg/l	0.200	2.50		105	40-127	43	20
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr)	*0.200*		µg/l		*0.200*		*100*	*30-150*		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr) [2C]	*0.190*		µg/l		*0.200*		*95*	*30-150*		
Surrogate: Decachlorobiphenyl (Sr)	*0.240*		µg/l		*0.200*		*120*	*30-150*		
Surrogate: Decachlorobiphenyl (Sr) [2C]	*0.220*		µg/l		*0.200*		*110*	*30-150*		

Extractable Petroleum Hydrocarbons - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1020616 - SW846 3510C										
Blank (1020616-BLK1)						Prepared: 01-Oct-10 Analyzed: 04-Oct-10				
Non-polar material (SGT-HEM)	BRL		mg/l	1.0						
LCS (1020616-BS1)						Prepared: 01-Oct-10 Analyzed: 04-Oct-10				
Non-polar material (SGT-HEM)	26.9		mg/l		31.0		87	83-101		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1020965 - EPA 200 Series										
Blank (1020965-BLK1)						Prepared & Analyzed: 08-Oct-10				
Zinc	BRL		mg/l	0.0050						
Iron	BRL		mg/l	0.250						
Selenium	BRL		mg/l	0.0150						
Nickel	BRL		mg/l	0.0050						
Lead	BRL		mg/l	0.0075						
Antimony	BRL		mg/l	0.0060						
Copper	BRL		mg/l	0.0050						
Chromium	BRL		mg/l	0.0050						
Cadmium	BRL		mg/l	0.0025						
Arsenic	BRL		mg/l	0.0040						
Silver	BRL		mg/l	0.0050						
LCS (1020965-BS1)						Prepared & Analyzed: 08-Oct-10				
Zinc	1.32		mg/l	0.0050	1.25		106	85-115		
Selenium	1.32		mg/l	0.0150	1.25		106	85-115		
Antimony	1.30		mg/l	0.0060	1.25		104	85-115		
Lead	1.31		mg/l	0.0075	1.25		105	85-115		
Nickel	1.31		mg/l	0.0050	1.25		105	85-115		
Iron	1.30		mg/l	0.250	1.25		104	85-115		
Copper	1.30		mg/l	0.0050	1.25		104	85-115		
Chromium	1.28		mg/l	0.0050	1.25		103	85-115		
Cadmium	1.33		mg/l	0.0025	1.25		107	85-115		
Silver	1.27		mg/l	0.0050	1.25		102	85-115		
Arsenic	1.30		mg/l	0.0040	1.25		104	85-115		
Batch 1020966 - EPA200/SW7000 Series										
Blank (1020966-BLK1)						Prepared: 08-Oct-10 Analyzed: 13-Oct-10				
Mercury	BRL		mg/l	0.00020						
LCS (1020966-BS1)						Prepared: 08-Oct-10 Analyzed: 13-Oct-10				
Mercury	0.00438		mg/l	0.00020	0.00500		88	85-115		

General Chemistry Parameters - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1020517 - General Preparation										
Blank (1020517-BLK1)						Prepared & Analyzed: 29-Sep-10				
Hexavalent Chromium	BRL		mg/l	0.005						
LCS (1020517-BS1)						Prepared & Analyzed: 29-Sep-10				
Hexavalent Chromium	0.050		mg/l	0.005	0.0500		100	80-120		
Duplicate (1020517-DUP1)			**Source: SB18811-01**			Prepared & Analyzed: 29-Sep-10				
Hexavalent Chromium	BRL		mg/l	0.005		BRL				20
Matrix Spike (1020517-MS1)			**Source: SB18811-01**			Prepared & Analyzed: 29-Sep-10				
Hexavalent Chromium	0.053		mg/l	0.005	0.0500	BRL	106	85-115		
Matrix Spike Dup (1020517-MSD1)			**Source: SB18811-01**			Prepared & Analyzed: 29-Sep-10				
Hexavalent Chromium	0.054		mg/l	0.005	0.0500	BRL	108	85-115	2	20
Reference (1020517-SRM1)						Prepared & Analyzed: 29-Sep-10				
Hexavalent Chromium	0.022		mg/l	0.005	0.0248		89	85-115		
Batch 1020542 - General Preparation										
Blank (1020542-BLK1)						Prepared & Analyzed: 30-Sep-10				
Cyanide (total)	BRL		mg/l	0.00500						
LCS (1020542-BS1)						Prepared & Analyzed: 30-Sep-10				
Cyanide (total)	0.302		mg/l	0.00500	0.300		101	90-110		
Duplicate (1020542-DUP1)			**Source: SB18811-01**			Prepared & Analyzed: 30-Sep-10				
Cyanide (total)	BRL		mg/l	0.00500		BRL				20
Matrix Spike (1020542-MS1)			**Source: SB18811-01**			Prepared & Analyzed: 30-Sep-10				
Cyanide (total)	0.306		mg/l	0.00500	0.300	BRL	102	90-110		
Matrix Spike Dup (1020542-MSD1)			**Source: SB18811-01**			Prepared & Analyzed: 30-Sep-10				
Cyanide (total)	0.297		mg/l	0.00500	0.300	BRL	99	90-110	3	20
Reference (1020542-SRM1)						Prepared & Analyzed: 30-Sep-10				
Cyanide (total)	0.194		mg/l	0.00500	0.184		105	84.56-134.78		
Batch 1020699 - General Preparation										
Blank (1020699-BLK1)						Prepared & Analyzed: 29-Sep-10				
Total Residual Chlorine	BRL		mg/l	0.020						
LCS (1020699-BS1)						Prepared & Analyzed: 29-Sep-10				
Total Residual Chlorine	0.051		mg/l	0.020	0.0500		102	90-110		
Duplicate (1020699-DUP1)			**Source: SB18811-01**			Prepared & Analyzed: 29-Sep-10				
Total Residual Chlorine	0.009	J	mg/l	0.020		0.011			20	20
Matrix Spike (1020699-MS1)			**Source: SB18811-01**			Prepared & Analyzed: 29-Sep-10				
Total Residual Chlorine	0.058		mg/l	0.020	0.0500	0.011	94	80-120		
Matrix Spike Dup (1020699-MSD1)			**Source: SB18811-01**			Prepared & Analyzed: 29-Sep-10				
Total Residual Chlorine	0.056		mg/l	0.020	0.0500	0.011	90	80-120	4	20
Reference (1020699-SRM1)						Prepared & Analyzed: 29-Sep-10				
Total Residual Chlorine	0.125		mg/l	0.020	0.111		113	85-115		
Batch 1020778 - General Preparation										
Blank (1020778-BLK1)						Prepared & Analyzed: 04-Oct-10				
Total Suspended Solids	BRL		mg/l	5.00						
Blank (1020778-BLK2)						Prepared & Analyzed: 04-Oct-10				
Total Suspended Solids	BRL		mg/l	5.00						
LCS (1020778-BS1)						Prepared & Analyzed: 04-Oct-10				
Total Suspended Solids	86.0		mg/l	10.0	91.3		94	90-110		
LCS (1020778-BS2)						Prepared & Analyzed: 04-Oct-10				
Total Suspended Solids	88.0		mg/l	10.0	91.3		96	90-110		

Notes and Definitions

HT2	This sample was received outside the EPA recommended holding time for the analysis specified.
QC2	Analyte out of acceptance range in QC spike but no reportable concentration present in sample.
QM7	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
QM9	The spike recovery for this QC sample is outside the established control limits. The sample results for the QC batch were accepted based on LCS/LCSD or SRM recoveries within the control limits.
QR2	The RPD result exceeded the QC control limits; however, both percent recoveries were acceptable. Sample results for the QC batch were accepted based on percent recoveries and completeness of QC data.
QR5	RPD out of acceptance range.
BRL	Below Reporting Limit - Analyte NOT DETECTED at or above the reporting limit
dry	Sample results reported on a dry weight basis
NR	Not Reported
RPD	Relative Percent Difference
J	Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag).
ClHT	The method for residual chlorine indicates that samples should be analyzed immediately. 40 CFR 136 specifies a holding time of 15 minutes from sampling to analysis. Therefore all aqueous residual chlorine samples not analyzed in the field are considered out of hold time at the time of sample receipt.

A plus sign (+) in the Method Reference column indicates the method is not accredited by NELAC.

Interpretation of Total Petroleum Hydrocarbon Report

Petroleum identification is determined by comparing the GC fingerprint obtained from the sample with a library of GC fingerprints obtained from analyses of various petroleum products. Possible match categories are as follows:

Gasoline - includes regular, unleaded, premium, etc.
Fuel Oil #2 - includes home heating oil, #2 fuel oil, and diesel
Fuel Oil #4 - includes #4 fuel oil
Fuel Oil #6 - includes #6 fuel oil and bunker "C" oil
Motor Oil - includes virgin and waste automobile oil
Ligroin - includes mineral spirits, petroleum naphtha, vm&p naphtha
Aviation Fuel - includes kerosene, Jet A and JP-4
Other Oil - includes lubricating and cutting oil, and silicon oil

At times, the unidentified petroleum product is quantified using a calibration that most closely approximates the distribution of compounds in the sample. When this occurs, the result is qualified as *TPH (Calculated as).

Laboratory Control Sample (LCS): A known matrix spiked with compound(s) representative of the target analytes, which is used to document laboratory performance.

Matrix Duplicate: An intra-laboratory split sample which is used to document the precision of a method in a given sample matrix.

Matrix Spike: An aliquot of a sample spiked with a known concentration of target analyte(s). The spiking occurs prior to sample preparation and analysis. A matrix spike is used to document the bias of a method in a given sample matrix.

Method Blank: An analyte-free matrix to which all reagents are added in the same volumes or proportions as used in sample processing. The method blank should be carried through the complete sample preparation and analytical procedure. The method blank is used to document contamination resulting from the analytical process.

Method Detection Limit (MDL): The minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero and is determined from analysis of a sample in a given matrix type containing the analyte.

Reportable Detection Limit (RDL): The lowest concentration that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operating conditions. For many analytes the RDL analyte concentration is selected as the lowest non-zero standard in the calibration curve. While the RDL is approximately 5 to 10 times the MDL, the RDL for each sample takes into account the sample volume/weight, extract/digestate volume, cleanup procedures and, if applicable, dry weight correction. Sample RDLs are highly matrix-dependent.

Surrogate: An organic compound which is similar to the target analyte(s) in chemical composition and behavior in the analytical process, but which is not normally found in environmental samples. These compounds are spiked into all blanks, standards, and samples prior to analysis. Percent recoveries are calculated for each surrogate.

Continuing Calibration Verification: The calibration relationship established during the initial calibration must be verified at periodic

Validated by:
Hanibal C. Tayeh, Ph.D.
June O'Connor
Kimberly Wisk

MassDEP Analytical Protocol Certification Form

Laboratory Name: Spectrum Analytical, Inc.	**Project #:** [none]
Project Location: Honey Farms - Charlton, MA	**RTN:**
This form provides certifications for the following data set:	SB18811-01 through SB18811-02
Matrices: Deionized Water Ground Water	

CAM Protocol

✓ 8260 VOC CAM II A	✓ 7470/7471 Hg CAM III B	MassDEP VPH CAM IV A	8081 Pesticides CAM V B	✓ 7196 Hex Cr CAM VI B	MassDEP APH CAM IX A
✓ 8270 SVOC CAM II B	7010 Metals CAM III C	MassDEP EPH CAM IV B	8151 Herbicides CAM V C	8330 Explosives CAM VIII A	TO-15 VOC CAM IX B
6010 Metals CAM III A	6020 Metals CAM III D	8082 PCB CAM V A	9014 Total Cyanide/PAC CAM VI A	6860 Perchlorate CAM VIII B	

Affirmative responses to questions A through F are 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 No
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	✓ Yes No
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 No
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 No
E	a. VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s)? b. APH and TO-15 Methods only: Was the complete analyte list reported for each method?	Yes No Yes No
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 No

Responses to questions G, H and I below are required for "Presumptive Certainty" status

G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	✓ Yes No

***Data User Note:* Data that achieve "Presumptive Certainty" status may not necessarily meet the data usability and representativeness requirements described in 310 CMR 40. 1056 (2)(k) and WSC-07-350.**

H	Were all QC performance standards specified in the CAM protocol(s) achieved?	Yes ✓ No
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	✓ Yes No

All negative responses are addressed in a case narrative on the cover page of this report.

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

Hanibal C. Tayeh, Ph.D.
President/Laboratory Director
Date: 10/21/2010

SB 18811 Dy

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

CHAIN OF CUSTODY RECORD

Page 1 of 1

Special Handling:
- ☒ Standard TAT - 7 to 10 business days
- ☐ Rush TAT - Date Needed: _____
- All TATs subject to laboratory approval.
- Min. 24-hour notification needed for rushes.
- Samples disposed of after 60 days unless otherwise instructed.

Report To: WILLIAMSON ENVIRONMOUTAL
2 SHAKER RD.
SHIRLEY MA
BUILDING A
Telephone #:
Project Mgr. JOE LESCA

Invoice To: HONEY FARMS
505 PLEASANT ST.
WORCESTER MA
P.O. No.: RQN:

Project No.:
Site Name: HONEY FARMS
Location: CHARLTON State: MA
Sampler(s): MP

1=Na_2S2O_3 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid 7=CH_3OH
8= $NaHSO_4$ 9= _____ 10= _____ 11= _____

List preservative code below:

QA/QC Reporting Notes:
(check as needed)

DW=Drinking Water GW=Groundwater WW=Wastewater
O=Oil SW= Surface Water SO=Soil SL=Sludge A=Air
X1= _____ X2= _____ X3= _____

G=Grab C=Composite

Lab Id:	Sample Id:	Date:	Time:	Type	Matrix	Containers: # of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	Analyses: SEE ATTACHED							
18811-01	TS-INF	9-28-10	4:00	G	GW	3	3		3	✓							
↓ 02	TB	9-28-10			DI	2											

☐ Provide MA DEP MCP CAM Report
☐ Provide CT DPH RCP Report

QA/QC Reporting Level
☐ Standard ☐ No QC
☐ Other _____

State specific reporting standards:
_____

Relinquished by:	Received by:	Date:	Time:	Temp°C
		9/29/10	8:00	5.1

☐ EDD Format _____
☐ E-mail to labdata@williamsonenv.com

☐ Ambient ☑ Iced ☐ Refrigerated ☐ Fridge temp ____ °C ☐ Freezer temp ____ °C

WORK ORDER REQUEST FORM

Project: Honey Farms

Location: 36-38 Worcester Road

Charlton, Massachusetts

Billing: T&M

DATE REQUESTED 9/16/2010
REQUESTED BY JR
DATE COMPLETED
WORK COMP. BY

subcontractor

To be completed by

Task No.	21J	Description
	11.1.1.1	TRAVEL (1-50 mi radius)
	11.1.1.2	TRAVEL (50-100 mi radius)
	11.1.2.1	WELL GAUGING (1-10 wells)
	11.1.3.1	PURGE & SAMPLE (1-10 wells)
	11.1.2.2	WELL GAUGING (11-25 wells)
	11.1.3.2	PURGE & SAMPLE (11-25 wells)
	11.1.5	HAND BAIL LNAPL
	11.1.6	FIELD FILTRATION
	11.1.7	DO, temp
	9.7.1.1.1	SURVEY 1/2 day (1-50 mi radius)
	9.7.1.1.2	SURVEY 1/2 day (51-100 mi radius)
X		**RGP Sampling**

Task No.	Description
1	Collected ground water treatment system influent sample for RGP parameters
	TSS 160.2/TRC 330.4/Hexavalent Chromium 7196A
	TPH 1664
	CN 335.3
	8260 + Oxygenates, Dioxane, EDB
	8270
	PCB 608
	Metals 220.7 Sb, As, Cd, Cr, Cu, Fe, Pb, Ni, Se, Ag, Z Run By 200.7 Per last request
	Mercury 245.1

Send samples to: Spectrum
TAT: standard

Address	Sample						
Treatment Influent	x						

Notes completed & submitted to _____ on _____ Notes reviewed by _____

Report Date:
08-Nov-10 13:48

☑ Final Report
☐ Re-Issued Report
☐ Revised Report

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

Laboratory Report

Williamson Environmental, LLC
2 Shaker Road, Building A
Shirley, MA 01464
Attn: Joe Resca

Project: Honey Farms - Charlton, MA
Project #: [none]

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
SB20290-01	TS-INF	Ground Water	27-Oct-10 15:00	28-Oct-10 15:50

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. These results relate only to the sample(s) as received.
All applicable NELAC requirements have been met.

Massachusetts # M-MA138/MA1110
Connecticut # PH-0777
Florida # E87600/E87936
Maine # MA138
New Hampshire # 2538
New Jersey # MA011/MA012
New York # 11393/11840
Pennsylvania # 68-04426/68-02924
Rhode Island # 98
USDA # S-51435

Authorized by:

Hanibal C. Tayeh, Ph.D.
President/Laboratory Director

Technical Reviewer's Initial:

Spectrum Analytical holds certification in the State of Massachusetts for the analytes as indicated with an X in the "Cert." column within this report. Please note that the State of Massachusetts does not offer certification for all analytes.
Please note that this report contains 5 pages of analytical data plus Chain of Custody document(s). When the Laboratory Report is indicated as revised, this report supersedes any previously dated reports for the laboratory ID(s) referenced above. Where this report identifies subcontracted analyses, copies of the subcontractor's test report are available upon request. This report may not be reproduced, except in full, without written approval from Spectrum Analytical, Inc.

Spectrum Analytical, Inc. is a NELAC accredited laboratory organization and meets NELAC testing standards. Use of the NELAC logo however does not insure that Spectrum is currently accredited for the specific method or analyte indicated. Please refer to our "Quality" web page at www.spectrum-analytical.com for a full listing of our current certifications and fields of accreditation. States in which Spectrum Analytical, Inc. holds NELAC certification are New York, New Hampshire, New Jersey and Florida. All analytical work for Volatile Organic and Air analysis are transferred to and conducted at our 830 Silver Street location (NY-11840, FL-E87936 and NJ-MA012).

CASE NARRATIVE:

The samples were received 3.6 degrees Celsius, please refer to the Chain of Custody for details specific to temperature upon receipt. An infrared thermometer with a tolerance of +/- 2.0 degrees Celsius was used immediately upon receipt of the samples.

If a Matrix Spike (MS), Matrix Spike Duplicate (MSD) or Duplicate (DUP) was not requested on the Chain of Custody, method criteria may have been fulfilled with a source sample not of this Sample Delivery Group.

See below for any non-conformances and issues relating to quality control samples and/or sample analysis/matrix.

EPA 300.0

Samples:

SB20290-01 *TS-INF*

Sample dilution required for high concentration of target analytes to be within the instrument calibration range.

Chloride

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
TS-INF SB20290-01	[none]	Ground Water	27-Oct-10 15:00	28-Oct-10

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Analyst*	*Batch*	*Cert.*
General Chemistry Parameters												
16887-00-6	Chloride	580	GS1	mg/l	10.0	10	EPA 300.0	04-Nov-10	04-Nov-10	Jolan	1023195	X

General Chemistry Parameters - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1023195 - General Preparation										
Blank (1023195-BLK1)						Prepared & Analyzed: 04-Nov-10				
Chloride	BRL		mg/l	1.00						
Calibration Blank (1023195-CCB1)						Prepared & Analyzed: 04-Nov-10				
Chloride	0.230		mg/l							
Calibration Blank (1023195-CCB2)						Prepared & Analyzed: 04-Nov-10				
Chloride	0.210		mg/l							
Calibration Blank (1023195-CCB3)						Prepared & Analyzed: 04-Nov-10				
Chloride	0.210		mg/l							
Calibration Blank (1023195-CCB4)						Prepared: 04-Nov-10 Analyzed: 05-Nov-10				
Chloride	0.180		mg/l							
Calibration Check (1023195-CCV1)						Prepared & Analyzed: 04-Nov-10				
Chloride	20.9		mg/l		20.0		105	90-110		
Calibration Check (1023195-CCV2)						Prepared & Analyzed: 04-Nov-10				
Chloride	4.08		mg/l		4.00		102	90-110		
Calibration Check (1023195-CCV3)						Prepared & Analyzed: 04-Nov-10				
Chloride	20.9		mg/l		20.0		105	90-110		
Calibration Check (1023195-CCV4)						Prepared & Analyzed: 04-Nov-10				
Chloride	4.11		mg/l		4.00		103	90-110		
Calibration Check (1023195-CCV5)						Prepared & Analyzed: 04-Nov-10				
Chloride	21.0		mg/l		20.0		105	90-110		
Calibration Check (1023195-CCV6)						Prepared & Analyzed: 04-Nov-10				
Chloride	4.16		mg/l		4.00		104	90-110		
Calibration Check (1023195-CCV7)						Prepared & Analyzed: 04-Nov-10				
Chloride	21.0		mg/l		20.0		105	90-110		
Calibration Check (1023195-CCV8)						Prepared: 04-Nov-10 Analyzed: 05-Nov-10				
Chloride	4.14		mg/l		4.00		104	90-110		
Reference (1023195-SRM1)						Prepared & Analyzed: 04-Nov-10				
Chloride	27.0		mg/l	1.00	25.0		108	90-110		
Reference (1023195-SRM2)						Prepared & Analyzed: 04-Nov-10				
Chloride	5.18		mg/l	1.00	5.00		104	90-110		

Notes and Definitions

GS1	Sample dilution required for high concentration of target analytes to be within the instrument calibration range.
BRL	Below Reporting Limit - Analyte NOT DETECTED at or above the reporting limit
dry	Sample results reported on a dry weight basis
NR	Not Reported
RPD	Relative Percent Difference

A plus sign (+) in the Method Reference column indicates the method is not accredited by NELAC.

Laboratory Control Sample (LCS): A known matrix spiked with compound(s) representative of the target analytes, which is used to document laboratory performance.

Matrix Duplicate: An intra-laboratory split sample which is used to document the precision of a method in a given sample matrix.

Matrix Spike: An aliquot of a sample spiked with a known concentration of target analyte(s). The spiking occurs prior to sample preparation and analysis. A matrix spike is used to document the bias of a method in a given sample matrix.

Method Blank: An analyte-free matrix to which all reagents are added in the same volumes or proportions as used in sample processing. The method blank should be carried through the complete sample preparation and analytical procedure. The method blank is used to document contamination resulting from the analytical process.

Method Detection Limit (MDL): The minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero and is determined from analysis of a sample in a given matrix type containing the analyte.

Reportable Detection Limit (RDL): The lowest concentration that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operating conditions. For many analytes the RDL analyte concentration is selected as the lowest non-zero standard in the calibration curve. While the RDL is approximately 5 to 10 times the MDL, the RDL for each sample takes into account the sample volume/weight, extract/digestate volume, cleanup procedures and, if applicable, dry weight correction. Sample RDLs are highly matrix-dependent.

Surrogate: An organic compound which is similar to the target analyte(s) in chemical composition and behavior in the analytical process, but which is not normally found in environmental samples. These compounds are spiked into all blanks, standards, and samples prior to analysis. Percent recoveries are calculated for each surrogate.

Continuing Calibration Verification: The calibration relationship established during the initial calibration must be verified at periodic

Validated by:
Hanibal C. Tayeh, Ph.D.
Kimberly Wisk

SB 20290

SPECTRUM ANALYTICAL, INC.
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CHAIN OF CUSTODY RECORD

Page 1 of 1

Special Handling:
- [x] Standard TAT - 7 to 10 business days
- [ ] Rush TAT - Date Needed: _____
- All TATs subject to laboratory approval. Min. 24-hour notification needed for rushes.
- Samples disposed of after 60 days unless otherwise instructed.

Report To: WILLIAMSON ENVIRONMENTAL
2 SHAKER RD.
BUILDING A
SHIRLEY MA
Project Mgr.: JOE RESCA

Invoice To: SAME

P.O. No.: _____ RQN: _____

Project No.: _____
Site Name: HONEY FARMS
Location: CHARLTON State: MA
Sampler(s): MP

1=$Na_2S_2O_3$ 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid
7=CH_3OH 8= $NaHSO_4$ 9=Ice 10=_____

DW=Drinking Water GW=Groundwater WW=Wastewater
O=Oil SW= Surface Water SO=Soil SL=Sludge A=Air
X1=_____ X2=_____ X3=_____

G=Grab C=Composite

Lab Id:	Sample Id:	Date:	Time:	Type	Matrix	Preservative	Containers: # of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	Analyses: CHLORIDE VIA 300.0 S.M.	QA Reporting Notes: (check if needed)
2029001	TS-INF	10-27-10	3:00	G	GW	9				1	✓	
												collection date changed due to submittal date

QA Reporting Notes (check if needed):
- [ ] Provide MA DEP MCP CAM Report
- [ ] Provide CT DPH RCP Report

QA/QC Reporting Level
- [ ] Standard
- [ ] No QC
- [x] Other _____

State specific reporting standards: _____

- [ ] Fax results when available to (_____) _____
- [x] E-mail to labdata@williamsonenv.com
EDD Format _____

Condition upon receipt: [x] Iced [ ] Ambient [x] °C 3.6

Relinquished by:	Received by:	Date:	Time:
		10/28/10	15:50