Williamson Environmental LLC

280 Ayer Road, Harvard, MA 01451 • Office: (978) 862-0110 • Fax: (978) 862-0111

April 3, 2009

US Environmental Protection Agency
RGP – NOI Processing
Municipal Assistance Unit (CMU)
1 Congress Street, Suite 1100
Boston, MA 02114-2023
Attn: Victor Alvarez

Re: Notice of Intent for Remediation General Permit (RGP)
Honey Farms, Inc.
36 – 38 Worcester Road
Charlton, MA
MA DEP RTN 2-15122

To Whom It May Concern:

On behalf of Honey Farms Inc., Williamson Environmental LLC (Williamson Environmental) has prepared this Notice of Intent (NOI) for discharge at the above referenced location.

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

Sincerely,
Williamson Environmental LLC

Thomas Williamson Jr.
2009.04.03 14:09:00 -04'00'

Thomas Williamson, Jr.
President

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

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

<table>
<tr><td colspan="2">a) Name of facility/site:
HONEY FARMS, Inc. Store No. 88</td><td colspan="4">Facility/site address:</td></tr>
<tr><td>Location of facility/site:
longitude: 71.99 latitude: 42.15</td><td>Facility SIC code(s):
5541</td><td colspan="4">Street:
36 - 38 WORCESTER ROAD</td></tr>
<tr><td colspan="2">b) Name of facility/site owner: HONEY FARMS, INC.</td><td colspan="4">Town: CHARLTON</td></tr>
<tr><td colspan="2">Email address of owner:</td><td colspan="2">State:
MA</td><td>Zip:
01507</td><td>County:
WORCESTER</td></tr>
<tr><td colspan="2">Telephone no.of facility/site owner: (508) 248-4864</td><td colspan="4"></td></tr>
<tr><td colspan="2">Fax no. of facility/site owner:</td><td colspan="4" rowspan="2">Owner is (check one): 1. Federal ____ 2. State/Tribal ____
3. Private ✔ 4. other, if so, describe:</td></tr>
<tr><td colspan="2">Address of owner (if different from site):</td></tr>
<tr><td colspan="6">Street: 505 PLEASANT STREET</td></tr>
<tr><td>Town: WORCESTER</td><td>State: MA</td><td>Zip: 01609</td><td colspan="3">County: WORCESTER</td></tr>
<tr><td rowspan="2">c) Legal name of operator:
WILLIAMSON ENVIRONMENTAL LLC</td><td colspan="5">Operator telephone no: (978) 862-0110</td></tr>
<tr><td colspan="2">Operator fax no.: (978) 862-0111</td><td colspan="3">Operator email:
heidir@williamsonenv.com</td></tr>
<tr><td colspan="6">Operator contact name and title: Thomas Williamson, Jr. LSP</td></tr>
</table>

Address of **operator** (if different from owner):	Street: 280 Ayer Road		
Town: Harvard	State: MA	Zip: 01451	County: Worcester

d) Check "yes" or "no" for the following:
1. Has a prior NPDES permit exclusion been granted for the discharge? Yes ✔ No ___, if "yes," number: MA-051-055
2. Has a prior NPDES application (Form 1 & 2C) ever been filed for the discharge? Yes ___ No ✔, if "yes," date and tracking #:
3. Is the discharge a "new discharge"as defined by 40 CFR 122.2? Yes ___ No ✔
4. For sites in Massachusetts, is the discharge covered under the MA Contingency Plan (MCP) and exempt from state permitting? Yes ✔ No ___

e) Is site/facility subject to any State permitting or other action which is causing the generation of discharge? Yes ✔ No ___
If "yes," please list:
1. site identification # assigned by the state of NH or MA: RTN 2-15122
2. permit or license # assigned:
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 storm water general permit? Y ___ N ✔, if Y, number:
2. phase I or II construction storm water general permit? Y ___ N ✔,
if Y, number:
3. individual NPDES permit? Y ___ N ✔, if Y, number:
4. any other water quality related permit? Y ___ N ✔, if Y, number:

2. Discharge information. Please provide information about the discharge, (attaching additional sheets as needed) 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 Average flow 0.01 Is maximum flow a **design value**? Y ___ N ✔ For average flow, include the units and appropriate notation if this value is a design value or estimate if not available. System discharged 0.65 GPM in Jan 2009. Design flow is

3) Latitude and longitude of each discharge within 100 feet: pt.1:long. 71. lat. 42. ; pt.2: long._____ lat._____; pt.3: long._____ lat._____;
pt.4:long._____ lat._____; pt.5: long._____ lat._____; pt.6:long._____ lat._____; pt.7: long._____ lat._____; pt.8:long._____ lat._____; etc.

4) If hydrostatic testing, total volume of the discharge (gals):	5) Is the discharge intermittent ✔ or seasonal ____? Is discharge ongoing Yes ✔ No ____?
c) Expected dates of discharge (mm/dd/yy): start 06/15/05 end 06/15/15	
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. In order to complete this section, the applicant will need to take a minimum of one sample of the untreated water and have it analyzed for **all** of the parameters listed in Appendix III. Historical data, (i.e., data taken no more than 2 years prior to the effective date of the permit) may be used if obtained pursuant to: i. Massachusetts' regulations 310 CMR 40.0000, the Massachusetts Contingency Plan ("Chapter 21E"); ii. New Hampshire's Title 50 RSA 485-A: Water Pollution and Waste Disposal or Title 50 RSA 485-C: Groundwater Protection Act; or iii. an EPA permit exclusion letter issued pursuant to 40 CFR 122.3, provided the data was analyzed with test methods that meet the requirements of this permit. Otherwise, a new sample shall be taken and analyzed.

a) Based on the analysis of the sample(s) of the untreated influent, the applicant must check the box of the sub-categories that the potential discharge falls within.

Gasoline Only ✔	VOC Only ☐	Primarily Metals ☐	Urban Fill Sites ☐	Contaminated Sumps ☐	Mixed Contaminants ☐	Aquifer Testing ☐
Fuel Oils (and Other Oils) only ☐	VOC with Other Contaminants ☐	Petroleum with Other Contaminants ☐	Listed Contaminated Sites ☐	Contaminated Dredge Condensates ☐	Hydrostatic Testing of Pipelines/Tanks ☐	Well Development or Rehabilitation ☐

b) Based on the analysis of the untreated influent, the applicant must indicate whether each listed chemical is **believed present** or **believed absent** in the potential discharge. Attach additional sheets as needed.

PARAMETER	**Believe Absent**	**Believe Present**	**# of Samples (1 min-imum)**	**Type of Sample (e.g., grab)**	**Analytical Method Used (method #)**	**Minimum Level (ML) of Test Method**	**Maximum daily value**		**Avg. daily value**	
							concentration (ug/l)	**mass (kg)**	**concentration (ug/l)**	**mass (kg)**
1. Total Suspended Solids	☐	✔	1	grab	2540D	5000	6,000			
2. Total Residual Chlorine	✔	☐	1	grab	8167	200	<200			
3. Total Petroleum Hydrocarbons	✔	☐	1	grab	1664	1,000	<1000			
4. Cyanide	✔	☐	1	grab	335.4	10.0	<10.0			
5. Benzene	✔	☐	1	grab	8260B	1.0	<1.0			
6. Toluene	✔	☐	1	grab	8260B	1.0	<1.0			
7. Ethylbenzene	✔	☐	1	grab	8260B	1.0	<1.0			
8. (m,p,o) Xylenes	✔	☐	1	grab	8260B	2.0	<2.0			
9. Total BTEX[4]	✔	☐	1	grab	8260B	---	---			

[4] BTEX = Sum of Benzene, Toluene, Ethylbenzene, total Xylenes.

PARAMETER	Believe Absent	Believe Present	# of Samples (1 min-imum)	Type of Sample (e.g., grab)	Analytical Method Used (method #)	Minimum Level (ML) of Test Method	Maximum daily value		Avg. daily value	
							concentration (ug/l)	mass (kg)	concentration (ug/l)	mass (kg)
10. Ethylene Dibromide (1,2- Dibromo-methane)	✔		1	grab	8260B	0.5	<0.5			
11. Methyl-tert-Butyl Ether (MtBE)		✔	1	grab	8260B	1.0	34.8			
12. tert-Butyl Alcohol (TBA)	✔		1	grab	8260B	10.0	<10.0			
13. tert-Amyl Methyl Ether (TAME)	✔		1	grab	8260B	1.0	<1.0			
14. Naphthalene	✔		1	grab	8260B	1.0	<1.0			
15. Carbon Tetra-chloride	✔		1	grab	8260B	1.0	<1.0			
16. 1,4 Dichlorobenzene	✔		1	grab	8260B	1.0	<1.0			
17. 1,2 Dichlorobenzene	✔		1	grab	8260B	1.0	<1.0			
18. 1,3 Dichlorobenzene	✔		1	grab	8260B	1.0	<1.0			
19. 1,1 Dichloroethane	✔		1	grab	8260B	1.0	<1.0			
20. 1,2 Dichloroethane	✔		1	grab	8260B	1.0	<1.0			
21. 1,1 Dichloroethylene	✔		1	grab	8260B	1.0	<1.0			
22. cis-1,2 Dichloro-ethylene	✔		1	grab	8260B	1.0	<1.0			
23. Dichloromethane (Methylene Chloride)	✔		1	grab	8260B	5.0	<5.0			
24. Tetrachloroethylene	✔		1	grab	8260B	1.0	<1.0			

PARAMETER	Believe Absent	Believe Present	# of Samples (1 min-imum)	Type of Sample (e.g., grab)	Analytical Method Used (method #)	Minimum Level (ML) of Test Method	Maximum daily value		Avg. daily Value	
							concentration (ug/l)	mass (kg)	concentration (ug/l)	mass (kg)
25. 1,1,1 Trichloroethane	✔		1	grab	8260B	1.0	<1.0			
26. 1,1,2 Trichloroethane	✔		1	grab	8260B	1.0	<1.0			
27. Trichloroethylene	✔		1	grab	8260B	1.0	<1.0			
28. Vinyl Chloride	✔		1	grab	8260B	1.0	<1.0			
29. Acetone	✔		1	grab	8260B	10.0	<10.0			
30. 1,4 Dioxane	✔		1	grab	8260B	20	<20			
31. Total Phenols	✔		1	grab	8270C	5.6	<5.6			
32. Pentachlorophenol	✔		1	grab	8270C	22.2	<22.2			
33. Total Phthalates [5] (Phthalate esthers)	✔		1	grab	8270C	ND	ND			
34. Bis (2-Ethylhexyl) Phthalate [Di-(ethylhexyl) Phthalate]	✔		1	grab	8270C	5.6	<5.6			
35. Total Group I Polycyclic Aromatic Hydrocarbons (PAH)	✔		1	grab	8270C	---	---			
a. Benzo(a) Anthracene	✔		1	grab	8270C	5.6	<5.6			
b. Benzo(a) Pyrene	✔		1	grab	8270C	5.6	<5.6			
c. Benzo(b)Fluoranthene	✔		1	grab	8270C	5.6	<5.6			
d. Benzo(k) Fluoranthene	✔		1	grab	8270C	5.6	<5.6			
e. Chrysene	✔		1	grab	8270C	5.6	<5.6			

[5] The sum of individual phthalate compounds.

PARAMETER	Believe Absent	Believe Present	# of Samples (1 min-imum)	Type of Sample (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)
f. Dibenzo(a,h) anthracene	✔		1	grab	8270C	5.6	<5.6			
g. Indeno(1,2,3-cd) Pyrene	✔		1	grab	8270C	5.6	<5.6			
36. Total Group II Polycyclic Aromatic Hydrocarbons (PAH)	✔		1	grab	8270C	---	---			
h. Acenaphthene	✔		1	grab	8270C	5.6	<5.6			
i. Acenaphthylene	✔		1	grab	8270C	5.6	<5.6			
j. Anthracene	✔		1	grab	8270C	5.6	<5.6			
k. Benzo(ghi) Perylene	✔		1	grab	8270C	5.6	<5.6			
l. Fluoranthene	✔		1	grab	8270C	5.6	<5.6			
m. Fluorene	✔		1	grab	8270C	5.6	<5.6			
n. Naphthalene-	✔		1	grab	8270C	5.6	<5.6			
o. Phenanthrene	✔		1	grab	8270C	5.6	<5.6			
p. Pyrene	✔		1	grab	8270C	5.6	<5.6			
37. Total Polychlorinated Biphenyls (PCBs)	✔		1	grab	608	0.07	<0.07			
***3*8. Antimony**	✔		1	grab	200.7	6.0	<6.0			
39. Arsenic	✔		1	grab	200.7	4.0	<4.0			
40. Cadmium	✔		1	grab	200.7	2.5	<2.5			
41. Chromium III	✔		1	grab	200.7	5.0	<5.0			
42. Chromium VI	✔		1	grab	7196A	5.0	<5.0			

PARAMETER	Believe Absent	Believe Present	# of Samples (1 min-imum)	Type of Sample (e.g., grab)	Analytical Method Used (method #)	Minimum Level (ML) of Test Method	Maximum daily value		Avg. daily value	
							concentration (ug/l)	**mass** (kg)	**concentration** (ug/l)	**mass** (kg)
43. Copper	✔		1	grab	200.7	5.0	<5.0			
44. Lead	✔		1	grab	200.7	7.5	<7.5			
45. Mercury	✔		1	grab	245.1	0.2	<0.2			
46. Nickel		✔	1	grab	200.7	5.0	14.2			
47. Selenium	✔		1	grab	200.7	15	<15			
48. Silver	✔		1	grab	200.7	5.0	<5.0			
49. Zinc		✔	1	grab	200.7	5.0	56.8			
50. Iron		✔	1	grab	200.7	15	326			
Other (describe):										

c) For discharges where **metals** are believed present, please fill out the following:

Step 1: Do any of the metals in the influent have a **reasonable potential** to exceed the effluent limits in Appendix III (i.e., the limits set at zero to five dilutions)? Y___ N_✔_	If yes, which metals?
Step 2: For any metals which have **reasonable potential** to 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? Metals:_____ DF: _____	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 "Yes," list which metals:

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

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

See attached schematic. The ground water pump and treat system actively operating at the site as a remedial action under MA DEP RTN 2-15122 includes pneumatic pumps controlled by an air compressor. Ground water is pumped into an equalization tank then pumped through two (2) 200-pound GAC filters, and subsequently discharged to a wetland area associated with Cady Brook.

b) Identify each applicable treatment unit (check all that apply):	Frac. tank ☐	Air stripper ☐	Oil/water separator ☐	Equalization tanks ✔	Bag filter ✔	GAC filter ✔
	Chlorination ☐	Dechlorination ☐	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 ☐	Within facility ☐	Storm drain ✔	River/brook ✔	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 inf 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? Yes ☐ No ✔ If yes, for which pollutant(s)?

Is there a TMDL? Yes ☐ No ✔ If yes, for which pollutant(s)?

6. Results of Consultation with Federal Services: Please provide the following information according to requirements of Part I.B.4 and Appendices II and VII.

a) Are any listed threatened or endangered species, or designated critical habitat, in proximity to the discharge? Yes ☐ No ✔
Has any consultation with the federal services been completed ? ☐ No ✔ or is consultation underway? Yes ☐ No ✔
What were the results of the consultation with the U.S. Fish and Wildlife Service and/or National Marine Fisheries Service (~~check~~ one):
a "no jeopardy" opinion? ☐ or written concurrence ☐ on a finding that the discharges are not likely to adversely affect any endangered species or critical habitat?

b) Are any historic properties listed or eligible for listing on the National Register of Historic Places located on the facility or site or in proximity to the discharge?
Yes ☐ No ✔ Have any state or tribal historic preservation officer been consulted in this determination (Massachusetts only)? Yes ☐ No ✔

7. Supplemental information. :

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

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

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

Facility/Site Name: HONEY FARMS

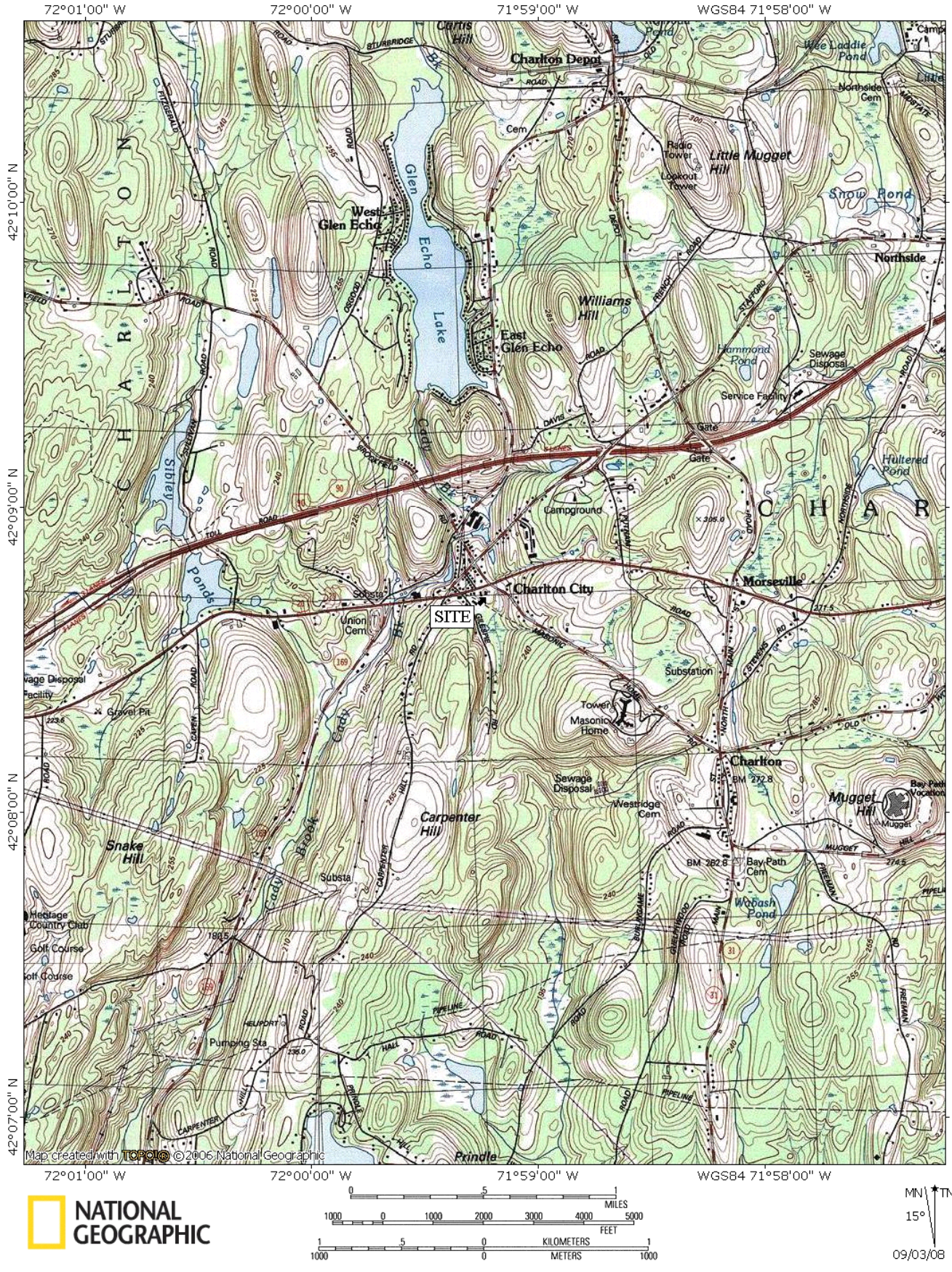
Operator signature: Thomas K. Williamson Jr.

Title: President, Williamson Environmental LLC

Date: 4/3/09

President, Williamson Environmental LLC

HONEY FARMS



NATIONAL GEOGRAPHIC

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

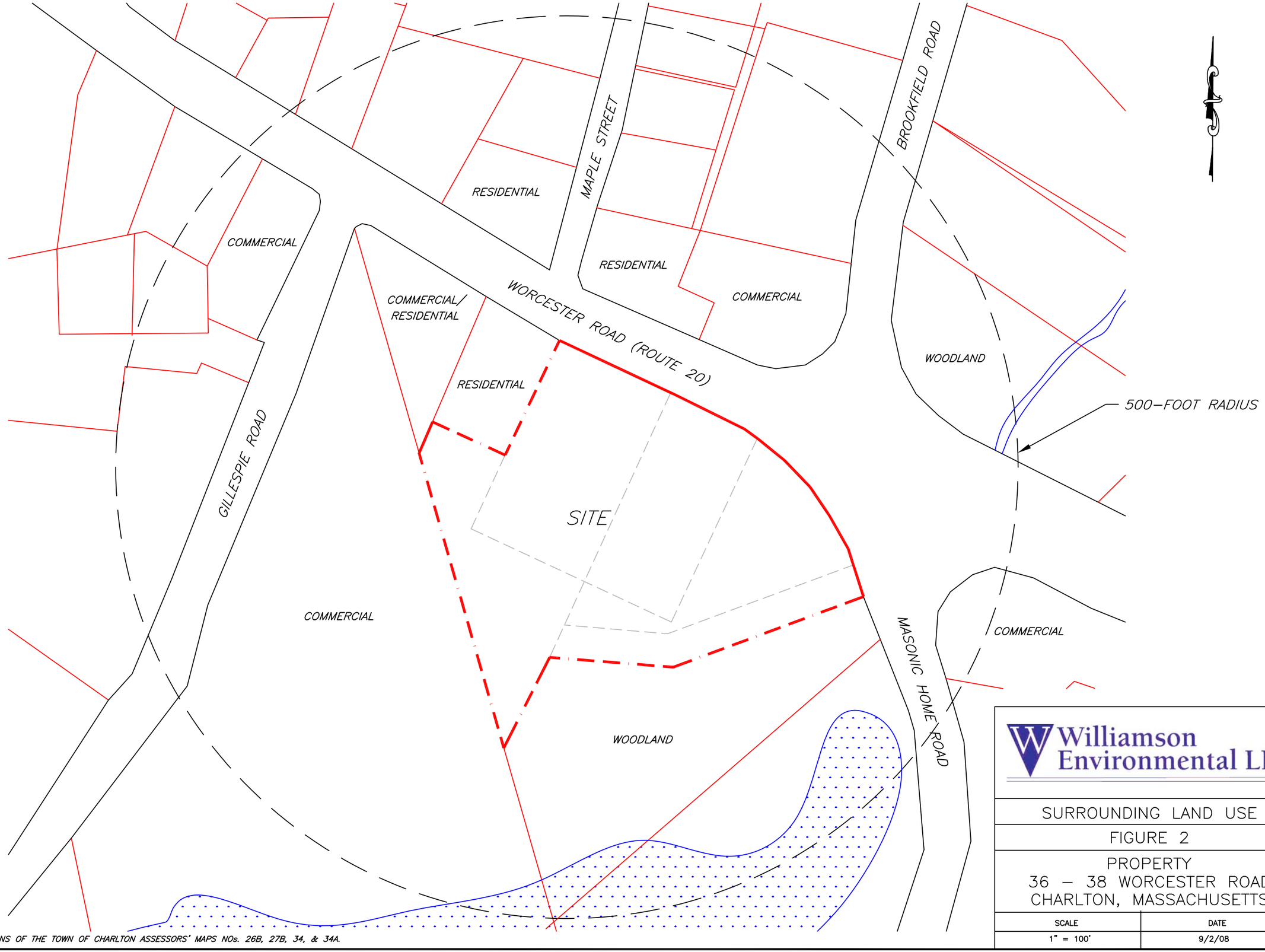


FIGURE CREATED FROM PORTIONS OF THE TOWN OF CHARLTON ASSESSORS' MAPS NOs. 26B, 27B, 34, & 34A.

Williamson Environmental LLC

SURROUNDING LAND USE

FIGURE 2

PROPERTY
36 – 38 WORCESTER ROAD
CHARLTON, MASSACHUSETTS

SCALE	DATE
1" = 100'	9/2/08

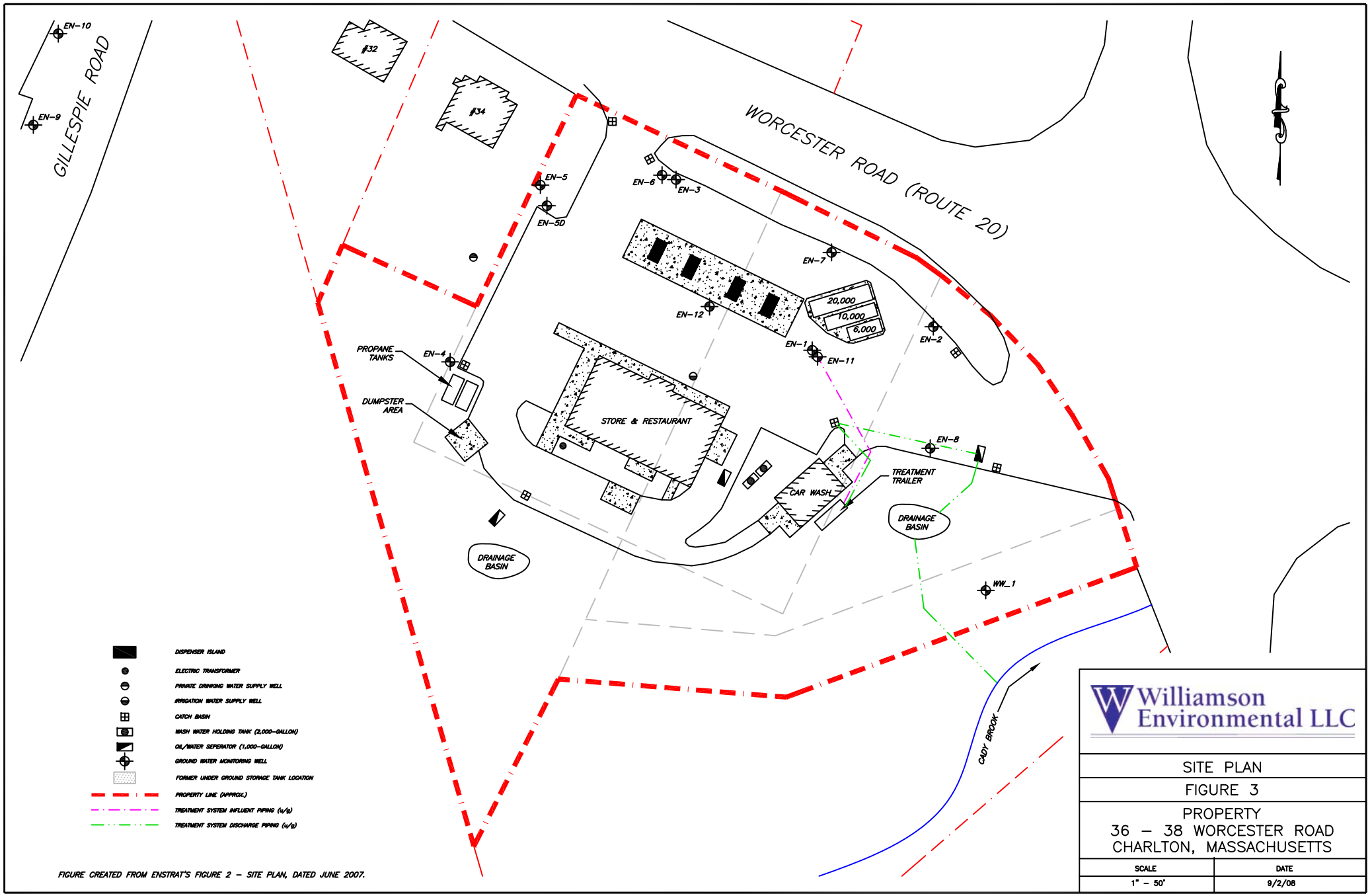


FIGURE CREATED FROM ENSTRAT'S FIGURE 2 – SITE PLAN, DATED JUNE 2007.

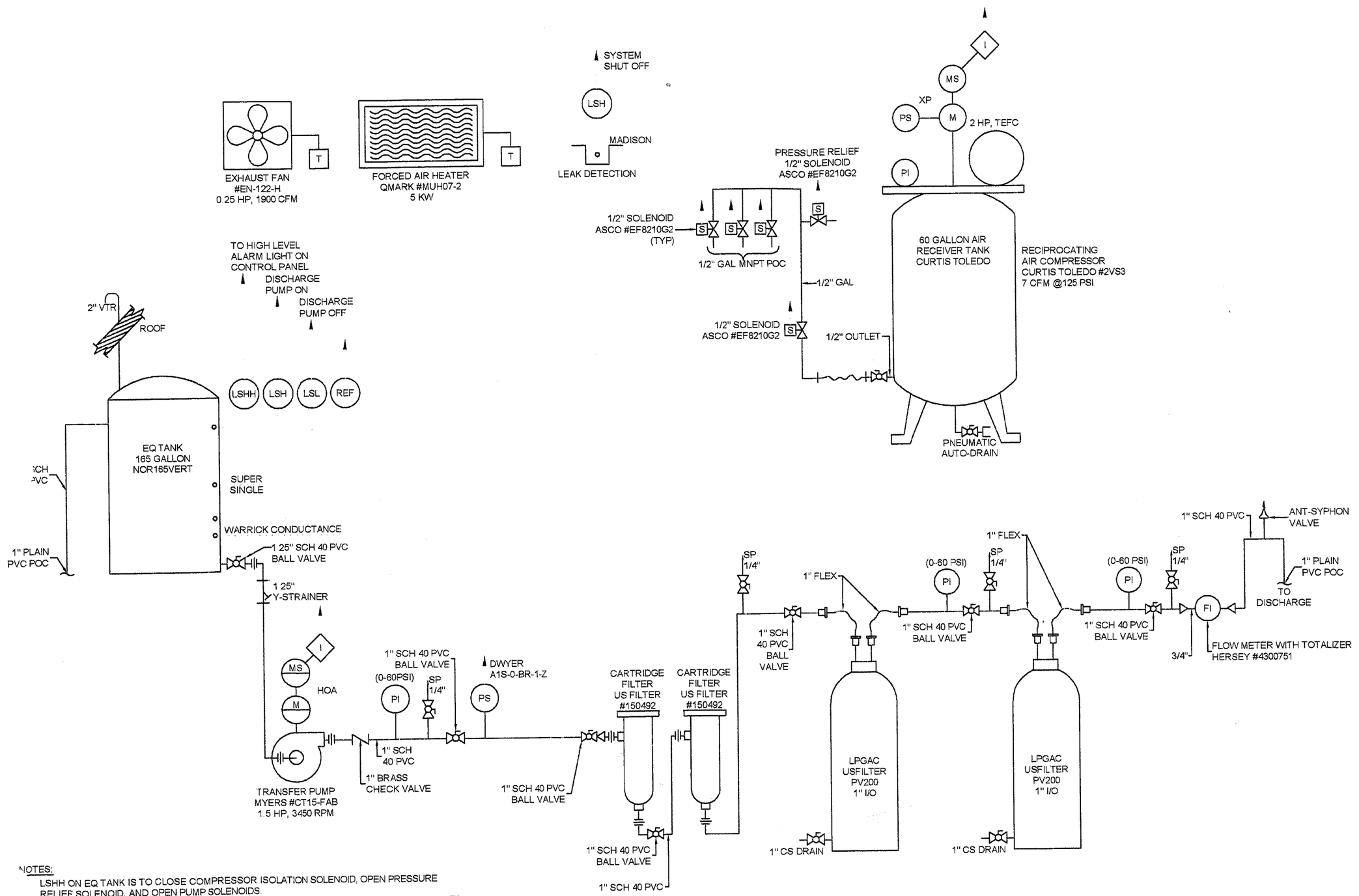
Williamson Environmental LLC

SITE PLAN

FIGURE 3

PROPERTY
36 – 38 WORCESTER ROAD
CHARLTON, MASSACHUSETTS

SCALE	DATE
1" = 50'	9/2/08



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

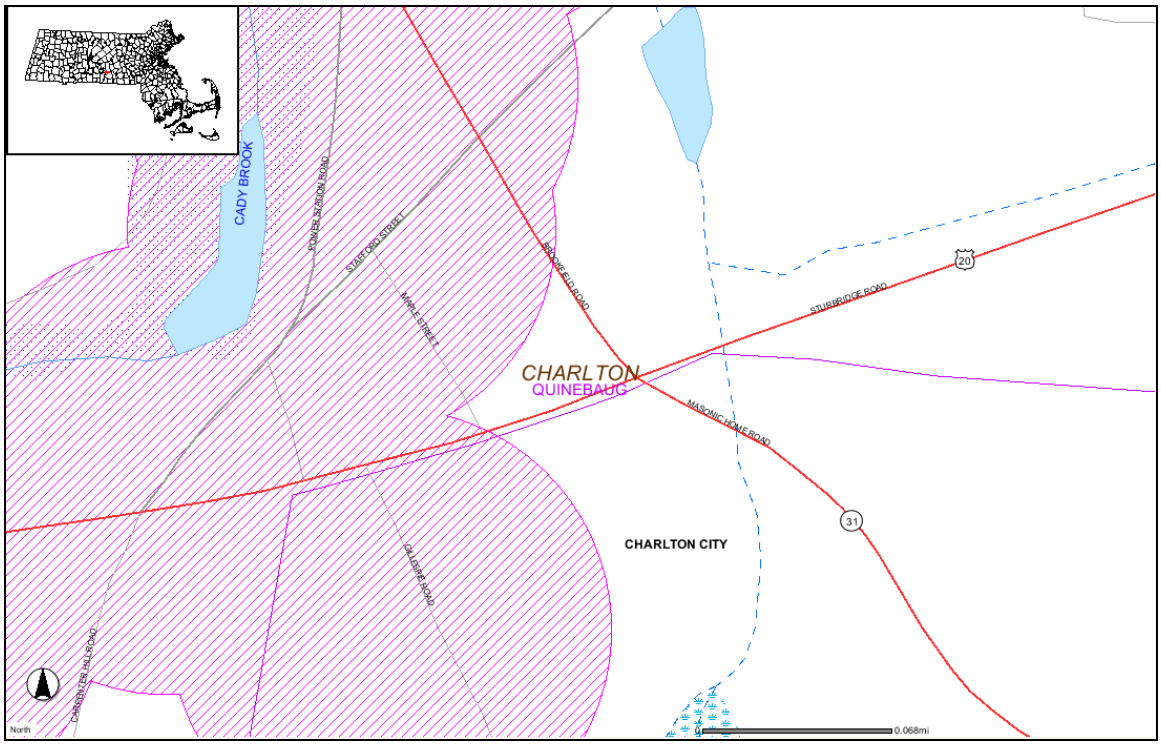
SENECA
ENVIRONMENTAL SERVICES
DES MOINES, IA 50313 (800) 369-3500

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

MASSACHUSETTS GEOGRAPHIC INFORMATION SYSTEMS
PRIORITY RESOURCE MAP



DEP MCP 21e Map Legend

- Zone IIs
- IWPAs
- Zone A
- Sole Source Aquifers
- Solid Waste Sites
- Protected Openspace
- ACECs
- NHESP Estimated Habitat of Rare Wildlife in Wetland Areas
- Certified Vernal Pools 2003 NHESP
- Subbasins
- Mass Major Basins
- DEP Region
- Town Arcs
- County Boundaries

Public Water Supplies

- COMMUNITY PUBLIC WATER SUPPLY - GROUNDWATER
- COMMUNITY PUBLIC WATER SUPPLY - SURFACE WATER
- NON COMMUNITY PUBLIC WATER SUPPLY

Aquifers, By Yield

- HIGH YIELD
- MEDIUM YIELD

Non Potential Drinking Water Source Area

- HIGH YIELD
- MEDIUM YIELD

FEMA Floodplains

- 100 YEAR FLOODPLAIN

Hydrography

- WATER
- RESERVOIR
- WETLANDS
- SALT WATER WETLANDS
- FLATS,SHOALS

Rivers and Streams

- PERENNIAL
- INTERMITTENT
- SHORELINE
- MAN MADE SHORE
- DAM
- AQUEDUCT

MHD Roads

- LIMITED ACCESS HIGHWAY
- MULTI-LANE HWY, NOT LIMITED ACCESS
- OTHER NUMBERED HWY
- MAJOR ROAD - COLLECTOR
- MINOR STREET OR ROAD, RAMP

Tracks and Trails MHD

- TRACK
- TRAIL

Transmission Lines

- PIPELINE
- POWERLINE
- TRAIN

Report Date:
18-Mar-09 11:53

☑ Final Report
☐ Re-Issued Report
☐ Revised Report

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

Laboratory Report

Williamson Environmental, LLC
280 Ayer Road
Harvard, MA 01451
Attn: Joe Resca

Project: Honey Farms - Charlton, MA
Project 32 Worcester Road

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
SA91751-01	HF RGP-1	Ground Water	05-Mar-09 14:30	05-Mar-09 15:40

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
Vermont # VT-11393

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 27 pages of analytical data plus Chain of Custody document(s). When the Laboratory Report is indicated as revised, this report supercedes any previously dated reports for the laboratory ID(s) referenced above. Where this report identifies subcontracted analyses, copies of the subcontractor's test report is 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).

Please contact the Laboratory or Technical Director at 800-789-9115 with any questions regarding the data contained in this laboratory report.

CASE NARRATIVE:

The samples were received 9.9 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.

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

EPA 200.7

Duplicates:

9030384-DUP1 *Source: SA91751-01*

RPD out of acceptance range. The batch is accepted based upon LCS and/or LCSD recovery.

Iron

Hach 8167

Samples:

SA91751-01 *HF RGP-1*

The Reporting Limit has been raised to account for matrix interference.

Total Residual Chlorine

SW846 8260B

Laboratory Control Samples:

9030426-BS1

Analyte out of acceptance range in QC spike but no reportable concentration present in sample.

Carbon disulfide
Styrene

Analyte out of acceptance range.

1,1,2-Trichlorotrifluoroethane (Freon 113)
Acrylonitrile
Tert-Butanol / butyl alcohol

9030426-BSD1

Analyte out of acceptance range in QC spike but no reportable concentration present in sample.

Carbon disulfide
Styrene

Spikes:

9030426-MS1 *Source: SA91720-10*

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

1,1-Dichloroethene

9030426-MSD1 *Source: SA91720-10*

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

1,1-Dichloroethene

SW846 8270C

SW846 8270C

Laboratory Control Samples:

9030523-BS1

Analyte out of acceptance range in QC spike but no reportable concentration present in sample.

2,4-Dinitrophenol
4,6-Dinitro-2-methylphenol
4-Chloroaniline
Aniline
Hexachlorocyclopentadiene

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
HF RGP-1 SA91751-01	32 Worcester Road	Ground Water	05-Mar-09 14:30	05-Mar-09

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	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	06-Mar-09	07-Mar-09	9030426	
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	5.0	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	"	"	"	"	
99-87-6	4-Isopropyltoluene	BRL		µg/l	1.0	1	"	"	"	"	
1634-04-4	Methyl tert-butyl ether	34.8		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	5.0	1	"	"	"	"	
91-20-3	Naphthalene	BRL		µg/l	1.0	1	"	"	"	"	
103-65-1	n-Propylbenzene	BRL		µg/l	1.0	1	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
HF RGP-1	32 Worcester Road	Ground Water	05-Mar-09 14:30	05-Mar-09
SA91751-01				

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Cert.
Volatile Organic Compounds											
Volatile Organic Compounds											
Prepared by method SW846 5030 Water MS											
100-42-5	Styrene	BRL		µg/l	1.0	1	SW846 8260B	06-Mar-09	07-Mar-09	9030426	
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	10.0	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*	*86*		*70-130 %*			"	"	"	"	
2037-26-5	*Toluene-d8*	*102*		*70-130 %*			"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*105*		*70-130 %*			"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*99*		*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	09-Mar-09	12-Mar-09	9030523	
208-96-8	Acenaphthylene	BRL		µg/l	5.56	1	"	"	"	"	
62-53-3	Aniline	BRL		µg/l	5.56	1	"	"	"	"	
120-12-7	Anthracene	BRL		µg/l	5.56	1	"	"	"	"	
1912-24-9	Atrazine	BRL		µg/l	5.56	1	"	"	"	"	
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	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
HF RGP-1	32 Worcester Road	Ground Water	05-Mar-09 14:30	05-Mar-09
SA91751-01				

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Batch*	*Cert.*
Semivolatile Organic Compounds by GCMS											
Semivolatile Organic Compounds by SW846 8270C											
Prepared by method SW846 3510C											
111-44-4	Bis(2-chloroethyl)ether	BRL		µg/l	5.56	1	SW846 8270C	09-Mar-09	12-Mar-09	9030523	
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	"	"	"	"	
67-72-1	Hexachloroethane	BRL		µg/l	5.56	1	"	"	"	"	
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	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
HF RGP-1 SA91751-01	32 Worcester Road	Ground Water	05-Mar-09 14:30	05-Mar-09

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Cert.
Semivolatile Organic Compounds by GCMS											
Semivolatile Organic Compounds by SW846 8270C											
Prepared by method SW846 3510C											
85-01-8	Phenanthrene	BRL		µg/l	5.56	1	SW846 8270C	09-Mar-09	12-Mar-09	9030523	
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*	*66*		*30-130 %*			"	"	"	"	
367-12-4	*2-Fluorophenol*	*40*		*15-110 %*			"	"	"	"	
4165-60-0	*Nitrobenzene-d5*	*62*		*30-130 %*			"	"	"	"	
4165-62-2	*Phenol-d5*	*27*		*15-110 %*			"	"	"	"	
1718-51-0	*Terphenyl-dl4*	*58*		*30-130 %*			"	"	"	"	
118-79-6	*2,4,6-Tribromophenol*	*68*		*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	11-Mar-09	11-Mar-09	9030699	
11104-28-2	Aroclor-1221	BRL		µg/l	0.0650	1	"	"	"	"	
11141-16-5	Aroclor-1232	BRL		µg/l	0.0650	1	"	"	"	"	
53469-21-9	Aroclor-1242	BRL		µg/l	0.0650	1	"	"	"	"	
12672-29-6	Aroclor-1248	BRL		µg/l	0.0650	1	"	"	"	"	
11097-69-1	Aroclor-1254	BRL		µg/l	0.0650	1	"	"	"	"	
11096-82-5	Aroclor-1260	BRL		µg/l	0.0650	1	"	"	"	"	
37324-23-5	Aroclor-1262	BRL		µg/l	0.0650	1	"	"	"	"	
11100-14-4	Aroclor-1268	BRL		µg/l	0.0650	1	"	"	"	"	
Surrogate recoveries:											
2051-24-3	*Decachlorobiphenyl (Sr)*	*49*		*30-150 %*			"	"	"	"	
10386-84-2	*4,4-DB-Octafluorobiphenyl (Sr)*	*46*		*30-150 %*			"	"	"	"	
Extractable Petroleum Hydrocarbons											
	Non-polar material (SGT-HEM)	BRL		mg/l	1.0	1	EPA 1664 Rev. A	10-Mar-09	11-Mar-09	9030587	
Total Metals by EPA 200 Series Methods											
7440-22-4	Silver	BRL		mg/l	0.0050	1	EPA 200.7	10-Mar-09	11-Mar-09	9030384	X
7440-38-2	Arsenic	BRL		mg/l	0.0040	1	"	"	"	"	X
7440-43-9	Cadmium	BRL		mg/l	0.0025	1	"	"	"	"	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	0.326		mg/l	0.0150	1	"	"	"	"	X
7439-97-6	Mercury	BRL		mg/l	0.00020	1	EPA 245.1/7470A	"	16-Mar-09	9030385	X
7440-02-0	Nickel	0.0142		mg/l	0.0050	1	EPA 200.7	"	11-Mar-09	9030384	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	"	"	"	"	
7440-66-6	Zinc	0.0568		mg/l	0.0050	1	"	"	"	"	X
General Chemistry Parameters											
18540-29-9	Hexavalent Chromium	BRL		mg/l	0.005	1	SW846 7196A/SM3500CrD	05-Mar-09 19:12	05-Mar-09 19:15	9030371	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
HF RGP-1 SA91751-01	32 Worcester Road	Ground Water	05-Mar-09 14:30	05-Mar-09

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Batch*	*Cert.*
General Chemistry Parameters											
57-12-5	Cyanide (total)	BRL		mg/l	0.0100	1	EPA 335.4	09-Mar-09	09-Mar-09	9030519	X
7782-50-5	Total Residual Chlorine	BRL	R01,CI HT	mg/l	0.200	10	Hach 8167	05-Mar-09 19:32	05-Mar-09 19:37	9030378	X
	Total Suspended Solids	6.00		mg/l	5.00	1	SM2540D	09-Mar-09	09-Mar-09	9030561	X

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9030426 - SW846 5030 Water MS										
Blank (9030426-BLK1)										
Prepared: 06-Mar-09 Analyzed: 07-Mar-09										
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	5.0						
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	5.0						
Naphthalene	BRL		µg/l	1.0						

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9030426 - SW846 5030 Water MS										
Blank (9030426-BLK1)										
Prepared: 06-Mar-09 Analyzed: 07-Mar-09										
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						
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	10.0						
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	*42.6*		µg/l		*50.0*		*85*	*70-130*		
Surrogate: Toluene-d8	*51.6*		µg/l		*50.0*		*103*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*54.6*		µg/l		*50.0*		*109*	*70-130*		
Surrogate: Dibromofluoromethane	*50.2*		µg/l		*50.0*		*100*	*70-130*		
LCS (9030426-BS1)										
Prepared: 06-Mar-09 Analyzed: 07-Mar-09										
1,1,2-Trichlorotrifluoroethane (Freon 113)	28.2	QC1	µg/l		20.0		141	70-130		
Acetone	28.5		µg/l		20.0		143	45.7-161		
Acrylonitrile	28.1	QC1	µg/l		20.0		140	70-130		
Benzene	20.3		µg/l		20.0		101	70-130		
Bromobenzene	22.2		µg/l		20.0		111	70-130		
Bromochloromethane	22.5		µg/l		20.0		113	70-130		
Bromodichloromethane	22.2		µg/l		20.0		111	70-130		
Bromoform	22.6		µg/l		20.0		113	70-130		
Bromomethane	20.5		µg/l		20.0		102	39.7-172		
2-Butanone (MEK)	21.6		µg/l		20.0		108	50.8-149		
n-Butylbenzene	18.0		µg/l		20.0		90	70-130		
sec-Butylbenzene	19.3		µg/l		20.0		96	70-130		
tert-Butylbenzene	19.0		µg/l		20.0		95	70-130		
Carbon disulfide	36.8	QC2	µg/l		20.0		184	70-130		
Carbon tetrachloride	23.0		µg/l		20.0		115	70-130		
Chlorobenzene	22.2		µg/l		20.0		111	70-130		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9030426 - SW846 5030 Water MS										
LCS (9030426-BS1)										
Prepared: 06-Mar-09 Analyzed: 07-Mar-09										
Chloroethane	20.1		µg/l		20.0		100	70-136		
Chloroform	21.0		µg/l		20.0		105	70-130		
Chloromethane	23.2		µg/l		20.0		116	70-130		
2-Chlorotoluene	19.6		µg/l		20.0		98	70-130		
4-Chlorotoluene	19.3		µg/l		20.0		96	70-130		
1,2-Dibromo-3-chloropropane	23.2		µg/l		20.0		116	70-130		
Dibromochloromethane	22.5		µg/l		20.0		112	59.7-133		
1,2-Dibromoethane (EDB)	20.6		µg/l		20.0		103	70-130		
Dibromomethane	19.8		µg/l		20.0		99	70-130		
1,2-Dichlorobenzene	21.8		µg/l		20.0		109	70-130		
1,3-Dichlorobenzene	23.3		µg/l		20.0		116	70-130		
1,4-Dichlorobenzene	21.1		µg/l		20.0		105	70-130		
Dichlorodifluoromethane (Freon12)	24.3		µg/l		20.0		122	43-134		
1,1-Dichloroethane	20.8		µg/l		20.0		104	70-130		
1,2-Dichloroethane	21.1		µg/l		20.0		106	70-130		
1,1-Dichloroethene	25.9		µg/l		20.0		129	70-130		
cis-1,2-Dichloroethene	23.6		µg/l		20.0		118	70-130		
trans-1,2-Dichloroethene	21.0		µg/l		20.0		105	70-130		
1,2-Dichloropropane	20.6		µg/l		20.0		103	70-130		
1,3-Dichloropropane	21.7		µg/l		20.0		108	70-130		
2,2-Dichloropropane	16.4		µg/l		20.0		82	70-130		
1,1-Dichloropropene	21.3		µg/l		20.0		107	70-130		
cis-1,3-Dichloropropene	18.1		µg/l		20.0		91	70-130		
trans-1,3-Dichloropropene	16.8		µg/l		20.0		84	70-130		
Ethylbenzene	19.3		µg/l		20.0		96	70-130		
Hexachlorobutadiene	19.3		µg/l		20.0		96	50.9-165		
2-Hexanone (MBK)	18.1		µg/l		20.0		91	70-130		
Isopropylbenzene	15.8		µg/l		20.0		79	70-130		
4-Isopropyltoluene	20.0		µg/l		20.0		100	70-130		
Methyl tert-butyl ether	21.8		µg/l		20.0		109	70-130		
4-Methyl-2-pentanone (MIBK)	19.9		µg/l		20.0		100	52.8-134		
Methylene chloride	22.6		µg/l		20.0		113	70-130		
Naphthalene	20.1		µg/l		20.0		101	70-130		
n-Propylbenzene	17.6		µg/l		20.0		88	70-130		
Styrene	10.5	QC2	µg/l		20.0		52	70-130		
1,1,1,2-Tetrachloroethane	22.4		µg/l		20.0		112	70-130		
1,1,2,2-Tetrachloroethane	22.2		µg/l		20.0		111	70-130		
Tetrachloroethene	20.8		µg/l		20.0		104	70-130		
Toluene	21.1		µg/l		20.0		106	70-130		
1,2,3-Trichlorobenzene	19.6		µg/l		20.0		98	70-130		
1,2,4-Trichlorobenzene	19.0		µg/l		20.0		95	70-130		
1,3,5-Trichlorobenzene	21.1		µg/l		20.0		106	70-130		
1,1,1-Trichloroethane	22.7		µg/l		20.0		114	70-130		
1,1,2-Trichloroethane	21.6		µg/l		20.0		108	70-130		
Trichloroethene	20.8		µg/l		20.0		104	70-130		
Trichlorofluoromethane (Freon 11)	27.1		µg/l		20.0		136	60-147		
1,2,3-Trichloropropane	25.6		µg/l		20.0		128	70-130		
1,2,4-Trimethylbenzene	19.2		µg/l		20.0		96	70-130		
1,3,5-Trimethylbenzene	19.0		µg/l		20.0		95	70-130		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9030426 - SW846 5030 Water MS										
LCS (9030426-BS1)										
Prepared: 06-Mar-09 Analyzed: 07-Mar-09										
Vinyl chloride	17.0		µg/l		20.0		85	70-130		
m,p-Xylene	38.9		µg/l		40.0		97	70-130		
o-Xylene	19.4		µg/l		20.0		97	70-130		
Tetrahydrofuran	19.6		µg/l		20.0		98	70-130		
Ethyl ether	25.2		µg/l		20.0		126	67.1-130		
Tert-amyl methyl ether	21.4		µg/l		20.0		107	70-130		
Ethyl tert-butyl ether	20.1		µg/l		20.0		100	70-130		
Di-isopropyl ether	20.0		µg/l		20.0		100	70-130		
Tert-Butanol / butyl alcohol	272	QC1	µg/l		200		136	70-130		
1,4-Dioxane	200		µg/l		200		100	56.4-130		
trans-1,4-Dichloro-2-butene	16.1		µg/l		20.0		80	70-130		
Ethanol	520		µg/l		400		130	70-130		
Surrogate: 4-Bromofluorobenzene	*50.7*		µg/l		*50.0*		*101*	*70-130*		
Surrogate: Toluene-d8	*50.8*		µg/l		*50.0*		*102*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*48.3*		µg/l		*50.0*		*97*	*70-130*		
Surrogate: Dibromofluoromethane	*49.2*		µg/l		*50.0*		*98*	*70-130*		
LCS Dup (9030426-BSD1)										
Prepared: 06-Mar-09 Analyzed: 07-Mar-09										
1,1,2-Trichlorotrifluoroethane (Freon 113)	25.8		µg/l		20.0		129	70-130	9	25
Acetone	25.0		µg/l		20.0		125	45.7-161	13	50
Acrylonitrile	25.8		µg/l		20.0		129	70-130	8	25
Benzene	19.4		µg/l		20.0		97	70-130	5	25
Bromobenzene	21.5		µg/l		20.0		107	70-130	3	25
Bromochloromethane	22.1		µg/l		20.0		110	70-130	2	25
Bromodichloromethane	21.2		µg/l		20.0		106	70-130	5	25
Bromoform	22.4		µg/l		20.0		112	70-130	0.8	25
Bromomethane	19.5		µg/l		20.0		98	39.7-172	5	50
2-Butanone (MEK)	17.0		µg/l		20.0		85	50.8-149	24	50
n-Butylbenzene	16.3		µg/l		20.0		82	70-130	10	25
sec-Butylbenzene	18.7		µg/l		20.0		94	70-130	3	25
tert-Butylbenzene	18.9		µg/l		20.0		95	70-130	0.3	25
Carbon disulfide	32.8	QC2	µg/l		20.0		164	70-130	12	25
Carbon tetrachloride	21.3		µg/l		20.0		106	70-130	8	25
Chlorobenzene	21.2		µg/l		20.0		106	70-130	5	25
Chloroethane	21.5		µg/l		20.0		108	70-136	7	50
Chloroform	19.7		µg/l		20.0		99	70-130	6	25
Chloromethane	21.0		µg/l		20.0		105	70-130	10	25
2-Chlorotoluene	19.1		µg/l		20.0		95	70-130	3	25
4-Chlorotoluene	18.5		µg/l		20.0		92	70-130	4	25
1,2-Dibromo-3-chloropropane	20.5		µg/l		20.0		103	70-130	12	25
Dibromochloromethane	21.3		µg/l		20.0		107	59.7-133	5	50
1,2-Dibromoethane (EDB)	20.1		µg/l		20.0		100	70-130	3	25
Dibromomethane	19.5		µg/l		20.0		97	70-130	2	25
1,2-Dichlorobenzene	20.5		µg/l		20.0		103	70-130	6	25
1,3-Dichlorobenzene	22.8		µg/l		20.0		114	70-130	2	25
1,4-Dichlorobenzene	19.3		µg/l		20.0		96	70-130	9	25
Dichlorodifluoromethane (Freon12)	21.8		µg/l		20.0		109	43-134	11	50
1,1-Dichloroethane	19.6		µg/l		20.0		98	70-130	6	25
1,2-Dichloroethane	20.0		µg/l		20.0		100	70-130	5	25
1,1-Dichloroethene	23.8		µg/l		20.0		119	70-130	8	25

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9030426 - SW846 5030 Water MS										
LCS Dup (9030426-BSD1)										
Prepared: 06-Mar-09 Analyzed: 07-Mar-09										
cis-1,2-Dichloroethene	21.6		µg/l		20.0		108	70-130	8	25
trans-1,2-Dichloroethene	19.0		µg/l		20.0		95	70-130	10	25
1,2-Dichloropropane	19.9		µg/l		20.0		100	70-130	3	25
1,3-Dichloropropane	20.9		µg/l		20.0		104	70-130	4	25
2,2-Dichloropropane	15.2		µg/l		20.0		76	70-130	8	25
1,1-Dichloropropene	19.9		µg/l		20.0		100	70-130	7	25
cis-1,3-Dichloropropene	17.5		µg/l		20.0		88	70-130	4	25
trans-1,3-Dichloropropene	16.6		µg/l		20.0		83	70-130	1	25
Ethylbenzene	18.2		µg/l		20.0		91	70-130	6	25
Hexachlorobutadiene	17.1		µg/l		20.0		85	50.9-165	12	50
2-Hexanone (MBK)	17.5		µg/l		20.0		87	70-130	4	25
Isopropylbenzene	15.4		µg/l		20.0		77	70-130	3	25
4-Isopropyltoluene	18.8		µg/l		20.0		94	70-130	6	25
Methyl tert-butyl ether	20.9		µg/l		20.0		104	70-130	4	25
4-Methyl-2-pentanone (MIBK)	19.2		µg/l		20.0		96	52.8-134	4	50
Methylene chloride	23.6		µg/l		20.0		118	70-130	4	25
Naphthalene	18.0		µg/l		20.0		90	70-130	11	25
n-Propylbenzene	16.8		µg/l		20.0		84	70-130	5	25
Styrene	9.7	QC2	µg/l		20.0		49	70-130	7	25
1,1,1,2-Tetrachloroethane	21.3		µg/l		20.0		106	70-130	5	25
1,1,2,2-Tetrachloroethane	21.4		µg/l		20.0		107	70-130	4	25
Tetrachloroethene	19.9		µg/l		20.0		100	70-130	4	25
Toluene	19.9		µg/l		20.0		100	70-130	6	25
1,2,3-Trichlorobenzene	17.5		µg/l		20.0		88	70-130	11	25
1,2,4-Trichlorobenzene	17.8		µg/l		20.0		89	70-130	7	25
1,3,5-Trichlorobenzene	19.7		µg/l		20.0		98	70-130	7	25
1,1,1-Trichloroethane	21.2		µg/l		20.0		106	70-130	7	25
1,1,2-Trichloroethane	20.8		µg/l		20.0		104	70-130	4	25
Trichloroethene	19.6		µg/l		20.0		98	70-130	6	25
Trichlorofluoromethane (Freon 11)	25.5		µg/l		20.0		127	60-147	6	50
1,2,3-Trichloropropane	24.5		µg/l		20.0		123	70-130	4	25
1,2,4-Trimethylbenzene	18.8		µg/l		20.0		94	70-130	2	25
1,3,5-Trimethylbenzene	18.5		µg/l		20.0		93	70-130	3	25
Vinyl chloride	15.0		µg/l		20.0		75	70-130	12	25
m,p-Xylene	37.2		µg/l		40.0		93	70-130	4	25
o-Xylene	18.6		µg/l		20.0		93	70-130	4	25
Tetrahydrofuran	18.3		µg/l		20.0		91	70-130	7	25
Ethyl ether	23.9		µg/l		20.0		120	67.1-130	5	50
Tert-amyl methyl ether	21.1		µg/l		20.0		106	70-130	1	25
Ethyl tert-butyl ether	19.2		µg/l		20.0		96	70-130	5	25
Di-isopropyl ether	19.1		µg/l		20.0		95	70-130	5	25
Tert-Butanol / butyl alcohol	251		µg/l		200		126	70-130	8	25
1,4-Dioxane	198		µg/l		200		99	56.4-130	1	25
trans-1,4-Dichloro-2-butene	14.6		µg/l		20.0		73	70-130	10	25
Ethanol	503		µg/l		400		126	70-130	3	30
Surrogate: 4-Bromofluorobenzene	*51.0*		µg/l		*50.0*		*102*	*70-130*		
Surrogate: Toluene-d8	*49.9*		µg/l		*50.0*		*100*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*48.4*		µg/l		*50.0*		*97*	*70-130*		
Surrogate: Dibromofluoromethane	*48.8*		µg/l		*50.0*		*98*	*70-130*		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9030426 - SW846 5030 Water MS										
Matrix Spike (9030426-MS1) **Source: SA91720-10**										
Prepared: 06-Mar-09 Analyzed: 07-Mar-09										
Benzene	15.0		µg/l		20.0	BRL	75	70-130		
Chlorobenzene	24.1		µg/l		20.0	BRL	120	70-130		
1,1-Dichloroethene	11.4	QM7	µg/l		20.0	BRL	57	70-130		
Toluene	19.0		µg/l		20.0	BRL	95	70-130		
Trichloroethene	15.4		µg/l		20.0	BRL	77	70-130		
Surrogate: 4-Bromofluorobenzene	*51.7*		µg/l		*50.0*		*103*	*70-130*		
Surrogate: Toluene-d8	*49.9*		µg/l		*50.0*		*100*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*46.7*		µg/l		*50.0*		*93*	*70-130*		
Surrogate: Dibromofluoromethane	*47.5*		µg/l		*50.0*		*95*	*70-130*		
Matrix Spike Dup (9030426-MSD1) **Source: SA91720-10**										
Prepared: 06-Mar-09 Analyzed: 07-Mar-09										
Benzene	15.2		µg/l		20.0	BRL	76	70-130	1	30
Chlorobenzene	24.0		µg/l		20.0	BRL	120	70-130	0.3	30
1,1-Dichloroethene	10.9	QM7	µg/l		20.0	BRL	54	70-130	5	30
Toluene	19.2		µg/l		20.0	BRL	96	70-130	1	30
Trichloroethene	16.7		µg/l		20.0	BRL	84	70-130	8	30
Surrogate: 4-Bromofluorobenzene	*53.2*		µg/l		*50.0*		*106*	*70-130*		
Surrogate: Toluene-d8	*50.4*		µg/l		*50.0*		*101*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*47.8*		µg/l		*50.0*		*96*	*70-130*		
Surrogate: Dibromofluoromethane	*48.0*		µg/l		*50.0*		*96*	*70-130*		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9030523 - SW846 3510C										
Blank (9030523-BLK1)										
Prepared & Analyzed: 09-Mar-09										
Acenaphthene	BRL		µg/l	5.00						
Acenaphthylene	BRL		µg/l	5.00						
Aniline	BRL		µg/l	5.00						
Anthracene	BRL		µg/l	5.00						
Atrazine	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						

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9030523 - SW846 3510C										
Blank (9030523-BLK1)										
Prepared & Analyzed: 09-Mar-09										
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						
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	*27.3*		µg/l		*50.0*		*55*	*30-130*		
Surrogate: 2-Fluorophenol	*24.0*		µg/l		*50.0*		*48*	*15-110*		
Surrogate: Nitrobenzene-d5	*26.6*		µg/l		*50.0*		*53*	*30-130*		
Surrogate: Phenol-d5	*18.9*		µg/l		*50.0*		*38*	*15-110*		
Surrogate: Terphenyl-dl4	*27.0*		µg/l		*50.0*		*54*	*30-130*		
Surrogate: 2,4,6-Tribromophenol	*30.2*		µg/l		*50.0*		*60*	*15-110*		
LCS (9030523-BS1)										
Prepared & Analyzed: 09-Mar-09										
Acenaphthene	32.0		µg/l	5.00	50.0		64	40-130		
Acenaphthylene	32.3		µg/l	5.00	50.0		65	40-130		
Aniline	0.650	QC2	µg/l	5.00	50.0		1	40-130		
Anthracene	36.1		µg/l	5.00	50.0		72	40-130		
Atrazine	36.6		µg/l	5.00	50.0		73	40-130		
Azobenzene/Diphenyldiazine	35.4		µg/l	5.00	50.0		71	40-130		
Benzidine	0.820		µg/l	5.00	50.0		2	0-130		
Benzo (a) anthracene	30.1		µg/l	5.00	50.0		60	40-130		
Benzo (a) pyrene	33.7		µg/l	5.00	50.0		67	40-130		
Benzo (b) fluoranthene	35.2		µg/l	5.00	50.0		70	40-130		
Benzo (g,h,i) perylene	28.8		µg/l	5.00	50.0		58	40-130		
Benzo (k) fluoranthene	35.6		µg/l	5.00	50.0		71	40-130		
Benzoic acid	31.1		µg/l	5.00	50.0		62	0-130		
Benzyl alcohol	30.4		µg/l	5.00	50.0		61	40-130		
Bis(2-chloroethoxy)methane	36.4		µg/l	5.00	50.0		73	40-130		
Bis(2-chloroethyl)ether	34.9		µg/l	5.00	50.0		70	40-130		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9030523 - SW846 3510C										
LCS (9030523-BS1)										
Prepared & Analyzed: 09-Mar-09										
Bis(2-chloroisopropyl)ether	38.3		µg/l	5.00	50.0		77	40-130		
Bis(2-ethylhexyl)phthalate	39.1		µg/l	5.00	50.0		78	40-130		
4-Bromophenyl phenyl ether	39.0		µg/l	5.00	50.0		78	40-130		
Butyl benzyl phthalate	37.4		µg/l	5.00	50.0		75	40-130		
Carbazole	36.8		µg/l	5.00	50.0		74	40-130		
4-Chloro-3-methylphenol	34.0		µg/l	5.00	50.0		68	40-130		
4-Chloroaniline	10.6	QC2	µg/l	5.00	50.0		21	40-130		
2-Chloronaphthalene	30.6		µg/l	5.00	50.0		61	40-130		
2-Chlorophenol	30.5		µg/l	5.00	50.0		61	40-130		
4-Chlorophenyl phenyl ether	34.0		µg/l	5.00	50.0		68	40-130		
Chrysene	31.5		µg/l	5.00	50.0		63	40-130		
Dibenzo (a,h) anthracene	29.8		µg/l	5.00	50.0		60	40-130		
Dibenzofuran	32.4		µg/l	5.00	50.0		65	40-130		
1,2-Dichlorobenzene	28.6		µg/l	5.00	50.0		57	40-130		
1,3-Dichlorobenzene	26.6		µg/l	5.00	50.0		53	40-130		
1,4-Dichlorobenzene	30.2		µg/l	5.00	50.0		60	40-130		
3,3´-Dichlorobenzidine	27.2		µg/l	5.00	50.0		54	40-130		
2,4-Dichlorophenol	31.0		µg/l	5.00	50.0		62	40-130		
Diethyl phthalate	35.9		µg/l	5.00	50.0		72	40-130		
Dimethyl phthalate	36.8		µg/l	5.00	50.0		74	40-130		
2,4-Dimethylphenol	30.8		µg/l	5.00	50.0		62	40-130		
Di-n-butyl phthalate	40.9		µg/l	5.00	50.0		82	40-130		
4,6-Dinitro-2-methylphenol	17.6	QC2	µg/l	5.00	50.0		35	40-130		
2,4-Dinitrophenol	16.7	QC2	µg/l	5.00	50.0		33	40-130		
2,4-Dinitrotoluene	33.9		µg/l	5.00	50.0		68	40-130		
2,6-Dinitrotoluene	33.2		µg/l	5.00	50.0		66	40-130		
Di-n-octyl phthalate	42.9		µg/l	5.00	50.0		86	40-130		
Fluoranthene	34.9		µg/l	5.00	50.0		70	40-130		
Fluorene	32.6		µg/l	5.00	50.0		65	40-130		
Hexachlorobenzene	32.9		µg/l	5.00	50.0		66	40-130		
Hexachlorobutadiene	29.0		µg/l	5.00	50.0		58	40-130		
Hexachlorocyclopentadiene	17.5	QC2	µg/l	5.00	50.0		35	40-130		
Hexachloroethane	26.0		µg/l	5.00	50.0		52	40-130		
Indeno (1,2,3-cd) pyrene	29.2		µg/l	5.00	50.0		58	40-130		
Isophorone	30.9		µg/l	5.00	50.0		62	40-130		
2-Methylnaphthalene	30.6		µg/l	5.00	50.0		61	40-130		
2-Methylphenol	32.3		µg/l	5.00	50.0		65	40-130		
3 & 4-Methylphenol	33.8		µg/l	10.0	50.0		68	40-130		
Naphthalene	31.1		µg/l	5.00	50.0		62	40-130		
2-Nitroaniline	34.2		µg/l	5.00	50.0		68	40-130		
3-Nitroaniline	33.1		µg/l	5.00	50.0		66	40-130		
4-Nitroaniline	36.6		µg/l	20.0	50.0		73	40-130		
Nitrobenzene	31.1		µg/l	5.00	50.0		62	40-130		
2-Nitrophenol	30.0		µg/l	5.00	50.0		60	40-130		
4-Nitrophenol	32.1		µg/l	20.0	50.0		64	40-130		
N-Nitrosodimethylamine	30.5		µg/l	5.00	50.0		61	40-130		
N-Nitrosodi-n-propylamine	34.6		µg/l	5.00	50.0		69	40-130		
N-Nitrosodiphenylamine	41.7		µg/l	5.00	50.0		83	40-130		
Pentachlorophenol	38.2		µg/l	20.0	50.0		76	40-130		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9030523 - SW846 3510C										
LCS (9030523-BS1)										
Prepared & Analyzed: 09-Mar-09										
Phenanthrene	34.6		µg/l	5.00	50.0		69	40-130		
Phenol	25.8		µg/l	5.00	50.0		52	40-130		
Pyrene	32.6		µg/l	5.00	50.0		65	40-130		
Pyridine	BRL		µg/l	5.00	50.0			0-130		
1-Methylnaphthalene	31.7		µg/l	5.00	50.0		63	40-140		
1,2,4-Trichlorobenzene	28.7		µg/l	5.00	50.0		57	40-130		
2,4,5-Trichlorophenol	33.8		µg/l	5.00	50.0		68	40-130		
2,4,6-Trichlorophenol	29.6		µg/l	5.00	50.0		59	40-130		
Pentachloronitrobenzene	29.9		µg/l	5.00	50.0		60	40-140		
1,2,4,5-Tetrachlorobenzene	29.1		µg/l	5.00	50.0		58	40-140		
Surrogate: 2-Fluorobiphenyl	*28.6*		µg/l		*50.0*		*57*	*30-130*		
Surrogate: 2-Fluorophenol	*27.9*		µg/l		*50.0*		*56*	*15-110*		
Surrogate: Nitrobenzene-d5	*30.2*		µg/l		*50.0*		*60*	*30-130*		
Surrogate: Phenol-d5	*21.0*		µg/l		*50.0*		*42*	*15-110*		
Surrogate: Terphenyl-dl4	*31.2*		µg/l		*50.0*		*62*	*30-130*		
Surrogate: 2,4,6-Tribromophenol	*35.2*		µg/l		*50.0*		*70*	*15-110*		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9030699 - SW846 3510C										
Blank (9030699-BLK1)										
Prepared & Analyzed: 11-Mar-09										
Aroclor-1016	BRL		µg/l	20.0						
Aroclor-1016 [2C]	BRL		µg/l	20.0						
Aroclor-1221	BRL		µg/l	20.0						
Aroclor-1221 [2C]	BRL		µg/l	20.0						
Aroclor-1232	BRL		µg/l	20.0						
Aroclor-1232 [2C]	BRL		µg/l	20.0						
Aroclor-1242	BRL		µg/l	20.0						
Aroclor-1242 [2C]	BRL		µg/l	20.0						
Aroclor-1248	BRL		µg/l	20.0						
Aroclor-1248 [2C]	BRL		µg/l	20.0						
Aroclor-1254	BRL		µg/l	20.0						
Aroclor-1254 [2C]	BRL		µg/l	20.0						
Aroclor-1260	BRL		µg/l	20.0						
Aroclor-1260 [2C]	BRL		µg/l	20.0						
Aroclor-1262	BRL		µg/l	20.0						
Aroclor-1262 [2C]	BRL		µg/l	20.0						
Aroclor-1268	BRL		µg/l	20.0						
Aroclor-1268 [2C]	BRL		µg/l	20.0						
Surrogate: Decachlorobiphenyl (Sr)	*20.4*		µg/l		*20.0*		*102*	*30-150*		
Surrogate: Decachlorobiphenyl (Sr) [2C]	*18.0*		µg/l		*20.0*		*90*	*30-150*		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr)	*21.1*		µg/l		*20.0*		*106*	*30-150*		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr) [2	*21.8*		µg/l		*20.0*		*109*	*30-150*		
LCS (9030699-BS1)										
Prepared & Analyzed: 11-Mar-09										
Aroclor-1016	217		µg/l	20.0	250		87	50-114		
Aroclor-1016 [2C]	205		µg/l	20.0	250		82	50-114		
Aroclor-1260	214		µg/l	20.0	250		86	40-127		
Aroclor-1260 [2C]	206		µg/l	20.0	250		82	40-127		
Surrogate: Decachlorobiphenyl (Sr)	*12.5*		µg/l		*20.0*		*62*	*30-150*		
Surrogate: Decachlorobiphenyl (Sr) [2C]	*12.6*		µg/l		*20.0*		*63*	*30-150*		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr)	*16.3*		µg/l		*20.0*		*82*	*30-150*		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr) [2	*16.4*		µg/l		*20.0*		*82*	*30-150*		
LCS Dup (9030699-BSD1)										
Prepared & Analyzed: 11-Mar-09										
Aroclor-1016	213		µg/l	20.0	250		85	50-114	2	20
Aroclor-1016 [2C]	205		µg/l	20.0	250		82	50-114	0.2	20
Aroclor-1260	217		µg/l	20.0	250		87	40-127	1	20
Aroclor-1260 [2C]	201		µg/l	20.0	250		80	40-127	2	20
Surrogate: Decachlorobiphenyl (Sr)	*12.5*		µg/l		*20.0*		*62*	*30-150*		
Surrogate: Decachlorobiphenyl (Sr) [2C]	*12.4*		µg/l		*20.0*		*62*	*30-150*		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr)	*16.5*		µg/l		*20.0*		*82*	*30-150*		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr) [2	*17.3*		µg/l		*20.0*		*86*	*30-150*		

Extractable Petroleum Hydrocarbons - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9030587 - SW846 3510C										
Blank (9030587-BLK1)										
Prepared: 10-Mar-09 Analyzed: 11-Mar-09										
Non-polar material (SGT-HEM)	BRL		mg/l	1.0						
LCS (9030587-BS1)										
Prepared: 10-Mar-09 Analyzed: 11-Mar-09										
Non-polar material (SGT-HEM)	20.5		mg/l		25.4		81	77.5-86.4		

Total Metals by EPA 200 Series Methods - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9030384 - EPA 200 Series										
Blank (9030384-BLK1)										
Prepared: 10-Mar-09 Analyzed: 11-Mar-09										
Nickel	BRL		mg/l	0.0050						
Lead	BRL		mg/l	0.0075						
Zinc	BRL		mg/l	0.0050						
Selenium	BRL		mg/l	0.0150						
Antimony	BRL		mg/l	0.0060						
Iron	BRL		mg/l	0.0150						
Cadmium	BRL		mg/l	0.0025						
Chromium	BRL		mg/l	0.0050						
Copper	BRL		mg/l	0.0050						
Silver	BRL		mg/l	0.0050						
Arsenic	BRL		mg/l	0.0040						
LCS (9030384-BS1)										
Prepared: 10-Mar-09 Analyzed: 11-Mar-09										
Lead	1.34		mg/l	0.0075	1.25		107	85-115		
Nickel	1.26		mg/l	0.0050	1.25		101	85-115		
Zinc	1.23		mg/l	0.0050	1.25		98	85-115		
Iron	1.32		mg/l	0.0150	1.25		106	85-115		
Antimony	1.22		mg/l	0.0060	1.25		97	85-115		
Selenium	1.36		mg/l	0.0150	1.25		109	85-115		
Silver	1.26		mg/l	0.0050	1.25		101	85-115		
Arsenic	1.28		mg/l	0.0040	1.25		102	85-115		
Cadmium	1.32		mg/l	0.0025	1.25		106	85-115		
Copper	1.25		mg/l	0.0050	1.25		100	85-115		
Chromium	1.28		mg/l	0.0050	1.25		103	85-115		
Duplicate (9030384-DUP1) **Source: SA91751-01**										
Prepared: 10-Mar-09 Analyzed: 11-Mar-09										
Selenium	BRL		mg/l	0.0150		BRL				20
Nickel	0.0142		mg/l	0.0050		0.0142			0.4	20
Lead	BRL		mg/l	0.0075		BRL				20
Zinc	0.0552		mg/l	0.0050		0.0568			3	20
Antimony	BRL		mg/l	0.0060		BRL				20
Iron	0.234	QR9	mg/l	0.0150		0.326			33	20
Copper	0.0039	J	mg/l	0.0050		0.0042			6	20
Chromium	BRL		mg/l	0.0050		BRL				20
Cadmium	0.0002	J	mg/l	0.0025		BRL				20
Arsenic	BRL		mg/l	0.0040		0.0034				20
Silver	BRL		mg/l	0.0050		BRL				20
Matrix Spike (9030384-MS1) **Source: SA91751-01**										
Prepared: 10-Mar-09 Analyzed: 11-Mar-09										
Zinc	1.31		mg/l	0.0050	1.25	0.0568	100	70-130		
Iron	1.55		mg/l	0.0150	1.25	0.326	98	70-130		
Antimony	1.27		mg/l	0.0060	1.25	BRL	102	70-130		
Lead	1.36		mg/l	0.0075	1.25	BRL	109	70-130		
Nickel	1.27		mg/l	0.0050	1.25	0.0142	101	70-130		
Selenium	1.38		mg/l	0.0150	1.25	BRL	111	70-130		
Copper	1.33		mg/l	0.0050	1.25	0.0042	106	70-130		
Arsenic	1.28		mg/l	0.0040	1.25	0.0034	103	70-130		
Silver	1.32		mg/l	0.0050	1.25	BRL	106	70-130		

Total Metals by EPA 200 Series Methods - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9030384 - EPA 200 Series										
Matrix Spike (9030384-MS1)	**Source: SA91751-01**									
Prepared: 10-Mar-09 Analyzed: 11-Mar-09										
Chromium	1.27		mg/l	0.0050	1.25	BRL	102	70-130		
Cadmium	1.29		mg/l	0.0025	1.25	BRL	103	70-130		
Post Spike (9030384-PS1)	**Source: SA91751-01**									
Prepared: 10-Mar-09 Analyzed: 11-Mar-09										
Zinc	1.31		mg/l	0.0050	1.25	0.0568	100	85-115		
Antimony	1.24		mg/l	0.0060	1.25	BRL	100	85-115		
Selenium	1.39		mg/l	0.0150	1.25	BRL	111	85-115		
Lead	1.37		mg/l	0.0075	1.25	BRL	109	85-115		
Iron	1.51		mg/l	0.0150	1.25	0.326	95	85-115		
Nickel	1.28		mg/l	0.0050	1.25	0.0142	101	85-115		
Arsenic	1.28		mg/l	0.0040	1.25	0.0034	102	85-115		
Copper	1.33		mg/l	0.0050	1.25	0.0042	106	85-115		
Cadmium	1.30		mg/l	0.0025	1.25	BRL	104	85-115		
Silver	1.32		mg/l	0.0050	1.25	BRL	106	85-115		
Chromium	1.28		mg/l	0.0050	1.25	BRL	102	85-115		
Batch 9030385 - EPA200/SW7000 Series										
Blank (9030385-BLK1)										
Prepared: 10-Mar-09 Analyzed: 16-Mar-09										
Mercury	BRL		mg/l	0.00020						
LCS (9030385-BS1)										
Prepared: 10-Mar-09 Analyzed: 16-Mar-09										
Mercury	0.00459		mg/l	0.00020	0.00500		92	85-115		
Duplicate (9030385-DUP1)	**Source: SA91751-01**									
Prepared: 10-Mar-09 Analyzed: 16-Mar-09										
Mercury	BRL		mg/l	0.00020		BRL				20
Matrix Spike (9030385-MS1)	**Source: SA91751-01**									
Prepared: 10-Mar-09 Analyzed: 16-Mar-09										
Mercury	0.00477		mg/l	0.00020	0.00500	BRL	95	75-125		
Post Spike (9030385-PS1)	**Source: SA91751-01**									
Prepared: 10-Mar-09 Analyzed: 16-Mar-09										
Mercury	0.00485		mg/l	0.00020	0.00500	BRL	97	85-115		

General Chemistry Parameters - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9030371 - General Preparation										
Blank (9030371-BLK1)										
Prepared & Analyzed: 05-Mar-09										
Hexavalent Chromium	BRL		mg/l	0.005						
Blank (9030371-BLK2)										
Prepared & Analyzed: 05-Mar-09										
Hexavalent Chromium	BRL		mg/l	0.005						
LCS (9030371-BS1)										
Prepared & Analyzed: 05-Mar-09										
Hexavalent Chromium	0.052		mg/l	0.005	0.0501		104	90-110		
LCS (9030371-BS2)										
Prepared & Analyzed: 05-Mar-09										
Hexavalent Chromium	0.051		mg/l	0.005	0.0501		102	90-110		
Duplicate (9030371-DUP1)	**Source: SA91765-06**									
Prepared & Analyzed: 05-Mar-09										
Hexavalent Chromium	BRL		mg/l	0.005		BRL				20
Matrix Spike (9030371-MS1)	**Source: SA91765-06**									
Prepared & Analyzed: 05-Mar-09										
Hexavalent Chromium	0.049		mg/l	0.005	0.0501	BRL	98	80-120		
Matrix Spike Dup (9030371-MSD1)	**Source: SA91765-06**									
Prepared & Analyzed: 05-Mar-09										
Hexavalent Chromium	0.050		mg/l	0.005	0.0501	BRL	100	80-120	2	20
Reference (9030371-SRM1)										
Prepared & Analyzed: 05-Mar-09										
Hexavalent Chromium	0.026		mg/l	0.005	0.0250		104	85-115		
Batch 9030378 - General Preparation										
Blank (9030378-BLK1)										
Prepared & Analyzed: 05-Mar-09										
Total Residual Chlorine	BRL		mg/l	0.020						
Blank (9030378-BLK2)										
Prepared & Analyzed: 05-Mar-09										
Total Residual Chlorine	BRL		mg/l	0.020						
LCS (9030378-BS1)										
Prepared & Analyzed: 05-Mar-09										
Total Residual Chlorine	0.049		mg/l	0.020	0.0500		98	90-110		
LCS (9030378-BS2)										
Prepared & Analyzed: 05-Mar-09										
Total Residual Chlorine	0.051		mg/l	0.020	0.0500		102	90-110		
Duplicate (9030378-DUP1)	**Source: SA91751-01**									
Prepared & Analyzed: 05-Mar-09										
Total Residual Chlorine	BRL		mg/l	0.200		BRL				20
Matrix Spike (9030378-MS1)	**Source: SA91751-01**									
Prepared & Analyzed: 05-Mar-09										
Total Residual Chlorine	0.510		mg/l	0.200	0.500	BRL	102	80-120		
Matrix Spike Dup (9030378-MSD1)	**Source: SA91751-01**									
Prepared & Analyzed: 05-Mar-09										
Total Residual Chlorine	0.500		mg/l	0.200	0.500	BRL	100	80-120	2	200

General Chemistry Parameters - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9030378 - General Preparation										
Matrix Spike Dup (9030378-MSD1)	**Source: SA91751-01**									
Prepared & Analyzed: 05-Mar-09										
Reference (9030378-SRM1)										
Prepared & Analyzed: 05-Mar-09										
Total Residual Chlorine	0.112		mg/l	0.020	0.113		99	85-115		
Batch 9030519 - General Preparation										
Blank (9030519-BLK1)										
Prepared & Analyzed: 09-Mar-09										
Cyanide (total)	BRL		mg/l	0.0100						
Blank (9030519-BLK2)										
Prepared & Analyzed: 09-Mar-09										
Cyanide (total)	BRL		mg/l	0.0100						
LCS (9030519-BS1)										
Prepared & Analyzed: 09-Mar-09										
Cyanide (total)	0.303		mg/l	0.0100	0.300		101	90-110		
LCS (9030519-BS2)										
Prepared & Analyzed: 09-Mar-09										
Cyanide (total)	0.306		mg/l	0.0100	0.300		102	90-110		
Duplicate (9030519-DUP1)	**Source: SA91765-08**									
Prepared & Analyzed: 09-Mar-09										
Cyanide (total)	BRL		mg/l	0.0100		BRL				20
Matrix Spike (9030519-MS1)	**Source: SA91765-08**									
Prepared & Analyzed: 09-Mar-09										
Cyanide (total)	0.302		mg/l	0.0100	0.300	BRL	101	90-110		
Matrix Spike Dup (9030519-MSD1)	**Source: SA91765-08**									
Prepared & Analyzed: 09-Mar-09										
Cyanide (total)	0.297		mg/l	0.0100	0.300	BRL	99	90-110	2	20
Reference (9030519-SRM1)										
Prepared & Analyzed: 09-Mar-09										
Cyanide (total)	0.135		mg/l	0.0100	0.137		98	5.18-124.8		
Batch 9030561 - General Preparation										
Blank (9030561-BLK1)										
Prepared & Analyzed: 09-Mar-09										
Total Suspended Solids	BRL		mg/l	5.00						
Blank (9030561-BLK2)										
Prepared & Analyzed: 09-Mar-09										
Total Suspended Solids	BRL		mg/l	5.00						
Duplicate (9030561-DUP1)	**Source: SA91695-01**									
Prepared & Analyzed: 09-Mar-09										
Total Suspended Solids	BRL		mg/l	5.00		BRL				20
Reference (9030561-SRM1)										
Prepared & Analyzed: 09-Mar-09										
Total Suspended Solids	92.0		mg/l	10.0	88.8		104	90-110		
Reference (9030561-SRM2)										
Prepared & Analyzed: 09-Mar-09										

General Chemistry Parameters - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9030561 - General Preparation										
Reference (9030561-SRM2)										
Prepared & Analyzed: 09-Mar-09										
Total Suspended Solids	96.0		mg/l	10.0	88.8		108	90-110		

Notes and Definitions

QC1	Analyte out of acceptance range.
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.
QR9	RPD out of acceptance range. The batch is accepted based upon LCS and/or LCSD recovery.
R01	The Reporting Limit has been raised to account for matrix interference.
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.

Validated by:
Hanibal C. Tayeh, Ph.D.
Rebecca Merz

SA 91751

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 ENVIRONMENTAL
200 AYER ROAD
HARVARD MA.

Project Mgr.: J. NESCA

Invoice To: HONEY FARMS
605 PLEASANT STREET
WORCESTER, MA

P.O. No.: _____ RQN: _____

Project No.: 32 WORCESTER ROAD
Site Name: HONEY FARMS
Location: CHARLTON State: MA
Sampler(s): M. PAMSEVALI

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=_____ 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: TSS 160.2/ME-330.1 NES-EMMON 7196A	TPH 1664	CN 335.3	8260 + TOX + 1,4 DIOXANE EDB	8270	PCB 608	METALS 200.7	METALS 200.8	QA Reporting Notes: (check if needed)
91951-01	HF REP-1	3/5/09	2:30	G	GW		3	3		3	✓	✓	✓	✓	✓	✓	✓	✓	ANALYSIS REQUIRED BY THE US EPA FOR REP PERMIT.
																			TOTAL RECOVERABLE METALS

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

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

State specific reporting standards: _____

☐ Fax results when available to (_____) _____
☒ E-mail to LAB DATA @ WILLIAMSONENV.COM
EDD Format _____

Condition upon receipt: ☐ Iced ☐ Ambient ☒ °C 9.9

Relinquished by:	Received by:	Date:	Time:
		3/5/09	1540