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:
Fuller Residence</td><td colspan="4">Facility/site address:</td></tr>
<tr><td colspan="2">Location of facility/site:
longitude: 72° 24' 12.16" latitude: 42° 20' 24.4"</td><td>Facility SIC code(s):</td><td colspan="3">Street:
18 Daniel Shays Highway</td></tr>
<tr><td colspan="3">b) Name of facility/site owner:</td><td colspan="3">Town: Pelham</td></tr>
<tr><td colspan="3" rowspan="2">Email address of owner:</td><td rowspan="2">State:
MA</td><td>Zip:
01007-9831</td><td>County:
Hampshire</td></tr>
<tr><td colspan="3">Telephone no.of facility/site owner: 413-207-1250</td></tr>
<tr><td colspan="3">Fax no. of facility/site owner:</td><td colspan="3" rowspan="2">Owner is (check one): 1. Federal____ 2. State/Tribal_____
3. Private__X__ 4. other, if so, describe:</td></tr>
<tr><td colspan="3">Address of owner (if different from site):</td></tr>
<tr><td colspan="6">Street:</td></tr>
<tr><td colspan="2">Town:</td><td>State:</td><td>Zip:</td><td colspan="2">County:</td></tr>
<tr><td colspan="2" rowspan="2">c) Legal name of operator:
Environmental Compliance Service, Inc.</td><td colspan="4">Operator telephone no: 802-257-1195</td></tr>
<tr><td colspan="2">Operator fax no.: 802-257-1603</td><td colspan="2">Operator email:
RGeisler@ecsconsult.com</td></tr>
<tr><td colspan="6">Operator contact name and title: Richard Geisler, PG, LSP</td></tr>
</table>

Address of **operator** (if different from owner):	Street: 588 Silver Street		
Town: Agawam	State: MA	Zip: 01001	County: Hampden

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

e) Is site/facility subject to any State permitting or other action which is causing the generation of discharge? Yes X No___
If "yes," please list:
1. site identification # assigned by the state of NH or MA: MA RTN 1-16025
2. permit or license # assigned:
3. state agency contact information: name, location, and telephone number:
MA DEP WERO 436 Dwight St. Springfield, MA 01103 (413)-784-1149

f) Is the site/facility covered by any other EPA permit, including:
1. multi-sector storm water general permit? Y___ N X, if Y, number:
2. phase I or II construction storm water general permit? Y___ N X,
if Y, number:
3. individual NPDES permit? Y___ N X, if Y, number:
4. any other water quality related permit? Y___ N X, 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:
A release of No. 2 Fuel Oil has occurred from an aboveground storage tank located in the basement of the site residence. Response actions at the site include removal of the concrete floor of the basement and the excavation of the soils beneath it. Depth to groundwater at the site is approximately 7-8 feet below grade. Groundwater flowing into the excavation will be pumped from the excavation into a fractionization tank and then through a liquid phase granulated activated carbon filtration system prior to discharge to an unnamed stream and then to Jobish Brook.

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 0.078 ft3/sec. Average flow 0.045 ft3/s Is maximum flow a **design value**? Y___ N X For average flow, include the units and appropriate notation if this value is a design value or estimate if not available. Estimate based on discharge equipment capacity

3) Latitude and longitude of each discharge within 100 feet: pt.1:long.72°24'11.66" lat.42°20'21.4" 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 1/25/06 end 3/25/06	
d) Please attach a line drawing or flow schematic showing water flow through the facility including: PLEASE SEE ATTACHED 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	SM 2540D	5000 ug/l	166,000		166,000	
2. Total Residual Chlorine	✓		1	grab	SW-846 9012A	200 ug/l				
3. Total Petroleum Hydrocarbons	✓		1	grab	8100	200 ug/l				
4. Cyanide	✓									
5. Benzene		✓	1	grab	8260B	0.5 ug/l	5.7		5.7	
6. Toluene		✓	1	grab	8260B	0.5 ug/l	32.4		32.4	
7. Ethylbenzene		✓	1	grab	8260B	0.5 ug/l	16.1		16.1	
8. (m,p,o) Xylenes		✓	1	grab	8260B	0.5 ug/l	99.7		99.7	
9. Total BTEX[4]		✓	1	grab	8260B	0.5 ug/l	153.9		153.9	

[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 ug/l				
11. Methyl-tert-Butyl Ether (MtBE)		✓	1	grab	8260B	0.5 ug/l	7.3		7.3	
12. tert-Butyl Alcohol (TBA)	✓		1	grab	8260B	0.5 ug/l				
13. tert-Amyl Methyl Ether (TAME)	✓		1	grab	8260B	0.5 ug/l				
14. Naphthalene		✓	1	grab	8260B	0.5 ug/l	32.9		32.9	
15. Carbon Tetra-chloride	✓		1	grab	8260B	0.5 ug/l				
16. 1,4 Dichlorobenzene	✓		1	grab	8260B	0.5 ug/l				
17. 1,2 Dichlorobenzene	✓		1	grab	8260B	0.5 ug/l				
18. 1,3 Dichlorobenzene	✓		1	grab	8260B	0.5 ug/l				
19. 1,1 Dichloroethane	✓		1	grab	8260B	0.5 ug/l				
20. 1,2 Dichloroethane	✓		1	grab	8260B	0.5 ug/l				
21. 1,1 Dichloroethylene	✓		1	grab	8260B	0.5 ug/l				
22. cis-1,2 Dichloro-ethylene	✓		1	grab	8260B	0.5 ug/l				
23. Dichloromethane (Methylene Chloride)	✓		1	grab	8260B	0.5 ug/l				
24. Tetrachloroethylene	✓		1	grab	8260B	0.5 ug/l				

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	0.5 ug/l				
26. 1,1,2 Trichloroethane	✓		1	grab	8260B	0.5 ug/l				
27. Trichloroethylene	✓		1	grab	8260B	0.5 ug/l				
28. Vinyl Chloride	✓		1	grab	8260B	0.5 ug/l				
29. Acetone	✓		1	grab	8260B	0.5 ug/l				
30. 1,4 Dioxane	✓		1	grab	8260B	0.5 ug/l				
31. Total Phenols	✓		1	grab	8270C	5.56 ug/l				
32. Pentachlorophenol	✓		1	grab	8270C	5.56 ug/l				
33. Total Phthalates [5] (Phthalate esthers)	✓		1	grab	8270C	5.56 ug/l				
34. Bis (2-Ethylhexyl) Phthalate [Di-(ethylhexyl) Phthalate]	✓		1	grab	8270C	5.56 ug/l				
35. Total Group I Polycyclic Aromatic Hydrocarbons (PAH)	✓		1	grab	MADEP EPH	5.56 ug/l				
a. Benzo(a) Anthracene	✓		1	grab	MADEP EPH	5.15 ug/l				
b. Benzo(a) Pyrene	✓		1	grab	MADEP EPH	5.15 ug/l				
c. Benzo(b)Fluoranthene	✓		1	grab	MADEP EPH	5.15 ug/l				
d. Benzo(k) Fluoranthene	✓		1	grab	MADEP EPH	5.15 ug/l				
e. Chrysene	✓		1	grab	MADEP EPH	5.15 ug/l				

[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	MADEP EPH	5.15 ug/l				
g. Indeno(1,2,3-cd) Pyrene	✓		1	grab	MADEP EPH	5.15 ug/l				
36. Total Group II Polycyclic Aromatic Hydrocarbons (PAH)	✓		1	grab	MADEP EPH	5.15 ug/l				
h. Acenaphthene	✓		1	grab	MADEP EPH	5.15 ug/l				
i. Acenaphthylene	✓		1	grab	MADEP EPH	5.15 ug/l				
j. Anthracene	✓		1	grab	MADEP EPH	5.15 ug/l				
k. Benzo(ghi) Perylene	✓		1	grab	MADEP EPH	5.15 ug/l				
l. Fluoranthene	✓		1	grab	MADEP EPH	5.15 ug/l				
m. Fluorene	✓		1	grab	MADEP EPH	5.15 ug/l				
n. Naphthalene-	✓		1	grab	MADEP EPH	5.15 ug/l				
o. Phenanthrene	✓		1	grab	MADEP EPH	5.15 ug/l				
p. Pyrene	✓		1	grab	MADEP EPH	5.15 ug/l				
37. Total Polychlorinated Biphenyls (PCBs)	✓		1	grab	608	0.444 ug/l				
38. Antimony	✓		1	grab	6000	6 ug/l				
39. Arsenic	✓		1	grab	6000	4 ug/l				
40. Cadmium	✓		1	grab	6000	12 ug/l				
41. Chromium III	✓		1	grab	6000	5 ug/l				
42. Chromium VI	✓		1	grab	6000	25 ug/l				

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	6000	25 ug/l				
44. Lead	✓		1	Grab	6000	38 ug/l				
45. Mercury	✓		1	Grab	200	0.2 ug/l				
46. Nickel	✓		1	Grab	6000	25 ug/l				
47. Selenium	✓		1	Grab	6000	75 ug/l				
48. Silver	✓		1	Grab	6000	50 ug/l				
49. Zinc		✓	1	Grab	6000	25 ug/l	0.0202		0.202	
50. Iron		✓	1	Grab	6000	25 ug/l	0.662		0.662	
Other (describe): See attached sheet										

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:

3. b. other contaminents

PARAMETER	Believe Present	# of samples	Analytical method used	Minimum Level of Test Method	Maximum Daily Value concentration	Maximum Daily Value mass	Avg. Daily Value concentration	Avg. Daily Value mass
n-buttybenzene	✓	1	8260B	0.5 ug/l	2.8		2.8	
sec-buttybenzene	✓	1	8260B	0.5 ug/l	3.5		3.5	
isopropylbenzene	✓	1	8260B	0.5 ug/l	5.6		5.6	
4-isopropyltoluene	✓	1	8260B	0.5 ug/l	3.1		3.1	
n-propylbenzene	✓	1	8260B	0.5 ug/l	6.6		6.6	
1,2,4-trimethylbenzene	✓	1	8260B	0.5 ug/l	42.8		42.8	
1,3,5-trimethylbenzene	✓	1	8260B	0.5 ug/l	16.8		16.8	

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
Groundwater from the excavation will be pumped to an on-site fractionization tank and pumped through two liquid phase granulated activated carbon units piped in series prior to discharge to an unnamed stream South of the site

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 25 Maximum flow rate of treatment system 35 Design flow rate of treatment system 25

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

5. Receiving surface water(s). Please provide information about the receiving water(s), using separate sheets as necessary:

a) Identify the discharge pathway:	Direct_____	Within facility__	Storm drain____	River/brook X	Wetlands_____	Other (describe):

b) Provide a narrative description of the discharge pathway, including the name(s) of the receiving waters:
Water pumped through the carbon units will be discharged to an unnamed stream located 200 feet South of the site along Daniel Shays Highway. The stream flows easterly under Daniel Shays Highways via an existing sub-roadway concrete conduit and into Jabish Brook, located approximately 600 feet east of the site.

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 Class B Warm Water,

e) Provide the reported or calculated seven day-ten year low flow (7Q10) of the receiving water 33.7 cfs (figure obtained from MA office of USGS and represents an estimate based on calculated 7Q10 for Swift River in West Ware)
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 X If yes, for which pollutant(s)?

Is there a TMDL? Yes____ No X 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 X
Has any consultation with the federal services been completed ? ____ No____ or is consultation underway? X 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 X Have any state or tribal historic preservation officer been consulted in this determination (Massachusetts only)? Yes_____ No X

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:

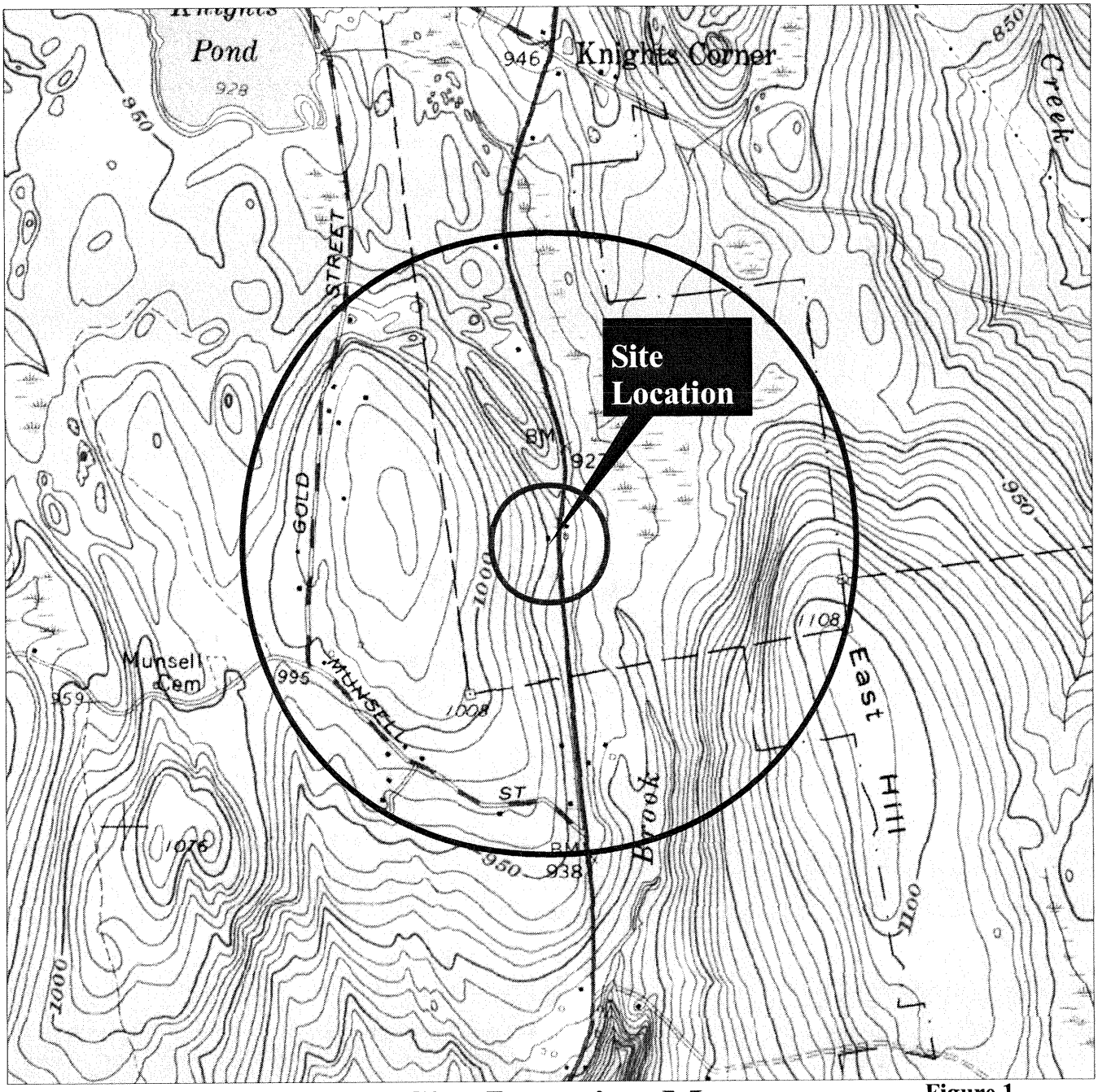
I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage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

Operator signature:

Title: Sr. Project Manager / Hydrogeologist

Date: 1/17/06



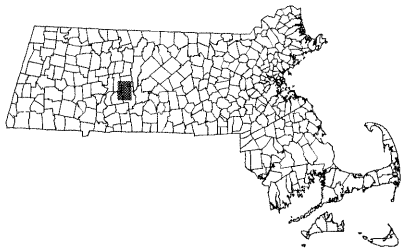
Site Location Map

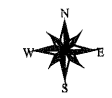
18 Daniel Shays Highway
Pelham, MA 01007

Figure 1

500 0 500 1000 Feet

1 in. = 1250 ft.

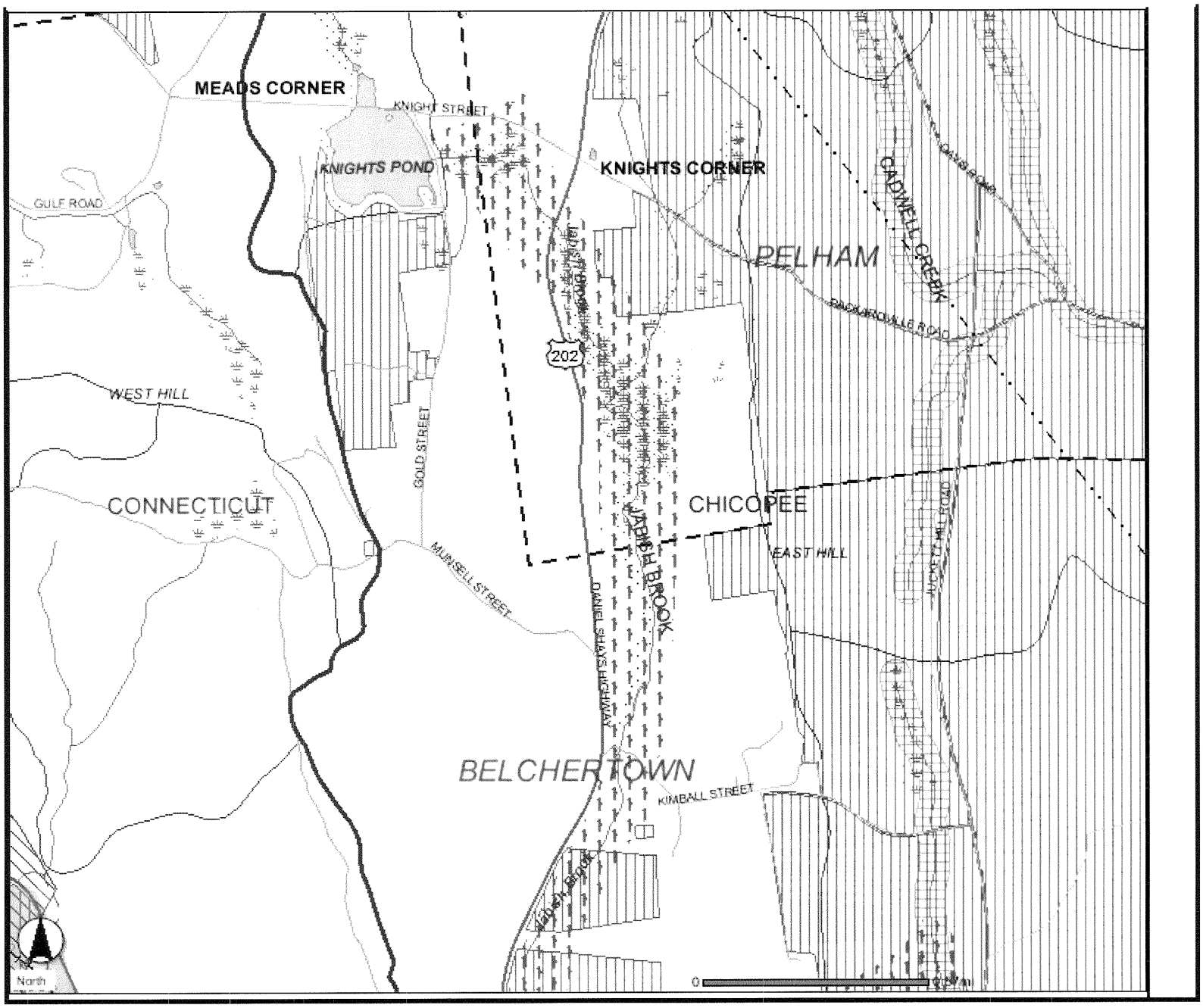




01-205419.00
01/09/06

Map taken from the USGS 7.5 Minute Belchertown Quadrangle, 1981.

ecs


MEADS CORNER
KNIGHT STREET
KNIGHTS POND
KNIGHTS CORNER
GULF ROAD
CADWELL CREEK
PELHAM
PACKARDVILLE ROAD
202
WEST HILL
GOLD STREET
CONNECTICUT
CHICOPEE
MUNSELL STREET
JABISH BROOK
EAST HILL
DANIEL SHAYS HIGHWAY
BELCHERTOWN
KIMBALL STREET
North
0

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

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
- SALTWATER WETLANDS
- FLATS,SHOALS

Rivers and Streams

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

EOT-OTP Roads

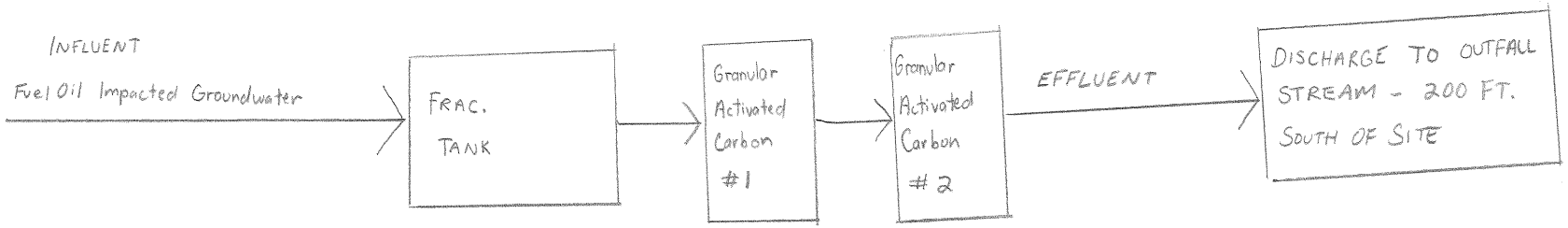
- LIMITED ACCESS HIGHW
- MULTI-LANE HWY, NOT LIMITED ACCESS
- OTHER NUMBERED HWY
- MAJOR ROAD - COLLECT
- MINOR STREET OR ROA RAMP

Tracks and Trails MHD

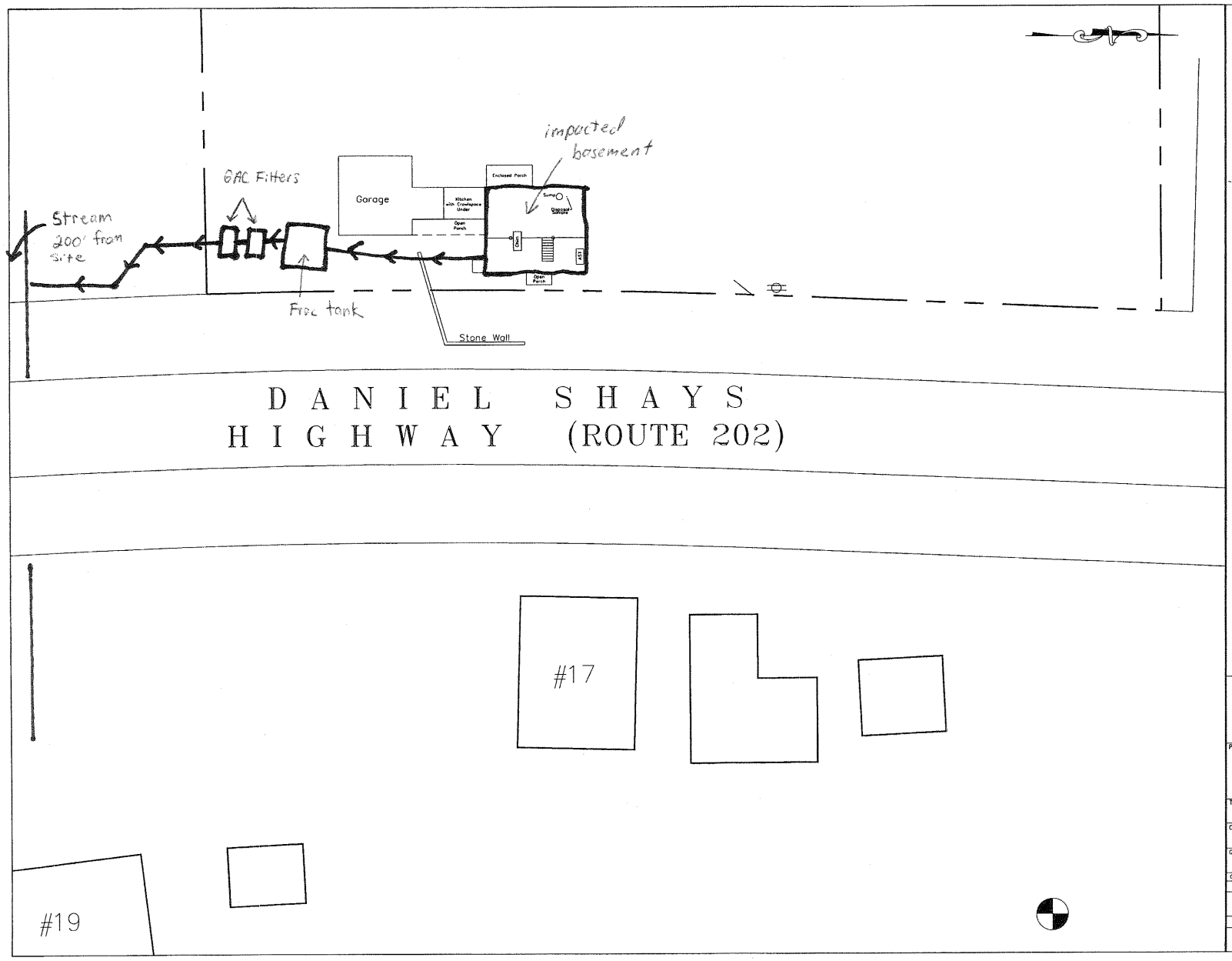
- TRACK
- TRAIL

Transmission Lines

- PIPELINE
- POWERLINE
- TRAIN



FULLER RESIDENCE
18 Daniel Shays Highway
Pelham, MA



Legend

- Approximate Property Line
- SS — Sanitary Sewer Line
- SW — Storm Sewer Line
- W — Water Line
- NG — Natural Gas Line
- OE — Overhead Electric Line
- MH — Manhole
- Catchbasin
- Water Gate
- Fire Hydrant
- Utility Pole
- Soil Boring
- Monitoring Well
- ECS-1 — Well I.D.

General Notes:

All locations, dimensions, and property lines depicted on this plan are approximate. This plan should not be used for construction or land conveyance purposes.

ecs
588 Silver Street * Agawam, MA 01001
Phone: 1-800-789-3530 Fax: 413-789-2776

PROJECT:
Fuller Residence
18 Daniel Sahys Highway
Pelham, Massachusetts

TITLE:
Site Plan

CLIENT:
CLIENT

GRAPHIC SCALE: 30 15 0 15 30

COMPUTER CADFILE : 205419E.DWG

DRAWN BY:	DESIGNED BY:	CHECKED BY:	APPROVED BY:
RAS/RRW	RAS	KK	KK
SCALE:	DATE:	JOB NO.:	FIGURE NO.:
1"=30'	Jan, 2006	205419	2

Report Date:
13-Jan-06 13:39

☐ Final Report
☐ Re-Issued Report
☐ Revised Report

Laboratory Report

Environmental Compliance Services
588 Silver Street
Agawam, MA 01001
Attn: Kate Kunkel

Project: Daniel Shays Hwy-Pelham, MA
Project #: 205419

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
SA39412-01	NIPTEES (1)	Ground Water	10-Jan-06 11:00	11-Jan-06 14:55
SA39412-02	NIPTEES (2)	Ground Water	11-Jan-06 11:00	11-Jan-06 14:55
SA39412-03	Trip Blank	Ground Water	11-Jan-06 00:00	11-Jan-06 14:55

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. All applicable NELAC requirements have been met.
Please note that this report contains 27 pages of analytical data plus Chain of Custody document(s).

Massachusetts Certification # M-MA138/MA1110
Connecticut # PH-0777
Florida # E87600/E87936
Maine # MA138
New Hampshire # 2538/2972
New York # 11393/11840
Rhode Island # 98
USDA # S-51435
Vermont # VT-11393

Authorized by:

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

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 indicated. Please refer to our "Quality" webpage at www.spectrum-analytical.com for a full listing of our current certifications.

CASE NARRATIVE:

The data set for work order SA39412 complies with internal QC criteria for the methods performed. The samples were received @ 2.0 degrees Celsius. An infrared thermometer with a tolerance of +/- 2.0 degrees Celsius was used immediately upon receipt of the samples.

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 5/2004 Rev.4, Table 11 A-1, recovery for some VOC analytes have been deemed potentially difficult. Although they may still be within the recommended 70%-130% recovery range, a range has been set based on historical control limits. Please refer to "Notes and Definitions" for all sample/analyte qualifiers. Qualifiers will narrate any non-conformances and issues relating to quality control samples and/or sample analysis/matrix.

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
NIPTEES (1) SA39412-01	205419	Ground Water	10-Jan-06 11:00	11-Jan-06

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Volatile Organic Compounds											
Volatile Organic Compounds											
Prepared by method	SW846 5030 Water MS										
67-64-1	Acetone	BRL		µg/l	5.0	1	SW 846 8260B	12-Jan-06	12-Jan-06	6010510	KL
107-13-1	Acrylonitrile	BRL		µg/l	0.5	1	"	"	"	"	"
71-43-2	Benzene	5.7		µg/l	0.5	1	"	"	"	"	"
108-86-1	Bromobenzene	BRL		µg/l	0.5	1	"	"	"	"	"
74-97-5	Bromochloromethane	BRL		µg/l	0.5	1	"	"	"	"	"
75-27-4	Bromodichloromethane	BRL		µg/l	0.5	1	"	"	"	"	"
75-25-2	Bromoform	BRL		µg/l	0.5	1	"	"	"	"	"
74-83-9	Bromomethane	BRL		µg/l	1.0	1	"	"	"	"	"
78-93-3	2-Butanone (MEK)	BRL		µg/l	5.0	1	"	"	"	"	"
104-51-8	n-Butylbenzene	2.8		µg/l	0.5	1	"	"	"	"	"
135-98-8	sec-Butylbenzene	3.5		µg/l	0.5	1	"	"	"	"	"
98-06-6	tert-Butylbenzene	BRL		µg/l	0.5	1	"	"	"	"	"
75-15-0	Carbon disulfide	BRL		µg/l	2.5	1	"	"	"	"	"
56-23-5	Carbon tetrachloride	BRL		µg/l	0.5	1	"	"	"	"	"
108-90-7	Chlorobenzene	BRL		µg/l	0.5	1	"	"	"	"	"
75-00-3	Chloroethane	BRL		µg/l	1.0	1	"	"	"	"	"
67-66-3	Chloroform	BRL		µg/l	0.5	1	"	"	"	"	"
74-87-3	Chloromethane	BRL		µg/l	1.0	1	"	"	"	"	"
95-49-8	2-Chlorotoluene	BRL		µg/l	0.5	1	"	"	"	"	"
106-43-4	4-Chlorotoluene	BRL		µg/l	0.5	1	"	"	"	"	"
96-12-8	1,2-Dibromo-3-chloropropane	BRL		µg/l	1.0	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	0.5	1	"	"	"	"	"
95-50-1	1,2-Dichlorobenzene	BRL		µg/l	0.5	1	"	"	"	"	"
541-73-1	1,3-Dichlorobenzene	BRL		µg/l	0.5	1	"	"	"	"	"
106-46-7	1,4-Dichlorobenzene	BRL		µg/l	0.5	1	"	"	"	"	"
75-71-8	Dichlorodifluoromethane (Freon12)	BRL		µg/l	1.0	1	"	"	"	"	"
75-34-3	1,1-Dichloroethane	BRL		µg/l	0.5	1	"	"	"	"	"
107-06-2	1,2-Dichloroethane	BRL		µg/l	0.5	1	"	"	"	"	"
75-35-4	1,1-Dichloroethene	BRL		µg/l	0.5	1	"	"	"	"	"
156-59-2	cis-1,2-Dichloroethene	BRL		µg/l	0.5	1	"	"	"	"	"
156-60-5	trans-1,2-Dichloroethene	BRL		µg/l	0.5	1	"	"	"	"	"
78-87-5	1,2-Dichloropropane	BRL		µg/l	0.5	1	"	"	"	"	"
142-28-9	1,3-Dichloropropane	BRL		µg/l	0.5	1	"	"	"	"	"
594-20-7	2,2-Dichloropropane	BRL		µg/l	0.5	1	"	"	"	"	"
563-58-6	1,1-Dichloropropene	BRL		µg/l	0.5	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	16.1		µg/l	0.5	1	"	"	"	"	"
87-68-3	Hexachlorobutadiene	BRL		µg/l	0.5	1	"	"	"	"	"
591-78-6	2-Hexanone (MBK)	BRL		µg/l	5.0	1	"	"	"	"	"
98-82-8	Isopropylbenzene	5.6		µg/l	0.5	1	"	"	"	"	"
99-87-6	4-Isopropyltoluene	3.1		µg/l	0.5	1	"	"	"	"	"
1634-04-4	Methyl tert-butyl ether	7.3		µg/l	0.5	1	"	"	"	"	"
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL		µg/l	5.0	1	"	"	"	"	"
75-09-2	Methylene chloride	BRL		µg/l	5.0	1	"	"	"	"	"
91-20-3	Naphthalene	32.9		µg/l	1.0	1	"	"	"	"	"
103-65-1	n-Propylbenzene	6.6		µg/l	0.5	1	"	"	"	"	"
100-42-5	Styrene	BRL		µg/l	0.5	1	"	"	"	"	"

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
NIPTEES (1) SA39412-01	205419	Ground Water	10-Jan-06 11:00	11-Jan-06

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Volatile Organic Compounds											
Volatile Organic Compounds											
Prepared by method SW846 5030 Water MS											
630-20-6	1,1,1,2-Tetrachloroethane	BRL		µg/l	0.5	1	SW 846 8260B	12-Jan-06	12-Jan-06	6010510	KL
79-34-5	1,1,2,2-Tetrachloroethane	BRL		µg/l	0.5	1	"	"	"	"	"
127-18-4	Tetrachloroethene	BRL		µg/l	0.5	1	"	"	"	"	"
108-88-3	Toluene	32.4		µg/l	0.5	1	"	"	"	"	"
87-61-6	1,2,3-Trichlorobenzene	BRL		µg/l	0.5	1	"	"	"	"	"
120-82-1	1,2,4-Trichlorobenzene	BRL		µg/l	0.5	1	"	"	"	"	"
71-55-6	1,1,1-Trichloroethane	BRL		µg/l	0.5	1	"	"	"	"	"
79-00-5	1,1,2-Trichloroethane	BRL		µg/l	0.5	1	"	"	"	"	"
79-01-6	Trichloroethene	BRL		µg/l	0.5	1	"	"	"	"	"
75-69-4	Trichlorofluoromethane (Freon 11)	BRL		µg/l	0.5	1	"	"	"	"	"
96-18-4	1,2,3-Trichloropropane	BRL		µg/l	0.5	1	"	"	"	"	"
95-63-6	1,2,4-Trimethylbenzene	42.8		µg/l	0.5	1	"	"	"	"	"
108-67-8	1,3,5-Trimethylbenzene	16.8		µg/l	0.5	1	"	"	"	"	"
75-01-4	Vinyl chloride	BRL		µg/l	0.5	1	"	"	"	"	"
1330-20-7	m,p-Xylene	52.9		µg/l	1.0	1	"	"	"	"	"
95-47-6	o-Xylene	46.8		µg/l	0.5	1	"	"	"	"	"
109-99-9	Tetrahydrofuran	BRL		µg/l	5.0	1	"	"	"	"	"
60-29-7	Ethyl ether	BRL		µg/l	0.5	1	"	"	"	"	"
994-05-8	Tert-amyl methyl ether	BRL		µg/l	0.5	1	"	"	"	"	"
637-92-3	Ethyl tert-butyl ether	BRL		µg/l	0.5	1	"	"	"	"	"
108-20-3	Di-isopropyl ether	BRL		µg/l	0.5	1	"	"	"	"	"
75-65-0	Tert-Butanol / butyl alcohol	BRL		µg/l	5.0	1	"	"	"	"	"
123-91-1	1,4-Dioxane	BRL		µg/l	10.0	1	"	"	"	"	"
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*101*		*70-130 %*			"	"	"	"	"
2037-26-5	*Toluene-d8*	*92.2*		*70-130 %*			"	"	"	"	"
17060-07-0	*1,2-Dichloroethane-d4*	*89.2*		*70-130 %*			"	"	"	"	"
1868-53-7	*Dibromofluoromethane*	*95.4*		*70-130 %*			"	"	"	"	"
Extractable Petroleum Hydrocarbons											
EPH Aliphatic/Aromatic Ranges											
Prepared by method SW846 3510C											
	C9-C18 Aliphatic Hydrocarbons	BRL		mg/l	0.2	1	+MADEP 5/2004 R	12-Jan-06	13-Jan-06	6010494	SM
	C19-C36 Aliphatic Hydrocarbons	BRL		mg/l	0.2	1	"	"	"	"	"
	C11-C22 Aromatic Hydrocarbons	BRL		mg/l	0.2	1	"	"	"	"	"
	Unadjusted C11-C22 Aromatic Hydrocarbons	BRL		mg/l	0.2	1	"	"	"	"	"
	Total Petroleum Hydrocarbons	BRL		mg/l	0.2	1	"	"	"	"	"
	Unadjusted Total Petroleum Hydrocarbons	BRL		mg/l	0.2	1	"	"	"	"	"
EPH Target PAH Analytes											
Prepared by method SW846 3510C											
91-20-3	Naphthalene	BRL		µg/l	5.15	1	"	"	"	"	"
91-57-6	2-Methylnaphthalene	5.92		µg/l	5.15	1	"	"	"	"	"
208-96-8	Acenaphthylene	BRL		µg/l	5.15	1	"	"	"	"	"
83-32-9	Acenaphthene	BRL		µg/l	5.15	1	"	"	"	"	"
86-73-7	Fluorene	BRL		µg/l	5.15	1	"	"	"	"	"
85-01-8	Phenanthrene	BRL		µg/l	5.15	1	"	"	"	"	"
120-12-7	Anthracene	BRL		µg/l	5.15	1	"	"	"	"	"
206-44-0	Fluoranthene	BRL		µg/l	5.15	1	"	"	"	"	"
129-00-0	Pyrene	BRL		µg/l	5.15	1	"	"	"	"	"

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
NIPTEES (1)	205419	Ground Water	10-Jan-06 11:00	11-Jan-06
SA39412-01				

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Extractable Petroleum Hydrocarbons											
EPH Target PAH Analytes											
Prepared by method	SW846 3510C										
56-55-3	Benzo (a) anthracene	BRL		µg/l	5.15	1	+MADEP 5/2004 R	12-Jan-06	13-Jan-06	6010494	SM
218-01-9	Chrysene	BRL		µg/l	5.15	1	"	"	"	"	"
205-99-2	Benzo (b) fluoranthene	BRL		µg/l	5.15	1	"	"	"	"	"
207-08-9	Benzo (k) fluoranthene	BRL		µg/l	5.15	1	"	"	"	"	"
50-32-8	Benzo (a) pyrene	BRL		µg/l	5.15	1	"	"	"	"	"
193-39-5	Indeno (1,2,3-cd) pyrene	BRL		µg/l	5.15	1	"	"	"	"	"
53-70-3	Dibenzo (a,h) anthracene	BRL		µg/l	5.15	1	"	"	"	"	"
191-24-2	Benzo (g,h,i) perylene	BRL		µg/l	5.15	1	"	"	"	"	"
Surrogate recoveries:											
3386-33-2	*1-Chlorooctadecane*	*59.0*		*40-140 %*			"	"	"	"	"
84-15-1	*Ortho-Terphenyl*	*63.7*		*40-140 %*			"	"	"	"	"
580-13-2	*2-Bromonaphthalene*	*82.8*		*40-140 %*			"	"	"	"	"
321-60-8	*2-Fluorobiphenyl*	*83.0*		*40-140 %*			"	"	"	"	"
TPH 8100 by GC											
Prepared by method	SW846 3535										
8006-61-9	Gasoline	BRL		mg/l	0.2	1	+SW846 8100Mod.	12-Jan-06	13-Jan-06	6010495	LK
68476-30-2	Fuel Oil #2	BRL		mg/l	0.2	1	"	"	"	"	"
68476-31-3	Fuel Oil #4	BRL		mg/l	0.2	1	"	"	"	"	"
68553-00-4	Fuel Oil #6	BRL		mg/l	0.2	1	"	"	"	"	"
M09800000	Motor Oil	BRL		mg/l	0.2	1	"	"	"	"	"
8032-32-4	Ligroin	BRL		mg/l	0.2	1	"	"	"	"	"
J00100000	Aviation Fuel	BRL		mg/l	0.2	1	"	"	"	"	"
	Unidentified	BRL		mg/l	0.2	1	"	"	"	"	"
	Other Oil	BRL		mg/l	0.2	1	"	"	"	"	"
	Total Petroleum Hydrocarbons	BRL		mg/l	0.2	1	"	"	"	"	"
Surrogate recoveries:											
3386-33-2	*1-Chlorooctadecane*	*59.0*		*40-140 %*			"	"	"	"	"
Total Metals by EPA 6000/7000 Series Methods											
7440-22-4	Silver	BRL		mg/l	0.0050	1	SW846 6010B	12-Jan-06	12-Jan-06	6010477	RE
7440-38-2	Arsenic	BRL		mg/l	0.0040	1	"	"	"	"	"
7440-41-7	Beryllium	BRL		mg/l	0.0010	1	"	"	"	"	"
7440-43-9	Cadmium	BRL		mg/l	0.0012	1	"	"	"	"	"
7440-47-3	Chromium	BRL		mg/l	0.0025	1	"	"	"	"	"
7440-50-8	Copper	BRL		mg/l	0.0025	1	"	"	"	"	"
7439-89-6	Iron	0.662		mg/l	0.0025	1	"	"	"	"	"
7440-02-0	Nickel	BRL		mg/l	0.0025	1	"	"	"	"	"
7439-92-1	Lead	BRL		mg/l	0.0038	1	"	"	"	"	"
7440-36-0	Antimony	BRL		mg/l	0.0060	1	"	"	"	"	"
7782-49-2	Selenium	BRL		mg/l	0.0075	1	"	"	"	"	"
7440-28-0	Thallium	BRL		mg/l	0.0050	1	"	"	"	"	"
7440-66-6	Zinc	0.0202		mg/l	0.0025	1	"	"	"	"	"
Total Metals by EPA 200 Series Methods											
7439-97-6	Mercury	BRL		mg/l	0.00020	1	EPA 245.2/7470A	12-Jan-06	12-Jan-06	6010478	YP

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
NIPTEES (2) SA39412-02	205419	Ground Water	11-Jan-06 11:00	11-Jan-06

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Semivolatile Organic Compounds by GC											
Polychlorinated Biphenyls by EPA 608											
Prepared by method	SW846 3510C										
12674-11-2	PCB 1016	BRL		µg/l	0.444	1	EPA 608	12-Jan-06	12-Jan-06	6010497	TG
11104-28-2	PCB 1221	BRL		µg/l	0.444	1	"	"	"	"	"
11141-16-5	PCB 1232	BRL		µg/l	0.444	1	"	"	"	"	"
53469-21-9	PCB 1242	BRL		µg/l	0.444	1	"	"	"	"	"
12672-29-6	PCB 1248	BRL		µg/l	0.444	1	"	"	"	"	"
11097-69-1	PCB 1254	BRL		µg/l	0.444	1	"	"	"	"	"
11096-82-5	PCB 1260	BRL		µg/l	0.444	1	"	"	"	"	"
37324-23-5	PCB 1262	BRL		µg/l	0.444	1	"	"	"	"	"
11100-14-4	PCB 1268	BRL		µg/l	0.444	1	"	"	"	"	"
Surrogate recoveries:											
10386-84-2	*4,4-DB-Octafluorobiphenyl (Sr)*	*70.0*		*30-150 %*			"	"	"	"	"
2051-24-3	*Decachlorobiphenyl (Sr)*	*105*		*30-150 %*			"	"	"	"	"
Semivolatile Organic Compounds by GCMS											
Phenols by SW846 8270C											
Prepared by method	SW846 3535										
87-86-5	Pentachlorophenol	BRL		µg/l	5.56	1	SW846 8270C	12-Jan-06	13-Jan-06	6010496	
Surrogate recoveries:											
367-12-4	*2-Fluorophenol*	*42.4*		*15-110 %*			"	"	"	"	"
4165-62-2	*Phenol-d5*	*44.7*		*15-110 %*			"	"	"	"	"
Phthalates by SW846 8270C											
Prepared by method	SW846 3535										
117-81-7	Bis(2-ethylhexyl)phthalate	BRL		µg/l	5.56	1	"	"	"	"	"
85-68-7	Butyl benzyl phthalate	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	"	"	"	"	"
84-74-2	Di-n-butyl phthalate	BRL		µg/l	5.56	1	"	"	"	"	"
117-84-0	Di-n-octyl phthalate	BRL		µg/l	5.56	1	"	"	"	"	"
Surrogate recoveries:											
4165-60-0	*Nitrobenzene-d5*	*60.2*		*30-130 %*			"	"	"	"	"
1718-51-0	*Terphenyl-dl4*	*79.5*		*30-130 %*			"	"	"	"	"
Total Metals by EPA 6000/7000 Series Methods											
7440-47-3	Chromium	BRL		mg/l	0.0025	1	SW846 6010B	12-Jan-06	12-Jan-06	6010477	RE
General Chemistry Parameters											
	Trivalent Chromium	BRL		mg/l	0.0050	1	Calculation	12-Jan-06	12-Jan-06	6010477	RE
1854-029-9	Hexavalent Chromium	BRL	R-01	mg/l	0.025	5	SM3500CrD/7196A	12-Jan-06 10:15	12-Jan-06	6010522	ES
57-12-5	Cyanide (total)	BRL		mg/l	0.0100	1	10-204-00-1-A / SW-846 9012A	12-Jan-06	12-Jan-06	6010542	AW
7782-50-5	Total Residual Chlorine	BRL	R-01	mg/l	0.200	10	Hach 8167	11-Jan-06 17:45	11-Jan-06	6010488	ES
	Total Suspended Solids	166		mg/l	5.00	1	SM2540D	13-Jan-06	13-Jan-06	6010584	EK

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
Trip Blank SA39412-03	205419	Ground Water	11-Jan-06 00:00	11-Jan-06

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Volatile Organic Compounds											
Volatile Organic Compounds											
Prepared by method	SW846 5030 Water MS										
67-64-1	Acetone	BRL		µg/l	5.0	1	SW 846 8260B	12-Jan-06	12-Jan-06	6010510	KL
107-13-1	Acrylonitrile	BRL		µg/l	0.5	1	"	"	"	"	"
71-43-2	Benzene	BRL		µg/l	0.5	1	"	"	"	"	"
108-86-1	Bromobenzene	BRL		µg/l	0.5	1	"	"	"	"	"
74-97-5	Bromochloromethane	BRL		µg/l	0.5	1	"	"	"	"	"
75-27-4	Bromodichloromethane	BRL		µg/l	0.5	1	"	"	"	"	"
75-25-2	Bromoform	BRL		µg/l	0.5	1	"	"	"	"	"
74-83-9	Bromomethane	BRL		µg/l	1.0	1	"	"	"	"	"
78-93-3	2-Butanone (MEK)	BRL		µg/l	5.0	1	"	"	"	"	"
104-51-8	n-Butylbenzene	BRL		µg/l	0.5	1	"	"	"	"	"
135-98-8	sec-Butylbenzene	BRL		µg/l	0.5	1	"	"	"	"	"
98-06-6	tert-Butylbenzene	BRL		µg/l	0.5	1	"	"	"	"	"
75-15-0	Carbon disulfide	BRL		µg/l	2.5	1	"	"	"	"	"
56-23-5	Carbon tetrachloride	BRL		µg/l	0.5	1	"	"	"	"	"
108-90-7	Chlorobenzene	BRL		µg/l	0.5	1	"	"	"	"	"
75-00-3	Chloroethane	BRL		µg/l	1.0	1	"	"	"	"	"
67-66-3	Chloroform	BRL		µg/l	0.5	1	"	"	"	"	"
74-87-3	Chloromethane	BRL		µg/l	1.0	1	"	"	"	"	"
95-49-8	2-Chlorotoluene	BRL		µg/l	0.5	1	"	"	"	"	"
106-43-4	4-Chlorotoluene	BRL		µg/l	0.5	1	"	"	"	"	"
96-12-8	1,2-Dibromo-3-chloropropane	BRL		µg/l	1.0	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	0.5	1	"	"	"	"	"
95-50-1	1,2-Dichlorobenzene	BRL		µg/l	0.5	1	"	"	"	"	"
541-73-1	1,3-Dichlorobenzene	BRL		µg/l	0.5	1	"	"	"	"	"
106-46-7	1,4-Dichlorobenzene	BRL		µg/l	0.5	1	"	"	"	"	"
75-71-8	Dichlorodifluoromethane (Freon12)	BRL		µg/l	1.0	1	"	"	"	"	"
75-34-3	1,1-Dichloroethane	BRL		µg/l	0.5	1	"	"	"	"	"
107-06-2	1,2-Dichloroethane	BRL		µg/l	0.5	1	"	"	"	"	"
75-35-4	1,1-Dichloroethene	BRL		µg/l	0.5	1	"	"	"	"	"
156-59-2	cis-1,2-Dichloroethene	BRL		µg/l	0.5	1	"	"	"	"	"
156-60-5	trans-1,2-Dichloroethene	BRL		µg/l	0.5	1	"	"	"	"	"
78-87-5	1,2-Dichloropropane	BRL		µg/l	0.5	1	"	"	"	"	"
142-28-9	1,3-Dichloropropane	BRL		µg/l	0.5	1	"	"	"	"	"
594-20-7	2,2-Dichloropropane	BRL		µg/l	0.5	1	"	"	"	"	"
563-58-6	1,1-Dichloropropene	BRL		µg/l	0.5	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	0.5	1	"	"	"	"	"
87-68-3	Hexachlorobutadiene	BRL		µg/l	0.5	1	"	"	"	"	"
591-78-6	2-Hexanone (MBK)	BRL		µg/l	5.0	1	"	"	"	"	"
98-82-8	Isopropylbenzene	BRL		µg/l	0.5	1	"	"	"	"	"
99-87-6	4-Isopropyltoluene	BRL		µg/l	0.5	1	"	"	"	"	"
1634-04-4	Methyl tert-butyl ether	BRL		µg/l	0.5	1	"	"	"	"	"
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL		µg/l	5.0	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	0.5	1	"	"	"	"	"
100-42-5	Styrene	BRL		µg/l	0.5	1	"	"	"	"	"

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
Trip Blank SA39412-03	205419	Ground Water	11-Jan-06 00:00	11-Jan-06

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Volatile Organic Compounds											
Volatile Organic Compounds											
Prepared by method	SW846 5030 Water MS										
630-20-6	1,1,1,2-Tetrachloroethane	BRL		µg/l	0.5	1	SW 846 8260B	12-Jan-06	12-Jan-06	6010510	KL
79-34-5	1,1,2,2-Tetrachloroethane	BRL		µg/l	0.5	1	"	"	"	"	"
127-18-4	Tetrachloroethene	BRL		µg/l	0.5	1	"	"	"	"	"
108-88-3	Toluene	BRL		µg/l	0.5	1	"	"	"	"	"
87-61-6	1,2,3-Trichlorobenzene	BRL		µg/l	0.5	1	"	"	"	"	"
120-82-1	1,2,4-Trichlorobenzene	BRL		µg/l	0.5	1	"	"	"	"	"
71-55-6	1,1,1-Trichloroethane	BRL		µg/l	0.5	1	"	"	"	"	"
79-00-5	1,1,2-Trichloroethane	BRL		µg/l	0.5	1	"	"	"	"	"
79-01-6	Trichloroethene	BRL		µg/l	0.5	1	"	"	"	"	"
75-69-4	Trichlorofluoromethane (Freon 11)	BRL		µg/l	0.5	1	"	"	"	"	"
96-18-4	1,2,3-Trichloropropane	BRL		µg/l	0.5	1	"	"	"	"	"
95-63-6	1,2,4-Trimethylbenzene	BRL		µg/l	0.5	1	"	"	"	"	"
108-67-8	1,3,5-Trimethylbenzene	BRL		µg/l	0.5	1	"	"	"	"	"
75-01-4	Vinyl chloride	BRL		µg/l	0.5	1	"	"	"	"	"
1330-20-7	m,p-Xylene	BRL		µg/l	1.0	1	"	"	"	"	"
95-47-6	o-Xylene	BRL		µg/l	0.5	1	"	"	"	"	"
109-99-9	Tetrahydrofuran	BRL		µg/l	5.0	1	"	"	"	"	"
60-29-7	Ethyl ether	BRL		µg/l	0.5	1	"	"	"	"	"
994-05-8	Tert-amyl methyl ether	BRL		µg/l	0.5	1	"	"	"	"	"
637-92-3	Ethyl tert-butyl ether	BRL		µg/l	0.5	1	"	"	"	"	"
108-20-3	Di-isopropyl ether	BRL		µg/l	0.5	1	"	"	"	"	"
75-65-0	Tert-Butanol / butyl alcohol	BRL		µg/l	5.0	1	"	"	"	"	"
123-91-1	1,4-Dioxane	BRL		µg/l	10.0	1	"	"	"	"	"
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*99.4*		*70-130 %*			"	"	"	"	"
2037-26-5	*Toluene-d8*	*91.4*		*70-130 %*			"	"	"	"	"
17060-07-0	*1,2-Dichloroethane-d4*	*89.4*		*70-130 %*			"	"	"	"	"
1868-53-7	*Dibromofluoromethane*	*93.0*		*70-130 %*			"	"	"	"	"

Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 6010510 - SW846 5030 Water MS										
Blank (6010510-BLK1)										
Prepared & Analyzed: 12-Jan-06										
Acetone	BRL		µg/l	10.0						
Acrylonitrile	BRL		µg/l	1.0						
Benzene	BRL		µg/l	1.0						
Bromobenzene	BRL		µg/l	1.0						
Bromochloromethane	BRL		µg/l	1.0						
Bromodichloromethane	BRL		µg/l	1.0						
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	1.0						
1,2-Dibromoethane (EDB)	BRL		µg/l	1.0						
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	1.0						
trans-1,3-Dichloropropene	BRL		µg/l	1.0						
Ethylbenzene	BRL		µg/l	1.0						
Hexachlorobutadiene	BRL		µg/l	1.0						
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	10.0						
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	1.0						
Tetrachloroethene	BRL		µg/l	1.0						
Toluene	BRL		µg/l	1.0						
1,2,3-Trichlorobenzene	BRL		µg/l	1.0						

Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 6010510 - SW846 5030 Water MS										
Blank (6010510-BLK1)										
Prepared & Analyzed: 12-Jan-06										
1,2,4-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						
Surrogate: 4-Bromofluorobenzene	*49.7*		µg/l		*50.0*		*99.4*	*70-130*		
Surrogate: Toluene-d8	*45.4*		µg/l		*50.0*		*90.8*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*50.3*		µg/l		*50.0*		*101*	*70-130*		
Surrogate: Dibromofluoromethane	*48.7*		µg/l		*50.0*		*97.4*	*70-130*		
LCS (6010510-BS1)										
Prepared & Analyzed: 12-Jan-06										
Acetone	27.8		µg/l		20.0		139	2.17-194		
Acrylonitrile	21.9		µg/l		20.0		110	70-130		
Benzene	21.2		µg/l		20.0		106	70-130		
Bromobenzene	22.8		µg/l		20.0		114	70-130		
Bromochloromethane	20.8		µg/l		20.0		104	70-130		
Bromodichloromethane	22.6		µg/l		20.0		113	70-130		
Bromoform	19.6		µg/l		20.0		98.0	70-130		
Bromomethane	22.2		µg/l		20.0		111	61.9-145		
2-Butanone (MEK)	15.6		µg/l		20.0		78.0	14.9-165		
n-Butylbenzene	22.6		µg/l		20.0		113	70-130		
sec-Butylbenzene	24.2		µg/l		20.0		121	70-130		
tert-Butylbenzene	24.6		µg/l		20.0		123	70-130		
Carbon disulfide	21.8		µg/l		20.0		109	70-130		
Carbon tetrachloride	20.7		µg/l		20.0		104	70-130		
Chlorobenzene	21.9		µg/l		20.0		110	70-130		
Chloroethane	22.8		µg/l		20.0		114	64.4-134		
Chloroform	21.9		µg/l		20.0		110	70-130		
Chloromethane	24.6		µg/l		20.0		123	70-130		
2-Chlorotoluene	22.7		µg/l		20.0		114	70-130		
4-Chlorotoluene	23.2		µg/l		20.0		116	70-130		
1,2-Dibromo-3-chloropropane	20.3		µg/l		20.0		102	70-130		
Dibromochloromethane	18.6		µg/l		20.0		93.0	45.3-146		
1,2-Dibromoethane (EDB)	20.9		µg/l		20.0		104	70-130		
Dibromomethane	21.8		µg/l		20.0		109	70-130		
1,2-Dichlorobenzene	23.2		µg/l		20.0		116	70-130		
1,3-Dichlorobenzene	23.7		µg/l		20.0		118	70-130		
1,4-Dichlorobenzene	22.6		µg/l		20.0		113	70-130		
Dichlorodifluoromethane (Freon12)	27.8		µg/l		20.0		139	49.6-201		
1,1-Dichloroethane	22.2		µg/l		20.0		111	70-130		
1,2-Dichloroethane	21.5		µg/l		20.0		108	70-130		
1,1-Dichloroethene	21.2		µg/l		20.0		106	70-130		

Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 6010510 - SW846 5030 Water MS										
LCS (6010510-BS1)										
Prepared & Analyzed: 12-Jan-06										
cis-1,2-Dichloroethene	22.1		µg/l		20.0		110	70-130		
trans-1,2-Dichloroethene	21.7		µg/l		20.0		108	70-130		
1,2-Dichloropropane	21.4		µg/l		20.0		107	70-130		
1,3-Dichloropropane	21.9		µg/l		20.0		110	70-130		
2,2-Dichloropropane	22.0		µg/l		20.0		110	70-130		
1,1-Dichloropropene	20.9		µg/l		20.0		104	70-130		
cis-1,3-Dichloropropene	18.5		µg/l		20.0		92.5	70-130		
trans-1,3-Dichloropropene	19.0		µg/l		20.0		95.0	70-130		
Ethylbenzene	22.8		µg/l		20.0		114	70-130		
Hexachlorobutadiene	23.4		µg/l		20.0		117	68.6-137		
2-Hexanone (MBK)	18.7		µg/l		20.0		93.5	70-130		
Isopropylbenzene	21.5		µg/l		20.0		108	70-130		
4-Isopropyltoluene	24.2		µg/l		20.0		121	70-130		
Methyl tert-butyl ether	23.1		µg/l		20.0		116	70-130		
4-Methyl-2-pentanone (MIBK)	19.2		µg/l		20.0		96.0	48.6-137		
Methylene chloride	19.5		µg/l		20.0		97.5	70-130		
Naphthalene	21.2		µg/l		20.0		106	70-130		
n-Propylbenzene	22.7		µg/l		20.0		114	70-130		
Styrene	22.8		µg/l		20.0		114	70-130		
1,1,1,2-Tetrachloroethane	22.1		µg/l		20.0		110	70-130		
1,1,2,2-Tetrachloroethane	22.8		µg/l		20.0		114	70-130		
Tetrachloroethene	20.6		µg/l		20.0		103	70-130		
Toluene	20.4		µg/l		20.0		102	70-130		
1,2,3-Trichlorobenzene	24.1		µg/l		20.0		120	70-130		
1,2,4-Trichlorobenzene	23.1		µg/l		20.0		116	70-130		
1,1,1-Trichloroethane	21.9		µg/l		20.0		110	70-130		
1,1,2-Trichloroethane	19.8		µg/l		20.0		99.0	70-130		
Trichloroethene	21.4		µg/l		20.0		107	70-130		
Trichlorofluoromethane (Freon 11)	21.8		µg/l		20.0		109	67.9-143		
1,2,3-Trichloropropane	22.5		µg/l		20.0		112	70-130		
1,2,4-Trimethylbenzene	23.4		µg/l		20.0		117	70-130		
1,3,5-Trimethylbenzene	23.9		µg/l		20.0		120	70-130		
Vinyl chloride	22.9		µg/l		20.0		114	70-130		
m,p-Xylene	46.8		µg/l		40.0		117	70-130		
o-Xylene	24.2		µg/l		20.0		121	70-130		
Tetrahydrofuran	20.0		µg/l		20.0		100	70-130		
Ethyl ether	22.7		µg/l		20.0		114	70-136		
Tert-amyl methyl ether	20.4		µg/l		20.0		102	70-130		
Ethyl tert-butyl ether	22.8		µg/l		20.0		114	70-130		
Di-isopropyl ether	21.8		µg/l		20.0		109	70-130		
Tert-Butanol / butyl alcohol	223		µg/l		200		112	70-130		
1,4-Dioxane	201		µg/l		200		100	36.5-156		
Surrogate: 4-Bromofluorobenzene	*51.5*		µg/l		*50.0*		*103*	*70-130*		
Surrogate: Toluene-d8	*44.5*		µg/l		*50.0*		*89.0*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*50.2*		µg/l		*50.0*		*100*	*70-130*		
Surrogate: Dibromofluoromethane	*50.0*		µg/l		*50.0*		*100*	*70-130*		
LCS Dup (6010510-BSD1)										
Prepared & Analyzed: 12-Jan-06										
Acetone	27.3		µg/l		20.0		136	2.17-194	2.18	50
Acrylonitrile	20.1		µg/l		20.0		100	70-130	9.52	25
Benzene	20.8		µg/l		20.0		104	70-130	1.90	25
Bromobenzene	22.3		µg/l		20.0		112	70-130	1.77	25
Bromochloromethane	20.5		µg/l		20.0		102	70-130	1.94	25
Bromodichloromethane	22.2		µg/l		20.0		111	70-130	1.79	25
Bromoform	19.8		µg/l		20.0		99.0	70-130	1.02	25

Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 6010510 - SW846 5030 Water MS										
LCS Dup (6010510-BSD1)										
Prepared & Analyzed: 12-Jan-06										
Bromomethane	21.3		µg/l		20.0		106	61.9-145	4.61	50
2-Butanone (MEK)	15.1		µg/l		20.0		75.5	14.9-165	3.26	50
n-Butylbenzene	22.1		µg/l		20.0		110	70-130	2.69	25
sec-Butylbenzene	23.7		µg/l		20.0		118	70-130	2.51	25
tert-Butylbenzene	24.2		µg/l		20.0		121	70-130	1.64	25
Carbon disulfide	20.3		µg/l		20.0		102	70-130	6.64	25
Carbon tetrachloride	20.8		µg/l		20.0		104	70-130	0.00	25
Chlorobenzene	21.6		µg/l		20.0		108	70-130	1.83	25
Chloroethane	22.2		µg/l		20.0		111	64.4-134	2.67	50
Chloroform	21.2		µg/l		20.0		106	70-130	3.70	25
Chloromethane	23.7		µg/l		20.0		118	70-130	4.15	25
2-Chlorotoluene	22.7		µg/l		20.0		114	70-130	0.00	25
4-Chlorotoluene	22.6		µg/l		20.0		113	70-130	2.62	25
1,2-Dibromo-3-chloropropane	20.7		µg/l		20.0		104	70-130	1.94	25
Dibromochloromethane	18.6		µg/l		20.0		93.0	45.3-146	0.00	50
1,2-Dibromoethane (EDB)	20.8		µg/l		20.0		104	70-130	0.00	25
Dibromomethane	20.7		µg/l		20.0		104	70-130	4.69	25
1,2-Dichlorobenzene	22.8		µg/l		20.0		114	70-130	1.74	25
1,3-Dichlorobenzene	23.0		µg/l		20.0		115	70-130	2.58	25
1,4-Dichlorobenzene	22.0		µg/l		20.0		110	70-130	2.69	25
Dichlorodifluoromethane (Freon12)	27.5		µg/l		20.0		138	49.6-201	0.722	50
1,1-Dichloroethane	21.5		µg/l		20.0		108	70-130	2.74	25
1,2-Dichloroethane	20.5		µg/l		20.0		102	70-130	5.71	25
1,1-Dichloroethene	20.6		µg/l		20.0		103	70-130	2.87	25
cis-1,2-Dichloroethene	21.2		µg/l		20.0		106	70-130	3.70	25
trans-1,2-Dichloroethene	20.5		µg/l		20.0		102	70-130	5.71	25
1,2-Dichloropropane	21.0		µg/l		20.0		105	70-130	1.89	25
1,3-Dichloropropane	20.6		µg/l		20.0		103	70-130	6.57	25
2,2-Dichloropropane	21.1		µg/l		20.0		106	70-130	3.70	25
1,1-Dichloropropene	20.2		µg/l		20.0		101	70-130	2.93	25
cis-1,3-Dichloropropene	18.0		µg/l		20.0		90.0	70-130	2.74	25
trans-1,3-Dichloropropene	18.5		µg/l		20.0		92.5	70-130	2.67	25
Ethylbenzene	22.8		µg/l		20.0		114	70-130	0.00	25
Hexachlorobutadiene	22.9		µg/l		20.0		114	68.6-137	2.60	50
2-Hexanone (MBK)	17.1		µg/l		20.0		85.5	70-130	8.94	25
Isopropylbenzene	21.2		µg/l		20.0		106	70-130	1.87	25
4-Isopropyltoluene	23.7		µg/l		20.0		118	70-130	2.51	25
Methyl tert-butyl ether	21.4		µg/l		20.0		107	70-130	8.07	25
4-Methyl-2-pentanone (MIBK)	19.7		µg/l		20.0		98.5	48.6-137	2.57	50
Methylene chloride	18.5		µg/l		20.0		92.5	70-130	5.26	25
Naphthalene	20.2		µg/l		20.0		101	70-130	4.83	25
n-Propylbenzene	22.2		µg/l		20.0		111	70-130	2.67	25
Styrene	22.4		µg/l		20.0		112	70-130	1.77	25
1,1,1,2-Tetrachloroethane	22.1		µg/l		20.0		110	70-130	0.00	25
1,1,2,2-Tetrachloroethane	22.1		µg/l		20.0		110	70-130	3.57	25
Tetrachloroethene	20.8		µg/l		20.0		104	70-130	0.966	25
Toluene	20.8		µg/l		20.0		104	70-130	1.94	25
1,2,3-Trichlorobenzene	23.0		µg/l		20.0		115	70-130	4.26	25
1,2,4-Trichlorobenzene	22.2		µg/l		20.0		111	70-130	4.41	25
1,1,1-Trichloroethane	21.4		µg/l		20.0		107	70-130	2.76	25
1,1,2-Trichloroethane	20.5		µg/l		20.0		102	70-130	2.99	25
Trichloroethene	20.9		µg/l		20.0		104	70-130	2.84	25
Trichlorofluoromethane (Freon 11)	21.5		µg/l		20.0		108	67.9-143	0.922	50
1,2,3-Trichloropropane	21.6		µg/l		20.0		108	70-130	3.64	25
1,2,4-Trimethylbenzene	22.9		µg/l		20.0		114	70-130	2.60	25

Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 6010510 - SW846 5030 Water MS										
LCS Dup (6010510-BSD1)										
Prepared & Analyzed: 12-Jan-06										
1,3,5-Trimethylbenzene	23.6		µg/l		20.0		118	70-130	1.68	25
Vinyl chloride	22.1		µg/l		20.0		110	70-130	3.57	25
m,p-Xylene	46.6		µg/l		40.0		116	70-130	0.858	25
o-Xylene	23.9		µg/l		20.0		120	70-130	0.830	25
Tetrahydrofuran	19.5		µg/l		20.0		97.5	70-130	2.53	25
Ethyl ether	20.7		µg/l		20.0		104	70-136	9.17	50
Tert-amyl methyl ether	20.0		µg/l		20.0		100	70-130	1.98	25
Ethyl tert-butyl ether	21.8		µg/l		20.0		109	70-130	4.48	25
Di-isopropyl ether	20.7		µg/l		20.0		104	70-130	4.69	25
Tert-Butanol / butyl alcohol	204		µg/l		200		102	70-130	9.35	25
1,4-Dioxane	196		µg/l		200		98.0	36.5-156	2.02	25
Surrogate: 4-Bromofluorobenzene	*51.8*		µg/l		*50.0*		*104*	*70-130*		
Surrogate: Toluene-d8	*47.2*		µg/l		*50.0*		*94.4*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*50.2*		µg/l		*50.0*		*100*	*70-130*		
Surrogate: Dibromofluoromethane	*49.5*		µg/l		*50.0*		*99.0*	*70-130*		
Matrix Spike (6010510-MS1)	Source: SA39414-02									
Prepared & Analyzed: 12-Jan-06										
Benzene	24.4		µg/l		20.0	2.58	109	70-130		
Chlorobenzene	26.0		µg/l		20.0	3.47	113	70-130		
1,1-Dichloroethene	21.1		µg/l		20.0	0.600	102	70-130		
Toluene	112		µg/l		20.0	89.9	110	70-130		
Trichloroethene	23.0		µg/l		20.0	1.53	107	70-130		
Surrogate: 4-Bromofluorobenzene	*51.4*		µg/l		*50.0*		*103*	*70-130*		
Surrogate: Toluene-d8	*46.6*		µg/l		*50.0*		*93.2*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*50.1*		µg/l		*50.0*		*100*	*70-130*		
Surrogate: Dibromofluoromethane	*49.1*		µg/l		*50.0*		*98.2*	*70-130*		
Matrix Spike Dup (6010510-MSD1)	Source: SA39414-02									
Prepared & Analyzed: 12-Jan-06										
Benzene	24.0		µg/l		20.0	2.58	107	70-130	1.85	30
Chlorobenzene	26.0		µg/l		20.0	3.47	113	70-130	0.00	30
1,1-Dichloroethene	21.7		µg/l		20.0	0.600	106	70-130	3.85	30
Toluene	115		µg/l		20.0	89.9	126	70-130	13.6	30
Trichloroethene	22.9		µg/l		20.0	1.53	107	70-130	0.00	30
Surrogate: 4-Bromofluorobenzene	*51.2*		µg/l		*50.0*		*102*	*70-130*		
Surrogate: Toluene-d8	*47.3*		µg/l		*50.0*		*94.6*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*49.4*		µg/l		*50.0*		*98.8*	*70-130*		
Surrogate: Dibromofluoromethane	*50.8*		µg/l		*50.0*		*102*	*70-130*		

Extractable Petroleum Hydrocarbons - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 6010494 - SW846 3510C										
Blank (6010494-BLK1)										
Prepared: 12-Jan-06 Analyzed: 13-Jan-06										
C9-C18 Aliphatic Hydrocarbons	BRL		mg/l	0.2						
C19-C36 Aliphatic Hydrocarbons	BRL		mg/l	0.2						
C11-C22 Aromatic Hydrocarbons	BRL		mg/l	0.2						
Unadjusted C11-C22 Aromatic Hydrocarbons	BRL		mg/l	0.2						
Naphthalene	BRL		µg/l	2.50						
2-Methylnaphthalene	BRL		µg/l	2.50						
Acenaphthylene	BRL		µg/l	2.50						
Acenaphthene	BRL		µg/l	2.50						
Fluorene	BRL		µg/l	2.50						
Phenanthrene	BRL		µg/l	2.50						
Anthracene	BRL		µg/l	2.50						
Fluoranthene	BRL		µg/l	2.50						
Pyrene	BRL		µg/l	2.50						
Benzo (a) anthracene	BRL		µg/l	2.50						
Chrysene	BRL		µg/l	2.50						
Benzo (b) fluoranthene	BRL		µg/l	2.50						
Benzo (k) fluoranthene	BRL		µg/l	2.50						
Benzo (a) pyrene	BRL		µg/l	2.50						
Indeno (1,2,3-cd) pyrene	BRL		µg/l	2.50						
Dibenzo (a,h) anthracene	BRL		µg/l	2.50						
Benzo (g,h,i) perylene	BRL		µg/l	2.50						
n-Hexadecane	0.00		µg/l							
n-Tetradecane	0.00		µg/l							
n-Eicosane	0.00		µg/l							
n-Nonadecane	0.00		µg/l							
n-Octacosane	0.00		µg/l							
Naphthalene (aliphatic fraction)	0.00		µg/l							
2-Methylnaphthalene (aliphatic fraction)	0.00		µg/l							
Surrogate: 1-Chlorooctadecane	*22.2*		µg/l		*50.0*		*44.4*	*40-140*		
Surrogate: Ortho-Terphenyl	*28.0*		µg/l		*50.0*		*56.0*	*40-140*		
Surrogate: 2-Bromonaphthalene	*35.1*		µg/l		*40.0*		*87.8*	*40-140*		
Surrogate: 2-Fluorobiphenyl	*32.3*		µg/l		*40.0*		*80.8*	*40-140*		
LCS (6010494-BS1)										
Prepared: 12-Jan-06 Analyzed: 13-Jan-06										
C9-C18 Aliphatic Hydrocarbons	0.306		mg/l	0.2	0.600		51.0	40-140		
C19-C36 Aliphatic Hydrocarbons	0.486		mg/l	0.2	0.800		60.8	40-140		
C11-C22 Aromatic Hydrocarbons	1.19		mg/l	0.2	1.70		70.0	40-140		
Naphthalene	38.4	QC-1	µg/l	2.50	100		38.4	40-140		
2-Methylnaphthalene	43.2		µg/l	2.50	100		43.2	40-140		
Acenaphthylene	55.4		µg/l	2.50	100		55.4	40-140		
Acenaphthene	55.6		µg/l	2.50	100		55.6	40-140		
Fluorene	55.5		µg/l	2.50	100		55.5	40-140		
Phenanthrene	65.2		µg/l	2.50	100		65.2	40-140		
Anthracene	68.6		µg/l	2.50	100		68.6	40-140		
Fluoranthene	66.3		µg/l	2.50	100		66.3	40-140		
Pyrene	65.8		µg/l	2.50	100		65.8	40-140		
Benzo (a) anthracene	62.2		µg/l	2.50	100		62.2	40-140		
Chrysene	65.2		µg/l	2.50	100		65.2	40-140		
Benzo (b) fluoranthene	63.4		µg/l	2.50	100		63.4	40-140		
Benzo (k) fluoranthene	62.7		µg/l	2.50	100		62.7	40-140		
Benzo (a) pyrene	63.2		µg/l	2.50	100		63.2	40-140		
Indeno (1,2,3-cd) pyrene	62.8		µg/l	2.50	100		62.8	40-140		
Dibenzo (a,h) anthracene	63.4		µg/l	2.50	100		63.4	40-140		
Benzo (g,h,i) perylene	62.3		µg/l	2.50	100		62.3	40-140		
Naphthalene (aliphatic fraction)	0.000100		µg/l		100		0.000100	0-200		

Extractable Petroleum Hydrocarbons - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 6010494 - SW846 3510C										
LCS (6010494-BS1)										
Prepared: 12-Jan-06 Analyzed: 13-Jan-06										
2-Methylnaphthalene (aliphatic fraction)	0.000100		µg/l		100		0.000100	0-200		
Surrogate: 1-Chlorooctadecane	*37.4*		µg/l		*50.0*		*74.8*	*40-140*		
Surrogate: Ortho-Terphenyl	*41.4*		µg/l		*50.0*		*82.8*	*40-140*		
Surrogate: 2-Bromonaphthalene	*32.4*		µg/l		*40.0*		*81.0*	*40-140*		
Surrogate: 2-Fluorobiphenyl	*28.5*		µg/l		*40.0*		*71.2*	*40-140*		
Naphthalene Breakthrough	0.00		%					0-5		
2-Methylnaphthalene Breakthrough	0.00		%					0-5		
LCS (6010494-BS2)										
Prepared & Analyzed: 12-Jan-06										
C9-C18 Aliphatic Hydrocarbons	0.345		mg/l	0.2	0.600		57.5	40-140		
C19-C36 Aliphatic Hydrocarbons	0.534		mg/l	0.2	0.800		66.8	40-140		
C11-C22 Aromatic Hydrocarbons	1.16		mg/l	0.2	1.70		68.2	40-140		
Naphthalene	64.5		µg/l	2.50	100		64.5	40-140		
2-Methylnaphthalene	67.2		µg/l	2.50	100		67.2	40-140		
Acenaphthylene	69.6		µg/l	2.50	100		69.6	40-140		
Acenaphthene	68.1		µg/l	2.50	100		68.1	40-140		
Fluorene	71.4		µg/l	2.50	100		71.4	40-140		
Phenanthrene	72.9		µg/l	2.50	100		72.9	40-140		
Anthracene	71.7		µg/l	2.50	100		71.7	40-140		
Fluoranthene	70.0		µg/l	2.50	100		70.0	40-140		
Pyrene	68.2		µg/l	2.50	100		68.2	40-140		
Benzo (a) anthracene	73.1		µg/l	2.50	100		73.1	40-140		
Chrysene	66.0		µg/l	2.50	100		66.0	40-140		
Benzo (b) fluoranthene	62.9		µg/l	2.50	100		62.9	40-140		
Benzo (k) fluoranthene	58.2		µg/l	2.50	100		58.2	40-140		
Benzo (a) pyrene	54.5		µg/l	2.50	100		54.5	40-140		
Indeno (1,2,3-cd) pyrene	46.5		µg/l	2.50	100		46.5	40-140		
Dibenzo (a,h) anthracene	44.3		µg/l	2.50	100		44.3	40-140		
Benzo (g,h,i) perylene	46.0		µg/l	2.50	100		46.0	40-140		
Naphthalene (aliphatic fraction)	0.000100		µg/l		100		0.000100	0-200		
2-Methylnaphthalene (aliphatic fraction)	0.000100		µg/l		100		0.000100	0-200		
Surrogate: 1-Chlorooctadecane	*35.1*		µg/l		*50.0*		*70.2*	*40-140*		
Surrogate: Ortho-Terphenyl	*46.5*		µg/l		*50.0*		*93.0*	*40-140*		
Surrogate: 2-Bromonaphthalene	*30.8*		µg/l		*40.0*		*77.0*	*40-140*		
Surrogate: 2-Fluorobiphenyl	*33.2*		µg/l		*40.0*		*83.0*	*40-140*		
Naphthalene Breakthrough	0.00		%					0-5		
2-Methylnaphthalene Breakthrough	0.00		%					0-5		
LCS Dup (6010494-BSD1)										
Prepared: 12-Jan-06 Analyzed: 13-Jan-06										
C9-C18 Aliphatic Hydrocarbons	0.306		mg/l	0.2	0.600		51.0	40-140	0.00	25
C19-C36 Aliphatic Hydrocarbons	0.583		mg/l	0.2	0.800		72.9	40-140	18.1	25
C11-C22 Aromatic Hydrocarbons	1.34		mg/l	0.2	1.70		78.8	40-140	11.8	25
Naphthalene	41.1		µg/l	2.50	100		41.1	40-140	6.79	20
2-Methylnaphthalene	45.6		µg/l	2.50	100		45.6	40-140	5.41	20
Acenaphthylene	57.6		µg/l	2.50	100		57.6	40-140	3.89	20
Acenaphthene	56.7		µg/l	2.50	100		56.7	40-140	1.96	20
Fluorene	57.1		µg/l	2.50	100		57.1	40-140	2.84	20
Phenanthrene	70.5		µg/l	2.50	100		70.5	40-140	7.81	20
Anthracene	69.5		µg/l	2.50	100		69.5	40-140	1.30	20
Fluoranthene	71.0		µg/l	2.50	100		71.0	40-140	6.85	20
Pyrene	74.6		µg/l	2.50	100		74.6	40-140	12.5	20
Benzo (a) anthracene	76.5	QR-02	µg/l	2.50	100		76.5	40-140	20.6	20
Chrysene	70.0		µg/l	2.50	100		70.0	40-140	7.10	20
Benzo (b) fluoranthene	79.6	QR-02	µg/l	2.50	100		79.6	40-140	22.7	20
Benzo (k) fluoranthene	75.2		µg/l	2.50	100		75.2	40-140	18.1	20

Extractable Petroleum Hydrocarbons - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 6010494 - SW846 3510C										
LCS Dup (6010494-BSD1)										
Prepared: 12-Jan-06 Analyzed: 13-Jan-06										
Benzo (a) pyrene	79.2	QR-02	µg/l	2.50	100		79.2	40-140	22.5	20
Indeno (1,2,3-cd) pyrene	82.6	QR-02	µg/l	2.50	100		82.6	40-140	27.2	20
Dibenzo (a,h) anthracene	83.3	QR-02	µg/l	2.50	100		83.3	40-140	27.1	20
Benzo (g,h,i) perylene	80.6	QR-02	µg/l	2.50	100		80.6	40-140	25.6	20
Naphthalene (aliphatic fraction)	0.00		µg/l		100			0-200		200
2-Methylnaphthalene (aliphatic fraction)	0.00		µg/l		100			0-200		200
Surrogate: 1-Chlorooctadecane	*39.2*		µg/l		*50.0*		*78.4*	*40-140*		
Surrogate: Ortho-Terphenyl	*45.8*		µg/l		*50.0*		*91.6*	*40-140*		
Surrogate: 2-Bromonaphthalene	*33.7*		µg/l		*40.0*		*84.2*	*40-140*		
Surrogate: 2-Fluorobiphenyl	*31.3*		µg/l		*40.0*		*78.2*	*40-140*		
Naphthalene Breakthrough	0.00		%					0-5		
2-Methylnaphthalene Breakthrough	0.00		%					0-5		
Batch 6010495 - SW846 3535										
Blank (6010495-BLK1)										
Prepared: 12-Jan-06 Analyzed: 13-Jan-06										
Gasoline	BRL		mg/l	0.1						
Fuel Oil #2	BRL		mg/l	0.1						
Fuel Oil #4	BRL		mg/l	0.1						
Fuel Oil #6	BRL		mg/l	0.1						
Motor Oil	BRL		mg/l	0.1						
Ligroin	BRL		mg/l	0.1						
Aviation Fuel	BRL		mg/l	0.1						
Unidentified	BRL		mg/l	0.1						
Other Oil	BRL		mg/l	0.1						
Total Petroleum Hydrocarbons	BRL		mg/l	0.1						
Surrogate: 1-Chlorooctadecane	*0.0339*		mg/l		*0.0500*		*67.8*	*40-140*		
LCS (6010495-BS1)										
Prepared: 12-Jan-06 Analyzed: 13-Jan-06										
Fuel Oil #2	10.5		mg/l	0.1	10.0		105	40-140		

Semivolatile Organic Compounds by GC - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 6010497 - SW846 3510C										
Blank (6010497-BLK1)										
Prepared & Analyzed: 12-Jan-06										
PCB 1016	BRL		µg/l	0.200						
PCB 1221	BRL		µg/l	0.200						
PCB 1232	BRL		µg/l	0.200						
PCB 1242	BRL		µg/l	0.200						
PCB 1248	BRL		µg/l	0.200						
PCB 1254	BRL		µg/l	0.200						
PCB 1260	BRL		µg/l	0.200						
PCB 1262	BRL		µg/l	0.200						
PCB 1268	BRL		µg/l	0.200						
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr)	*0.190*		µg/l		*0.200*		*95.0*	*30-150*		
Surrogate: Decachlorobiphenyl (Sr)	*0.200*		µg/l		*0.200*		*100*	*30-150*		
LCS (6010497-BS1)										
Prepared & Analyzed: 12-Jan-06										
PCB 1016	2.10		µg/l	0.200	2.50		84.0	40-140		
PCB 1260	2.26		µg/l	0.200	2.50		90.4	40-140		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr)	*0.170*		µg/l		*0.200*		*85.0*	*30-150*		
Surrogate: Decachlorobiphenyl (Sr)	*0.230*		µg/l		*0.200*		*115*	*30-150*		

Semivolatile Organic Compounds by GCMS - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 6010496 - SW846 3535										
Blank (6010496-BLK1)										
Prepared & Analyzed: 12-Jan-06										
Bis(2-ethylhexyl)phthalate	BRL		µg/l	2.50						
Butyl benzyl phthalate	BRL		µg/l	2.50						
4-Chloro-3-methylphenol	BRL		µg/l	2.50						
2-Chlorophenol	BRL		µg/l	2.50						
2,4-Dichlorophenol	BRL		µg/l	2.50						
Diethyl phthalate	BRL		µg/l	2.50						
Dimethyl phthalate	BRL		µg/l	2.50						
2,4-Dimethylphenol	BRL		µg/l	2.50						
Di-n-butyl phthalate	BRL		µg/l	2.50						
4,6-Dinitro-2-methylphenol	BRL		µg/l	2.50						
2,4-Dinitrophenol	BRL		µg/l	2.50						
Di-n-octyl phthalate	BRL		µg/l	2.50						
2-Methylphenol	BRL		µg/l	2.50						
3,4-Methylphenol	BRL		µg/l	5.00						
2-Nitrophenol	BRL		µg/l	2.50						
4-Nitrophenol	BRL		µg/l	2.50						
Pentachlorophenol	BRL		µg/l	2.50						
Phenol	BRL		µg/l	2.50						
2,4,5-Trichlorophenol	BRL		µg/l	2.50						
2,4,6-Trichlorophenol	BRL		µg/l	2.50						
Surrogate: 2-Fluorophenol	*54.6*		µg/l		*100*		*54.6*	*15-110*		
Surrogate: Nitrobenzene-d5	*66.1*		µg/l		*100*		*66.1*	*30-130*		
Surrogate: Phenol-d5	*48.4*		µg/l		*100*		*48.4*	*15-110*		
Surrogate: Terphenyl-dl4	*93.4*		µg/l		*100*		*93.4*	*30-130*		
LCS (6010496-BS1)										
Prepared & Analyzed: 12-Jan-06										
Bis(2-ethylhexyl)phthalate	82.6		µg/l	2.50	100		82.6	40-140		
Butyl benzyl phthalate	81.6		µg/l	2.50	100		81.6	40-140		
4-Chloro-3-methylphenol	66.2		µg/l	2.50	100		66.2	30-130		
2-Chlorophenol	64.5		µg/l	2.50	100		64.5	30-130		
2,4-Dichlorophenol	60.1		µg/l	2.50	100		60.1	30-130		
Diethyl phthalate	78.3		µg/l	2.50	100		78.3	40-140		
Dimethyl phthalate	76.8		µg/l	2.50	100		76.8	40-140		
2,4-Dimethylphenol	65.1		µg/l	2.50	100		65.1	30-130		
Di-n-butyl phthalate	83.5		µg/l	2.50	100		83.5	40-140		
4,6-Dinitro-2-methylphenol	69.5		µg/l	2.50	100		69.5	30-130		
2,4-Dinitrophenol	68.9		µg/l	2.50	100		68.9	30-130		
Di-n-octyl phthalate	76.0		µg/l	2.50	100		76.0	40-140		
2-Methylphenol	65.8		µg/l	2.50	100		65.8	30-130		
3,4-Methylphenol	40.8		µg/l	5.00	100		40.8	40-130		
2-Nitrophenol	62.0		µg/l	2.50	100		62.0	30-130		
4-Nitrophenol	74.9		µg/l	2.50	100		74.9	30-130		
Pentachlorophenol	72.3		µg/l	2.50	100		72.3	30-130		
Phenol	69.0		µg/l	2.50	100		69.0	30-130		
2,4,5-Trichlorophenol	80.4		µg/l	2.50	100		80.4	30-130		
2,4,6-Trichlorophenol	65.0		µg/l	2.50	100		65.0	30-130		
Surrogate: 2-Fluorophenol	*42.9*		µg/l		*100*		*42.9*	*15-110*		
Surrogate: Nitrobenzene-d5	*40.9*		µg/l		*100*		*40.9*	*30-130*		
Surrogate: Phenol-d5	*44.0*		µg/l		*100*		*44.0*	*15-110*		
Surrogate: Terphenyl-dl4	*72.1*		µg/l		*100*		*72.1*	*30-130*		

Total Metals by EPA 6000/7000 Series Methods - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 6010477 - SW846 3005A										
Blank (6010477-BLK1)										
Prepared & Analyzed: 12-Jan-06										
Thallium	BRL		mg/l	0.0050						
Lead	BRL		mg/l	0.0038						
Iron	0.0280	QB-01	mg/l	0.0025						
Antimony	BRL		mg/l	0.0060						
Selenium	BRL		mg/l	0.0075						
Nickel	BRL		mg/l	0.0025						
Zinc	BRL		mg/l	0.0025						
Silver	BRL		mg/l	0.0050						
Cadmium	BRL		mg/l	0.0012						
Chromium	BRL		mg/l	0.0025						
Copper	BRL		mg/l	0.0025						
Arsenic	BRL		mg/l	0.0040						
Beryllium	BRL		mg/l	0.0010						
LCS (6010477-BS1)										
Prepared & Analyzed: 12-Jan-06										
Nickel	0.0876		mg/l	0.0025	0.100		87.6	85-115		
Iron	0.104		mg/l	0.0025	0.100		104	85-115		
Zinc	0.0850		mg/l	0.0025	0.100		85.0	85-115		
Thallium	0.0860		mg/l	0.0050	0.100		86.0	85-115		
Selenium	0.0888		mg/l	0.0075	0.100		88.8	85-115		
Antimony	0.0858		mg/l	0.0060	0.100		85.8	85-115		
Lead	0.103		mg/l	0.0015	0.100		103	85-115		
Beryllium	0.0948		mg/l	0.0004	0.100		94.8	85-115		
Arsenic	0.0888		mg/l	0.0040	0.100		88.8	85-115		
Cadmium	0.104		mg/l	0.0005	0.100		104	85-115		
Chromium	0.0900		mg/l	0.0025	0.100		90.0	85-115		
Copper	0.0921		mg/l	0.0010	0.100		92.1	85-115		
Silver	0.0442		mg/l	0.0050	0.0500		88.4	85-115		
LCS Dup (6010477-BSD1)										
Prepared & Analyzed: 12-Jan-06										
Selenium	0.0858		mg/l	0.0075	0.100		85.8	85-115	3.44	20
Thallium	0.0869		mg/l	0.0050	0.100		86.9	85-115	1.04	20
Iron	0.109		mg/l	0.0025	0.100		109	85-115	4.69	20
Zinc	0.0853		mg/l	0.0025	0.100		85.3	85-115	0.352	20
Nickel	0.0870		mg/l	0.0025	0.100		87.0	85-115	0.687	20
Lead	0.105		mg/l	0.0015	0.100		105	85-115	1.92	20
Antimony	0.0857		mg/l	0.0060	0.100		85.7	85-115	0.117	20
Copper	0.0905		mg/l	0.0010	0.100		90.5	85-115	1.75	20
Chromium	0.0878		mg/l	0.0025	0.100		87.8	85-115	2.47	20
Beryllium	0.0948		mg/l	0.0004	0.100		94.8	85-115	0.00	20
Silver	0.0443		mg/l	0.0050	0.0500		88.6	85-115	0.226	20
Arsenic	0.0868		mg/l	0.0040	0.100		86.8	85-115	2.28	20
Cadmium	0.103		mg/l	0.0005	0.100		103	85-115	0.966	20
Duplicate (6010477-DUP1)	Source: SA39412-01									
Prepared & Analyzed: 12-Jan-06										
Antimony	BRL	QR-06	mg/l	0.0060		0.0044			25.6	20
Lead	BRL		mg/l	0.0038		0.0012				20
Nickel	BRL		mg/l	0.0025		BRL				20
Selenium	BRL		mg/l	0.0075		BRL				20
Thallium	BRL		mg/l	0.0050		BRL				20
Zinc	0.0210		mg/l	0.0025		0.0202			3.88	20
Iron	0.634		mg/l	0.0025		0.662			4.32	20
Arsenic	BRL		mg/l	0.0040		BRL				20

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* Reportable Detection Limit BRL = Below Reporting Limit

Total Metals by EPA 6000/7000 Series Methods - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 6010477 - SW846 3005A										
Duplicate (6010477-DUP1)	**Source: SA39412-01**									
Prepared & Analyzed: 12-Jan-06										
Copper	BRL		mg/l	0.0025		0.0012			8.70	20
Chromium	BRL		mg/l	0.0025		BRL				20
Cadmium	BRL		mg/l	0.0012		BRL				20
Beryllium	BRL		mg/l	0.0010		0.0002			0.00	20
Silver	BRL		mg/l	0.0050		BRL				20
Matrix Spike (6010477-MS1)	**Source: SA39412-02**									
Prepared & Analyzed: 12-Jan-06										
Selenium	0.0725	QM-07	mg/l	0.0075	0.100	BRL	72.5	75-125		
Nickel	0.0740	QM-07	mg/l	0.0025	0.100	BRL	74.0	75-125		
Zinc	0.0954	QM-07	mg/l	0.0025	0.100	0.0239	71.5	75-125		
Thallium	0.0793		mg/l	0.0050	0.100	BRL	79.3	75-125		
Antimony	0.0762	QM-07	mg/l	0.0060	0.100	0.0050	71.2	75-125		
Lead	0.0776		mg/l	0.0038	0.100	BRL	77.6	75-125		
Iron	0.900	QM-07	mg/l	0.0025	0.100	0.630	270	75-125		
Chromium	0.0769		mg/l	0.0025	0.100	BRL	76.9	75-125		
Cadmium	0.0726	QM-07	mg/l	0.0012	0.100	BRL	72.6	75-125		
Beryllium	0.0725	QM-07	mg/l	0.0010	0.100	0.0003	72.2	75-125		
Arsenic	0.0817		mg/l	0.0040	0.100	BRL	81.7	75-125		
Copper	0.0738	QM-07	mg/l	0.0025	0.100	BRL	73.8	75-125		
Silver	0.0406		mg/l	0.0050	0.0500	BRL	81.2	75-125		
Matrix Spike Dup (6010477-MSD1)	**Source: SA39412-02**									
Prepared & Analyzed: 12-Jan-06										
Iron	0.827	QM-07	mg/l	0.0025	0.100	0.630	197	75-125	8.45	20
Antimony	0.0768	QM-07	mg/l	0.0060	0.100	0.0050	71.8	75-125	0.784	20
Lead	0.0780		mg/l	0.0038	0.100	BRL	78.0	75-125	0.514	20
Zinc	0.0944	QM-07	mg/l	0.0025	0.100	0.0239	70.5	75-125	1.05	20
Selenium	0.0797		mg/l	0.0075	0.100	BRL	79.7	75-125	9.46	20
Thallium	0.0810		mg/l	0.0050	0.100	BRL	81.0	75-125	2.12	20
Nickel	0.0732	QM-07	mg/l	0.0025	0.100	BRL	73.2	75-125	1.09	20
Beryllium	0.0733	QM-07	mg/l	0.0010	0.100	0.0003	73.0	75-125	1.10	20
Copper	0.0724	QM-07	mg/l	0.0025	0.100	BRL	72.4	75-125	1.92	20
Chromium	0.0763		mg/l	0.0025	0.100	BRL	76.3	75-125	0.783	20
Silver	0.0393		mg/l	0.0050	0.0500	BRL	78.6	75-125	3.25	20
Cadmium	0.0743	QM-07	mg/l	0.0012	0.100	BRL	74.3	75-125	2.31	20
Arsenic	0.0804		mg/l	0.0040	0.100	BRL	80.4	75-125	1.60	20

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 6010478 - EPA200/SW7000 Series										
Blank (6010478-BLK1)										
Prepared & Analyzed: 12-Jan-06										
Mercury	BRL		mg/l	0.00020						
LCS (6010478-BS1)										
Prepared & Analyzed: 12-Jan-06										
Mercury	0.00234		mg/l	0.00020	0.00250		93.6	80-120		
Duplicate (6010478-DUP1)	**Source: SA39412-01**									
Prepared & Analyzed: 12-Jan-06										
Mercury	BRL		mg/l	0.00020		BRL				20
Matrix Spike (6010478-MS1)	**Source: SA39412-01**									
Prepared & Analyzed: 12-Jan-06										
Mercury	0.00225		mg/l	0.00020	0.00250	BRL	90.0	75-125		
Matrix Spike Dup (6010478-MSD1)	**Source: SA39412-01**									
Prepared & Analyzed: 12-Jan-06										
Mercury	0.00224		mg/l	0.00020	0.00250	BRL	89.6	75-125	0.445	20
Post Spike (6010478-PS1)	**Source: SA39412-01**									
Prepared & Analyzed: 12-Jan-06										
Mercury	0.00224		mg/l	0.00020	0.00250	BRL	89.6	75-125		

General Chemistry Parameters - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 6010477 - SW846 3005A										
Blank (6010477-BLK1)										
Prepared & Analyzed: 12-Jan-06										
Trivalent Chromium	BRL		mg/l	0.0050						
Batch 6010488 - General Preparation										
Blank (6010488-BLK1)										
Prepared & Analyzed: 11-Jan-06										
Total Residual Chlorine	BRL		mg/l	0.020						
LCS (6010488-BS1)										
Prepared & Analyzed: 11-Jan-06										
Total Residual Chlorine	0.053		mg/l	0.020	0.0500		106	90-110		
Duplicate (6010488-DUP1)	Source: SA39412-02									
Prepared & Analyzed: 11-Jan-06										
Total Residual Chlorine	BRL	R-01	mg/l	0.200		0.100			9.52	20
Matrix Spike (6010488-MS1)	Source: SA39412-02									
Prepared & Analyzed: 11-Jan-06										
Total Residual Chlorine	0.700	R-01	mg/l	0.200	0.500	0.100	120	80-120		
Reference (6010488-SRM1)										
Prepared & Analyzed: 11-Jan-06										
Total Residual Chlorine	0.121		mg/l	0.020	0.111		109	85-115		
Batch 6010522 - General Preparation										
Blank (6010522-BLK1)										
Prepared & Analyzed: 12-Jan-06										
Hexavalent Chromium	BRL		mg/l	0.005						
LCS (6010522-BS1)										
Prepared & Analyzed: 12-Jan-06										
Hexavalent Chromium	0.053		mg/l	0.005	0.0500		106	90-110		
Duplicate (6010522-DUP1)	Source: SA39412-02									
Prepared & Analyzed: 12-Jan-06										
Hexavalent Chromium	BRL	R-01	mg/l	0.025		0.015			0.00	20
Matrix Spike (6010522-MS1)	Source: SA39412-02									
Prepared & Analyzed: 12-Jan-06										
Hexavalent Chromium	0.265	R-01	mg/l	0.025	0.250	0.015	100	80-120		
Reference (6010522-SRM1)										
Prepared & Analyzed: 12-Jan-06										
Hexavalent Chromium	0.023		mg/l	0.005	0.0250		92.0	85-115		
Batch 6010542 - General Preparation										
Blank (6010542-BLK1)										
Prepared & Analyzed: 12-Jan-06										
Cyanide (total)	BRL		mg/l	0.0100						
Blank (6010542-BLK2)										
Prepared & Analyzed: 12-Jan-06										
Cyanide (total)	BRL		mg/l	0.0100						
LCS (6010542-BS1)										
Prepared & Analyzed: 12-Jan-06										
Cyanide (total)	0.294		mg/l	0.0100	0.300		98.0	90-110		
LCS (6010542-BS2)										

General Chemistry Parameters - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 6010542 - General Preparation										
Prepared & Analyzed: 12-Jan-06										
Cyanide (total)	0.302		mg/l	0.0100	0.300		101	90-110		
Matrix Spike (6010542-MS1)	**Source: SA39313-02**									
Prepared & Analyzed: 12-Jan-06										
Cyanide (total)	0.278		mg/l	0.0100	0.300	BRL	92.7	75-125		
Matrix Spike Dup (6010542-MSD1)	**Source: SA39313-02**									
Prepared & Analyzed: 12-Jan-06										
Cyanide (total)	0.289		mg/l	0.0100	0.300	BRL	96.3	75-125	3.88	20
Reference (6010542-SRM1)										
Prepared & Analyzed: 12-Jan-06										
Cyanide (total)	0.121		mg/l	0.0100	0.145		83.4	77.2-128		
Batch 6010584 - General Preparation										
Blank (6010584-BLK1)										
Prepared & Analyzed: 13-Jan-06										
Total Suspended Solids	BRL		mg/l	5.00						
Duplicate (6010584-DUP1)	**Source: SA39412-02**									
Prepared & Analyzed: 13-Jan-06										
Total Suspended Solids	167		mg/l	5.00		166			0.601	20
Reference (6010584-SRM1)										
Prepared & Analyzed: 13-Jan-06										
Total Suspended Solids	102		mg/l	10.0	95.3		107	90-110		

Extractable Petroleum Hydrocarbons - CCV Evaluation Report

Analyte	Average RF	CCRF	% D	Limit
Batch 0601091				
Calibration Check (0601091-CCV1)				
C9-C18 Aliphatic Hydrocarbons	3.75967E+09	3.26493E+09	-13.2	25.00
C19-C36 Aliphatic Hydrocarbons	3.17117E+09	2.92115E+09	-7.88	25.00
C11-C22 Aromatic Hydrocarbons	21779	17.3258	22.9	25.00
Naphthalene	6.3246	6.96109	10.1	20.00
2-Methylnaphthalene	4.08824	4.32213	5.72	20.00
Acenaphthylene	6.16025	6.80944	10.5	20.00
Acenaphthene	3.78341	4.09692	8.29	20.00
Fluorene	4.46823	4.40173	-1.49	20.00
Phenanthrene	6.22601	6.2609	0.560	20.00
Anthracene	5.9614	5.88212	-1.33	20.00
Fluoranthene	6.30616	6.41102	1.66	20.00
Pyrene	6.62977	6.76954	2.11	20.00
Benzo (a) anthracene	6.39824	6.9121	8.03	20.00
Chrysene	6.01313	6.45204	7.30	20.00
Benzo (b) fluoranthene	6.67752	7.88181	18.0	20.00
Benzo (k) fluoranthene	5.99541	5.56174	-7.23	20.00
Benzo (a) pyrene	6.09169	6.30237	3.46	20.00
Indeno (1,2,3-cd) pyrene	6.89936	8.09675	17.4	20.00
Dibenzo (a,h) anthracene	5.80101	6.55608	13.0	20.00
Benzo (g,h,i) perylene	5.99566	5.98998	-0.0947	20.00

Notes and Definitions

QB-01	The method blank contains analyte at a concentration above the MRL; however, concentration is less than 10% of the sample result, which is negligible according to method criteria.
QC-1	Analyte out of acceptance range.
QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
QR-02	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.
QR-06	The RPD exceeded the QC control limits; however precision is demonstrated with acceptable RPD values for MS/MSD.
R-01	The Reporting Limit for this analyte 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

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

Validated by:
Hanibal C. Tayeh, Ph.D.
Nicole Brown

The following outlines the condition of all EPH samples contained within this report upon laboratory receipt.

Matrix	☐ Aqueous	☐ Soil	☐ Sediment	☐ Other	
Containers	☐ Satisfactory	☐ Broken	☐ Leaking		
Aqueous Preservative	☐ N/A	☐ pH≤2	☐ pH>2	☐ pH adjusted to <2 in lab	Comment:
Temperature	☐ Received on ice	☐ Received at 4 ± 2 °C	☐ Other:	°C	

Were all QA/QC procedures followed as required by the EPH method? Yes_____ No _____
Were any significant modifications made to the EPH method as specified in Section 11.3? No
Were all performance/acceptance standards for required QA/QC procedures achieved? Yes_____ No_____

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

Authorized by:

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

MADEP MCP ANALYTICAL METHOD REPORT CERTIFICATION FORM

MADEP RTN [1]:					
This form provides certifications for the following Spectrum Analytical, Inc. work order #: SA39412					
Matrix	☐ Groundwater	☐ Soil/Sediment	☐ Drinking Water	☐ Other	
MCP SW-846 Methods Used	☐ 8260B	☐ 8151A	☐ 8330	☐ 6010B	☐ 7470A/1A
	☐ 8270C	☐ 8081A	☐ VPH	☐ 6020	☐ 9014M [2]
	☐ 8082	☐ 8021B	☐ EPH	☐ 7000S [3]	☐ 7196A

1 List Release Tracking Number (RTN), if known
2 M - SW-846 Method 9014 or MADEP Physiologically Available Cyanide (PAC) Method
3 S - SW-846 Methods 7000 Series List individual method and analyte

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

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

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

E	Were all analytical QC performance standards and recommendations for the specified methods achieved?	☐ Yes ☐ No
F	Were results for all analyte-list compounds/elements for the specified method(s) reported?	☐ 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: 1/13/2006