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:
McGinn Sunoco Service Station</td><td colspan="4">Facility/site address:</td></tr>
<tr><td>Location of facility/site:
longitude: 71 00' 42.92" latitude: 42 15' 27.37"</td><td>Facility SIC code(s):
5541</td><td colspan="4">Street:
627 Newport Avenue</td></tr>
<tr><td colspan="2">b) Name of facility/site owner: 627 Newport Avenue Trust</td><td colspan="4">Town: Quincy</td></tr>
<tr><td colspan="2" rowspan="2">Email address of owner:
bud1122@hotmail.com</td><td rowspan="2">State:
MA</td><td rowspan="2">Zip:
02170</td><td rowspan="2">County:
Norfolk</td></tr>
<tr><td colspan="2">Telephone no.of facility/site owner: (781) 749-6886</td></tr>
<tr><td colspan="2">Fax no. of facility/site owner:</td><td colspan="3" 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="5">Street:</td></tr>
<tr><td colspan="2">Town:</td><td>State:</td><td>Zip:</td><td>County:</td></tr>
<tr><td colspan="2" rowspan="2">c) Legal name of operator:
Environmental Compliance Services, Inc.</td><td colspan="3">Operator telephone no: (781) 246-8897</td></tr>
<tr><td colspan="2">Operator fax no.: (781) 246-8950</td><td>Operator email:
cellis@ecsconsult.com</td></tr>
<tr><td colspan="5">Operator contact name and title: Craig Ellis, Senior Project Manager</td></tr>
</table>

Address of **operator** (if different from owner):	Street: 607 North Avenue, Suite 11		
Town: Wakefield	State: MA	Zip: 01880	County: Middlesex

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:
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 3-02150
2. permit or license # assigned: 3-02150
3. state agency contact information: name, location, and telephone number:
MassDEP Northeast Region, 205A Lowell St, Wilmington, MA 978-694-3200

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:
Construction Dewatering Discharge - For removal and installation of gasoline underground storage tanks

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 0.12 Average flow 0.05 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. 25 gallons per minute is anticipated average flowrate

3) Latitude and longitude of each discharge within 100 feet: pt.1:long. 71 00' 42.92" lat. 42 15' 27.37"; 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): N/A	5) Is the discharge intermittent ✔ or seasonal _____? Is discharge ongoing Yes ✔ No _____?
c) Expected dates of discharge (mm/dd/yy): start 12/11/06 end 01/09/07	
d) Please attach a line drawing or flow schematic showing water flow through the facility including: 1. sources of intake water, 2. contributing flow from the operation, 3. treatment units, and 4. discharge points and receiving waters(s). See Figure 2 - Site Plan and treatment system schematic attached	

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		2,030,000	552.8	2,030,000	276.6
2. Total Residual Chlorine		✔	1	grab	8167	100	555	0.151	555	0.075
3. Total Petroleum Hydrocarbons		✔	1	grab	1664	1,000	12600	3.431	12600	1.716
4. Cyanide		✔	1	grab	9012A	10	14	0.0038	14	.0019
5. Benzene		✔	1	grab	8260B	10	132	0.036	132	0.018
6. Toluene		✔	1	grab	8260B	10	251	0.068	251	0.034
7. Ethylbenzene		✔	1	grab	8260B	10	93.2	0.025	93.2	0.013
8. (m,p,o) Xylenes		✔	1	grab	8260B	20	1,421	0.387	1,421	0.193
9. Total BTEX[4]		✔	1	grab	8260B		1,897	0.517	1,897	0.258

[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	504.1	0.01				
11. Methyl-tert-Butyl Ether (MtBE)		✔	1	grab	8260B	10	681	0.185	681	0.093
12. tert-Butyl Alcohol (TBA)		✔	1	grab	8260B	100	5,740	1.563	5,740	0.781
13. tert-Amyl Methyl Ether (TAME)		✔	1	grab	8260B	10	536	0.146	536	0.073
14. Naphthalene		✔	1	grab	8260B	10	47.7	0.013	47.7	0.006
15. Carbon Tetra-chloride	✔		1	grab	8260B	10				
16. 1,4 Dichlorobenzene	✔		1	grab	8260B	10				
17. 1,2 Dichlorobenzene	✔		1	grab	8260B	10				
18. 1,3 Dichlorobenzene	✔		1	grab	8260B	10				
19. 1,1 Dichloroethane	✔		1	grab	8260B	10				
20. 1,2 Dichloroethane	✔		1	grab	8260B	10				
21. 1,1 Dichloroethylene	✔		1	grab	8260B	10				
22. cis-1,2 Dichloro-ethylene	✔		1	grab	8260B	10				
23. Dichloromethane (Methylene Chloride)	✔		1	grab	8260B	100				
24. Tetrachloroethylene	✔		1	grab	8260B	10				

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	10				
26. 1,1,2 Trichloroethane	✔		1	grab	8260B	10				
27. Trichloroethylene	✔		1	grab	8260B	10				
28. Vinyl Chloride	✔		1	grab	8260B	10				
29. Acetone	✔		1	grab	8260B	100				
30. 1,4 Dioxane	✔		1	grab	8260B	200				
31. Total Phenols	✔		1	grab	8270C	5				
32. Pentachlorophenol	✔		1	grab	8270C	20				
33. Total Phthalates [5] (Phthalate esthers)	✔		1	grab	8270C	5				
34. Bis (2-Ethylhexyl) Phthalate [Di-(ethylhexyl) Phthalate]	✔		1	grab	8270C	5				
35. Total Group I Polycyclic Aromatic Hydrocarbons (PAH)	✔		1	grab	8270C					
a. Benzo(a) Anthracene	✔		1	grab	8270C	5				
b. Benzo(a) Pyrene	✔		1	grab	8270C	5				
c. Benzo(b)Fluoranthene	✔		1	grab	8270C	5				
d. Benzo(k) Fluoranthene	✔		1	grab	8270C	5				
e. Chrysene	✔		1	grab	8270C	5				

[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				
g. Indeno(1,2,3-cd) Pyrene	✔		1	grab	8270C	5				
36. Total Group II Polycyclic Aromatic Hydrocarbons (PAH)		✔	1	grab	8270					
h. Acenaphthene	✔		1	grab	8270C	5				
i. Acenaphthylene	✔		1	grab	8270C	5				
j. Anthracene	✔		1	grab	8270C	5				
k. Benzo(ghi) Perylene	✔		1	grab	8270C	5				
l. Fluoranthene	✔		1	grab	8270C	5				
m. Fluorene	✔		1	grab	8270C	5				
n. Naphthalene-		✔	1	grab	8270C	5	48.2	0.013	48.2	0.0066
o. Phenanthrene	✔		1	grab	8270C	5				
p. Pyrene	✔		1	grab	8270C	5				
37. Total Polychlorinated Biphenyls (PCBs)	✔		1	grab	608	0.4				
***3*8. Antimony**	✔									
39. Arsenic		✔	1	grab	6010B	2	23.6	0.0064	23.6	0.0032
40. Cadmium		✔	1	grab	6020	0.2	9.1	0.0025	9.1	0.0012
41. Chromium III		✔	1	grab		5	190	0.052	190	0.026
42. Chromium VI	✔		1	grab		25				

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	6010B	2.5	800	0.218	800	0.109
44. Lead		✔	1	grab	6020	0.2	478	0.130	478	0.065
45. Mercury		✔	1	grab	245.1	0.2	0.2	0.00005	0.2	0.00003
46. Nickel		✔	1	grab	6010B	2.5	92.6	0.025	92.6	0.012
47. Selenium		✔	1	grab	6020	1.2	2.2	0.0006	2.2	0.0003
48. Silver	✔		1	grab	6020	0.8				
49. Zinc		✔	1	grab	6010B	2.5	3140	0.855	3140	0.427
50. Iron		✔	1	grab	6010B	2.5	72000	19.61	72000	9.80
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? arsenic, cadmium, chromium(III), copper, iron, nickel, lead, zinc
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: 2.58	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: arsenic, cadmium, chromium(III), copper, iron, nickel, lead, zinc

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:

Frac tank followed by liquid phase granular activated carbon treatment system with bag prefilters. See attached schematic.

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 50 Design flow rate of treatment system 50

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

None

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

a) Identify the discharge pathway:	Direct_____	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:

Furnace Brook is culverted beneath site. Discharge will be directly to Furnace Brook via a manhole located on the Site. (See Figure 2)

c) Attach a detailed map(s) indicating the site location and location of the outfall to the receiving water: See Figure 2
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 0.19 cfs
Please attach any calculation sheets used to support stream flow and dilution calculations.
See attached printout from USGS online tool

f) Is the receiving water a listed 303(d) water quality impaired or limited water? Yes ✔ No____ If yes, for which pollutant(s)?
Organic Enrichment/ Low Dissolved Oxygen

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 ? Yes ✔ 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.

1) Endangered species/habitat consultation included use of National Heritage and Endangered Species Program (NHESP) atlases and conversation with US Fish and Wildlife Service New England Field Office. Both sources indicated no know endangered species or critical habitat associated with Furnace Brook.

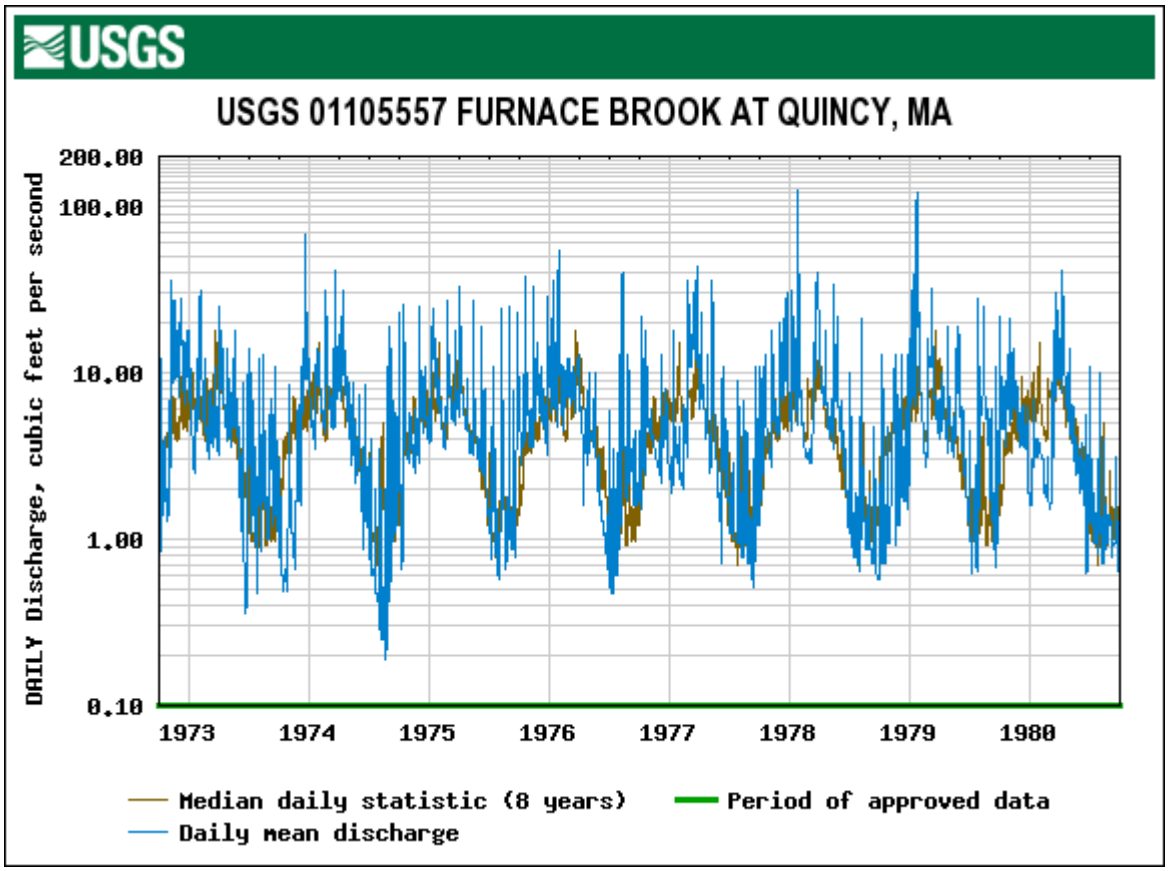
2) 7Q10 Flow calculated using USGS online tools - see attached printouts

3) Figures attached include Figure 1 - Site Location Map, Figure 2 - Site Plan, and treatment system schematic.

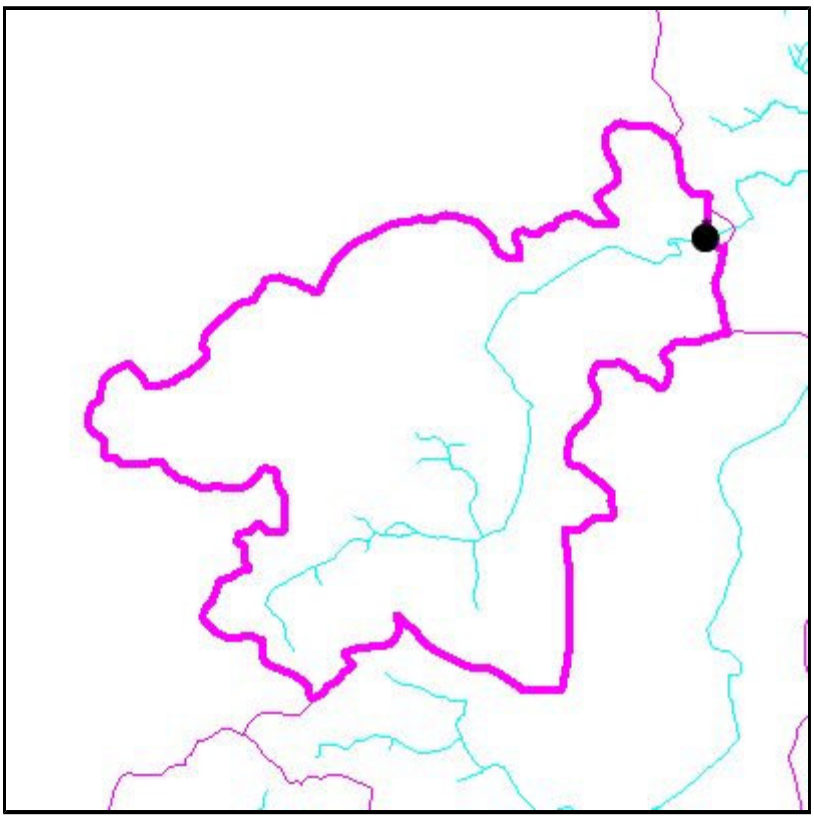
8. Signature Requirements: The Notice of Intent must be signed by the operator in accordance with the signatory requirements of 40 CFR Section 122.22, including the following certification:

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:
Operator signature:
Title:
Date:


USGS
USGS 01105557 FURNACE BROOK AT QUINCY, MA
DAILY Discharge, cubic feet per second
200.00
100.00
10.00
1.00
0.10
1973
1974
1975
1976
1977
1978
1979
1980
Median daily statistic (8 years)
Period of approved data
Daily mean discharge

Streamflow Statistics Report



Date: Wed Nov 15 12:01:40 2006
Latitude: 42.2571
Longitude: -71.011
Measured Basin Characteristics:
Drainage Area (square miles): 3.81
Stratified Drift Area (square miles): 1.25
Stream Length (miles): 5.59
Slope (percent): 3.51
Region: 0

Statistic	Estimated streamflow, ft^3/s	90% Prediction interval	
		Minimum	Maximum
99-percent duration flow	0.19	0.05	0.69
98-percent duration flow	0.28	0.08	0.89
95-percent duration flow	0.44	0.15	1.27
90-percent duration flow	0.75	0.30	1.87
85-percent duration flow	0.92	0.37	2.25
80-percent duration flow	1.22	0.51	2.85

75-percent duration flow	1.33	0.61	2.83
70-percent duration flow	1.70	0.79	3.63
60-percent duration flow	2.71	1.19	6.13
50-percent duration flow	3.74	1.73	8.04
7-day, 2-year low flow	0.42	0.14	1.25
7-day, 10-year low flow	0.19	0.05	0.70
August median flow	0.95	0.37	2.38

U.S. Department of the Interior, U.S. Geological Survey
10 Bearfoot Road
Northborough, MA 01532
(508) 490-5000

Maintainer: webmaster@mass1.er.usgs.gov

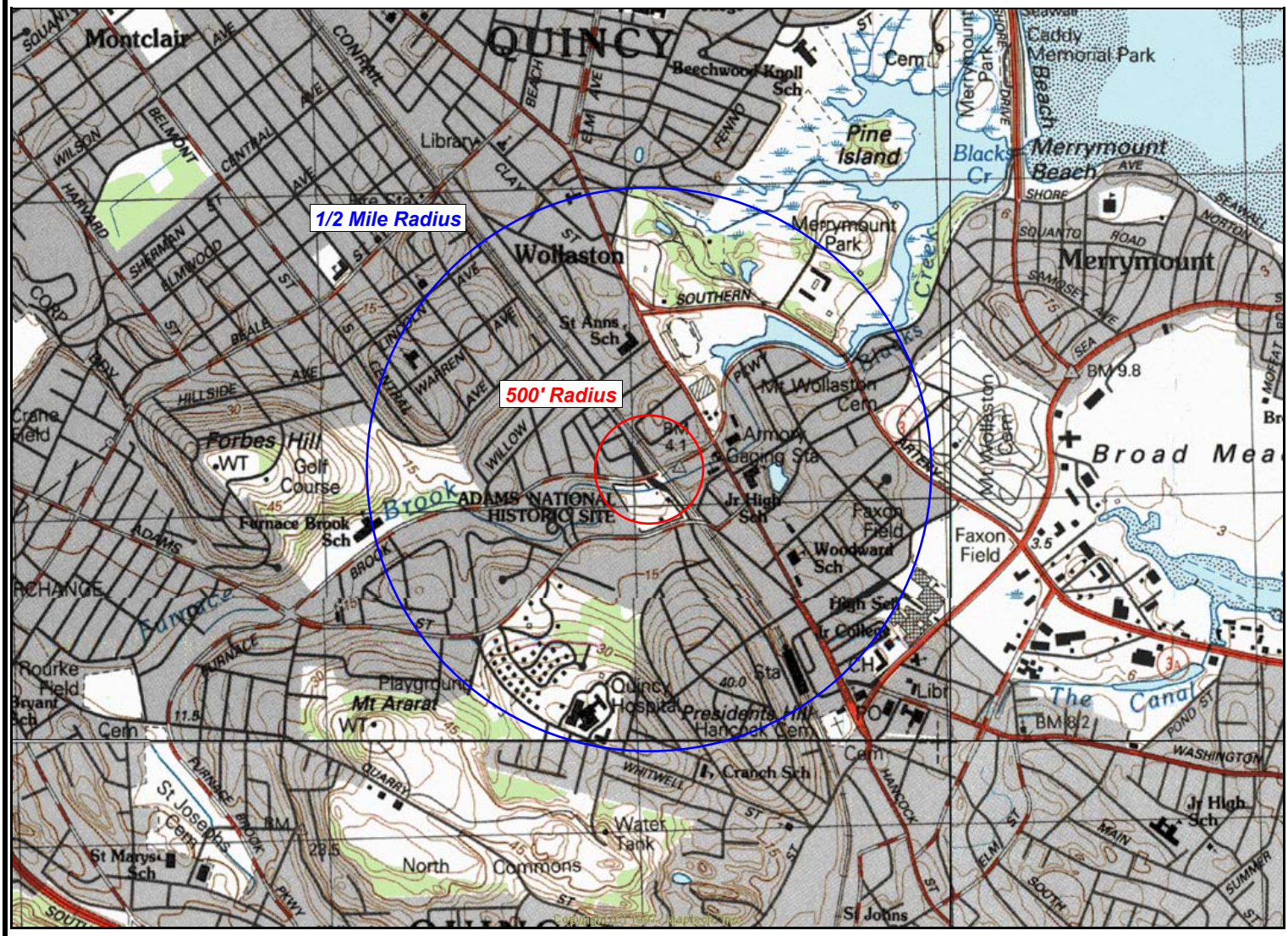
Environmental Compliance Services, Inc.
607 North Avenue, Wakefield, MA 01880
Phone (781)-246-8897 Fax (781)-246-8950
www.ecsconsult.com

SITE LOCUS

Figure: 1

McGinn Sunoco Service Station
627 Newport Avenue
Quincy, MA
02170

Job Number: 05-207351.00



1 — 1/2 — 0 — 1 Mile

1 inch = 1500 feet

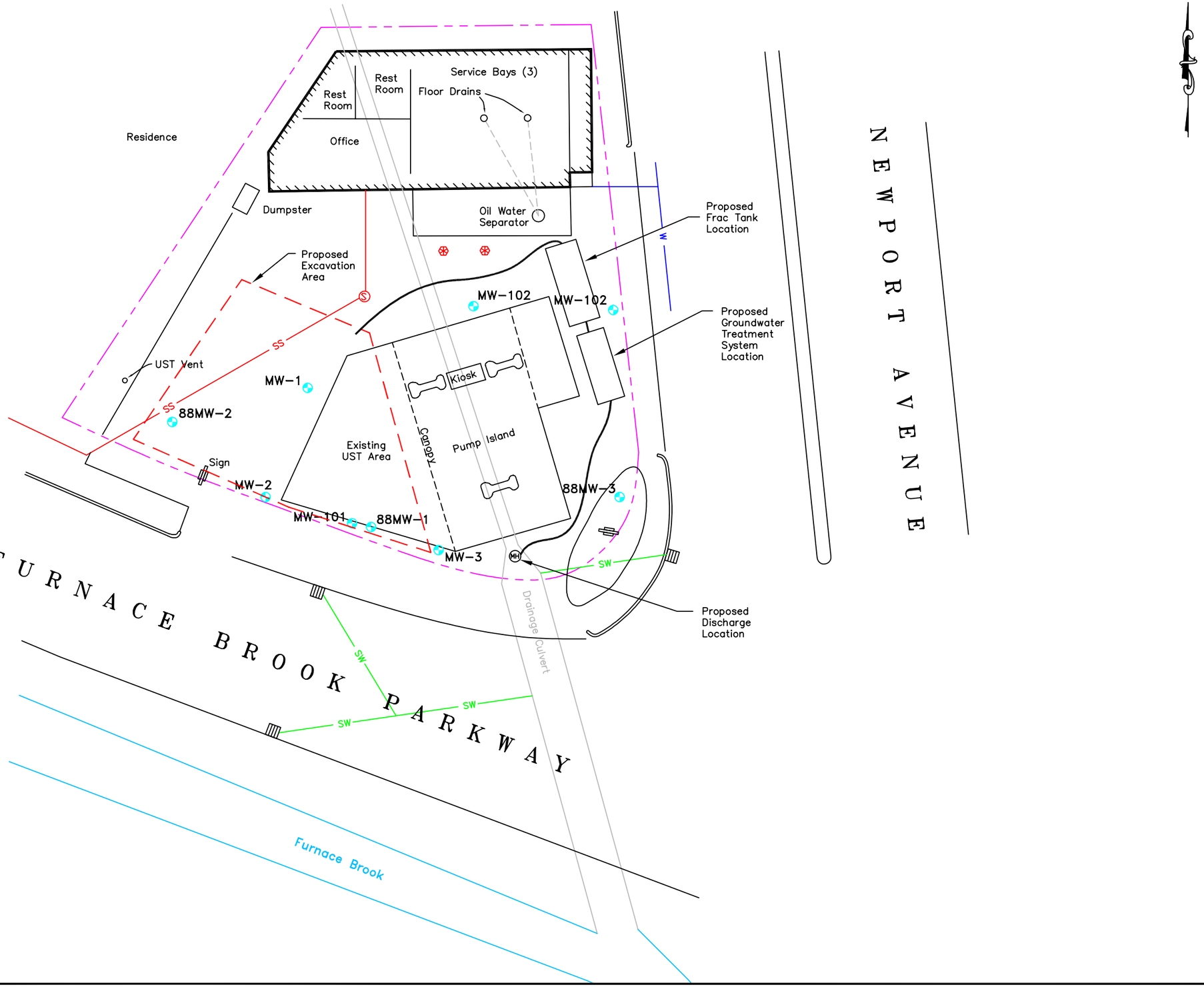
Contour Interval: 3 Meters

North

Base Map: U.S. Geological Survey; Quadrangle Location: Boston South, MA

UTM Coordinates: 19 0334043 East / 46 80124 North

Map Edited: 1987 *Map Revised: NA* *Generated By: JNS*



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.

Plan referenced from Corporate Environmental Advisors, Inc., figure entitled "Site Plan" and dated July 11, 1996.

ecs
607 North Avenue Suite 11 * Wakefield, MA 01880
Phone: 781-246-8697 Fax: 781-246-8950

PROJECT:
McGinn's Citgo Service Station
627 Newport Avenue
Quincy, Massachusetts

TITLE:
Site Plan

CLIENT:
627 Newport Avenue Trust

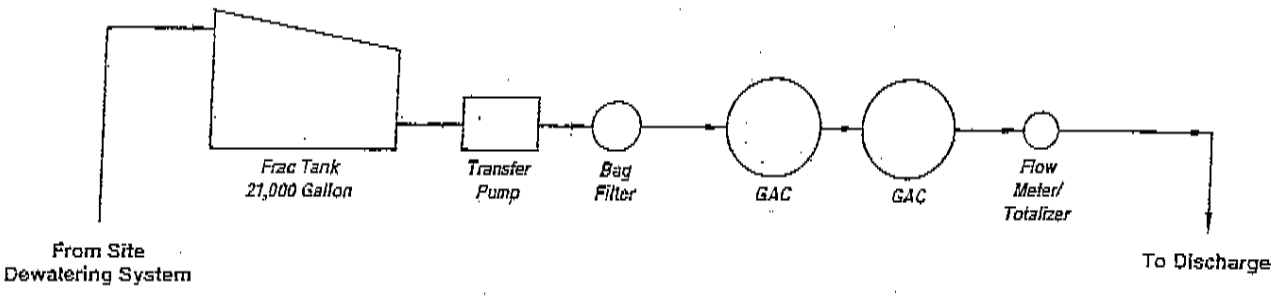
GRAPHIC SCALE: 40 20 0 20 40

COMPUTER CADFILE \Projects\95-207351\Figures\95-207351s

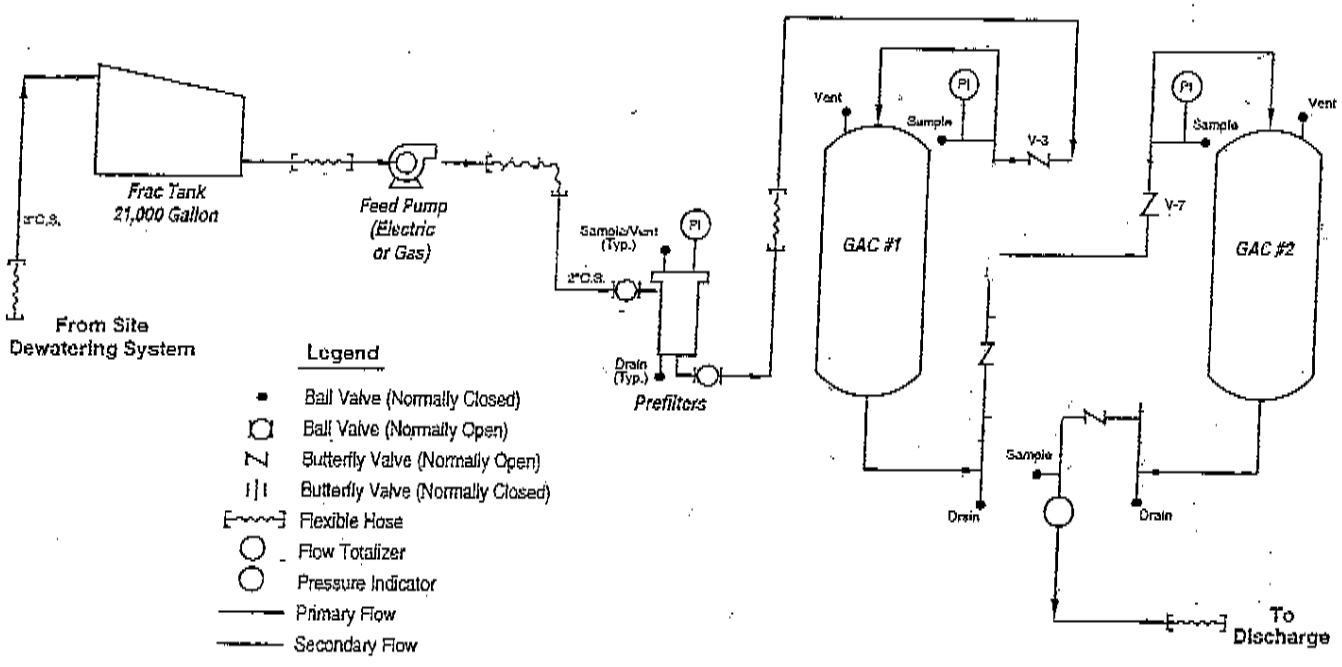
DRAWN BY:	DESIGNED BY:	CHECKED BY:	APPROVED BY:
MDR	--	CE	CE
SCALE:	DATE:	JOB NO.:	FIGURE NO.:
1"=40'	Nov 2006	95-207351	2

SERVICE TECH, INC.

Activated Carbon Engineering, Sales and Service



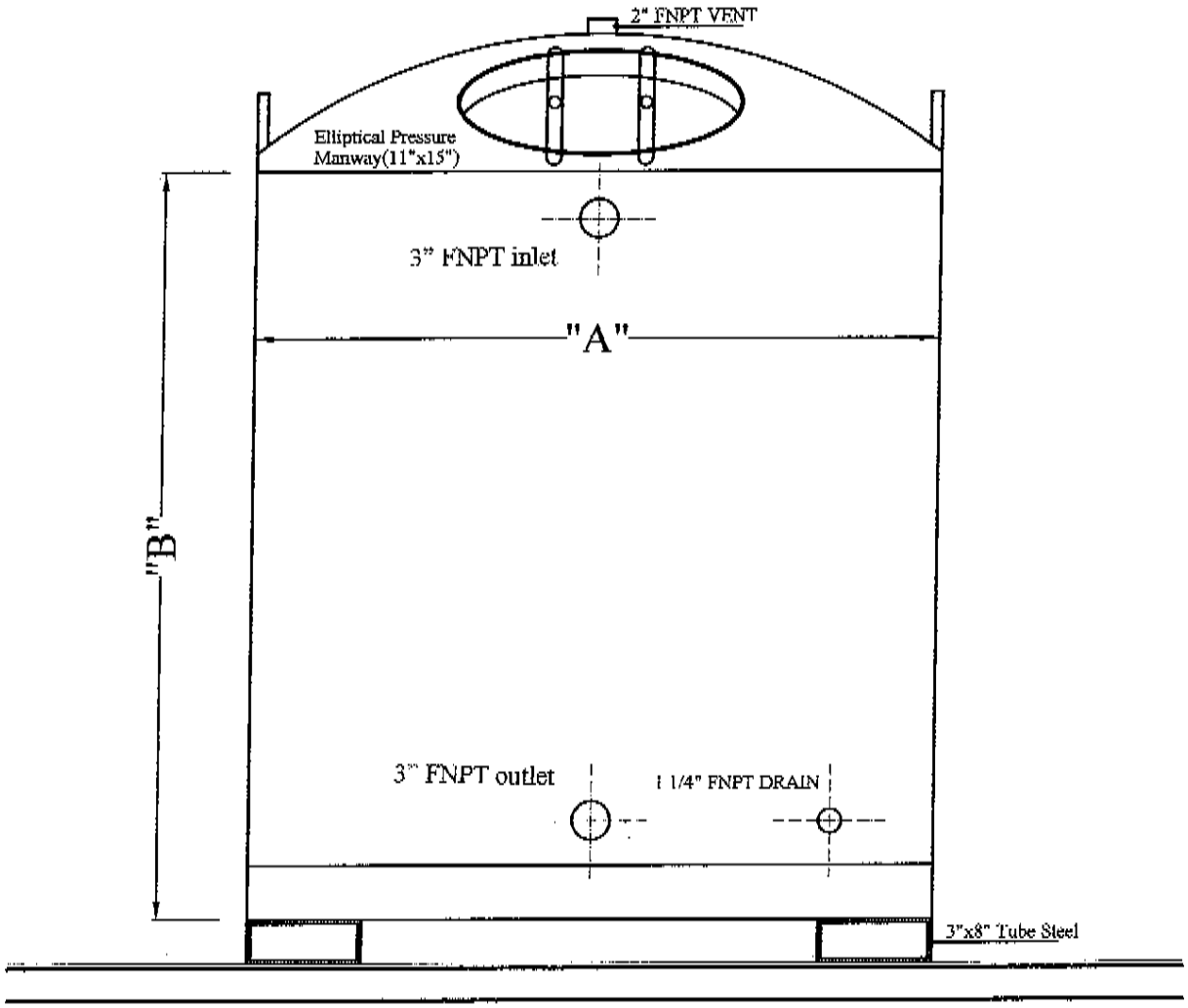
Process Flow Diagram
Dewatering Treatment System (Typical)



SERVICE TECH, INC.

Activated Carbon Engineering Sales and Service.

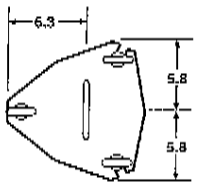
High Pressure
Liquid Phase
Activated Carbon Adsorbers
(75 PSI "HP" Series)



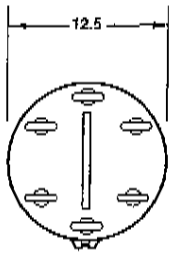
Design Specifications

MODEL	POUNDS GAC	MAXIMUM FLOW RATE (GPM)	DIMENSIONS DIA. X HT. "A" x "B"	OVERALL HEIGHT	INLET/ OUTLET
HP500-75	500	35	36" x 50"	66"	2"
HP1000-75	1000	50	48" x 48"	66"	2"
HP1000-75	1000	50	36" x 72"	90"	2"
HP2000-75	2000	100	48" x 72"	90"	4"
HP3000-75	3000	145	60" x 72"	108"	4"

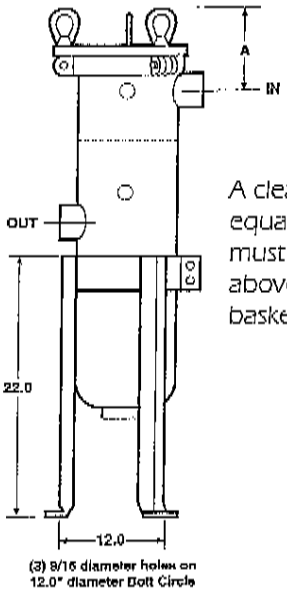
Cover Types



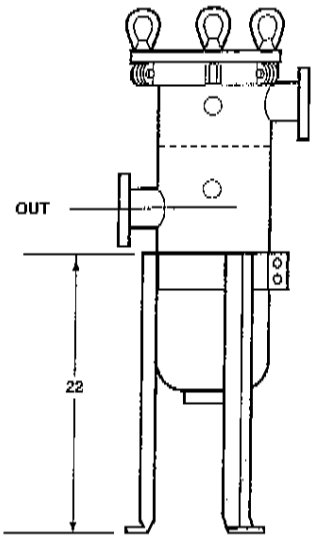
150 PSIG Design



300 PSIG Design



A clearance distance equal to basket depth must be available above housing for basket removal



Dimensions (IN) 150 PSIG Design

Model	Pipe Size	A	A1	A2	B	C	D	E	F	G	G1	H	H1	L	N
8-15	2	6.6	2.9	2.9	5.9	7.5	21.2	23.5	4.9	21.0	21.0	23.2	23.2	5.0	4.06
	3	7.5	3.7	3.7	6.8	7.5	22.5	24.6	6.6	21.9	21.9	25.4	25.4	7.25	6.12
	4	7.5	3.7	5.0	6.8	8.6	22.5	25.1	8.4	21.9	20.6	26.8	25.6	9.0	7.75
	6	9.0	5.2	5.9	7.1	8.6	23.6	26.0	9.0	23.4	22.8	30.9	30.3	12.5	11.0
8-30	2	6.6	2.8	2.9	5.9	7.5	36.2	38.5	4.9	36.0	36.0	38.2	38.2	5.0	4.06
	3	7.5	3.7	3.7	6.7	7.5	37.5	39.6	6.6	36.9	36.9	40.4	40.4	7.25	6.12
	4	7.5	3.7	5.0	6.7	8.6	37.5	40.1	8.4	36.9	35.6	41.8	40.6	9.0	7.75
	6	9.0	5.2	5.9	7.1	8.6	38.6	41.0	9.0	38.4	37.8	45.9	45.3	12.5	11.0

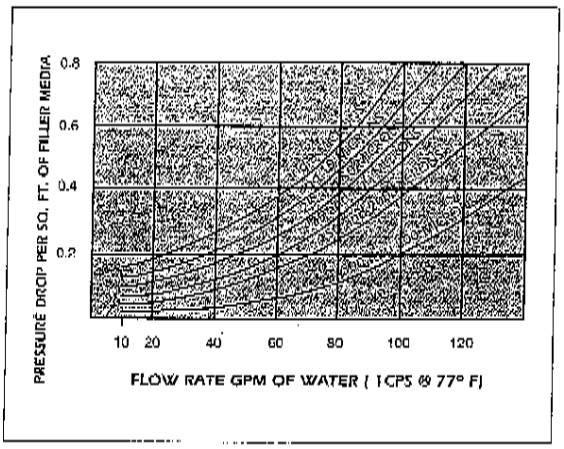
Dimensions (IN) 300 PSIG Design

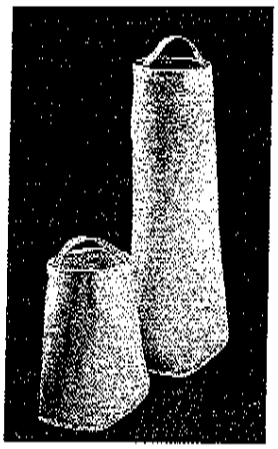
Model	Pipe Size	A	A1/A2	B	C	D	E	F	G/G1	H/H1	L	N
8-15	2	7.6	3.8	5.9	7.5	21.2	23.5	4.9	21.0	23.2	5.0	4.06
	3	8.9	5.0	6.8	8.6	22.5	24.6	6.6	21.9	25.4	7.25	6.12
	4	8.9	5.0	6.8	9.6	22.5	25.1	8.4	21.9	26.8	9.0	7.75
	6	10.1	6.2	6.3	10.0	23.6	26.0	9.0	23.4	30.9	12.5	11.0
8-30	2	7.6	3.8	5.9	7.5	36.0	38.5	4.9	36.0	38.2	5.0	4.06
	3	8.9	5.0	6.8	7.5	36.7	39.6	6.6	36.9	40.4	7.25	6.12
	4	8.9	5.0	6.8	8.6	36.5	40.1	8.4	36.9	41.8	9.0	7.75
	6	10.1	6.2	7.1	8.6	38.6	41.0	9.0	38.4	45.9	12.5	11.0

HIGH CAPACITY FILTER BAGS

Pressure Drop Data

The graph shows pressure drop through clean filter bag media of various micron ratings. The curves do not consider pressure drop through the filter housing.





Bag Size Correction

To obtain pressure drop correction for a specific bag size, divide the pressure drop obtained from the graph by the area of the bag

Viscosity Correction

If viscosity is higher than one, multiply the corrected pressure drop as obtained above by the appropriate viscosity correction factor

Bag Size	Surface Area (sq. ft.)	Viscosity (cps)	Correction Factor
		50	4.5
		100	8.3
1	2.0	200	16.6
1 (inner)	1.6	400	27.7
2	4.4	800	50.0
2 (inner)	3.6	1000	56.7
3	0.5	1500	77.2
4	1.0	2000	113.6
7	1.8	4000	161.0
8	2.0	6000	250.0
9	3.4	8000	326.0
12	5.6	10000	430.0

Standard Fibers And Micron Ratings

Available Micron Ratings

Construction	Fiber	1	3	5	10	15	25	50	75	100	125	150	175	200	250	300	400	600	800
Felts	Polyester	▪	▪	▪	▪	▪	▪	▪	▪	▪				▪					
	Oil-Adsorb (pp)						▪												
	Polypropylene	▪	▪	▪	▪		▪	▪		▪									
	Nomex (Nylon)			▪	▪		▪	▪		▪									
	Teflon®				▪														
Multifilament Meshes	Polyester								▪	▪	▪	▪		▪	▪	▪	▪		▪
	Nylon									▪		▪							▪
Monofilament Meshes	Polypropylene															▪		▪	
	Nylon			▪	▪		▪	▪	▪	▪	▪	▪	▪	▪	▪	▪	▪	▪	▪

Compatibility and Temperature Limits For Standard Bag Materials*

Compatibility With

Fiber	Organic Solvents	Animal Vegetable & Petro Oils	Micro-Organisms	Alkalies	Organic Acids	Oxidizing Agents	Mineral Acids	Temperature Limitations (max. deg. F)
Polyester	Excellent	Excellent	Excellent	Good	Good	Good	Good	325
Polypropylene	Excellent	Excellent	Excellent	Excellent	Excellent	Good	Good	225
Nylon	Excellent	Excellent	Excellent	Good	Fair	Poor	Poor	325
Nomex Nylon	Excellent	Excellent	Excellent	Good	Fair	Poor	Poor	450
Teflon	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	500

* Chart is to be used as a guide. User should make tests with specific media to assure compatibility

Filter Bag Sizes

Used on Rosedale Model No.	Bag Size	Length (inches)	Diameter (inches)	Surface Area (sq. ft.)	Bag Volume (gallons)
16	3	8	4.12	0.5	0.5
4-12	4	14	4.12	1.0	1.0
6-12	7	15	5.62	1.3	1.3
6-18	8	21	5.62	2.0	1.5
6-30	9	32	5.62	3.4	2.8
8-15	1	16.5	7.06	2.0	2.1
	1 (inner)	14.5	5.75	1.6	1.7
8-30	2	32	7.06	4.4	4.6
and 16 thru 36	2 (inner)	30	5.75	3.6	3.8
LCO	12	32	8.37	5.6	6.0

Report Date:
27-Nov-06 16:12

☑ Final Report
☐ Re-Issued Report
☐ Revised Report

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

Laboratory Report

Environmental Compliance Services
607 North Avenue; Suite 11
Wakefield, MA 01880
Attn: Craig Ellis

Project: 627 Newport Ave. - Quincy, MA
Project 95-207351.00

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
SA54478-01	Trip Blank	Ground Water	20-Nov-06 00:00	21-Nov-06 12:40
SA54478-02	MW-1	Ground Water	20-Nov-06 12:00	21-Nov-06 12:40
SA54478-03	MW-3	Ground Water	20-Nov-06 11:00	21-Nov-06 12:40
SA54478-04	MW-101	Ground Water	20-Nov-06 10:30	21-Nov-06 12:40
SA54478-05	MW-102	Ground Water	20-Nov-06 10:00	21-Nov-06 12:40
SA54478-06	MW-103	Ground Water	20-Nov-06 11:30	21-Nov-06 12:40
SA54478-07	MW-2	Ground Water	20-Nov-06 12:30	21-Nov-06 12:40

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.
Please note that this report contains 32 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 Jersey # MA011/MA012
New York # 11393/11840
Rhode Island # 98
USDA # S-51435
Vermont # VT-11393

Authorized by:

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

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CASE NARRATIVE:

The data set for work order SA54478 complies with internal QC criteria for the methods performed.

The samples were received @ 6.0 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
Trip Blank SA54478-01	95-207351.00	Ground Water	20-Nov-06 00:00	21-Nov-06

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Volatile Organic Compounds											
VPH Aliphatic/Aromatic Carbon Ranges											
Prepared by method VPH											
	C5-C8 Aliphatic Hydrocarbons	BRL		mg/l	0.0750	1	+MADEP 5/2004 Rev. 1.1	22-Nov-06	22-Nov-06	6111630	EQ
	C9-C12 Aliphatic Hydrocarbons	BRL		mg/l	0.0250	1	"	"	"	"	"
	C9-C10 Aromatic Hydrocarbons	BRL		mg/l	0.0250	1	"	"	"	"	"
	Unadjusted C5-C8 Aliphatic Hydrocarbons	BRL		mg/l	0.0750	1	"	"	"	"	"
	Unadjusted C9-C12 Aliphatic Hydrocarbons	BRL		mg/l	0.0250	1	"	"	"	"	"
VPH Target Analytes											
Prepared by method VPH											
71-43-2	Benzene	BRL		µg/l	5.0	1	"	"	"	"	"
100-41-4	Ethylbenzene	BRL		µg/l	5.0	1	"	"	"	"	"
1634-04-4	Methyl tert-butyl ether	BRL		µg/l	5.0	1	"	"	"	"	"
91-20-3	Naphthalene	BRL		µg/l	5.0	1	"	"	"	"	"
108-88-3	Toluene	BRL		µg/l	5.0	1	"	"	"	"	"
1330-20-7	m,p-Xylene	BRL		µg/l	10.0	1	"	"	"	"	"
95-47-6	o-Xylene	BRL		µg/l	5.0	1	"	"	"	"	"
Surrogate recoveries:											
615-59-8	*2,5-Dibromotoluene (FID)*	*103*		*70-130 %*			"	"	"	"	"
615-59-8	*2,5-Dibromotoluene (PID)*	*106*		*70-130 %*			"	"	"	"	"

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-1 SA54478-02	95-207351.00	Ground Water	20-Nov-06 12:00	21-Nov-06

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Volatile Organic Compounds											
VPH Aliphatic/Aromatic Carbon Ranges											
Prepared by method VPH											
	C5-C8 Aliphatic Hydrocarbons	0.583		mg/l	0.0750	5	+MADEP 5/2004 Rev. 1.1	22-Nov-06	22-Nov-06	6111630	EQ
	C9-C12 Aliphatic Hydrocarbons	0.103		mg/l	0.0250	5	"	"	"	"	"
	C9-C10 Aromatic Hydrocarbons	0.198		mg/l	0.0250	5	"	"	"	"	"
	Unadjusted C5-C8 Aliphatic Hydrocarbons	0.594		mg/l	0.0750	5	"	"	"	"	"
	Unadjusted C9-C12 Aliphatic Hydrocarbons	0.300		mg/l	0.0250	5	"	"	"	"	"
VPH Target Analytes											
Prepared by method VPH											
71-43-2	Benzene	5.9		µg/l	5.0	5	"	"	"	"	"
100-41-4	Ethylbenzene	BRL		µg/l	5.0	5	"	"	"	"	"
1634-04-4	Methyl tert-butyl ether	BRL		µg/l	5.0	5	"	"	"	"	"
91-20-3	Naphthalene	34.7		µg/l	5.0	5	"	"	"	"	"
108-88-3	Toluene	BRL		µg/l	5.0	5	"	"	"	"	"
1330-20-7	m,p-Xylene	BRL		µg/l	10.0	5	"	"	"	"	"
95-47-6	o-Xylene	BRL		µg/l	5.0	5	"	"	"	"	"
Surrogate recoveries:											
615-59-8	*2,5-Dibromotoluene (FID)*	*92.6*		*70-130 %*			"	"	"	"	"
615-59-8	*2,5-Dibromotoluene (PID)*	*94.6*		*70-130 %*			"	"	"	"	"

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-3 SA54478-03	95-207351.00	Ground Water	20-Nov-06 11:00	21-Nov-06

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Volatile Organic Compounds											
VPH Aliphatic/Aromatic Carbon Ranges											
Prepared by method VPH											
	C5-C8 Aliphatic Hydrocarbons	BRL		mg/l	0.0750	5	+MADEP 5/2004 Rev. 1.1	22-Nov-06	22-Nov-06	6111630	EQ
	C9-C12 Aliphatic Hydrocarbons	BRL		mg/l	0.0250	5	"	"	"	"	"
	C9-C10 Aromatic Hydrocarbons	BRL		mg/l	0.0250	5	"	"	"	"	"
	Unadjusted C5-C8 Aliphatic Hydrocarbons	BRL		mg/l	0.0750	5	"	"	"	"	"
	Unadjusted C9-C12 Aliphatic Hydrocarbons	BRL		mg/l	0.0250	5	"	"	"	"	"
VPH Target Analytes											
Prepared by method VPH											
71-43-2	Benzene	BRL		µg/l	5.0	5	"	"	"	"	"
100-41-4	Ethylbenzene	BRL		µg/l	5.0	5	"	"	"	"	"
1634-04-4	Methyl tert-butyl ether	BRL		µg/l	5.0	5	"	"	"	"	"
91-20-3	Naphthalene	BRL		µg/l	5.0	5	"	"	"	"	"
108-88-3	Toluene	BRL		µg/l	5.0	5	"	"	"	"	"
1330-20-7	m,p-Xylene	BRL		µg/l	10.0	5	"	"	"	"	"
95-47-6	o-Xylene	BRL		µg/l	5.0	5	"	"	"	"	"
Surrogate recoveries:											
615-59-8	*2,5-Dibromotoluene (FID)*	*87.2*		*70-130 %*			"	"	"	"	"
615-59-8	*2,5-Dibromotoluene (PID)*	*88.6*		*70-130 %*			"	"	"	"	"

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-101 SA54478-04	95-207351.00	Ground Water	20-Nov-06 10:30	21-Nov-06

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Volatile Organic Compounds											
VPH Aliphatic/Aromatic Carbon Ranges											
Prepared by method VPH											
	C5-C8 Aliphatic Hydrocarbons	2.62		mg/l	0.750	50	+MADEP 5/2004 Rev. 1.1	22-Nov-06	22-Nov-06	6111630	EQ
	C9-C12 Aliphatic Hydrocarbons	1.17		mg/l	0.250	50	"	"	"	"	"
	C9-C10 Aromatic Hydrocarbons	2.38		mg/l	0.250	50	"	"	"	"	"
	Unadjusted C5-C8 Aliphatic Hydrocarbons	12.5		mg/l	0.750	50	"	"	"	"	"
	Unadjusted C9-C12 Aliphatic Hydrocarbons	3.55		mg/l	0.250	50	"	"	"	"	"
VPH Target Analytes											
Prepared by method VPH											
71-43-2	Benzene	716		µg/l	50.0	50	"	"	"	"	"
100-41-4	Ethylbenzene	67.8		µg/l	50.0	50	"	"	"	"	"
1634-04-4	Methyl tert-butyl ether	6,060		µg/l	50.0	50	"	"	"	"	"
91-20-3	Naphthalene	129		µg/l	50.0	50	"	"	"	"	"
108-88-3	Toluene	1,030		µg/l	50.0	50	"	"	"	"	"
1330-20-7	m,p-Xylene	1,370		µg/l	100	50	"	"	"	"	"
95-47-6	o-Xylene	660		µg/l	50.0	50	"	"	"	"	"
Surrogate recoveries:											
615-59-8	*2,5-Dibromotoluene (FID)*	*80.6*		*70-130 %*			"	"	"	"	"
615-59-8	*2,5-Dibromotoluene (PID)*	*78.2*		*70-130 %*			"	"	"	"	"

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-102 SA54478-05	95-207351.00	Ground Water	20-Nov-06 10:00	21-Nov-06

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Volatile Organic Compounds											
VPH Aliphatic/Aromatic Carbon Ranges											
Prepared by method VPH											
	C5-C8 Aliphatic Hydrocarbons	BRL		mg/l	0.0750	5	+MADEP 5/2004 Rev. 1.1	22-Nov-06	22-Nov-06	6111630	EQ
	C9-C12 Aliphatic Hydrocarbons	BRL		mg/l	0.0250	5	"	"	"	"	"
	C9-C10 Aromatic Hydrocarbons	BRL		mg/l	0.0250	5	"	"	"	"	"
	Unadjusted C5-C8 Aliphatic Hydrocarbons	BRL		mg/l	0.0750	5	"	"	"	"	"
	Unadjusted C9-C12 Aliphatic Hydrocarbons	BRL		mg/l	0.0250	5	"	"	"	"	"
VPH Target Analytes											
Prepared by method VPH											
71-43-2	Benzene	BRL		µg/l	5.0	5	"	"	"	"	"
100-41-4	Ethylbenzene	BRL		µg/l	5.0	5	"	"	"	"	"
1634-04-4	Methyl tert-butyl ether	43.1		µg/l	5.0	5	"	"	"	"	"
91-20-3	Naphthalene	7.1		µg/l	5.0	5	"	"	"	"	"
108-88-3	Toluene	BRL		µg/l	5.0	5	"	"	"	"	"
1330-20-7	m,p-Xylene	BRL		µg/l	10.0	5	"	"	"	"	"
95-47-6	o-Xylene	BRL		µg/l	5.0	5	"	"	"	"	"
Surrogate recoveries:											
615-59-8	*2,5-Dibromotoluene (FID)*	*86.0*		*70-130 %*			"	"	"	"	"
615-59-8	*2,5-Dibromotoluene (PID)*	*87.2*		*70-130 %*			"	"	"	"	"

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-103 SA54478-06	95-207351.00	Ground Water	20-Nov-06 11:30	21-Nov-06

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Volatile Organic Compounds											
VPH Aliphatic/Aromatic Carbon Ranges											
Prepared by method VPH											
	C5-C8 Aliphatic Hydrocarbons	0.510		mg/l	0.0750	5	+MADEP 5/2004 Rev. 1.1	22-Nov-06	22-Nov-06	6111630	EQ
	C9-C12 Aliphatic Hydrocarbons	0.142		mg/l	0.0250	5	"	"	"	"	"
	C9-C10 Aromatic Hydrocarbons	0.434		mg/l	0.0250	5	"	"	"	"	"
	Unadjusted C5-C8 Aliphatic Hydrocarbons	1.23		mg/l	0.0750	5	"	"	"	"	"
	Unadjusted C9-C12 Aliphatic Hydrocarbons	0.575		mg/l	0.0250	5	"	"	"	"	"
VPH Target Analytes											
Prepared by method VPH											
71-43-2	Benzene	63.8		µg/l	5.0	5	"	"	"	"	"
100-41-4	Ethylbenzene	73.5		µg/l	5.0	5	"	"	"	"	"
1634-04-4	Methyl tert-butyl ether	56.6		µg/l	5.0	5	"	"	"	"	"
91-20-3	Naphthalene	22.7		µg/l	5.0	5	"	"	"	"	"
108-88-3	Toluene	122		µg/l	5.0	5	"	"	"	"	"
1330-20-7	m,p-Xylene	295		µg/l	10.0	5	"	"	"	"	"
95-47-6	o-Xylene	105		µg/l	5.0	5	"	"	"	"	"
Surrogate recoveries:											
615-59-8	*2,5-Dibromotoluene (FID)*	*82.8*		*70-130 %*			"	"	"	"	"
615-59-8	*2,5-Dibromotoluene (PID)*	*83.6*		*70-130 %*			"	"	"	"	"

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-2 SA54478-07	95-207351.00	Ground Water	20-Nov-06 12:30	21-Nov-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											
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	BRL		µg/l	10.0	10	SW 846 8260B	21-Nov-06	22-Nov-06	6111585	RLJ
67-64-1	Acetone	BRL		µg/l	100	10	"	"	"	"	"
107-13-1	Acrylonitrile	BRL		µg/l	10.0	10	"	"	"	"	"
71-43-2	Benzene	132		µg/l	10.0	10	"	"	"	"	"
108-86-1	Bromobenzene	BRL		µg/l	10.0	10	"	"	"	"	"
74-97-5	Bromochloromethane	BRL		µg/l	10.0	10	"	"	"	"	"
75-27-4	Bromodichloromethane	BRL		µg/l	10.0	10	"	"	"	"	"
75-25-2	Bromoform	BRL		µg/l	10.0	10	"	"	"	"	"
74-83-9	Bromomethane	BRL		µg/l	20.0	10	"	"	"	"	"
78-93-3	2-Butanone (MEK)	BRL		µg/l	100	10	"	"	"	"	"
104-51-8	n-Butylbenzene	BRL		µg/l	10.0	10	"	"	"	"	"
135-98-8	sec-Butylbenzene	BRL		µg/l	10.0	10	"	"	"	"	"
98-06-6	tert-Butylbenzene	BRL		µg/l	10.0	10	"	"	"	"	"
75-15-0	Carbon disulfide	BRL		µg/l	50.0	10	"	"	"	"	"
56-23-5	Carbon tetrachloride	BRL		µg/l	10.0	10	"	"	"	"	"
108-90-7	Chlorobenzene	BRL		µg/l	10.0	10	"	"	"	"	"
75-00-3	Chloroethane	BRL		µg/l	20.0	10	"	"	"	"	"
67-66-3	Chloroform	BRL		µg/l	10.0	10	"	"	"	"	"
74-87-3	Chloromethane	BRL		µg/l	20.0	10	"	"	"	"	"
95-49-8	2-Chlorotoluene	BRL		µg/l	10.0	10	"	"	"	"	"
106-43-4	4-Chlorotoluene	BRL		µg/l	10.0	10	"	"	"	"	"
96-12-8	1,2-Dibromo-3-chloropropane	BRL		µg/l	20.0	10	"	"	"	"	"
124-48-1	Dibromochloromethane	BRL		µg/l	10.0	10	"	"	"	"	"
106-93-4	1,2-Dibromoethane (EDB)	BRL		µg/l	10.0	10	"	"	"	"	"
74-95-3	Dibromomethane	BRL		µg/l	10.0	10	"	"	"	"	"
95-50-1	1,2-Dichlorobenzene	BRL		µg/l	10.0	10	"	"	"	"	"
541-73-1	1,3-Dichlorobenzene	BRL		µg/l	10.0	10	"	"	"	"	"
106-46-7	1,4-Dichlorobenzene	BRL		µg/l	10.0	10	"	"	"	"	"
75-71-8	Dichlorodifluoromethane (Freon12)	BRL		µg/l	20.0	10	"	"	"	"	"
75-34-3	1,1-Dichloroethane	BRL		µg/l	10.0	10	"	"	"	"	"
107-06-2	1,2-Dichloroethane	BRL		µg/l	10.0	10	"	"	"	"	"
75-35-4	1,1-Dichloroethene	BRL		µg/l	10.0	10	"	"	"	"	"
156-59-2	cis-1,2-Dichloroethene	BRL		µg/l	10.0	10	"	"	"	"	"
156-60-5	trans-1,2-Dichloroethene	BRL		µg/l	10.0	10	"	"	"	"	"
78-87-5	1,2-Dichloropropane	BRL		µg/l	10.0	10	"	"	"	"	"
142-28-9	1,3-Dichloropropane	BRL		µg/l	10.0	10	"	"	"	"	"
594-20-7	2,2-Dichloropropane	BRL		µg/l	10.0	10	"	"	"	"	"
563-58-6	1,1-Dichloropropene	BRL		µg/l	10.0	10	"	"	"	"	"
10061-01-5	cis-1,3-Dichloropropene	BRL		µg/l	10.0	10	"	"	"	"	"
10061-02-6	trans-1,3-Dichloropropene	BRL		µg/l	10.0	10	"	"	"	"	"
100-41-4	Ethylbenzene	93.2		µg/l	10.0	10	"	"	"	"	"
87-68-3	Hexachlorobutadiene	BRL		µg/l	10.0	10	"	"	"	"	"
591-78-6	2-Hexanone (MBK)	BRL		µg/l	100	10	"	"	"	"	"
98-82-8	Isopropylbenzene	BRL		µg/l	10.0	10	"	"	"	"	"
99-87-6	4-Isopropyltoluene	BRL		µg/l	10.0	10	"	"	"	"	"
1634-04-4	Methyl tert-butyl ether	681		µg/l	10.0	10	"	"	"	"	"
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL		µg/l	100	10	"	"	"	"	"
75-09-2	Methylene chloride	BRL		µg/l	100	10	"	"	"	"	"
91-20-3	Naphthalene	47.7		µg/l	10.0	10	"	"	"	"	"

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-2 SA54478-07	95-207351.00	Ground Water	20-Nov-06 12:30	21-Nov-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											
103-65-1	n-Propylbenzene	18.7		µg/l	10.0	10	SW 846 8260B	21-Nov-06	22-Nov-06	6111585	RLJ
100-42-5	Styrene	BRL		µg/l	10.0	10	"	"	"	"	"
630-20-6	1,1,1,2-Tetrachloroethane	BRL		µg/l	10.0	10	"	"	"	"	"
79-34-5	1,1,2,2-Tetrachloroethane	BRL		µg/l	10.0	10	"	"	"	"	"
127-18-4	Tetrachloroethene	BRL		µg/l	10.0	10	"	"	"	"	"
108-88-3	Toluene	251		µg/l	10.0	10	"	"	"	"	"
87-61-6	1,2,3-Trichlorobenzene	BRL		µg/l	10.0	10	"	"	"	"	"
120-82-1	1,2,4-Trichlorobenzene	BRL		µg/l	10.0	10	"	"	"	"	"
71-55-6	1,1,1-Trichloroethane	BRL		µg/l	10.0	10	"	"	"	"	"
79-00-5	1,1,2-Trichloroethane	BRL		µg/l	10.0	10	"	"	"	"	"
79-01-6	Trichloroethene	BRL		µg/l	10.0	10	"	"	"	"	"
75-69-4	Trichlorofluoromethane (Freon 11)	BRL		µg/l	10.0	10	"	"	"	"	"
96-18-4	1,2,3-Trichloropropane	BRL		µg/l	10.0	10	"	"	"	"	"
95-63-6	1,2,4-Trimethylbenzene	745		µg/l	10.0	10	"	"	"	"	"
108-67-8	1,3,5-Trimethylbenzene	344		µg/l	10.0	10	"	"	"	"	"
75-01-4	Vinyl chloride	BRL		µg/l	10.0	10	"	"	"	"	"
1330-20-7	m,p-Xylene	955		µg/l	20.0	10	"	"	"	"	"
95-47-6	o-Xylene	466		µg/l	10.0	10	"	"	"	"	"
109-99-9	Tetrahydrofuran	BRL		µg/l	100	10	"	"	"	"	"
60-29-7	Ethyl ether	BRL		µg/l	10.0	10	"	"	"	"	"
994-05-8	Tert-amyl methyl ether	536		µg/l	10.0	10	"	"	"	"	"
637-92-3	Ethyl tert-butyl ether	BRL		µg/l	10.0	10	"	"	"	"	"
108-20-3	Di-isopropyl ether	BRL		µg/l	10.0	10	"	"	"	"	"
75-65-0	Tert-Butanol / butyl alcohol	5,740		µg/l	100	10	"	"	"	"	"
123-91-1	1,4-Dioxane	BRL		µg/l	200	10	"	"	"	"	"
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*98.0*		*70-130 %*			"	"	"	"	"
2037-26-5	*Toluene-d8*	*92.0*		*70-130 %*			"	"	"	"	"
17060-07-0	*1,2-Dichloroethane-d4*	*95.6*		*70-130 %*			"	"	"	"	"
1868-53-7	*Dibromofluoromethane*	*92.8*		*70-130 %*			"	"	"	"	"
VPH Aliphatic/Aromatic Carbon Ranges											
Prepared by method VPH											
	C5-C8 Aliphatic Hydrocarbons	3.14		mg/l	0.0750	5	+MADEP 5/2004 Rev. 1.1	22-Nov-06	22-Nov-06	6111630	EQ
	C9-C12 Aliphatic Hydrocarbons	1.55		mg/l	0.0250	5	"	"	"	"	"
	C9-C10 Aromatic Hydrocarbons	3.80		mg/l	0.0250	5	"	"	"	"	"
	Unadjusted C5-C8 Aliphatic Hydrocarbons	5.67		mg/l	0.0750	5	"	"	"	"	"
	Unadjusted C9-C12 Aliphatic Hydrocarbons	5.34		mg/l	0.0250	5	"	"	"	"	"
VPH Target Analytes											
Prepared by method VPH											
71-43-2	Benzene	173		µg/l	5.0	5	"	"	"	"	"
100-41-4	Ethylbenzene	74.2		µg/l	5.0	5	"	"	"	"	"
1634-04-4	Methyl tert-butyl ether	804		µg/l	5.0	5	"	"	"	"	"
91-20-3	Naphthalene	163		µg/l	5.0	5	"	"	"	"	"
108-88-3	Toluene	288		µg/l	5.0	5	"	"	"	"	"
1330-20-7	m,p-Xylene	814		µg/l	10.0	5	"	"	"	"	"
95-47-6	o-Xylene	376		µg/l	5.0	5	"	"	"	"	"
Surrogate recoveries:											

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-2 SA54478-07	95-207351.00	Ground Water	20-Nov-06 12:30	21-Nov-06

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Volatile Organic Compounds											
VPH Target Analytes											
Prepared by method VPH											
615-59-8	*2,5-Dibromotoluene (FID)*	*91.6*		*70-130 %*			+MADEP 5/2004 Rev. 1.1	22-Nov-06	22-Nov-06	6111630	EQ
615-59-8	*2,5-Dibromotoluene (PID)*	*93.2*		*70-130 %*			"	"	"	"	"
Microextractable Organic Compounds											
106-93-4	1,2-Dibromoethane (EDB)	BRL		µg/l	0.0100	1	EPA 504.1	21-Nov-06	22-Nov-06	6111557	mp
Extractable Petroleum Hydrocarbons											
	Non-polar material (SGT-HEM)	12.6		mg/l	1.0	1	EPA 1664	21-Nov-06	22-Nov-06	6111573	DS
Semivolatile Organic Compounds by GC											
Polychlorinated Biphenyls by EPA 608											
Prepared by method SW846 3535											
12674-11-2	PCB 1016	BRL		µg/l	0.400	1	EPA 608	21-Nov-06	21-Nov-06	6111490	SM
11104-28-2	PCB 1221	BRL		µg/l	0.400	1	"	"	"	"	"
11141-16-5	PCB 1232	BRL		µg/l	0.400	1	"	"	"	"	"
53469-21-9	PCB 1242	BRL		µg/l	0.400	1	"	"	"	"	"
12672-29-6	PCB 1248	BRL		µg/l	0.400	1	"	"	"	"	"
11097-69-1	PCB 1254	BRL		µg/l	0.400	1	"	"	"	"	"
11096-82-5	PCB 1260	BRL		µg/l	0.400	1	"	"	"	"	"
37324-23-5	PCB 1262	BRL		µg/l	0.400	1	"	"	"	"	"
11100-14-4	PCB 1268	BRL		µg/l	0.400	1	"	"	"	"	"
Surrogate recoveries:											
10386-84-2	*4,4-DB-Octafluorobiphenyl (Sr)*	*55.0*		*30-150 %*			"	"	"	"	"
2051-24-3	*Decachlorobiphenyl (Sr)*	*55.0*		*30-150 %*			"	"	"	"	"
Semivolatile Organic Compounds by GCMS											
Semivolatile Organic Compounds by SW846 8270C											
Prepared by method SW846 3510C											
83-32-9	Acenaphthene	BRL		µg/l	5.00	1	SW846 8270C	21-Nov-06	21-Nov-06	6111492	M.B
208-96-8	Acenaphthylene	BRL		µg/l	5.00	1	"	"	"	"	"
62-53-3	Aniline	BRL		µg/l	5.00	1	"	"	"	"	"
120-12-7	Anthracene	BRL		µg/l	5.00	1	"	"	"	"	"
1912-24-9	Atrazine	BRL		µg/l	5.00	1	"	"	"	"	"
103-33-3	Azobenzene/Diphenyldiazine	BRL		µg/l	5.00	1	"	"	"	"	"
92-87-5	Benzidine	BRL		µg/l	5.00	1	"	"	"	"	"
56-55-3	Benzo (a) anthracene	BRL		µg/l	5.00	1	"	"	"	"	"
50-32-8	Benzo (a) pyrene	BRL		µg/l	5.00	1	"	"	"	"	"
205-99-2	Benzo (b) fluoranthene	BRL		µg/l	5.00	1	"	"	"	"	"
191-24-2	Benzo (g,h,i) perylene	BRL		µg/l	5.00	1	"	"	"	"	"
207-08-9	Benzo (k) fluoranthene	BRL		µg/l	5.00	1	"	"	"	"	"
65-85-0	Benzoic acid	BRL		µg/l	5.00	1	"	"	"	"	"
100-51-6	Benzyl alcohol	BRL		µg/l	5.00	1	"	"	"	"	"
111-91-1	Bis(2-chloroethoxy)methane	BRL		µg/l	5.00	1	"	"	"	"	"
111-44-4	Bis(2-chloroethyl)ether	BRL		µg/l	5.00	1	"	"	"	"	"
39638-32-9	Bis(2-chloroisopropyl)ether	BRL		µg/l	5.00	1	"	"	"	"	"
117-81-7	Bis(2-ethylhexyl)phthalate	BRL		µg/l	5.00	1	"	"	"	"	"
101-55-3	4-Bromophenyl phenyl ether	BRL		µg/l	5.00	1	"	"	"	"	"
85-68-7	Butyl benzyl phthalate	BRL		µg/l	5.00	1	"	"	"	"	"
86-74-8	Carbazole	BRL		µg/l	5.00	1	"	"	"	"	"
59-50-7	4-Chloro-3-methylphenol	BRL		µg/l	5.00	1	"	"	"	"	"
106-47-8	4-Chloroaniline	BRL		µg/l	5.00	1	"	"	"	"	"
91-58-7	2-Chloronaphthalene	BRL		µg/l	5.00	1	"	"	"	"	"

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-2	95-207351.00	Ground Water	20-Nov-06 12:30	21-Nov-06
SA54478-07				

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Semivolatile Organic Compounds by GCMS											
Semivolatile Organic Compounds by SW846 8270C											
Prepared by method SW846 3510C											
95-57-8	2-Chlorophenol	BRL		µg/l	5.00	1	SW846 8270C	21-Nov-06	21-Nov-06	6111492	M.B
7005-72-3	4-Chlorophenyl phenyl ether	BRL		µg/l	5.00	1	"	"	"	"	"
218-01-9	Chrysene	BRL		µg/l	5.00	1	"	"	"	"	"
53-70-3	Dibenzo (a,h) anthracene	BRL		µg/l	5.00	1	"	"	"	"	"
132-64-9	Dibenzofuran	BRL		µg/l	5.00	1	"	"	"	"	"
95-50-1	1,2-Dichlorobenzene	BRL		µg/l	5.00	1	"	"	"	"	"
541-73-1	1,3-Dichlorobenzene	BRL		µg/l	5.00	1	"	"	"	"	"
106-46-7	1,4-Dichlorobenzene	BRL		µg/l	5.00	1	"	"	"	"	"
91-94-1	3,3´-Dichlorobenzidine	BRL		µg/l	5.00	1	"	"	"	"	"
120-83-2	2,4-Dichlorophenol	BRL		µg/l	5.00	1	"	"	"	"	"
84-66-2	Diethyl phthalate	BRL		µg/l	5.00	1	"	"	"	"	"
131-11-3	Dimethyl phthalate	BRL		µg/l	5.00	1	"	"	"	"	"
105-67-9	2,4-Dimethylphenol	BRL		µg/l	5.00	1	"	"	"	"	"
84-74-2	Di-n-butyl phthalate	BRL		µg/l	5.00	1	"	"	"	"	"
534-52-1	4,6-Dinitro-2-methylphenol	BRL		µg/l	5.00	1	"	"	"	"	"
51-28-5	2,4-Dinitrophenol	BRL		µg/l	5.00	1	"	"	"	"	"
121-14-2	2,4-Dinitrotoluene	BRL		µg/l	5.00	1	"	"	"	"	"
606-20-2	2,6-Dinitrotoluene	BRL		µg/l	5.00	1	"	"	"	"	"
117-84-0	Di-n-octyl phthalate	BRL		µg/l	5.00	1	"	"	"	"	"
206-44-0	Fluoranthene	BRL		µg/l	5.00	1	"	"	"	"	"
86-73-7	Fluorene	BRL		µg/l	5.00	1	"	"	"	"	"
118-74-1	Hexachlorobenzene	BRL		µg/l	5.00	1	"	"	"	"	"
87-68-3	Hexachlorobutadiene	BRL		µg/l	5.00	1	"	"	"	"	"
77-47-4	Hexachlorocyclopentadiene	BRL		µg/l	5.00	1	"	"	"	"	"
67-72-1	Hexachloroethane	BRL		µg/l	5.00	1	"	"	"	"	"
193-39-5	Indeno (1,2,3-cd) pyrene	BRL		µg/l	5.00	1	"	"	"	"	"
78-59-1	Isophorone	BRL		µg/l	5.00	1	"	"	"	"	"
91-57-6	2-Methylnaphthalene	41.2		µg/l	5.00	1	"	"	"	"	"
95-48-7	2-Methylphenol	BRL		µg/l	5.00	1	"	"	"	"	"
108-39-4, 106-44-5	3,4-Methylphenol	BRL		µg/l	10.0	1	"	"	"	"	"
91-20-3	Naphthalene	48.2		µg/l	5.00	1	"	"	"	"	"
88-74-4	2-Nitroaniline	BRL		µg/l	5.00	1	"	"	"	"	"
99-09-2	3-Nitroaniline	BRL		µg/l	5.00	1	"	"	"	"	"
100-01-6	4-Nitroaniline	BRL		µg/l	20.0	1	"	"	"	"	"
98-95-3	Nitrobenzene	BRL		µg/l	5.00	1	"	"	"	"	"
88-75-5	2-Nitrophenol	BRL		µg/l	5.00	1	"	"	"	"	"
100-02-7	4-Nitrophenol	BRL		µg/l	20.0	1	"	"	"	"	"
62-75-9	N-Nitrosodimethylamine	BRL		µg/l	5.00	1	"	"	"	"	"
621-64-7	N-Nitrosodi-n-propylamine	BRL		µg/l	5.00	1	"	"	"	"	"
86-30-6	N-Nitrosodiphenylamine	BRL		µg/l	5.00	1	"	"	"	"	"
87-86-5	Pentachlorophenol	BRL		µg/l	20.0	1	"	"	"	"	"
85-01-8	Phenanthrene	BRL		µg/l	5.00	1	"	"	"	"	"
108-95-2	Phenol	BRL		µg/l	5.00	1	"	"	"	"	"
129-00-0	Pyrene	BRL		µg/l	5.00	1	"	"	"	"	"
110-86-1	Pyridine	BRL		µg/l	5.00	1	"	"	"	"	"
120-82-1	1,2,4-Trichlorobenzene	BRL		µg/l	5.00	1	"	"	"	"	"
90-12-0	1-Methylnaphthalene	27.1		µg/l	5.00	1	"	"	"	"	"
95-95-4	2,4,5-Trichlorophenol	BRL		µg/l	5.00	1	"	"	"	"	"
88-06-2	2,4,6-Trichlorophenol	BRL		µg/l	5.00	1	"	"	"	"	"

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-2 SA54478-07	95-207351.00	Ground Water	20-Nov-06 12:30	21-Nov-06

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Semivolatile Organic Compounds by GCMS											
Semivolatile Organic Compounds by SW846 8270C											
Prepared by method SW846 3510C											
Surrogate recoveries:											
321-60-8	*2-Fluorobiphenyl*	*64.4*		*30-130 %*			SW846 8270C	21-Nov-06	21-Nov-06	6111492	M.B
367-12-4	*2-Fluorophenol*	*51.7*		*15-110 %*			"	"	"	"	"
4165-60-0	*Nitrobenzene-d5*	*52.5*		*30-130 %*			"	"	"	"	"
4165-62-2	*Phenol-d5*	*43.6*		*15-110 %*			"	"	"	"	"
1718-51-0	*Terphenyl-dl4*	*60.1*		*30-130 %*			"	"	"	"	"
118-79-6	*2,4,6-Tribromophenol*	*65.4*		*15-110 %*			"	"	"	"	"
Total Metals by EPA 6000/7000 Series Methods											
7440-22-4	Silver	BRL		mg/l	0.0008	1	SW846 6020	22-Nov-06	22-Nov-06	6111616	LR
7440-38-2	Arsenic	0.0236		mg/l	0.0020	1	SW846 6010B	"	22-Nov-06	6111611	"
7440-43-9	Cadmium	0.0091		mg/l	0.0002	10	SW846 6020	"	22-Nov-06	6111616	"
7440-47-3	Chromium	0.190		mg/l	0.0025	1	SW846 6010B	"	22-Nov-06	6111611	"
7440-50-8	Copper	0.800		mg/l	0.0025	1	"	"	"	"	"
7439-89-6	Iron	72.0		mg/l	0.0025	1	"	"	"	"	"
7440-02-0	Nickel	0.0926		mg/l	0.0025	1	"	"	"	"	"
7439-92-1	Lead	0.478		mg/l	0.0002	10	SW846 6020	"	22-Nov-06	6111616	"
7782-49-2	Selenium	0.0022		mg/l	0.0012	10	"	"	"	"	"
7440-66-6	Zinc	3.14		mg/l	0.0025	1	SW846 6010B	"	22-Nov-06	6111611	"
Total Metals by EPA 200 Series Methods											
7439-97-6	Mercury	0.00020		mg/l	0.00020	1	EPA 245.1/7470A	22-Nov-06	22-Nov-06	6111612	YP
General Chemistry Parameters											
	Trivalent Chromium	0.190		mg/l	0.0050	1	Calculation	22-Nov-06	22-Nov-06	6111611	LR
1854-029-9	Hexavalent Chromium	BRL	HT2	mg/l	0.025	5	SM3500CrD/7196A	21-Nov-06 18:26	21-Nov-06	6111588	SS
57-12-5	Cyanide (total)	0.0140		mg/l	0.0100	1	10-204-00-1-A / SW846 9012A	21-Nov-06	22-Nov-06	6111673	RLT
7782-50-5	Total Residual Chlorine	0.555	HT2	mg/l	0.100	5	Hach 8167	21-Nov-06 18:35	21-Nov-06	6111589	SS
	Total Suspended Solids	2,030		mg/l	16.6	3.33	SM2540D	21-Nov-06	21-Nov-06	6111586	"

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 6111585 - SW846 5030 Water MS										
Blank (6111585-BLK1)										
Prepared: 21-Nov-06 Analyzed: 22-Nov-06										
1,1,2-Trichlorotrifluoroethane (Freon 113)	BRL		µg/l	1.0						
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						

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 6111585 - SW846 5030 Water MS										
Blank (6111585-BLK1)										
Prepared: 21-Nov-06 Analyzed: 22-Nov-06										
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						
1,1,1-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	*46.9*		µg/l		*50.0*		*93.8*	*70-130*		
Surrogate: Toluene-d8	*48.1*		µg/l		*50.0*		*96.2*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*49.3*		µg/l		*50.0*		*98.6*	*70-130*		
Surrogate: Dibromofluoromethane	*47.4*		µg/l		*50.0*		*94.8*	*70-130*		
LCS (6111585-BS1)										
Prepared: 21-Nov-06 Analyzed: 22-Nov-06										
1,1,2-Trichlorotrifluoroethane (Freon 113)	15.9		µg/l		20.0		79.5	70-130		
Acetone	19.7		µg/l		20.0		98.5	32.4-154		
Acrylonitrile	19.6		µg/l		20.0		98.0	70-130		
Benzene	16.9		µg/l		20.0		84.5	70-130		
Bromobenzene	21.6		µg/l		20.0		108	70-130		
Bromochloromethane	19.0		µg/l		20.0		95.0	70-130		
Bromodichloromethane	18.4		µg/l		20.0		92.0	70-130		
Bromoform	18.0		µg/l		20.0		90.0	70-130		
Bromomethane	23.9		µg/l		20.0		120	57.6-150		
2-Butanone (MEK)	16.6		µg/l		20.0		83.0	46.5-137		
n-Butylbenzene	20.4		µg/l		20.0		102	70-130		
sec-Butylbenzene	20.8		µg/l		20.0		104	70-130		
tert-Butylbenzene	21.2		µg/l		20.0		106	70-130		
Carbon disulfide	18.4		µg/l		20.0		92.0	70-130		
Carbon tetrachloride	16.9		µg/l		20.0		84.5	70-130		
Chlorobenzene	20.6		µg/l		20.0		103	70-130		
Chloroethane	17.6		µg/l		20.0		88.0	57.6-143		
Chloroform	18.4		µg/l		20.0		92.0	70-130		
Chloromethane	16.4		µg/l		20.0		82.0	70-130		
2-Chlorotoluene	21.7		µg/l		20.0		108	70-130		
4-Chlorotoluene	21.9		µg/l		20.0		110	70-130		
1,2-Dibromo-3-chloropropane	19.2		µg/l		20.0		96.0	70-130		
Dibromochloromethane	16.9		µg/l		20.0		84.5	62.5-139		
1,2-Dibromoethane (EDB)	17.7		µg/l		20.0		88.5	70-130		
Dibromomethane	17.7		µg/l		20.0		88.5	70-130		
1,2-Dichlorobenzene	22.9		µg/l		20.0		114	70-130		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 6111585 - SW846 5030 Water MS										
LCS (6111585-BS1)										
Prepared: 21-Nov-06 Analyzed: 22-Nov-06										
1,3-Dichlorobenzene	22.3		µg/l		20.0		112	70-130		
1,4-Dichlorobenzene	22.3		µg/l		20.0		112	70-130		
Dichlorodifluoromethane (Freon12)	13.3		µg/l		20.0		66.5	34.6-198		
1,1-Dichloroethane	17.5		µg/l		20.0		87.5	70-130		
1,2-Dichloroethane	18.0		µg/l		20.0		90.0	70-130		
1,1-Dichloroethene	16.3		µg/l		20.0		81.5	70-130		
cis-1,2-Dichloroethene	17.9		µg/l		20.0		89.5	70-130		
trans-1,2-Dichloroethene	13.9	QC1	µg/l		20.0		69.5	70-130		
1,2-Dichloropropane	18.4		µg/l		20.0		92.0	70-130		
1,3-Dichloropropane	18.7		µg/l		20.0		93.5	70-130		
2,2-Dichloropropane	13.0	QC1	µg/l		20.0		65.0	70-130		
1,1-Dichloropropene	16.2		µg/l		20.0		81.0	70-130		
cis-1,3-Dichloropropene	17.6		µg/l		20.0		88.0	70-130		
trans-1,3-Dichloropropene	18.0		µg/l		20.0		90.0	70-130		
Ethylbenzene	20.3		µg/l		20.0		102	70-130		
Hexachlorobutadiene	21.0		µg/l		20.0		105	63.4-142		
2-Hexanone (MBK)	16.3		µg/l		20.0		81.5	70-130		
Isopropylbenzene	19.5		µg/l		20.0		97.5	70-130		
4-Isopropyltoluene	21.8		µg/l		20.0		109	70-130		
Methyl tert-butyl ether	16.5		µg/l		20.0		82.5	70-130		
4-Methyl-2-pentanone (MIBK)	16.6		µg/l		20.0		83.0	51-135		
Methylene chloride	18.0		µg/l		20.0		90.0	70-130		
Naphthalene	23.8		µg/l		20.0		119	70-130		
n-Propylbenzene	20.7		µg/l		20.0		104	70-130		
Styrene	21.2		µg/l		20.0		106	70-130		
1,1,1,2-Tetrachloroethane	20.3		µg/l		20.0		102	70-130		
1,1,2,2-Tetrachloroethane	19.0		µg/l		20.0		95.0	70-130		
Tetrachloroethene	16.1		µg/l		20.0		80.5	70-130		
Toluene	17.1		µg/l		20.0		85.5	70-130		
1,2,3-Trichlorobenzene	23.9		µg/l		20.0		120	70-130		
1,2,4-Trichlorobenzene	23.6		µg/l		20.0		118	70-130		
1,1,1-Trichloroethane	16.5		µg/l		20.0		82.5	70-130		
1,1,2-Trichloroethane	18.1		µg/l		20.0		90.5	70-130		
Trichloroethene	17.0		µg/l		20.0		85.0	70-130		
Trichlorofluoromethane (Freon 11)	16.3		µg/l		20.0		81.5	63.2-153		
1,2,3-Trichloropropane	22.2		µg/l		20.0		111	70-130		
1,2,4-Trimethylbenzene	21.7		µg/l		20.0		108	70-130		
1,3,5-Trimethylbenzene	21.2		µg/l		20.0		106	70-130		
Vinyl chloride	23.7		µg/l		20.0		118	70-130		
m,p-Xylene	40.6		µg/l		40.0		102	70-130		
o-Xylene	21.4		µg/l		20.0		107	70-130		
Tetrahydrofuran	17.5		µg/l		20.0		87.5	70-130		
Ethyl ether	17.8		µg/l		20.0		89.0	57.2-135		
Tert-amyl methyl ether	17.3		µg/l		20.0		86.5	70-130		
Ethyl tert-butyl ether	18.3		µg/l		20.0		91.5	70-130		
Di-isopropyl ether	17.9		µg/l		20.0		89.5	70-130		
Tert-Butanol / butyl alcohol	171		µg/l		200		85.5	70-130		
1,4-Dioxane	163		µg/l		200		81.5	41.5-136		
Surrogate: 4-Bromofluorobenzene	*49.3*		µg/l		*50.0*		*98.6*	*70-130*		
Surrogate: Toluene-d8	*48.8*		µg/l		*50.0*		*97.6*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*49.9*		µg/l		*50.0*		*99.8*	*70-130*		
Surrogate: Dibromofluoromethane	*49.2*		µg/l		*50.0*		*98.4*	*70-130*		

Matrix Spike (6111585-MS1) **Source: SA54184-02**

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 6111585 - SW846 5030 Water MS										
Prepared: 21-Nov-06 Analyzed: 22-Nov-06										
Benzene	16.0		µg/l		20.0	BRL	80.0	70-130		
Chlorobenzene	20.2		µg/l		20.0	BRL	101	70-130		
1,1-Dichloroethene	17.9		µg/l		20.0	BRL	89.5	70-130		
Toluene	17.1		µg/l		20.0	0.670	82.2	70-130		
Trichloroethene	17.4		µg/l		20.0	BRL	87.0	70-130		
Surrogate: 4-Bromofluorobenzene	*46.7*		µg/l		*50.0*		*93.4*	*70-130*		
Surrogate: Toluene-d8	*47.7*		µg/l		*50.0*		*95.4*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*49.7*		µg/l		*50.0*		*99.4*	*70-130*		
Surrogate: Dibromofluoromethane	*47.2*		µg/l		*50.0*		*94.4*	*70-130*		
Matrix Spike Dup (6111585-MSD1) **Source: SA54184-02**										
Prepared: 21-Nov-06 Analyzed: 22-Nov-06										
Benzene	15.8		µg/l		20.0	BRL	79.0	70-130	1.26	30
Chlorobenzene	20.4		µg/l		20.0	BRL	102	70-130	0.985	30
1,1-Dichloroethene	17.8		µg/l		20.0	BRL	89.0	70-130	0.560	30
Toluene	16.8		µg/l		20.0	0.670	80.6	70-130	1.97	30
Trichloroethene	17.1		µg/l		20.0	BRL	85.5	70-130	1.74	30
Surrogate: 4-Bromofluorobenzene	*46.7*		µg/l		*50.0*		*93.4*	*70-130*		
Surrogate: Toluene-d8	*47.5*		µg/l		*50.0*		*95.0*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*49.3*		µg/l		*50.0*		*98.6*	*70-130*		
Surrogate: Dibromofluoromethane	*47.5*		µg/l		*50.0*		*95.0*	*70-130*		
Batch 6111630 - VPH										
Blank (6111630-BLK1)										
Prepared & Analyzed: 22-Nov-06										
C5-C8 Aliphatic Hydrocarbons	BRL		mg/l	0.0750						
C9-C12 Aliphatic Hydrocarbons	BRL		mg/l	0.0250						
C9-C10 Aromatic Hydrocarbons	BRL		mg/l	0.0250						
Unadjusted C5-C8 Aliphatic Hydrocarbons	BRL		mg/l	0.0750						
Unadjusted C9-C12 Aliphatic Hydrocarbons	BRL		mg/l	0.0250						
Benzene	BRL		µg/l	5.0						
Ethylbenzene	BRL		µg/l	5.0						
Methyl tert-butyl ether	BRL		µg/l	5.0						
Naphthalene	BRL		µg/l	5.0						
Toluene	BRL		µg/l	5.0						
m,p-Xylene	BRL		µg/l	10.0						
o-Xylene	BRL		µg/l	5.0						
2-Methylpentane	BRL		µg/l	5.0						
n-Nonane	BRL		µg/l	10.0						
n-Pentane	BRL		µg/l	10.0						
1,2,4-Trimethylbenzene	BRL		µg/l	5.0						
2,2,4-Trimethylpentane	BRL		µg/l	5.0						
n-Butylcyclohexane	BRL		µg/l	5.0						
n-Decane	BRL		µg/l	5.0						
Surrogate: 2,5-Dibromotoluene (FID)	*47.4*		µg/l		*50.0*		*94.8*	*70-130*		
Surrogate: 2,5-Dibromotoluene (PID)	*46.4*		µg/l		*50.0*		*92.8*	*70-130*		
LCS (6111630-BS1)										
Prepared & Analyzed: 22-Nov-06										
C5-C8 Aliphatic Hydrocarbons	120		mg/l		140		85.7	70-130		
C9-C12 Aliphatic Hydrocarbons	61.9		mg/l		55.2		112	70-130		
C9-C10 Aromatic Hydrocarbons	38.8		mg/l		40.0		97.0	70-130		
Unadjusted C5-C8 Aliphatic Hydrocarbons	265		mg/l		280		94.6	70-130		
Unadjusted C9-C12 Aliphatic Hydrocarbons	101		mg/l		84.8		119	70-130		
Benzene	21.8		µg/l		20.0		109	70-130		
Ethylbenzene	19.1		µg/l		20.0		95.5	70-130		
Methyl tert-butyl ether	23.5		µg/l		20.0		118	70-130		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 6111630 - VPH										
LCS (6111630-BS1)										
Prepared & Analyzed: 22-Nov-06										
Naphthalene	22.6		µg/l		20.0		113	70-130		
Toluene	21.5		µg/l		20.0		108	70-130		
m,p-Xylene	40.0		µg/l		40.0		100	70-130		
o-Xylene	18.9		µg/l		20.0		94.5	70-130		
2-Methylpentane	20.6		µg/l		20.0		103	70-130		
n-Nonane	19.7		µg/l		20.0		98.5	70-130		
n-Pentane	19.2		µg/l		20.0		96.0	70-130		
1,2,4-Trimethylbenzene	19.6		µg/l		20.0		98.0	70-130		
2,2,4-Trimethylpentane	21.5		µg/l		20.0		108	70-130		
n-Butylcyclohexane	18.9		µg/l		20.0		94.5	70-130		
n-Decane	19.1		µg/l		20.0		95.5	70-130		
Surrogate: 2,5-Dibromotoluene (FID)	*44.7*		µg/l		*50.0*		*89.4*	*70-130*		
Surrogate: 2,5-Dibromotoluene (PID)	*45.7*		µg/l		*50.0*		*91.4*	*70-130*		
LCS Dup (6111630-BSD1)										
Prepared & Analyzed: 22-Nov-06										
C5-C8 Aliphatic Hydrocarbons	113		mg/l		140		80.7	70-130	6.01	25
C9-C12 Aliphatic Hydrocarbons	63.9		mg/l		55.2		116	70-130	3.51	25
C9-C10 Aromatic Hydrocarbons	39.9		mg/l		40.0		99.8	70-130	2.85	25
Unadjusted C5-C8 Aliphatic Hydrocarbons	258		mg/l		280		92.1	70-130	2.68	25
Unadjusted C9-C12 Aliphatic Hydrocarbons	104		mg/l		84.8		123	70-130	3.31	25
Benzene	22.2		µg/l		20.0		111	70-130	1.82	25
Ethylbenzene	19.0		µg/l		20.0		95.0	70-130	0.525	25
Methyl tert-butyl ether	23.1		µg/l		20.0		116	70-130	1.71	25
Naphthalene	20.9		µg/l		20.0		104	70-130	8.29	25
Toluene	21.4		µg/l		20.0		107	70-130	0.930	25
m,p-Xylene	40.4		µg/l		40.0		101	70-130	0.995	25
o-Xylene	19.2		µg/l		20.0		96.0	70-130	1.57	25
2-Methylpentane	21.3		µg/l		20.0		106	70-130	2.87	25
n-Nonane	20.5		µg/l		20.0		102	70-130	3.49	25
n-Pentane	16.8		µg/l		20.0		84.0	70-130	13.3	25
1,2,4-Trimethylbenzene	19.5		µg/l		20.0		97.5	70-130	0.512	25
2,2,4-Trimethylpentane	21.2		µg/l		20.0		106	70-130	1.87	25
n-Butylcyclohexane	20.1		µg/l		20.0		100	70-130	5.66	25
n-Decane	18.6		µg/l		20.0		93.0	70-130	2.65	25
Surrogate: 2,5-Dibromotoluene (FID)	*47.2*		µg/l		*50.0*		*94.4*	*70-130*		
Surrogate: 2,5-Dibromotoluene (PID)	*49.2*		µg/l		*50.0*		*98.4*	*70-130*		
Duplicate (6111630-DUP1) **Source: SA54428-01**										
Prepared & Analyzed: 22-Nov-06										
C5-C8 Aliphatic Hydrocarbons	0.0113	J	mg/l	0.0750		0.0119			5.17	50
C9-C12 Aliphatic Hydrocarbons	BRL		mg/l	0.0250		BRL				50
C9-C10 Aromatic Hydrocarbons	BRL		mg/l	0.0250		BRL				50
Unadjusted C5-C8 Aliphatic Hydrocarbons	0.0113	J	mg/l	0.0750		0.0119			5.17	50
Unadjusted C9-C12 Aliphatic Hydrocarbons	BRL		mg/l	0.0250		BRL				50
Benzene	BRL		µg/l	5.0		BRL				50
Ethylbenzene	BRL		µg/l	5.0		BRL				50
Methyl tert-butyl ether	BRL		µg/l	5.0		BRL				50
Naphthalene	BRL		µg/l	5.0		BRL				50
Toluene	BRL		µg/l	5.0		BRL				50
m,p-Xylene	BRL		µg/l	10.0		BRL				50
o-Xylene	BRL		µg/l	5.0		BRL				50
Surrogate: 2,5-Dibromotoluene (FID)	*50.7*		µg/l		*50.0*		*101*	*70-130*		
Surrogate: 2,5-Dibromotoluene (PID)	*52.0*		µg/l		*50.0*		*104*	*70-130*		

Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 6111630 - VPH										
Matrix Spike (6111630-MS1)	**Source: SA54428-01**									
Prepared & Analyzed: 22-Nov-06										
Benzene	19.8		µg/l		20.0	BRL	99.0	70-130		
Ethylbenzene	16.7		µg/l		20.0	BRL	83.5	70-130		
Methyl tert-butyl ether	20.5		µg/l		20.0	BRL	102	70-130		
Naphthalene	19.6		µg/l		20.0	BRL	98.0	70-130		
Toluene	18.9		µg/l		20.0	BRL	94.5	70-130		
m,p-Xylene	35.4		µg/l		40.0	BRL	88.5	70-130		
o-Xylene	17.2		µg/l		20.0	BRL	86.0	70-130		
2-Methylpentane	16.3		µg/l		20.0	BRL	81.5	70-130		
n-Nonane	19.0		µg/l		20.0	BRL	95.0	70-130		
n-Pentane	14.0		µg/l		20.0	BRL	70.0	70-130		
1,2,4-Trimethylbenzene	17.7		µg/l		20.0	BRL	88.5	70-130		
2,2,4-Trimethylpentane	18.5		µg/l		20.0	BRL	92.5	70-130		
n-Butylcyclohexane	17.0		µg/l		20.0	0.0	85.0	70-130		
n-Decane	17.5		µg/l		20.0	0.0	87.5	70-130		
Surrogate: 2,5-Dibromotoluene (FID)	*40.6*		µg/l		*50.0*		*81.2*	*70-130*		
Surrogate: 2,5-Dibromotoluene (PID)	*43.1*		µg/l		*50.0*		*86.2*	*70-130*		

Microextractable Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 6111557 - Microextr. by 504.1										
Blank (6111557-BLK1)										
Prepared: 21-Nov-06 Analyzed: 22-Nov-06										
1,2-Dibromoethane (EDB)	BRL		µg/l	0.0100						
LCS (6111557-BS1)										
Prepared: 21-Nov-06 Analyzed: 22-Nov-06										
1,2-Dibromoethane (EDB)	0.176		µg/l	0.0100	0.200		88.0	50-150		
Duplicate (6111557-DUP1)	**Source: SA54443-02**									
Prepared: 21-Nov-06 Analyzed: 22-Nov-06										
1,2-Dibromoethane (EDB)	BRL		µg/l	0.0100		BRL				30

Extractable Petroleum Hydrocarbons - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 6111573 - SW846 3510C										
Blank (6111573-BLK1)										
Prepared: 21-Nov-06 Analyzed: 22-Nov-06										
Non-polar material (SGT-HEM)	BRL		mg/l	1.0						
LCS (6111573-BS1)										
Prepared: 21-Nov-06 Analyzed: 22-Nov-06										
Non-polar material (SGT-HEM)	10.4		mg/l		10.5		99.0	83-101		

Semivolatile Organic Compounds by GC - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 6111490 - SW846 3535										
Blank (6111490-BLK1)										
Prepared & Analyzed: 21-Nov-06										
PCB 1016	BRL		µg/l	0.0200						
PCB 1221	BRL		µg/l	0.0200						
PCB 1232	BRL		µg/l	0.0200						
PCB 1242	BRL		µg/l	0.0200						
PCB 1248	BRL		µg/l	0.0200						
PCB 1254	BRL		µg/l	0.0200						
PCB 1260	BRL		µg/l	0.0200						
PCB 1262	BRL		µg/l	0.0200						
PCB 1268	BRL		µg/l	0.0200						
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr)	*0.0140*		µg/l		*0.0200*		*70.0*	*30-150*		
Surrogate: Decachlorobiphenyl (Sr)	*0.0240*		µg/l		*0.0200*		*120*	*30-150*		
LCS (6111490-BS1)										
Prepared & Analyzed: 21-Nov-06										
PCB 1016	2.16		µg/l	0.200	2.50		86.4	50-114		
PCB 1260	2.82		µg/l	0.200	2.50		113	40-127		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr)	*0.130*		µg/l		*0.200*		*65.0*	*30-150*		
Surrogate: Decachlorobiphenyl (Sr)	*0.250*		µg/l		*0.200*		*125*	*30-150*		
LCS Dup (6111490-BSD1)										
Prepared & Analyzed: 21-Nov-06										
PCB 1016	2.13		µg/l	0.200	2.50		85.2	50-114	1.40	20
PCB 1260	2.78		µg/l	0.200	2.50		111	40-127	1.79	20
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr)	*0.130*		µg/l		*0.200*		*65.0*	*30-150*		
Surrogate: Decachlorobiphenyl (Sr)	*0.240*		µg/l		*0.200*		*120*	*30-150*		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 6111492 - SW846 3510C										
Blank (6111492-BLK1)										
Prepared & Analyzed: 21-Nov-06										
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						
Indeno (1,2,3-cd) pyrene	BRL		µg/l	5.00						
Isophorone	BRL		µg/l	5.00						
2-Methylnaphthalene	BRL		µg/l	5.00						
2-Methylphenol	BRL		µg/l	5.00						

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 6111492 - SW846 3510C										
Blank (6111492-BLK1)										
Prepared & Analyzed: 21-Nov-06										
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						
Surrogate: 2-Fluorobiphenyl	*92.5*		µg/l		*100*		*92.5*	*30-130*		
Surrogate: 2-Fluorophenol	*102*		µg/l		*100*		*102*	*15-110*		
Surrogate: Nitrobenzene-d5	*88.3*		µg/l		*100*		*88.3*	*30-130*		
Surrogate: Phenol-d5	*105*		µg/l		*100*		*105*	*15-110*		
Surrogate: Terphenyl-dl4	*97.0*		µg/l		*100*		*97.0*	*30-130*		
Surrogate: 2,4,6-Tribromophenol	*107*		µg/l		*100*		*107*	*15-110*		
LCS (6111492-BS1)										
Prepared & Analyzed: 21-Nov-06										
Acenaphthene	79.1		µg/l	5.00	100		79.1	40-130		
Acenaphthylene	114		µg/l	5.00	100		114	40-130		
Aniline	75.7		µg/l	5.00	100		75.7	40-130		
Anthracene	93.5		µg/l	5.00	100		93.5	40-130		
Atrazine	113		µg/l	5.00	100		113	0-200		
Azobenzene/Diphenyldiazine	82.2		µg/l	5.00	100		82.2	40-130		
Benzidine	0.590	QC2	µg/l	5.00	100		0.590	40-130		
Benzo (a) anthracene	78.2		µg/l	5.00	100		78.2	40-130		
Benzo (a) pyrene	87.4		µg/l	5.00	100		87.4	40-130		
Benzo (b) fluoranthene	89.6		µg/l	5.00	100		89.6	40-130		
Benzo (g,h,i) perylene	86.3		µg/l	5.00	100		86.3	40-130		
Benzo (k) fluoranthene	68.4		µg/l	5.00	100		68.4	40-130		
Benzoic acid	82.0		µg/l	5.00	100		82.0	40-130		
Benzyl alcohol	62.0		µg/l	5.00	100		62.0	40-130		
Bis(2-chloroethoxy)methane	80.5		µg/l	5.00	100		80.5	40-130		
Bis(2-chloroethyl)ether	74.3		µg/l	5.00	100		74.3	40-130		
Bis(2-chloroisopropyl)ether	73.1		µg/l	5.00	100		73.1	40-130		
Bis(2-ethylhexyl)phthalate	78.4		µg/l	5.00	100		78.4	40-130		
4-Bromophenyl phenyl ether	96.8		µg/l	5.00	100		96.8	40-130		
Butyl benzyl phthalate	77.8		µg/l	5.00	100		77.8	40-130		
Carbazole	119		µg/l	5.00	100		119	40-130		
4-Chloro-3-methylphenol	85.8		µg/l	5.00	100		85.8	40-130		
4-Chloroaniline	74.6		µg/l	5.00	100		74.6	40-130		
2-Chloronaphthalene	74.3		µg/l	5.00	100		74.3	40-130		
2-Chlorophenol	69.4		µg/l	5.00	100		69.4	40-130		

Semivolatile Organic Compounds by GCMS - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 6111492 - SW846 3510C										
LCS (6111492-BS1)										
Prepared & Analyzed: 21-Nov-06										
4-Chlorophenyl phenyl ether	82.8		µg/l	5.00	100		82.8	40-130		
Chrysene	78.2		µg/l	5.00	100		78.2	40-130		
Dibenzo (a,h) anthracene	88.2		µg/l	5.00	100		88.2	40-130		
Dibenzofuran	75.0		µg/l	5.00	100		75.0	40-130		
1,2-Dichlorobenzene	65.5		µg/l	5.00	100		65.5	40-130		
1,3-Dichlorobenzene	56.2		µg/l	5.00	100		56.2	40-130		
1,4-Dichlorobenzene	57.0		µg/l	5.00	100		57.0	40-130		
3,3´-Dichlorobenzidine	90.7		µg/l	5.00	100		90.7	40-130		
2,4-Dichlorophenol	80.5		µg/l	5.00	100		80.5	40-130		
Diethyl phthalate	89.8		µg/l	5.00	100		89.8	40-130		
Dimethyl phthalate	90.0		µg/l	5.00	100		90.0	40-130		
2,4-Dimethylphenol	78.6		µg/l	5.00	100		78.6	40-130		
Di-n-butyl phthalate	71.8		µg/l	5.00	100		71.8	40-130		
4,6-Dinitro-2-methylphenol	88.9		µg/l	5.00	100		88.9	40-130		
2,4-Dinitrophenol	86.1		µg/l	5.00	100		86.1	40-130		
2,4-Dinitrotoluene	93.5		µg/l	5.00	100		93.5	40-130		
2,6-Dinitrotoluene	101		µg/l	5.00	100		101	40-130		
Di-n-octyl phthalate	86.2		µg/l	5.00	100		86.2	40-130		
Fluoranthene	80.6		µg/l	5.00	100		80.6	40-130		
Fluorene	79.4		µg/l	5.00	100		79.4	40-130		
Hexachlorobenzene	92.2		µg/l	5.00	100		92.2	40-130		
Hexachlorobutadiene	79.1		µg/l	5.00	100		79.1	40-130		
Hexachlorocyclopentadiene	75.7		µg/l	5.00	100		75.7	40-130		
Hexachloroethane	62.4		µg/l	5.00	100		62.4	40-130		
Indeno (1,2,3-cd) pyrene	88.7		µg/l	5.00	100		88.7	40-130		
Isophorone	75.8		µg/l	5.00	100		75.8	40-130		
2-Methylnaphthalene	73.5		µg/l	5.00	100		73.5	40-130		
2-Methylphenol	67.6		µg/l	5.00	100		67.6	40-130		
3,4-Methylphenol	78.6		µg/l	10.0	100		78.6	40-130		
Naphthalene	69.9		µg/l	5.00	100		69.9	40-130		
2-Nitroaniline	84.0		µg/l	5.00	100		84.0	40-130		
3-Nitroaniline	78.8		µg/l	5.00	100		78.8	40-130		
4-Nitroaniline	100		µg/l	20.0	100		100	40-130		
Nitrobenzene	71.4		µg/l	5.00	100		71.4	40-130		
2-Nitrophenol	81.6		µg/l	5.00	100		81.6	40-130		
4-Nitrophenol	48.6		µg/l	20.0	100		48.6	40-130		
N-Nitrosodimethylamine	60.6		µg/l	5.00	100		60.6	40-130		
N-Nitrosodi-n-propylamine	81.9		µg/l	5.00	100		81.9	40-130		
N-Nitrosodiphenylamine	92.5		µg/l	5.00	100		92.5	40-130		
Pentachlorophenol	114		µg/l	20.0	100		114	40-130		
Phenanthrene	82.0		µg/l	5.00	100		82.0	40-130		
Phenol	68.1		µg/l	5.00	100		68.1	40-130		
Pyrene	64.9		µg/l	5.00	100		64.9	40-130		
Pyridine	86.4		µg/l	5.00	100		86.4	40-130		
1,2,4-Trichlorobenzene	70.4		µg/l	5.00	100		70.4	40-130		
1-Methylnaphthalene	75.8		µg/l	5.00	100		75.8	40-140		
2,4,5-Trichlorophenol	99.2		µg/l	5.00	100		99.2	40-130		
2,4,6-Trichlorophenol	85.6		µg/l	5.00	100		85.6	40-130		
Surrogate: 2-Fluorobiphenyl	*86.5*		µg/l		*100*		*86.5*	*30-130*		
Surrogate: 2-Fluorophenol	*68.6*		µg/l		*100*		*68.6*	*15-110*		
Surrogate: Nitrobenzene-d5	*84.6*		µg/l		*100*		*84.6*	*30-130*		
Surrogate: Phenol-d5	*67.3*		µg/l		*100*		*67.3*	*15-110*		
Surrogate: Terphenyl-dl4	*79.8*		µg/l		*100*		*79.8*	*30-130*		
Surrogate: 2,4,6-Tribromophenol	*112*	SGC	µg/l		*100*		*112*	*15-110*		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 6111611 - SW846 3005A										
Blank (6111611-BLK1)										
Prepared & Analyzed: 22-Nov-06										
Zinc	BRL		mg/l	0.0025						
Nickel	BRL		mg/l	0.0025						
Iron	0.0052	QB1	mg/l	0.0025						
Arsenic	BRL		mg/l	0.0020						
Copper	BRL		mg/l	0.0025						
Chromium	BRL		mg/l	0.0025						
LCS (6111611-BS1)										
Prepared & Analyzed: 22-Nov-06										
Iron	0.268		mg/l	0.0025	0.250		107	85-115		
Nickel	0.276		mg/l	0.0025	0.250		110	85-115		
Zinc	0.253		mg/l	0.0025	0.250		101	85-115		
Chromium	0.263		mg/l	0.0025	0.250		105	85-115		
Copper	0.271		mg/l	0.0025	0.250		108	85-115		
Arsenic	0.262		mg/l	0.0020	0.250		105	85-115		
LCS Dup (6111611-BSD1)										
Prepared & Analyzed: 22-Nov-06										
Nickel	0.272		mg/l	0.0025	0.250		109	85-115	1.46	20
Zinc	0.250		mg/l	0.0025	0.250		100	85-115	1.19	20
Iron	0.263		mg/l	0.0025	0.250		105	85-115	1.88	20
Chromium	0.258		mg/l	0.0025	0.250		103	85-115	1.92	20
Arsenic	0.260		mg/l	0.0020	0.250		104	85-115	0.766	20
Copper	0.266		mg/l	0.0025	0.250		106	85-115	1.86	20
Duplicate (6111611-DUP1)	**Source: SA54478-07**									
Prepared & Analyzed: 22-Nov-06										
Iron	78.1		mg/l	0.0025		72.0			8.13	20
Zinc	3.44		mg/l	0.0025		3.14			9.12	20
Nickel	0.0998		mg/l	0.0025		0.0926			7.48	20
Copper	0.840		mg/l	0.0025		0.800			4.88	20
Arsenic	0.0259		mg/l	0.0020		0.0236			9.29	20
Chromium	0.205		mg/l	0.0025		0.190			7.59	20
Matrix Spike (6111611-MS1)	**Source: SA54478-07**									
Prepared & Analyzed: 22-Nov-06										
Iron	74.3	QM2	mg/l	0.0025	0.250	72.0	920	75-125		
Nickel	0.328		mg/l	0.0025	0.250	0.0926	94.2	75-125		
Zinc	3.47	QM4X	mg/l	0.0025	0.250	3.14	132	75-125		
Chromium	0.427		mg/l	0.0025	0.250	0.190	94.8	75-125		
Copper	1.01		mg/l	0.0025	0.250	0.800	84.0	75-125		
Arsenic	0.252		mg/l	0.0020	0.250	0.0236	91.4	75-125		
Matrix Spike Dup (6111611-MSD1)	**Source: SA54478-07**									
Prepared & Analyzed: 22-Nov-06										
Iron	73.4	QM2	mg/l	0.0025	0.250	72.0	560	75-125	1.22	20
Zinc	3.36		mg/l	0.0025	0.250	3.14	88.0	75-125	3.22	20
Nickel	0.322		mg/l	0.0025	0.250	0.0926	91.8	75-125	1.85	20
Copper	0.991		mg/l	0.0025	0.250	0.800	76.4	75-125	1.90	20
Chromium	0.428		mg/l	0.0025	0.250	0.190	95.2	75-125	0.234	20
Arsenic	0.248		mg/l	0.0020	0.250	0.0236	89.8	75-125	1.60	20
Post Spike (6111611-PS1)	**Source: SA54478-07**									
Prepared & Analyzed: 22-Nov-06										
Zinc	3.58	QM4X	mg/l	0.0025	0.250	3.14	176	80-120		
Iron	68.4	QM2	mg/l	0.0025	0.250	72.0	NR	80-120		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 6111616 - SW846 3005A										
Blank (6111616-BLK1)										
Prepared & Analyzed: 22-Nov-06										
Lead	0.0002	QB1	mg/l	0.00002						
Selenium	BRL		mg/l	0.0001						
Cadmium	BRL		mg/l	0.00002						
Silver	BRL		mg/l	0.0008						
LCS (6111616-BS1)										
Prepared & Analyzed: 22-Nov-06										
Lead	0.299	QC1	mg/l	0.0012	0.250		120	85-115		
Selenium	0.320	QC3	mg/l	0.0012	0.250		128	85-115		
Cadmium	0.311	QC3	mg/l	0.0002	0.250		124	85-115		
Silver	0.271		mg/l	0.0012	0.250		108	85-115		
LCS Dup (6111616-BSD1)										
Prepared & Analyzed: 22-Nov-06										
Lead	0.262		mg/l	0.0012	0.250		105	85-115	13.2	20
Silver	0.239		mg/l	0.0012	0.250		95.6	85-115	12.5	20
Cadmium	0.265		mg/l	0.0002	0.250		106	85-115	16.0	20
Selenium	0.276		mg/l	0.0012	0.250		110	85-115	14.8	20
Duplicate (6111616-DUP1)	**Source: SA54478-07**									
Prepared & Analyzed: 22-Nov-06										
Lead	0.435		mg/l	0.0002		0.478			9.42	20
Selenium	0.0019		mg/l	0.0012		0.0022			14.6	20
Silver	0.0010	J,QR1	mg/l	0.0075		0.0006			50.0	20
Cadmium	0.0085		mg/l	0.0002		0.0091			6.82	20
Matrix Spike (6111616-MS1)	**Source: SA54478-07**	QM7								
Prepared & Analyzed: 22-Nov-06										
Lead	0.601		mg/l	0.0002	0.250	0.478	49.2	70-130		
Selenium	0.219		mg/l	0.0012	0.250	0.0022	86.7	70-130		
Silver	0.145	QM7	mg/l	0.0075	0.250	0.0006	57.8	70-130		
Cadmium	0.257		mg/l	0.0002	0.250	0.0091	99.2	70-130		
Matrix Spike Dup (6111616-MSD1)	**Source: SA54478-07**									
Prepared & Analyzed: 22-Nov-06										
Lead	0.656		mg/l	0.0002	0.250	0.478	71.2	70-130	8.75	20
Cadmium	0.279		mg/l	0.0002	0.250	0.0091	108	70-130	8.21	20
Selenium	0.242		mg/l	0.0012	0.250	0.0022	95.9	70-130	9.98	20
Silver	0.0810	M7, QR	mg/l	0.0075	0.250	0.0006	32.2	70-130	56.6	20

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 6111612 - EPA200/SW7000 Series										
Blank (6111612-BLK1)										
Prepared & Analyzed: 22-Nov-06										
Mercury	BRL		mg/l	0.00020						
LCS (6111612-BS1)										
Prepared & Analyzed: 22-Nov-06										
Mercury	0.00234		mg/l	0.00020	0.00250		93.6	80-120		
Duplicate (6111612-DUP1)	**Source: SA54478-07**									
Prepared & Analyzed: 22-Nov-06										
Mercury	0.00010	J,QR1	mg/l	0.00020		0.00020			66.7	20
Matrix Spike (6111612-MS1)	**Source: SA54478-07**									
Prepared & Analyzed: 22-Nov-06										
Mercury	0.00247		mg/l	0.00020	0.00250	0.00020	90.8	75-125		
Matrix Spike Dup (6111612-MSD1)	**Source: SA54478-07**									
Prepared & Analyzed: 22-Nov-06										
Mercury	0.00273		mg/l	0.00020	0.00250	0.00020	101	75-125	10.0	20
Post Spike (6111612-PS1)	**Source: SA54478-07**									
Prepared & Analyzed: 22-Nov-06										
Mercury	0.00321		mg/l	0.00020	0.00250	0.00020	120	75-125		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 6111586 - General Preparation										
Blank (6111586-BLK1)										
Prepared & Analyzed: 21-Nov-06										
Total Suspended Solids	BRL		mg/l	5.00						
Duplicate (6111586-DUP1)	**Source: SA54451-01**									
Prepared & Analyzed: 21-Nov-06										
Total Suspended Solids	9.00	QR1	mg/l	5.00		7.00			25.0	20
Reference (6111586-SRM1)										
Prepared & Analyzed: 21-Nov-06										
Total Suspended Solids	94.0		mg/l	10.0	86.0		109	90-110		
Batch 6111588 - General Preparation										
Blank (6111588-BLK1)										
Prepared & Analyzed: 21-Nov-06										
Hexavalent Chromium	BRL		mg/l	0.005						
LCS (6111588-BS1)										
Prepared & Analyzed: 21-Nov-06										
Hexavalent Chromium	0.055		mg/l	0.005	0.0500		110	90-110		
Duplicate (6111588-DUP1)	**Source: SA54479-01**									
Prepared & Analyzed: 21-Nov-06										
Hexavalent Chromium	0.007	QR1	mg/l	0.005		0.005			33.3	20
Matrix Spike (6111588-MS1)	**Source: SA54479-01**									
Prepared & Analyzed: 21-Nov-06										
Hexavalent Chromium	0.056		mg/l	0.005	0.0500	0.005	102	80-120		
Reference (6111588-SRM1)										
Prepared & Analyzed: 21-Nov-06										
Hexavalent Chromium	0.026		mg/l	0.005	0.0250		104	85-115		
Batch 6111589 - General Preparation										
Blank (6111589-BLK1)										
Prepared & Analyzed: 21-Nov-06										
Total Residual Chlorine	BRL		mg/l	0.020						
LCS (6111589-BS1)										
Prepared & Analyzed: 21-Nov-06										
Total Residual Chlorine	0.046		mg/l	0.020	0.0500		92.0	90-110		
Duplicate (6111589-DUP1)	**Source: SA54478-07**									
Prepared & Analyzed: 21-Nov-06										
Total Residual Chlorine	0.655		mg/l	0.100		0.555			16.5	20
Matrix Spike (6111589-MS1)	**Source: SA54478-07**									
Prepared & Analyzed: 21-Nov-06										
Total Residual Chlorine	0.780		mg/l	0.100	0.250	0.555	90.0	80-120		
Reference (6111589-SRM1)										
Prepared & Analyzed: 21-Nov-06										
Total Residual Chlorine	0.095		mg/l	0.020	0.0996		95.4	85-115		
Batch 6111611 - SW846 3005A										
Blank (6111611-BLK1)										
Prepared & Analyzed: 22-Nov-06										
Trivalent Chromium	BRL		mg/l	0.0050						
Duplicate (6111611-DUP1)	**Source: SA54478-07**									

General Chemistry Parameters - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 6111611 - SW846 3005A										
Prepared & Analyzed: 22-Nov-06										
Trivalent Chromium	0.205		mg/l	0.0050		0.190			7.59	20
Post Spike (6111611-PS1)	**Source: SA54478-07**									
Prepared & Analyzed: 22-Nov-06										
Trivalent Chromium	0.798		mg/l	0.0050		0.190		0-200		
Batch 6111673 - General Preparation										
Blank (6111673-BLK1)										
Prepared & Analyzed: 22-Nov-06										
Cyanide (total)	BRL		mg/l	0.0100						
Blank (6111673-BLK2)										
Prepared & Analyzed: 22-Nov-06										
Cyanide (total)	BRL		mg/l	0.0100						
LCS (6111673-BS1)										
Prepared & Analyzed: 22-Nov-06										
Cyanide (total)	0.280		mg/l	0.0100	0.300		93.3	90-110		
LCS (6111673-BS2)										
Prepared & Analyzed: 22-Nov-06										
Cyanide (total)	0.282		mg/l	0.0100	0.300		94.0	90-110		
Matrix Spike (6111673-MS1)	**Source: SA54277-10**									
Prepared & Analyzed: 22-Nov-06										
Cyanide (total)	0.269		mg/l	0.0100	0.300	BRL	89.7	75-125		
Matrix Spike (6111673-MS2)	**Source: SA54433-02**									
Prepared & Analyzed: 22-Nov-06										
Cyanide (total)	0.275		mg/l	0.0100	0.300	BRL	91.7	75-125		
Matrix Spike Dup (6111673-MSD1)	**Source: SA54277-10**									
Prepared & Analyzed: 22-Nov-06										
Cyanide (total)	0.285		mg/l	0.0100	0.300	BRL	95.0	75-125	5.78	20
Matrix Spike Dup (6111673-MSD2)	**Source: SA54433-02**									
Prepared & Analyzed: 22-Nov-06										
Cyanide (total)	0.271		mg/l	0.0100	0.300	BRL	90.3	75-125	1.47	20
Reference (6111673-SRM1)										
Prepared & Analyzed: 22-Nov-06										
Cyanide (total)	0.323		mg/l	0.0100	0.370		87.3	75.1-124.9		

Notes and Definitions

FP	Field Preserved
HT2	This sample was received outside the EPA recommended holding time for the analysis specified.
QB1	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.
QC1	Analyte out of acceptance range.
QC2	Analyte out of acceptance range in QC spike but no reportable concentration present in sample.
QC3	The spike recovery is outside acceptable limits for the LCS. The batch was accepted based upon the MS and/or MSD meeting the LCS limits criteria.
QM2	The RPD and/or percent recovery for this QC spike sample cannot be accurately calculated due to the high concentration of analyte inherent in the sample.
QM4X	The spike recovery was outside of QC acceptance limits for the MS, MSD and/or PS due to analyte concentration at 4 times or greater the spike concentration. The QC batch was accepted based on LCS and/or LCSD recoveries within the acceptance limits.
QM7	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
QR1	Analyses are not controlled on RPD values from sample concentrations less than 10 times the reporting limit. QC batch accepted based on LCS and/or LCSD QC results.
QR5	RPD out of acceptance range.
SGC	Surrogate recovery outside of control limits. The data was accepted based on valid recovery of the remaining surrogate.
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 samples prior to analysis. Percent recoveries are calculated for each surrogate.

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

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

Matrix	☐ Aqueous ☐ Soil ☐ Sediment ☐ Other		
Containers	☐ Satisfactory ☐ Broken ☐ Leaking		
Sample Preservative	Aqueous (acid-preserved)	☐ N/A ☐ pH≤2 ☐ pH>2 Comment:	
	Soil or Sediment	☐ N/A ☐ Samples not received in Methanol or air-tight container	ml Methanol/g soil ☐ 1:1 +/-25% ☐ Other:
		☐ Samples received in Methanol: ☐ covering soil/sediment ☐ not covering soil/sediment	
		☐ Samples received in air-tight container:	
Temperature	☐ Received on ice ☐ Received at 4 ± 2 ºC ☐ Other: ºC		

Were all QA/QC procedures followed as required by the VPH method? Yes_____ No _____
Were any significant modifications made to the VPH method as specified in section 11.3? No *see below
Were all performance/acceptance standards for required QA/QC procedures achieved? Yes_____ No_____
* Yes, if PID and FID surrogate recoveries are listed as n/a, then that sample was run via GCMS using all QC criteria specified in the method

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 RTN [1]:					
This form provides certifications for the following Spectrum Analytical, Inc. work order #: SA54478					
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: 11/27/2006

SAS4478m

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: 11/22/06
- All TATs subject to laboratory approval. Min. 24-hour notification needed for rushes.
- Samples disposed of after 60 days unless otherwise instructed.

Report To: ECS Wakefield
607 North Ave., Suite 11
Wakefield, MA 01880

Project Mgr.: Craig Ellis

Invoice To: ECS Agawam

P.O. No.: 95-207351 RQN: 003

Project No.: 95-20735100
Site Name: Newport Ave.
Location: 627 Newport Ave., Quincy State: MA
Sampler(s): T. Schuming

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

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	Cyanide	Analyses: VPH	Volatiles by SW846 8260	EDB by EPA 504.1	Semi volatiles by SW846 8270	PCB's by EPA 608	TPH 1664	Metals	TSS, TRC, Cr+6
SAS4478-01	TRIP BLANK	11/20/06	—	G	GW	2	1					x							
-02	MW-1		1200			2	3					x							
-03	MW-3		1100			2	3					x							
-04	MW-101		1030			2	3					x							
-05	MW-102		1000			2	3					x							
-06	MW-103		1130			2	3					x							
-07	MW-2		1230			2,4,5	8	3		3	x	x	x	x	x	x	x	x	x

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

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

State specific reporting standards: _____

Relinquished by:	Received by:	Date:	Time:
Sara Sabatini		11/21/06	1740

- ☐ Fax results when available to (____) _____
- ☑ E-mail to ellis@ecsconsult.com
- EDD Format _____

Condition upon receipt: ☑ Iced ☐ Ambient ☐ °C 6

RUSH 11/22

SAS4478m

CHAIN OF CUSTODY RECORD

Page 1 of 1

Special Handling:
- ☐ Standard TAT - 7 to 10 business days
- ☑ Rush TAT - Date Needed: 11/22/06
- All TATs subject to laboratory approval. Min. 24-hour notification needed for rushes.
- Samples disposed of after 60 days unless otherwise instructed.

Report To: ECS Wakefield
607 North Ave., Suite 11
Wakefield, MA 01880

Project Mgr.: Craig Ellis

Invoice To: ECS Agawam

P.O. No.: 95-207351 RQN: 003

Project No.: 95-207351.00
Site Name: Newport Ave.
Location: 627 Newport Ave., Quincy State: MA
Sampler(s): T. Schoning

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	Cyanide	Analyses: VPH	Volatiles by SW846 8260	EDB by EPA 504.1	Semi Volatiles by SW846 8270	PCBs by EPA 608	TPH 1664	Metals	TSS, TRC, Cr+6	QA Reporting Notes: (check if needed)
SAS4478-01	TRIP BLANK	11/20/06	—	G	GW	2	1					x								As, Cd, Cr3, Cu, Pb
-02	MW-1		1200			2	3					x								Hg, Ni, Se, Ag, Zn
-03	MW-3		1100			2	3					x								Fe
-04	MW-101		1030			2	3					x								per attached email
-05	MW-102		1000			2	3					x								
-06	MW-103		1130			2	3					x								
-07	MW-2		1230			2,HS	8	3		3	x	x	x	x	x	x	x	x	x	

☐ Fax results when available to (____) _____
☑ E-mail to cellis@ecsconsult.com
EDD Format _____

Condition upon receipt: ☑ Iced ☐ Ambient ☐ °C 6

Relinquished by:	Received by:	Date:	Time:
Sara Schoning		11/21/06	1740

11 Almgren Drive • Agawam, Massachusetts 01001 • 413-789-9018 • Fax 413-789-4076 • www.spectrum-analytical.com