Response Environmental, Inc.

February 22, 2006

US EPA
RGP-NOC Processing
Municipal Assistance Unit [CMU]
1 Congress Street, Suite 1100
Boston, MA 02114-2023

RE: NOI for RGP
#2 Fuel Oil Release MA-DEP RTN 3-25652
Residence 3 Vinson Street
Boston [Dorchester], MA

Attached please find a completed Notice of Intent [NOI] form and applicable attachments for coverage of a remedial discharge under the RGP. The NOI is for a groundwater treatment system in response to the need to dewater and treat localized groundwater for a virgin residual #2 fuel oil. The oil is the result of a February 8, 2006 release of virgin #2 fuel oil from a residential fuel oil tank which migrated to groundwater below the residential basement floor. This groundwater extraction is necessary to treat residual dissolved constituents in groundwater and dewater very shallow groundwater which seasonally could result in flooding of the basement. The work is being conducted under MADEP Immediate Response Action protocol. In addition, an application for discharge to the Boston Water and Sewer Commission storm drain [new storm water only line] has been submitted to the City of Boston.

It is expected that discharge would commence March 9, 2006 based on the RGP.

If you have any questions please contact me at (508) 795-0110 ext. 202.

Sincerely,

Glenn S. Goral, LSP
Certified Operator Grade 2-M
President

FEB 27 2006

Cc: Mr. Paul Giddings
MA DEP NERO BWSC
205B Lowell Street
Wilmington, MA 01887
Ref RTN: 3-25652

REI Project File

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:

a) Name of **facility/site**: RESIDENCE		**Facility/site** address:		
Location of **facility/site**: longitude: 71° 03.837' latitude: 42° 17.930'	Facility SIC code(s): NA (Residence)	Street: 3 VINSON STREET		
b) Name of **facility/site owner:** JOHN LAING		Town: BOSTON		
Email address of owner: —		State: MA	Zip: 02124	County: SUFFOLK
Telephone no.of facility/site **owner**: 617-288-2030				
Fax no. of facility/site **owner**: —		**Owner** is (check one): 1. Federal___ 2. State/Tribal___ 3. Private_X_ 4. other, if so, describe:		
Address of **owner** (if different from site): SAME				
Street:				
Town:	State:	Zip:	County:	
c) Legal name of **operator**: RESPONSE ENVIRONMENTAL, INC	**Operator** telephone no: 508-795-0110			
	Operator fax no.: 508-795-0910	**Operator** email: GGORAL@SPILLMANAGER.COM		
Operator contact name and title: GLENN GORAL, President LSP				
Address of **operator** (if different from owner):	Street: 563 MAIN STREET			
Town: WORCESTER	State: MA	Zip: 01608	County: WORCESTER	

d) Check "yes" or "no" for the following:

1. Has a prior NPDES permit exclusion been granted for the discharge? Yes___ No_X_, if "yes," number:
2. Has a prior NPDES application (Form 1 & 2C) ever been filed for the discharge? Yes___ No_X_, if "yes," date and tracking #:
3. Is the discharge a "new discharge"as defined by 40 CFR 122.2? Yes___ No___
4. For sites in Massachusetts, is the discharge covered under the MA Contingency Plan (MCP) and exempt from state permitting? Yes_X_ No___

e) Is site/facility subject to any State permitting or other action which is causing the generation of discharge? Yes X No___ If "yes," please list: 1. site identification # assigned by the state of NH or MA: 3-25652 2. permit or license # assigned: 3. state agency contact information: name, location, and telephone number: PAUL GIDDINGS DEP NERO 978-694-3200	f) Is the site/facility covered by any other EPA permit, including: 1. multi-sector storm water general permit? Y___ N X, if Y, number: 2. phase I or II construction storm water general permit? Y___ N X, if Y, number: 3. individual NPDES permit? Y___ N X, if Y, number: 4. any other water quality related permit? Y___ N X, if Y, number:

2. Discharge information. Please provide information about the discharge, (attaching additional sheets as needed) including:

a) Describe the discharge activities for which the owner/applicant is seeking coverage:
TREATMENT OF GROUNDWATER AT RESIDENCE AFFECTED BY VIRGIN #2 FUEL OIL RELEASE WITH TREATED DISCHARGE TO STORM WATER SYSTEM, ULTIMATE DISCHARGE IS DORCHESTER BAY

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, ft3/s)? Max. flow 0.025 Average flow 0.015 Is maximum flow a **design value**? Y X N___ For average flow, include the units and appropriate notation if this value is a design value or estimate if not available. AVERAGE IN FT^3/SEC ~ ESTIMATE OF 1-3 GPM

3) Latitude and longitude of each discharge within 100 feet: pt.1:long. 71° 03.837' LAT. 42° 17.930' 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): NA	5) Is the discharge intermittent Y or seasonal N ? Is discharge ongoing Yes___ No X ?

c) Expected dates of discharge (mm/dd/yy): start 3/9/06 end 8/1/06

d) Please attach a line drawing or flow schematic showing water flow through the facility including:
1. sources of intake water, 2. contributing flow from the operation, 3. treatment units, and 4. discharge points and receiving waters(s).

3. Contaminant information. In order to complete this section, the applicant will need to take a minimum of one sample of the untreated water and have it analyzed for **all** of the parameters listed in Appendix III. Historical data, (i.e., data taken no more than 2 years prior to the effective date of the permit) may be used if obtained pursuant to: i. Massachusetts' regulations 310 CMR 40.0000, the Massachusetts Contingency Plan ("Chapter 21E"); ii. New Hampshire's Title 50 RSA 485-A: Water Pollution and Waste Disposal or Title 50 RSA 485-C: Groundwater Protection Act; or iii. an EPA permit exclusion letter issued pursuant to 40 CFR 122.3, provided the data was analyzed with test methods that meet the requirements of this permit. Otherwise, a new sample shall be taken and analyzed.

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

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

UNIT #2

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		X	1	GRAB	SM2540D	5.0	31			
2. Total Residual Chlorine	X				FIELD TEST STRIP	1.0	BRL <1			
3. Total Petroleum Hydrocarbons		X			1664	1.0	1.0			
4. Cyanide	X				SW846	0.01	BRL			
5. Benzene		X			8260	1.0	4.9			
6. Toluene		X				1.0	19.6			
7. Ethylbenzene		X				1.0	7.2			
8. (m,p,o) Xylenes		X				2.0	34.7			
9. Total BTEX[4]		X				1.0	66.4			

[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 [5] (1,2- Dibromo-methane)	X		1	GRAB	504.1	0.0100	BRL			
11. Methyl-tert-Butyl Ether (MtBE)		X			8260	1.0	8.2			
12. tert-Butyl Alcohol (TBA)	X				8260	10.0	BRL			
13. tert-Amyl Methyl Ether (TAME)	X				8260	1.0	BRL			
14. Naphthalene		X			8260	1.0	9.2			
15. Carbon Tetra-chloride	X					1.0	BRL			
16. 1,4 Dichlorobenzene	X						BRL			
17. 1,2 Dichlorobenzene	X						BRL			
18. 1,3 Dichlorobenzene	X						BRL			
19. 1,1 Dichloroethane	X						BRL			
20. 1,2 Dichloroethane	X						BRL			
21. 1,1 Dichloroethylene	X						BRL			
22. cis-1,2 Dichloro-ethylene	X						BRL			
23. Dichloromethane (Methylene Chloride)	X						BRL			
24. Tetrachloroethylene	X						BRL			

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

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	X		1	GRAB	8260	1.0	BRL			
26. 1,1,2 Trichloroethane	X					1.0	BRL			
27. Trichloroethylene	X					1.0	BRL			
28. Vinyl Chloride	X					1.0	BRL			
29. Acetone	X					10.0	BRL			
30. 1,4 Dioxane	X					20.0	BRL			
31. Total Phenols	X				625	10.0	BRL			
32. Pentachlorophenol	X					5.0	BRL			
33. Total Phthalates [6] (Phthalate esthers)	X						BRL			
34. Bis (2-Ethylhexyl) Phthalate [Di-(ethylhexyl) Phthalate]	X						BRL			
35. Total Group I Polycyclic Aromatic Hydrocarbons (PAH)	X						BRL			
a. Benzo(a) Anthracene	X						BRL			
b. Benzo(a) Pyrene	X						BRL			
c. Benzo(b)Fluoranthene	X						BRL			
d. Benzo(k) Fluoranthene	X						BRL			
e. Chrysene	X						BRL			

[6] 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	X		1	GRAB	625	5.0	BRL			
g. Indeno(1,2,3-cd) Pyrene	X				625	5.0	BRL			
36. Total Group II Polycyclic Aromatic Hydrocarbons (PAH)		X			625	5.0	33.58			
h. Acenaphthene	X					5.0	BRL			
i. Acenaphthylene	X						BRL			
j. Anthracene	X						BRL			
k. Benzo(ghi) Perylene	X						BRL			
l. Fluoranthene	X						BRL			
m. Fluorene	X						BRL			
n. Naphthalene-		X					6.28			
o. Phenanthrene	X						BRL			
p. Pyrene	X						BRL			
37. Total Polychlorinated Biphenyls (PCBs)	X				608	0.211	BRL			
38. Antimony	X				200.7	0.0060	BRL			
39. Arsenic	X					0.0040	BRL			
40. Cadmium	X					0.0012	BRL			
41. Chromium III	X					0.005	BRL			
42. Chromium VI	X					0.005	BRL			

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		X	1	GRAB	200.7	0,0025	0,0152			
44. Lead		X			200.7	0,0038	0,0260			
45. Mercury	X				245.2	0.00020	BRL			
46. Nickel	X				200.7	0,0025	BRL			
47. Selenium	X				200.7	0.0075	BRL			
48. Silver	X				200.7	0,0050	BRL			
49. Zinc		X			200.7	0,0050	0,0920			
50. Iron		X			200.7	0,125	0,819			
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 X	If yes, which metals? NA
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? NA Metals:_____ DF: _____	Look up the limit calculated at the corresponding dilution factor in **Appendix IV.** Do any of the metals in the **influent** have the potential to exceed the corresponding **effluent** limits in Appendix IV (i.e., is the influent concentration above the limit set at the calculated dilution factor)? Y____ N X If "Yes," list which metals:

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

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

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): BENTONITE ANTHRACITE CONTACTOR			

c) Proposed **average** and **maximum flow rates** (gallons per minute) for the discharge and the **design flow rate**(s) (gallons per minute) of the treatment system:
Average flow rate of discharge 1-3 Maximum flow rate of treatment system 10 Design flow rate of treatment system 5

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

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

a) Identify the discharge pathway:	Direct____	Within facility__	Storm drain X	River/brook____	Wetlands____	Other (describe):

b) Provide a narrative description of the discharge pathway, including the name(s) of the receiving waters:
DISCHARGE TO BNSC STORM DRAIN (NEW LINE) TO DORCHESTER BAY (BNSC OUTFALL CS090)

c) Attach a detailed map(s) indicating the site location and location of the outfall to the receiving water:
1. For multiple discharges, number the discharges sequentially.
2. For indirect dischargers, indicate the location of the discharge to the indirect conveyance and the discharge to surface water
The map should also include the location and distance to the nearest sanitary sewer as well as the locus of nearby sensitive receptors (based on USGS topographical mapping), such as surface waters, drinking water supplies, and wetland areas.

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

e) Provide the reported or calculated seven day-ten year low flow (7Q10) of the receiving water_____cfs
Please attach any calculation sheets used to support stream flow and dilution calculations.

f) Is the receiving water a listed 303(d) water quality impaired or limited water? Yes____ No____ If yes, for which pollutant(s)?
Is there a TMDL? Yes____ No____ If yes, for which pollutant(s)?

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

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

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

7. Supplemental information. :

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

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

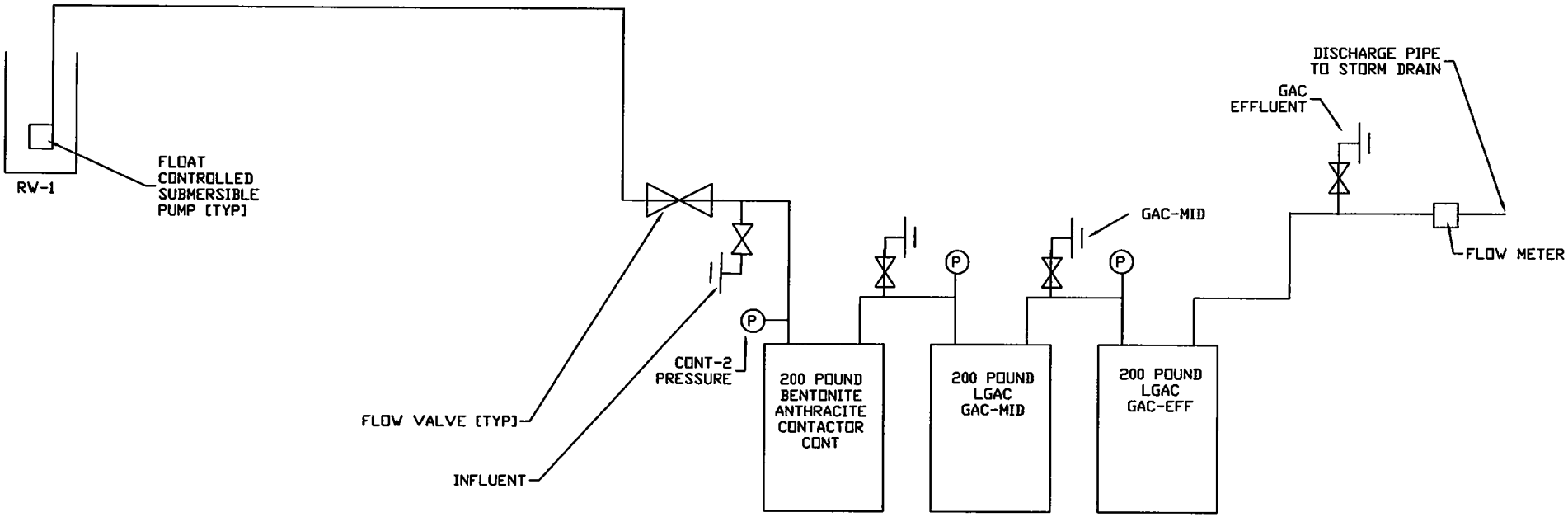
I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage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

Facility/Site Name: RESIDENCE 3 UNION STREET BOSTON, MA

Operator signature: [signature]

Title: President

Date: 2/23/06



RESPONSE ENVIRONMENTAL, INC.

RESIDENCE
3 VINSON STREET
DORCHESTER, MA
RTN 3-25652

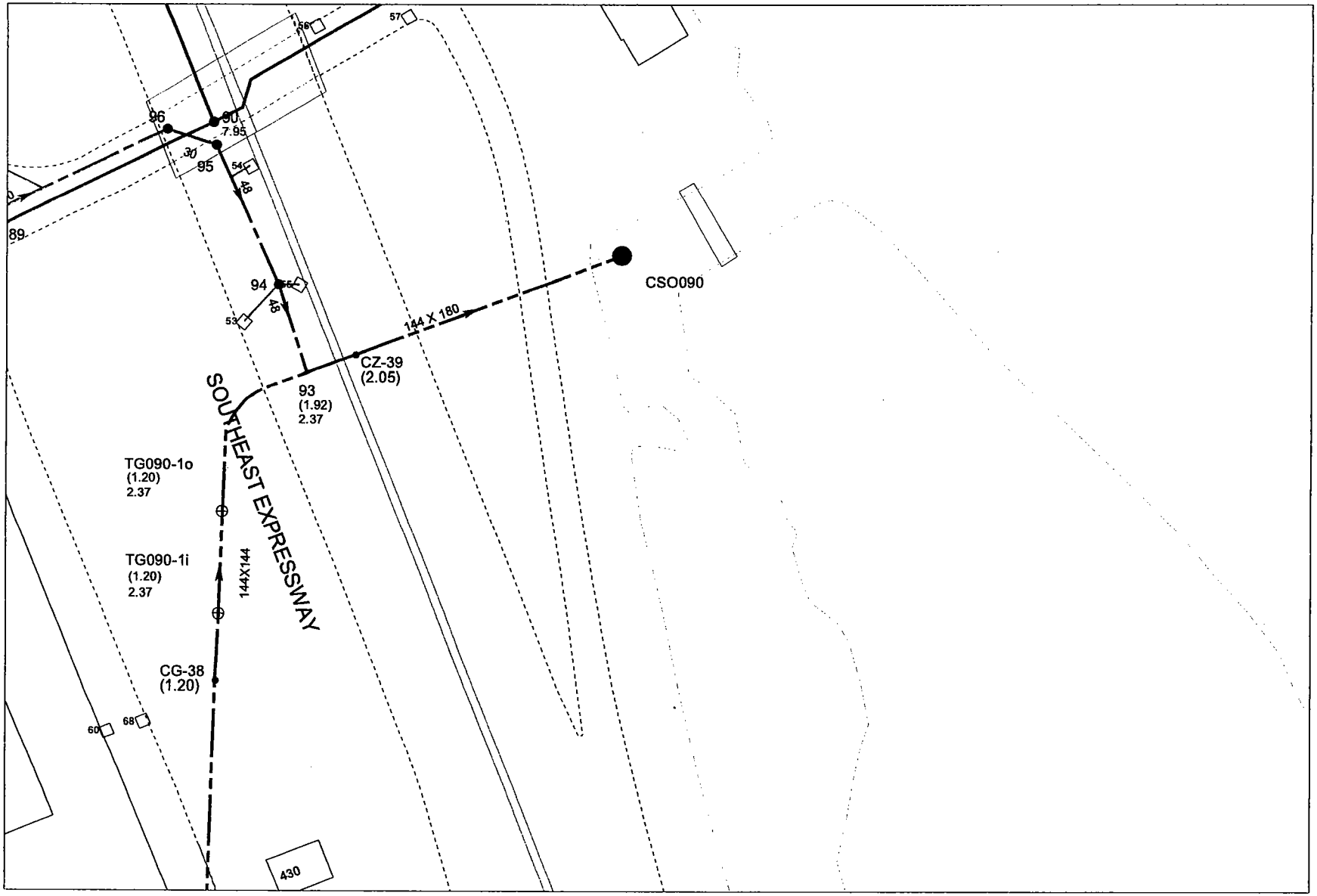
DATE: FEBRUARY 2006

SCALE: NTS

PROCESS DIAGRAM LAYOUT

140 0 140 280 Feet

One Inch Equals 140 Feet



Report Date:
22-Feb-06 17:03

☑ Final Report
☐ Re-Issued Report
☐ Revised Report

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

Laboratory Report

Response Environmental, Inc.
563 Main Street; Suite 211
Worcester, MA 01608
Attn: Jeff Curtis

Project: Cargill Energy Inc-Dorchester, MA
Project #: K-Cargill

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
SA40922-01	Ground Water	Ground Water	15-Feb-06 09:44	16-Feb-06 17:25

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. All applicable NELAC requirements have been met.
Please note that this report contains 21 pages of analytical data including Chain of Custody document(s).
This report may not be reproduced, except in full, without written approval from Spectrum Analytical, Inc.

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

Authorized by:

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

Spectrum Analytical, Inc. is a NELAC accredited laboratory organization and meets NELAC testing standards. Use of the NELAC logo however does not insure that Spectrum is currently accredited for the specific method indicated. Please refer to our "Quality" webpage at www.spectrum-analytical.com for a full listing of our current certifications.

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
Ground Water	K-Cargill	Ground Water	15-Feb-06 09:44	16-Feb-06
SA40922-01				

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Volatile Organic Compounds											
Volatile Organic Compounds											
Prepared by method Volatiles											
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	BRL		µg/l	1.0	1	SW 846 8260B	18-Feb-06	18-Feb-06	6021100	RLJ
67-64-1	Acetone	BRL		µg/l	10.0	1	"	"	"	"	"
107-13-1	Acrylonitrile	BRL		µg/l	1.0	1	"	"	"	"	"
71-43-2	Benzene	4.9		µg/l	1.0	1	"	"	"	"	"
108-86-1	Bromobenzene	BRL		µg/l	1.0	1	"	"	"	"	"
74-97-5	Bromochloromethane	BRL		µg/l	1.0	1	"	"	"	"	"
75-27-4	Bromodichloromethane	BRL		µg/l	1.0	1	"	"	"	"	"
75-25-2	Bromoform	BRL		µg/l	1.0	1	"	"	"	"	"
74-83-9	Bromomethane	BRL		µg/l	2.0	1	"	"	"	"	"
78-93-3	2-Butanone (MEK)	BRL		µg/l	10.0	1	"	"	"	"	"
104-51-8	n-Butylbenzene	BRL		µg/l	1.0	1	"	"	"	"	"
135-98-8	sec-Butylbenzene	BRL		µg/l	1.0	1	"	"	"	"	"
98-06-6	tert-Butylbenzene	BRL		µg/l	1.0	1	"	"	"	"	"
75-15-0	Carbon disulfide	BRL		µg/l	5.0	1	"	"	"	"	"
56-23-5	Carbon tetrachloride	BRL		µg/l	1.0	1	"	"	"	"	"
108-90-7	Chlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	"
75-00-3	Chloroethane	BRL		µg/l	2.0	1	"	"	"	"	"
67-66-3	Chloroform	BRL		µg/l	1.0	1	"	"	"	"	"
74-87-3	Chloromethane	3.8		µg/l	2.0	1	"	"	"	"	"
95-49-8	2-Chlorotoluene	BRL		µg/l	1.0	1	"	"	"	"	"
106-43-4	4-Chlorotoluene	BRL		µg/l	1.0	1	"	"	"	"	"
96-12-8	1,2-Dibromo-3-chloropropane	BRL		µg/l	2.0	1	"	"	"	"	"
124-48-1	Dibromochloromethane	BRL		µg/l	1.0	1	"	"	"	"	"
106-93-4	1,2-Dibromoethane (EDB)	BRL		µg/l	1.0	1	"	"	"	"	"
74-95-3	Dibromomethane	BRL		µg/l	1.0	1	"	"	"	"	"
95-50-1	1,2-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	"
541-73-1	1,3-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	"
106-46-7	1,4-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	"
75-71-8	Dichlorodifluoromethane (Freon12)	BRL		µg/l	2.0	1	"	"	"	"	"
75-34-3	1,1-Dichloroethane	BRL		µg/l	1.0	1	"	"	"	"	"
107-06-2	1,2-Dichloroethane	BRL		µg/l	1.0	1	"	"	"	"	"
75-35-4	1,1-Dichloroethene	BRL		µg/l	1.0	1	"	"	"	"	"
156-59-2	cis-1,2-Dichloroethene	BRL		µg/l	1.0	1	"	"	"	"	"
156-60-5	trans-1,2-Dichloroethene	BRL		µg/l	1.0	1	"	"	"	"	"
78-87-5	1,2-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	"
142-28-9	1,3-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	"
594-20-7	2,2-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	"
563-58-6	1,1-Dichloropropene	BRL		µg/l	1.0	1	"	"	"	"	"
10061-01-5	cis-1,3-Dichloropropene	BRL		µg/l	1.0	1	"	"	"	"	"
10061-02-6	trans-1,3-Dichloropropene	BRL		µg/l	1.0	1	"	"	"	"	"
100-41-4	Ethylbenzene	7.2		µg/l	1.0	1	"	"	"	"	"
87-68-3	Hexachlorobutadiene	BRL		µg/l	1.0	1	"	"	"	"	"
591-78-6	2-Hexanone (MBK)	BRL		µg/l	10.0	1	"	"	"	"	"
98-82-8	Isopropylbenzene	BRL		µg/l	1.0	1	"	"	"	"	"
99-87-6	4-Isopropyltoluene	BRL		µg/l	1.0	1	"	"	"	"	"
1634-04-4	Methyl tert-butyl ether	8.2		µg/l	1.0	1	"	"	"	"	"
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL		µg/l	10.0	1	"	"	"	"	"
75-09-2	Methylene chloride	BRL		µg/l	10.0	1	"	"	"	"	"
91-20-3	Naphthalene	9.2		µg/l	1.0	1	"	"	"	"	"

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
Ground Water	K-Cargill	Ground Water	15-Feb-06 09:44	16-Feb-06
SA40922-01				

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Volatile Organic Compounds											
Volatile Organic Compounds											
Prepared by method Volatiles											
103-65-1	n-Propylbenzene	1.3		µg/l	1.0	1	SW 846 8260B	18-Feb-06	18-Feb-06	6021100	RLJ
100-42-5	Styrene	BRL		µg/l	1.0	1	"	"	"	"	"
630-20-6	1,1,1,2-Tetrachloroethane	BRL		µg/l	1.0	1	"	"	"	"	"
79-34-5	1,1,2,2-Tetrachloroethane	BRL		µg/l	1.0	1	"	"	"	"	"
127-18-4	Tetrachloroethene	BRL		µg/l	1.0	1	"	"	"	"	"
108-88-3	Toluene	19.6		µg/l	1.0	1	"	"	"	"	"
87-61-6	1,2,3-Trichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	"
120-82-1	1,2,4-Trichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	"
71-55-6	1,1,1-Trichloroethane	BRL		µg/l	1.0	1	"	"	"	"	"
79-00-5	1,1,2-Trichloroethane	BRL		µg/l	1.0	1	"	"	"	"	"
79-01-6	Trichloroethene	BRL		µg/l	1.0	1	"	"	"	"	"
75-69-4	Trichlorofluoromethane (Freon 11)	BRL		µg/l	1.0	1	"	"	"	"	"
96-18-4	1,2,3-Trichloropropane	BRL		µg/l	1.0	1	"	"	"	"	"
95-63-6	1,2,4-Trimethylbenzene	10.1		µg/l	1.0	1	"	"	"	"	"
108-67-8	1,3,5-Trimethylbenzene	2.4		µg/l	1.0	1	"	"	"	"	"
75-01-4	Vinyl chloride	BRL		µg/l	1.0	1	"	"	"	"	"
1330-20-7	m,p-Xylene	21.0		µg/l	2.0	1	"	"	"	"	"
95-47-6	o-Xylene	13.7		µg/l	1.0	1	"	"	"	"	"
109-99-9	Tetrahydrofuran	BRL		µg/l	10.0	1	"	"	"	"	"
60-29-7	Ethyl ether	BRL		µg/l	1.0	1	"	"	"	"	"
994-05-8	Tert-amyl methyl ether	BRL		µg/l	1.0	1	"	"	"	"	"
637-92-3	Ethyl tert-butyl ether	BRL		µg/l	1.0	1	"	"	"	"	"
108-20-3	Di-isopropyl ether	BRL		µg/l	1.0	1	"	"	"	"	"
75-65-0	Tert-Butanol / butyl alcohol	BRL		µg/l	10.0	1	"	"	"	"	"
123-91-1	1,4-Dioxane	678		µg/l	20.0	1	"	"	"	"	"
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*103*		*70-130 %*			"	"	"	"	"
2037-26-5	*Toluene-d8*	*100*		*70-130 %*			"	"	"	"	"
17060-07-0	*1,2-Dichloroethane-d4*	*89.2*		*70-130 %*			"	"	"	"	"
1868-53-7	*Dibromofluoromethane*	*98.8*		*70-130 %*			"	"	"	"	"
Microextractable Organic Compounds											
106-93-4	1,2-Dibromoethane (EDB)	BRL		µg/l	0.0100	1	EPA 504.1	17-Feb-06	21-Feb-06	6021033	SM
Extractable Petroleum Hydrocarbons											
	Non-polar material (SGT-HEM)	BRL		mg/l	1.0	1	EPA 1664	17-Feb-06	21-Feb-06	6021023	JK
Semivolatile Organic Compounds by GC											
Polychlorinated Biphenyls by EPA 608											
Prepared by method SW846 3510C											
12674-11-2	PCB 1016	BRL		µg/l	0.211	1	EPA 608	17-Feb-06	17-Feb-06	6021029	MP
11104-28-2	PCB 1221	BRL		µg/l	0.211	1	"	"	"	"	"
11141-16-5	PCB 1232	BRL		µg/l	0.211	1	"	"	"	"	"
53469-21-9	PCB 1242	BRL		µg/l	0.211	1	"	"	"	"	"
12672-29-6	PCB 1248	BRL		µg/l	0.211	1	"	"	"	"	"
11097-69-1	PCB 1254	BRL		µg/l	0.211	1	"	"	"	"	"
11096-82-5	PCB 1260	BRL		µg/l	0.211	1	"	"	"	"	"
37324-23-5	PCB 1262	BRL		µg/l	0.211	1	"	"	"	"	"
11100-14-4	PCB 1268	BRL		µg/l	0.211	1	"	"	"	"	"
Surrogate recoveries:											
10386-84-2	*4,4-DB-Octafluorobiphenyl (Sr)*	*110*		*40-140 %*			"	"	"	"	"
2051-24-3	*Decachlorobiphenyl (Sr)*	*89.6*		*40-140 %*			"	"	"	"	"

This laboratory report is not valid without an authorized signature on the cover page.

* Reportable Detection Limit BRL = Below Reporting Limit

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
Ground Water	K-Cargill	Ground Water	15-Feb-06 09:44	16-Feb-06
SA40922-01				

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Semivolatile Organic Compounds by GCMS											
Semivolatile Organic Compounds by EPA 625											
Prepared by method SW846 3535											
83-32-9	Acenaphthene	BRL		µg/l	5.00	1	EPA 625	17-Feb-06	18-Feb-06	6021025	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	"	"	"	"	"
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	"	"	"	"	"
95-57-8	2-Chlorophenol	BRL		µg/l	5.00	1	"	"	"	"	"
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	"	"	"	"	"

This laboratory report is not valid without an authorized signature on the cover page.

* Reportable Detection Limit BRL = Below Reporting Limit

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
Ground Water	K-Cargill	Ground Water	15-Feb-06 09:44	16-Feb-06
SA40922-01				

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
Semivolatile Organic Compounds by GCMS											
Semivolatile Organic Compounds by EPA 625											
Prepared by method SW846 3535											
91-57-6	2-Methylnaphthalene	27.3		µg/l	5.00	1	EPA 625	17-Feb-06	18-Feb-06	6021025	M.B
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	6.28		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	5.00	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	5.00	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	5.00	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	"	"	"	"	"
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	"	"	"	"	"
Surrogate recoveries:											
321-60-8	*2-Fluorobiphenyl*	*55.2*		*30-130 %*			"	"	"	"	"
367-12-4	*2-Fluorophenol*	*56.5*		*15-110 %*			"	"	"	"	"
4165-60-0	*Nitrobenzene-d5*	*48.6*		*30-130 %*			"	"	"	"	"
4165-62-2	*Phenol-d5*	*43.5*		*15-110 %*			"	"	"	"	"
1718-51-0	*Terphenyl-dl4*	*77.2*		*30-130 %*			"	"	"	"	"
118-79-6	*2,4,6-Tribromophenol*	*64.4*		*15-110 %*			"	"	"	"	"
Total Metals by EPA 200 Series Methods											
7440-22-4	Silver	BRL		mg/l	0.0050	1	EPA 200.7	17-Feb-06	20-Feb-06	6020976	RE
7440-38-2	Arsenic	BRL		mg/l	0.0040	1	"	"	"	"	"
7440-43-9	Cadmium	BRL		mg/l	0.0012	1	"	"	"	"	"
7440-50-8	Copper	0.0152		mg/l	0.0025	1	"	"	"	"	"
7439-89-6	Iron	0.819		mg/l	0.125	1	"	"	"	"	"
7439-97-6	Mercury	BRL		mg/l	0.00020	1	EPA 245.2/7470A	"	21-Feb-06	6020977	YP
7440-02-0	Nickel	BRL		mg/l	0.0025	1	EPA 200.7	"	20-Feb-06	6020976	RE
7439-92-1	Lead	0.0260		mg/l	0.0038	1	"	"	"	"	"
7440-36-0	Antimony	BRL		mg/l	0.0060	1	"	"	"	"	"
7782-49-2	Selenium	BRL		mg/l	0.0075	1	"	"	"	"	"
7440-66-6	Zinc	0.0920		mg/l	0.0050	1	"	"	"	"	"
General Chemistry Parameters											
57-12-5	Cyanide (total)	BRL		mg/l	0.0100	1	10-204-00-1-A / SW-846 9012A	21-Feb-06	21-Feb-06	6021197	EK
	Total Suspended Solids	31.0		mg/l	5.00	1	SM2540D	17-Feb-06	17-Feb-06	6021047	"

This laboratory report is not valid without an authorized signature on the cover page.

* Reportable Detection Limit BRL = Below Reporting Limit

Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 6021100 - Volatiles										
Blank (6021100-BLK1)										
Prepared & Analyzed: 18-Feb-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						
Tetrachloroethene	BRL		µg/l	1.0						
Toluene	BRL		µg/l	1.0						

Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 6021100 - Volatiles										
Blank (6021100-BLK1)										
Prepared & Analyzed: 18-Feb-06										
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	*52.2*		µg/l		*50.0*		*104*	*70-130*		
Surrogate: Toluene-d8	*50.8*		µg/l		*50.0*		*102*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*46.6*		µg/l		*50.0*		*93.2*	*70-130*		
Surrogate: Dibromofluoromethane	*50.1*		µg/l		*50.0*		*100*	*70-130*		
LCS (6021100-BS1)										
Prepared & Analyzed: 18-Feb-06										
1,1,2-Trichlorotrifluoroethane (Freon 113)	21.1		µg/l		20.0		106	70-130		
Acetone	15.0		µg/l		20.0		75.0	2.17-194		
Acrylonitrile	15.8		µg/l		20.0		79.0	70-130		
Benzene	21.2		µg/l		20.0		106	70-130		
Bromobenzene	24.6		µg/l		20.0		123	70-130		
Bromochloromethane	22.3		µg/l		20.0		112	70-130		
Bromodichloromethane	24.2		µg/l		20.0		121	70-130		
Bromoform	21.1		µg/l		20.0		106	70-130		
Bromomethane	17.0		µg/l		20.0		85.0	61.9-145		
2-Butanone (MEK)	16.3		µg/l		20.0		81.5	14.9-165		
n-Butylbenzene	19.6		µg/l		20.0		98.0	70-130		
sec-Butylbenzene	24.7		µg/l		20.0		124	70-130		
tert-Butylbenzene	25.4		µg/l		20.0		127	70-130		
Carbon disulfide	14.1		µg/l		20.0		70.5	70-130		
Carbon tetrachloride	25.6		µg/l		20.0		128	70-130		
Chlorobenzene	23.3		µg/l		20.0		116	70-130		
Chloroethane	18.3		µg/l		20.0		91.5	64.4-134		
Chloroform	21.4		µg/l		20.0		107	70-130		
Chloromethane	21.4		µg/l		20.0		107	70-130		
2-Chlorotoluene	22.6		µg/l		20.0		113	70-130		
4-Chlorotoluene	23.5		µg/l		20.0		118	70-130		
1,2-Dibromo-3-chloropropane	19.2		µg/l		20.0		96.0	70-130		
Dibromochloromethane	22.1		µg/l		20.0		110	45.3-146		
1,2-Dibromoethane (EDB)	21.8		µg/l		20.0		109	70-130		
Dibromomethane	20.4		µg/l		20.0		102	70-130		
1,2-Dichlorobenzene	20.9		µg/l		20.0		104	70-130		
1,3-Dichlorobenzene	24.2		µg/l		20.0		121	70-130		
1,4-Dichlorobenzene	20.4		µg/l		20.0		102	70-130		
Dichlorodifluoromethane (Freon12)	24.8		µg/l		20.0		124	49.6-201		
1,1-Dichloroethane	20.6		µg/l		20.0		103	70-130		

Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 6021100 - Volatiles										
LCS (6021100-BS1)										
Prepared & Analyzed: 18-Feb-06										
1,2-Dichloroethane	19.3		µg/l		20.0		96.5	70-130		
1,1-Dichloroethene	19.4		µg/l		20.0		97.0	70-130		
cis-1,2-Dichloroethene	22.6		µg/l		20.0		113	70-130		
trans-1,2-Dichloroethene	19.3		µg/l		20.0		96.5	70-130		
1,2-Dichloropropane	20.5		µg/l		20.0		102	70-130		
1,3-Dichloropropane	19.4		µg/l		20.0		97.0	70-130		
2,2-Dichloropropane	23.0		µg/l		20.0		115	70-130		
1,1-Dichloropropene	21.0		µg/l		20.0		105	70-130		
cis-1,3-Dichloropropene	21.0		µg/l		20.0		105	70-130		
trans-1,3-Dichloropropene	24.5		µg/l		20.0		122	70-130		
Ethylbenzene	23.4		µg/l		20.0		117	70-130		
Hexachlorobutadiene	21.1		µg/l		20.0		106	68.6-137		
2-Hexanone (MBK)	16.4		µg/l		20.0		82.0	70-130		
Isopropylbenzene	23.6		µg/l		20.0		118	70-130		
4-Isopropyltoluene	21.9		µg/l		20.0		110	70-130		
Methyl tert-butyl ether	20.0		µg/l		20.0		100	70-130		
4-Methyl-2-pentanone (MIBK)	16.2		µg/l		20.0		81.0	48.6-137		
Methylene chloride	18.4		µg/l		20.0		92.0	70-130		
Naphthalene	21.0		µg/l		20.0		105	70-130		
n-Propylbenzene	23.6		µg/l		20.0		118	70-130		
Styrene	24.5		µg/l		20.0		122	70-130		
1,1,1,2-Tetrachloroethane	23.3		µg/l		20.0		116	70-130		
1,1,2,2-Tetrachloroethane	20.2		µg/l		20.0		101	70-130		
Tetrachloroethene	22.2		µg/l		20.0		111	70-130		
Toluene	20.9		µg/l		20.0		104	70-130		
1,2,3-Trichlorobenzene	20.9		µg/l		20.0		104	70-130		
1,2,4-Trichlorobenzene	20.4		µg/l		20.0		102	70-130		
1,1,1-Trichloroethane	24.8		µg/l		20.0		124	70-130		
1,1,2-Trichloroethane	20.1		µg/l		20.0		100	70-130		
Trichloroethene	21.4		µg/l		20.0		107	70-130		
Trichlorofluoromethane (Freon 11)	21.7		µg/l		20.0		108	67.9-143		
1,2,3-Trichloropropane	22.6		µg/l		20.0		113	70-130		
1,2,4-Trimethylbenzene	24.5		µg/l		20.0		122	70-130		
1,3,5-Trimethylbenzene	24.0		µg/l		20.0		120	70-130		
Vinyl chloride	18.5		µg/l		20.0		92.5	70-130		
m,p-Xylene	47.3		µg/l		40.0		118	70-130		
o-Xylene	24.0		µg/l		20.0		120	70-130		
Tetrahydrofuran	16.3		µg/l		20.0		81.5	70-130		
Ethyl ether	19.1		µg/l		20.0		95.5	70-136		
Tert-amyl methyl ether	16.8		µg/l		20.0		84.0	70-130		
Ethyl tert-butyl ether	20.9		µg/l		20.0		104	70-130		
Di-isopropyl ether	19.7		µg/l		20.0		98.5	70-130		
Tert-Butanol / butyl alcohol	144		µg/l		200		72.0	70-130		
1,4-Dioxane	188		µg/l		200		94.0	36.5-156		
Surrogate: 4-Bromofluorobenzene	*54.0*		µg/l		*50.0*		*108*	*70-130*		
Surrogate: Toluene-d8	*50.7*		µg/l		*50.0*		*101*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*45.6*		µg/l		*50.0*		*91.2*	*70-130*		
Surrogate: Dibromofluoromethane	*50.6*		µg/l		*50.0*		*101*	*70-130*		
LCS Dup (6021100-BSD1)										
Prepared & Analyzed: 18-Feb-06										
1,1,2-Trichlorotrifluoroethane (Freon 113)	20.2		µg/l		20.0		101	70-130	4.83	25
Acetone	11.1		µg/l		20.0		55.5	2.17-194	29.9	50
Acrylonitrile	13.8	QC-1	µg/l		20.0		69.0	70-130	13.5	25
Benzene	20.2		µg/l		20.0		101	70-130	4.83	25
Bromobenzene	22.8		µg/l		20.0		114	70-130	7.59	25

Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 6021100 - Volatiles										
LCS Dup (6021100-BSD1)										
Prepared & Analyzed: 18-Feb-06										
Bromochloromethane	20.7		µg/l		20.0		104	70-130	7.41	25
Bromodichloromethane	22.7		µg/l		20.0		114	70-130	5.96	25
Bromoform	20.1		µg/l		20.0		100	70-130	5.83	25
Bromomethane	15.2		µg/l		20.0		76.0	61.9-145	11.2	50
2-Butanone (MEK)	13.9		µg/l		20.0		69.5	14.9-165	15.9	50
n-Butylbenzene	18.6		µg/l		20.0		93.0	70-130	5.24	25
sec-Butylbenzene	22.9		µg/l		20.0		114	70-130	8.40	25
tert-Butylbenzene	23.9		µg/l		20.0		120	70-130	5.67	25
Carbon disulfide	13.8	QC-1	µg/l		20.0		69.0	70-130	2.15	25
Carbon tetrachloride	23.2		µg/l		20.0		116	70-130	9.84	25
Chlorobenzene	22.1		µg/l		20.0		110	70-130	5.31	25
Chloroethane	17.8		µg/l		20.0		89.0	64.4-134	2.77	50
Chloroform	20.3		µg/l		20.0		102	70-130	4.78	25
Chloromethane	21.1		µg/l		20.0		106	70-130	0.939	25
2-Chlorotoluene	21.4		µg/l		20.0		107	70-130	5.45	25
4-Chlorotoluene	21.8		µg/l		20.0		109	70-130	7.93	25
1,2-Dibromo-3-chloropropane	17.7		µg/l		20.0		88.5	70-130	8.13	25
Dibromochloromethane	20.6		µg/l		20.0		103	45.3-146	6.57	50
1,2-Dibromoethane (EDB)	19.6		µg/l		20.0		98.0	70-130	10.6	25
Dibromomethane	18.9		µg/l		20.0		94.5	70-130	7.63	25
1,2-Dichlorobenzene	19.5		µg/l		20.0		97.5	70-130	6.45	25
1,3-Dichlorobenzene	22.2		µg/l		20.0		111	70-130	8.62	25
1,4-Dichlorobenzene	19.3		µg/l		20.0		96.5	70-130	5.54	25
Dichlorodifluoromethane (Freon12)	23.3		µg/l		20.0		116	49.6-201	6.67	50
1,1-Dichloroethane	19.3		µg/l		20.0		96.5	70-130	6.52	25
1,2-Dichloroethane	17.8		µg/l		20.0		89.0	70-130	8.09	25
1,1-Dichloroethene	18.4		µg/l		20.0		92.0	70-130	5.29	25
cis-1,2-Dichloroethene	21.1		µg/l		20.0		106	70-130	6.39	25
trans-1,2-Dichloroethene	18.5		µg/l		20.0		92.5	70-130	4.23	25
1,2-Dichloropropane	19.3		µg/l		20.0		96.5	70-130	5.54	25
1,3-Dichloropropane	17.8		µg/l		20.0		89.0	70-130	8.60	25
2,2-Dichloropropane	21.5		µg/l		20.0		108	70-130	6.28	25
1,1-Dichloropropene	20.1		µg/l		20.0		100	70-130	4.88	25
cis-1,3-Dichloropropene	19.5		µg/l		20.0		97.5	70-130	7.41	25
trans-1,3-Dichloropropene	22.3		µg/l		20.0		112	70-130	8.55	25
Ethylbenzene	22.4		µg/l		20.0		112	70-130	4.37	25
Hexachlorobutadiene	19.6		µg/l		20.0		98.0	68.6-137	7.84	50
2-Hexanone (MBK)	14.7		µg/l		20.0		73.5	70-130	10.9	25
Isopropylbenzene	22.4		µg/l		20.0		112	70-130	5.22	25
4-Isopropyltoluene	20.8		µg/l		20.0		104	70-130	5.61	25
Methyl tert-butyl ether	18.5		µg/l		20.0		92.5	70-130	7.79	25
4-Methyl-2-pentanone (MIBK)	14.9		µg/l		20.0		74.5	48.6-137	8.36	50
Methylene chloride	17.4		µg/l		20.0		87.0	70-130	5.59	25
Naphthalene	19.0		µg/l		20.0		95.0	70-130	10.0	25
n-Propylbenzene	22.2		µg/l		20.0		111	70-130	6.11	25
Styrene	23.3		µg/l		20.0		116	70-130	5.04	25
1,1,1,2-Tetrachloroethane	22.8		µg/l		20.0		114	70-130	1.74	25
1,1,2,2-Tetrachloroethane	18.1		µg/l		20.0		90.5	70-130	11.0	25
Tetrachloroethene	21.2		µg/l		20.0		106	70-130	4.61	25
Toluene	19.7		µg/l		20.0		98.5	70-130	5.43	25
1,2,3-Trichlorobenzene	19.1		µg/l		20.0		95.5	70-130	8.52	25
1,2,4-Trichlorobenzene	18.9		µg/l		20.0		94.5	70-130	7.63	25
1,1,1-Trichloroethane	23.7		µg/l		20.0		118	70-130	4.96	25
1,1,2-Trichloroethane	18.6		µg/l		20.0		93.0	70-130	7.25	25
Trichloroethene	20.8		µg/l		20.0		104	70-130	2.84	25

Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 6021100 - Volatiles										
LCS Dup (6021100-BSD1)										
Prepared & Analyzed: 18-Feb-06										
Trichlorofluoromethane (Freon 11)	20.4		µg/l		20.0		102	67.9-143	5.71	50
1,2,3-Trichloropropane	20.4		µg/l		20.0		102	70-130	10.2	25
1,2,4-Trimethylbenzene	22.6		µg/l		20.0		113	70-130	7.66	25
1,3,5-Trimethylbenzene	22.5		µg/l		20.0		112	70-130	6.90	25
Vinyl chloride	17.5		µg/l		20.0		87.5	70-130	5.56	25
m,p-Xylene	44.7		µg/l		40.0		112	70-130	5.22	25
o-Xylene	22.8		µg/l		20.0		114	70-130	5.13	25
Tetrahydrofuran	14.3		µg/l		20.0		71.5	70-130	13.1	25
Ethyl ether	17.5		µg/l		20.0		87.5	70-136	8.74	50
Tert-amyl methyl ether	15.8		µg/l		20.0		79.0	70-130	6.13	25
Ethyl tert-butyl ether	19.8		µg/l		20.0		99.0	70-130	4.93	25
Di-isopropyl ether	18.7		µg/l		20.0		93.5	70-130	5.21	25
Tert-Butanol / butyl alcohol	123	QC-1	µg/l		200		61.5	70-130	15.7	25
1,4-Dioxane	147		µg/l		200		73.5	36.5-156	24.5	25
Surrogate: 4-Bromofluorobenzene	*53.7*		µg/l		*50.0*		*107*	*70-130*		
Surrogate: Toluene-d8	*50.5*		µg/l		*50.0*		*101*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*44.1*		µg/l		*50.0*		*88.2*	*70-130*		
Surrogate: Dibromofluoromethane	*50.3*		µg/l		*50.0*		*101*	*70-130*		
Matrix Spike (6021100-MS1)	**Source: SA40615-16**									
Prepared & Analyzed: 18-Feb-06										
Benzene	13.7	QM-07	µg/l		20.0	BRL	68.5	70-130		
Chlorobenzene	19.3		µg/l		20.0	BRL	96.5	70-130		
1,1-Dichloroethene	9.0	QM-07	µg/l		20.0	BRL	45.0	70-130		
Toluene	15.0		µg/l		20.0	BRL	75.0	70-130		
Trichloroethene	14.7		µg/l		20.0	BRL	73.5	70-130		
Surrogate: 4-Bromofluorobenzene	*51.3*		µg/l		*50.0*		*103*	*70-130*		
Surrogate: Toluene-d8	*50.2*		µg/l		*50.0*		*100*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*46.4*		µg/l		*50.0*		*92.8*	*70-130*		
Surrogate: Dibromofluoromethane	*50.6*		µg/l		*50.0*		*101*	*70-130*		
Matrix Spike Dup (6021100-MSD1)	**Source: SA40615-16**									
Prepared & Analyzed: 18-Feb-06										
Benzene	18.0		µg/l		20.0	BRL	90.0	70-130	27.1	30
Chlorobenzene	22.5		µg/l		20.0	BRL	112	70-130	14.9	30
1,1-Dichloroethene	10.4	QM-07	µg/l		20.0	BRL	52.0	70-130	14.4	30
Toluene	17.8		µg/l		20.0	BRL	89.0	70-130	17.1	30
Trichloroethene	17.5		µg/l		20.0	BRL	87.5	70-130	17.4	30
Surrogate: 4-Bromofluorobenzene	*52.2*		µg/l		*50.0*		*104*	*70-130*		
Surrogate: Toluene-d8	*50.2*		µg/l		*50.0*		*100*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*45.4*		µg/l		*50.0*		*90.8*	*70-130*		
Surrogate: Dibromofluoromethane	*50.4*		µg/l		*50.0*		*101*	*70-130*		

Microextractable Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 6021033 - Microextr. by 504.1										
Blank (6021033-BLK1)										
Prepared: 17-Feb-06 Analyzed: 21-Feb-06										
1,2-Dibromoethane (EDB)	BRL		µg/l	0.0100						
LCS (6021033-BS1)										
Prepared: 17-Feb-06 Analyzed: 21-Feb-06										
1,2-Dibromoethane (EDB)	0.228		µg/l	0.0100	0.200		114	50-150		
Duplicate (6021033-DUP1)	**Source: SA40696-05**									
Prepared: 17-Feb-06 Analyzed: 21-Feb-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 6021023 - SW846 3510C										
Blank (6021023-BLK1)										
Prepared: 17-Feb-06 Analyzed: 21-Feb-06										
Non-polar material (SGT-HEM)	BRL		mg/l	1.0						
LCS (6021023-BS1)										
Prepared: 17-Feb-06 Analyzed: 21-Feb-06										
Non-polar material (SGT-HEM)	23.1		mg/l		25.0		92.4	0-200		

Semivolatile Organic Compounds by GC - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 6021029 - SW846 3510C										
Blank (6021029-BLK1)										
Prepared & Analyzed: 17-Feb-06										
PCB 1016	BRL		µg/l	0.200						
PCB 1221	BRL		µg/l	0.200						
PCB 1232	BRL		µg/l	0.200						
PCB 1242	BRL		µg/l	0.200						
PCB 1248	BRL		µg/l	0.200						
PCB 1254	BRL		µg/l	0.200						
PCB 1260	BRL		µg/l	0.200						
PCB 1262	BRL		µg/l	0.200						
PCB 1268	BRL		µg/l	0.200						
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr)	*0.110*		µg/l		*0.200*		*55.0*	*40-140*		
Surrogate: Decachlorobiphenyl (Sr)	*0.120*		µg/l		*0.200*		*60.0*	*40-140*		
LCS (6021029-BS1)										
Prepared & Analyzed: 17-Feb-06										
PCB 1016	2.23		µg/l	0.200	2.50		89.2	50-114		
PCB 1260	2.46		µg/l	0.200	2.50		98.4	40-127		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr)	*0.150*		µg/l		*0.200*		*75.0*	*40-140*		
Surrogate: Decachlorobiphenyl (Sr)	*0.170*		µg/l		*0.200*		*85.0*	*40-140*		

Semivolatile Organic Compounds by GCMS - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 6021025 - SW846 3535										
Blank (6021025-BLK1)										
Prepared: 17-Feb-06 Analyzed: 18-Feb-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						
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						
3,4-Methylphenol	BRL		µg/l	10.0						
Naphthalene	BRL		µg/l	5.00						
2-Nitroaniline	BRL		µg/l	5.00						

Semivolatile Organic Compounds by GCMS - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 6021025 - SW846 3535										
Blank (6021025-BLK1)										
Prepared: 17-Feb-06 Analyzed: 18-Feb-06										
3-Nitroaniline	BRL		µg/l	5.00						
4-Nitroaniline	BRL		µg/l	5.00						
Nitrobenzene	BRL		µg/l	5.00						
2-Nitrophenol	BRL		µg/l	5.00						
4-Nitrophenol	BRL		µg/l	5.00						
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	5.00						
Phenanthrene	BRL		µg/l	5.00						
Phenol	BRL		µg/l	5.00						
Pyrene	BRL		µg/l	5.00						
Pyridine	BRL		µg/l	5.00						
1,2,4-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	*67.5*		µg/l		*100*		*67.5*	*30-130*		
Surrogate: 2-Fluorophenol	*71.1*		µg/l		*100*		*71.1*	*15-110*		
Surrogate: Nitrobenzene-d5	*63.3*		µg/l		*100*		*63.3*	*30-130*		
Surrogate: Phenol-d5	*57.8*		µg/l		*100*		*57.8*	*15-110*		
Surrogate: Terphenyl-dl4	*77.4*		µg/l		*100*		*77.4*	*30-130*		
Surrogate: 2,4,6-Tribromophenol	*66.7*		µg/l		*100*		*66.7*	*15-110*		
LCS (6021025-BS1)										
Prepared: 17-Feb-06 Analyzed: 18-Feb-06										
Acenaphthene	67.0		µg/l	5.00	100		67.0	40-140		
Acenaphthylene	68.6		µg/l	5.00	100		68.6	40-140		
Aniline	59.8		µg/l	5.00	100		59.8	40-140		
Anthracene	73.5		µg/l	5.00	100		73.5	40-140		
Azobenzene/Diphenyldiazine	61.7		µg/l	5.00	100		61.7	40-140		
Benzidine	38.4	QC-2	µg/l	5.00	100		38.4	40-140		
Benzo (a) anthracene	68.9		µg/l	5.00	100		68.9	40-140		
Benzo (a) pyrene	71.2		µg/l	5.00	100		71.2	40-140		
Benzo (b) fluoranthene	67.5		µg/l	5.00	100		67.5	40-140		
Benzo (g,h,i) perylene	60.5		µg/l	5.00	100		60.5	40-140		
Benzo (k) fluoranthene	73.3		µg/l	5.00	100		73.3	40-140		
Benzoic acid	18.6	QC-2	µg/l	5.00	100		18.6	30-130		
Benzyl alcohol	66.3		µg/l	5.00	100		66.3	40-140		
Bis(2-chloroethoxy)methane	62.0		µg/l	5.00	100		62.0	40-140		
Bis(2-chloroethyl)ether	58.0		µg/l	5.00	100		58.0	40-140		
Bis(2-chloroisopropyl)ether	60.0		µg/l	5.00	100		60.0	40-140		
Bis(2-ethylhexyl)phthalate	66.6		µg/l	5.00	100		66.6	40-140		
4-Bromophenyl phenyl ether	69.3		µg/l	5.00	100		69.3	40-140		
Butyl benzyl phthalate	66.8		µg/l	5.00	100		66.8	40-140		
Carbazole	114		µg/l	5.00	100		114	0-200		
4-Chloro-3-methylphenol	73.2		µg/l	5.00	100		73.2	30-130		
4-Chloroaniline	60.2		µg/l	5.00	100		60.2	40-140		
2-Chloronaphthalene	66.2		µg/l	5.00	100		66.2	40-140		
2-Chlorophenol	62.0		µg/l	5.00	100		62.0	30-130		
4-Chlorophenyl phenyl ether	70.6		µg/l	5.00	100		70.6	40-140		
Chrysene	68.0		µg/l	5.00	100		68.0	40-140		
Dibenzo (a,h) anthracene	66.1		µg/l	5.00	100		66.1	40-140		
Dibenzofuran	69.4		µg/l	5.00	100		69.4	40-140		
1,2-Dichlorobenzene	58.7		µg/l	5.00	100		58.7	40-140		
1,3-Dichlorobenzene	57.5		µg/l	5.00	100		57.5	40-140		
1,4-Dichlorobenzene	59.3		µg/l	5.00	100		59.3	40-140		

Semivolatile Organic Compounds by GCMS - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 6021025 - SW846 3535										
LCS (6021025-BS1)										
Prepared: 17-Feb-06 Analyzed: 18-Feb-06										
3,3'-Dichlorobenzidine	81.9		µg/l	5.00	100		81.9	40-140		
2,4-Dichlorophenol	68.0		µg/l	5.00	100		68.0	30-130		
Diethyl phthalate	70.6		µg/l	5.00	100		70.6	40-140		
Dimethyl phthalate	68.2		µg/l	5.00	100		68.2	40-140		
2,4-Dimethylphenol	63.1		µg/l	5.00	100		63.1	30-130		
Di-n-butyl phthalate	68.4		µg/l	5.00	100		68.4	40-140		
4,6-Dinitro-2-methylphenol	44.4		µg/l	5.00	100		44.4	30-130		
2,4-Dinitrophenol	43.0		µg/l	5.00	100		43.0	30-130		
2,4-Dinitrotoluene	74.4		µg/l	5.00	100		74.4	40-140		
2,6-Dinitrotoluene	70.8		µg/l	5.00	100		70.8	40-140		
Di-n-octyl phthalate	68.7		µg/l	5.00	100		68.7	40-140		
Fluoranthene	68.8		µg/l	5.00	100		68.8	40-140		
Fluorene	71.1		µg/l	5.00	100		71.1	40-140		
Hexachlorobenzene	70.5		µg/l	5.00	100		70.5	40-140		
Hexachlorobutadiene	62.3		µg/l	5.00	100		62.3	40-140		
Hexachlorocyclopentadiene	30.8	QC-2	µg/l	5.00	100		30.8	40-140		
Hexachloroethane	54.8		µg/l	5.00	100		54.8	40-140		
Indeno (1,2,3-cd) pyrene	66.1		µg/l	5.00	100		66.1	40-140		
Isophorone	62.8		µg/l	5.00	100		62.8	40-140		
2-Methylnaphthalene	65.5		µg/l	5.00	100		65.5	40-140		
2-Methylphenol	65.2		µg/l	5.00	100		65.2	40-140		
3,4-Methylphenol	68.2		µg/l	10.0	100		68.2	40-140		
Naphthalene	65.5		µg/l	5.00	100		65.5	40-140		
2-Nitroaniline	67.7		µg/l	5.00	100		67.7	40-140		
3-Nitroaniline	72.6		µg/l	5.00	100		72.6	40-140		
4-Nitroaniline	86.9		µg/l	5.00	100		86.9	40-140		
Nitrobenzene	61.8		µg/l	5.00	100		61.8	40-140		
2-Nitrophenol	63.9		µg/l	5.00	100		63.9	30-130		
4-Nitrophenol	52.6		µg/l	5.00	100		52.6	30-130		
N-Nitrosodimethylamine	53.8		µg/l	5.00	100		53.8	40-140		
N-Nitrosodi-n-propylamine	68.1		µg/l	5.00	100		68.1	40-140		
N-Nitrosodiphenylamine	82.0		µg/l	5.00	100		82.0	40-140		
Pentachlorophenol	72.4		µg/l	5.00	100		72.4	30-130		
Phenanthrene	67.6		µg/l	5.00	100		67.6	40-140		
Phenol	66.2		µg/l	5.00	100		66.2	30-130		
Pyrene	68.8		µg/l	5.00	100		68.8	40-140		
Pyridine	54.8		µg/l	5.00	100		54.8	40-140		
1,2,4-Trichlorobenzene	61.7		µg/l	5.00	100		61.7	40-140		
2,4,5-Trichlorophenol	75.5		µg/l	5.00	100		75.5	30-130		
2,4,6-Trichlorophenol	66.2		µg/l	5.00	100		66.2	30-130		
Surrogate: 2-Fluorobiphenyl	*65.8*		µg/l		*100*		*65.8*	*30-130*		
Surrogate: 2-Fluorophenol	*53.5*		µg/l		*100*		*53.5*	*15-110*		
Surrogate: Nitrobenzene-d5	*59.6*		µg/l		*100*		*59.6*	*30-130*		
Surrogate: Phenol-d5	*45.6*		µg/l		*100*		*45.6*	*15-110*		
Surrogate: Terphenyl-dl4	*72.2*		µg/l		*100*		*72.2*	*30-130*		
Surrogate: 2,4,6-Tribromophenol	*70.8*		µg/l		*100*		*70.8*	*15-110*		

Total Metals by EPA 200 Series Methods - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 6020976 - EPA 200 Series										
Blank (6020976-BLK1)										
Prepared: 17-Feb-06 Analyzed: 20-Feb-06										
Antimony	BRL		mg/l	0.0060						
Lead	BRL		mg/l	0.0038						
Selenium	BRL		mg/l	0.0075						
Nickel	BRL		mg/l	0.0025						
Iron	BRL		mg/l	0.125						
Zinc	BRL		mg/l	0.0050						
Arsenic	BRL		mg/l	0.0040						
Silver	BRL		mg/l	0.0050						
Cadmium	BRL		mg/l	0.0012						
Copper	BRL		mg/l	0.0025						
LCS (6020976-BS1)										
Prepared: 17-Feb-06 Analyzed: 20-Feb-06										
Nickel	0.218		mg/l	0.0025	0.250		87.2	85-115		
Lead	0.220		mg/l	0.0038	0.250		88.0	85-115		
Antimony	0.219		mg/l	0.0060	0.250		87.6	85-115		
Selenium	0.216		mg/l	0.0075	0.250		86.4	85-115		
Iron	0.250		mg/l	0.125	0.250		100	85-115		
Zinc	0.217		mg/l	0.0050	0.250		86.8	85-115		
Silver	0.107		mg/l	0.0050	0.125		85.6	85-115		
Arsenic	0.212		mg/l	0.0040	0.250		84.8	85-115		
Cadmium	0.213		mg/l	0.0012	0.250		85.2	85-115		
Copper	0.223		mg/l	0.0025	0.250		89.2	85-115		
Duplicate (6020976-DUP1)	**Source: SA40838-10**									
Prepared: 17-Feb-06 Analyzed: 20-Feb-06										
Antimony	BRL		mg/l	0.0060		0.0034			19.4	20
Nickel	0.0329		mg/l	0.0025		0.0321			2.46	20
Zinc	0.0371		mg/l	0.0050		0.0345			7.26	20
Selenium	BRL		mg/l	0.0075		BRL				20
Iron	20.1		mg/l	0.125		18.5			8.29	20
Lead	BRL		mg/l	0.0038		BRL				20
Silver	BRL		mg/l	0.0050		BRL				20
Cadmium	BRL		mg/l	0.0012		0.0005			0.00	20
Copper	BRL		mg/l	0.0025		0.0010			10.5	20
Arsenic	0.0358		mg/l	0.0040		0.0347			3.12	20
Matrix Spike (6020976-MS1)	**Source: SA40916-03**									
Prepared: 17-Feb-06 Analyzed: 20-Feb-06										
Zinc	0.241		mg/l	0.0050	0.250	0.0284	85.0	70-130		
Antimony	0.217		mg/l	0.0060	0.250	0.0023	85.9	70-130		
Lead	0.209		mg/l	0.0038	0.250	BRL	83.6	70-130		
Nickel	0.234		mg/l	0.0025	0.250	0.0228	84.5	70-130		
Selenium	0.215		mg/l	0.0075	0.250	BRL	86.0	70-130		
Iron	0.255		mg/l	0.125	0.250	0.0211	93.6	70-130		
Cadmium	0.207		mg/l	0.0012	0.250	BRL	82.8	70-130		
Arsenic	0.216		mg/l	0.0040	0.250	BRL	86.4	70-130		
Silver	0.105		mg/l	0.0050	0.125	BRL	84.0	70-130		
Copper	0.222		mg/l	0.0025	0.250	0.0018	88.1	70-130		
Matrix Spike Dup (6020976-MSD1)	**Source: SA40916-03**									
Prepared: 17-Feb-06 Analyzed: 20-Feb-06										
Antimony	0.209		mg/l	0.0060	0.250	0.0023	82.7	70-130	3.76	20
Selenium	0.207		mg/l	0.0075	0.250	BRL	82.8	70-130	3.79	20
Zinc	0.232		mg/l	0.0050	0.250	0.0284	81.4	70-130	3.81	20
Iron	0.232		mg/l	0.125	0.250	0.0211	84.4	70-130	9.45	20

This laboratory report is not valid without an authorized signature on the cover page.

* Reportable Detection Limit BRL = Below Reporting Limit

Total Metals by EPA 200 Series Methods - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 6020976 - EPA 200 Series										
Matrix Spike Dup (6020976-MSD1)	Source: SA40916-03									
Prepared: 17-Feb-06 Analyzed: 20-Feb-06										
Nickel	0.225		mg/l	0.0025	0.250	0.0228	80.9	70-130	3.92	20
Lead	0.202		mg/l	0.0038	0.250	BRL	80.8	70-130	3.41	20
Cadmium	0.200		mg/l	0.0012	0.250	BRL	80.0	70-130	3.44	20
Arsenic	0.208		mg/l	0.0040	0.250	BRL	83.2	70-130	3.77	20
Silver	0.0993		mg/l	0.0050	0.125	BRL	79.4	70-130	5.58	20
Copper	0.210		mg/l	0.0025	0.250	0.0018	83.3	70-130	5.56	20
Post Spike (6020976-PS1)	Source: SA40916-03									
Prepared: 17-Feb-06 Analyzed: 20-Feb-06										
Iron	0.238		mg/l	0.125	0.250	0.0211	86.8	85-115		
Nickel	0.237		mg/l	0.0025	0.250	0.0228	85.7	85-115		
Antimony	0.219		mg/l	0.0060	0.250	0.0023	86.7	85-115		
Selenium	0.218		mg/l	0.0075	0.250	BRL	87.2	85-115		
Zinc	0.244		mg/l	0.0050	0.250	0.0284	86.2	85-115		
Arsenic	0.221		mg/l	0.0040	0.250	BRL	88.4	85-115		
Copper	0.227		mg/l	0.0025	0.250	0.0018	90.1	85-115		
Batch 6020977 - EPA200/SW7000 Series										
Blank (6020977-BLK1)										
Prepared: 17-Feb-06 Analyzed: 21-Feb-06										
Mercury	BRL		mg/l	0.00020						
LCS (6020977-BS1)										
Prepared: 17-Feb-06 Analyzed: 21-Feb-06										
Mercury	0.00254		mg/l	0.00020	0.00250		102	80-120		
Duplicate (6020977-DUP1)	Source: SA40838-05									
Prepared: 17-Feb-06 Analyzed: 21-Feb-06										
Mercury	BRL		mg/l	0.00020		BRL				20
Matrix Spike (6020977-MS1)	Source: SA40922-01									
Prepared: 17-Feb-06 Analyzed: 21-Feb-06										
Mercury	0.00248		mg/l	0.00020	0.00250	0.00019	91.6	75-125		
Matrix Spike Dup (6020977-MSD1)	Source: SA40922-01									
Prepared: 17-Feb-06 Analyzed: 21-Feb-06										
Mercury	0.00262		mg/l	0.00020	0.00250	0.00019	97.2	75-125	5.49	20
Post Spike (6020977-PS1)	Source: SA40922-01									
Prepared: 17-Feb-06 Analyzed: 21-Feb-06										
Mercury	0.00262		mg/l	0.00020	0.00250	0.00019	97.2	75-125		

General Chemistry Parameters - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 6021047 - General Preparation										
Blank (6021047-BLK1)										
Prepared & Analyzed: 17-Feb-06										
Total Suspended Solids	BRL		mg/l	5.00						
Duplicate (6021047-DUP1)	Source: SA40766-01									
Prepared & Analyzed: 17-Feb-06										
Total Suspended Solids	46.0		mg/l	5.00		40.0			14.0	20
Duplicate (6021047-DUP2)	Source: SA40799-01									
Prepared & Analyzed: 17-Feb-06										
Total Suspended Solids	25.0		mg/l	5.00		22.0			12.8	20
Reference (6021047-SRM1)										
Prepared & Analyzed: 17-Feb-06										
Total Suspended Solids	78.0		mg/l	10.0	81.5		95.7	85-115.1		
Batch 6021197 - General Preparation										
Blank (6021197-BLK1)										
Prepared & Analyzed: 21-Feb-06										
Cyanide (total)	BRL		mg/l	0.0100						
Blank (6021197-BLK2)										
Prepared & Analyzed: 21-Feb-06										
Cyanide (total)	BRL		mg/l	0.0100						
LCS (6021197-BS1)										
Prepared & Analyzed: 21-Feb-06										
Cyanide (total)	0.286		mg/l	0.0100	0.300		95.3	90-110		
LCS (6021197-BS2)										
Prepared & Analyzed: 21-Feb-06										
Cyanide (total)	0.288		mg/l	0.0100	0.300		96.0	90-110		
Matrix Spike (6021197-MS1)	Source: SA40922-01									
Prepared & Analyzed: 21-Feb-06										
Cyanide (total)	0.294		mg/l	0.0100	0.300	BRL	98.0	75-125		
Matrix Spike Dup (6021197-MSD1)	Source: SA40922-01									
Prepared & Analyzed: 21-Feb-06										
Cyanide (total)	0.263		mg/l	0.0100	0.300	BRL	87.7	75-125	11.1	20
Reference (6021197-SRM1)										
Prepared & Analyzed: 21-Feb-06										
Cyanide (total)	0.350		mg/l	0.0100	0.386		90.7	75.1-125		

Notes and Definitions

QC-1	Analyte out of acceptance range.
QC-2	Analyte out of acceptance range in QC spike but no reportable concentration present in sample.
QC-3	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.
QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
BRL	Below Reporting Limit - Analyte NOT DETECTED at or above the reporting limit
dry	Sample results reported on a dry weight basis
NR	Not Reported
RPD	Relative Percent Difference

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

Interpretation of Total Petroleum Hydrocarbon Report

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

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

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

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

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

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

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

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

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

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

Validated by:
Hanibal C. Tayeh, Ph.D.
June O'Connor
Nicole Brown

SH 46922

CHAIN OF CUSTODY RECORD

SPECTRUM ANALYTICAL, INC.
Featuring
RANSOM TECHNOLOGY

Page 1 of 1

Special Handling:
- ☐ Standard TAT - 7 to 10 business days
- ☒ Rush TAT - Date Needed: 2/21/06
- All TATs subject to laboratory approval.
- Min. 24-hour notification needed for rushes.
- Samples disposed of after 60 days unless otherwise instructed.

Report To: REI
Invoice To: REI
Project No.: K-Cargill
Site Name: Cargill Energy
Location: Dorchester State: MA
Project Mgr: JCURTIS
P.O No.: RQN:
Sampler(s): MCEIGER

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=4°C 10=

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

G=Grab C=Composite

Lab Id:	Sample Id:	Date:	Time:	Type	Matrix	Preservative	Containers: # of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	Analyses: TSS/Total Metals/BOD + Hg	Total Cyanide	Hex Chromium	TPH 1664	EDB 504.1	VOC 8260	RCRA Cat 8	SVOC 8270	QA Reporting Notes: (check if needed)
46922-01	Groundwater	2/15/06	0944	G	GW	2,4,9	3	3		3	X	1	1	1	1	1	1	X	7 See Attached schedule of compounds

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

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

State specific reporting standards:

Fax results when available to (508) 795-0910
E-mail to: ok MGeiger@spectrumanalytical.com
EDD Format PDF MGeiger@spectrumanalytical.com

Condition upon receipt: ☐ Iced ☐ Ambient ☐ °C 3

Relinquished by:	Received by:	Date:	Time:
		2/16/06	1443
		2/16/06	1725

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

IW Arrangements

* Reportable Detection Limit BRL = Below Reporting Limit

SPECTRUM ANALYTICAL, INC.
Featuring
HANNIBAL TECHNOLOGY

CHAIN OF CUSTODY RECORD

Page 1 of 1

SDH 46922

Special Handling:
- ☐ Standard TAT - 7 to 10 business days
- ☒ Rush TAT - Date Needed: 2/21/06
- All TATs subject to laboratory approval. Min. 24-hour notification needed for rushes.
- Samples disposed of after 60 days unless otherwise instructed.

Report To: REI
Invoice To: REI
Project No.: K-Cargill
Site Name: Cargill Energy
Location: Dorchester State: MA
Project Mgr.: JYRNS
P.O. No.: RQN:
Sampler(s): MGEIGER

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=4°C 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	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic		TSS/Total Metals Sec 7 + Hg	Total Cyanide	Hex Chromium	TPH 1664	EDB 504.1	VOC 8260	PCB 608	SVOC 625	QA Reporting Notes: (check if needed)
46922-1	Groundwater	2/15/06	0944	G	GW	2,4,9	3	3		3		X	4	4	9	7	7	7	7	7 See Attached schedule of compounds

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

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

State specific reporting standards:

Cancel Hex Cr. Do not hold time per S.C.

Fax results when available to: 505 795-0910
~~E-mail to:~~ OK MGeiger@spectrumanalytical.com
EDD Format: pdf MGeiger@spectrumanalytical.com

Condition upon receipt: ☐ Iced ☐ Ambient ☒ °C 3

Relinquished by:	Received by:	Date:	Time:
		2/16/06	1443
		2/16/06	1725

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

IN Refrigerator

Report Date:
22-Feb-06 15:46

☑ Final Report
☐ Re-Issued Report
☐ Revised Report

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

Laboratory Report

Response Environmental, Inc.
563 Main Street; Suite 211
Worcester, MA 01608
Attn: Jeff Curtis

Project: Cargill Energy Inc-Dorchester, MA
Project #: K-Cargill

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
SA40988-01	Groundwater 1	Ground Water	20-Feb-06 14:01	21-Feb-06 07:15

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. All applicable NELAC requirements have been met.
Please note that this report contains 5 pages of analytical data including Chain of Custody document(s).
This report may not be reproduced, except in full, without written approval from Spectrum Analytical, Inc.

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

Authorized by:

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

Spectrum Analytical, Inc. is a NELAC accredited laboratory organization and meets NELAC testing standards. Use of the NELAC logo however does not insure that Spectrum is currently accredited for the specific method indicated. Please refer to our "Quality" webpage at www.spectrum-analytical.com for a full listing of our current certifications.

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
Groundwater 1 SA40988-01	K-Cargill	Ground Water	20-Feb-06 14:01	21-Feb-06

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
General Chemistry Parameters											
1854-029-9	Hexavalent Chromium	BRL		mg/l	0.005	1	SM3500CrD/7196A	21-Feb-06 12:00	21-Feb-06	6021216	ES

This laboratory report is not valid without an authorized signature on the cover page.

* Reportable Detection Limit BRL = Below Reporting Limit

General Chemistry Parameters - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 6021216 - General Preparation										
Blank (6021216-BLK1)										
Prepared & Analyzed: 21-Feb-06										
Hexavalent Chromium	BRL		mg/l	0.005						
LCS (6021216-BS1)										
Prepared & Analyzed: 21-Feb-06										
Hexavalent Chromium	0.049		mg/l	0.005	0.0500		98.0	90-110		
Duplicate (6021216-DUP1)	Source: SA40988-01									
Prepared & Analyzed: 21-Feb-06										
Hexavalent Chromium	BRL	QR-01	mg/l	0.005		0.003			40.0	20
Matrix Spike (6021216-MS1)	Source: SA40988-01									
Prepared & Analyzed: 21-Feb-06										
Hexavalent Chromium	0.049		mg/l	0.005	0.0500	0.003	92.0	80-120		
Reference (6021216-SRM1)										
Prepared & Analyzed: 21-Feb-06										
Hexavalent Chromium	0.022		mg/l	0.005	0.0250		88.0	85-115		

Notes and Definitions

QR-01	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.
BRL	Below Reporting Limit - Analyte NOT DETECTED at or above the reporting limit
dry	Sample results reported on a dry weight basis
NR	Not Reported
RPD	Relative Percent Difference

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

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

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

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

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

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

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

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

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

SA 40988

SPECTRUM ANALYTICAL, INC.
Formerly
HANDEX TECHNOLOGY

CHAIN OF CUSTODY RECORD

Page 1 of 1

Special Handling:
- ☐ Standard TAT - 7 to 10 business days
- ☒ Rush TAT - Date Needed: 22 Feb 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: Response Environmental Inc
563 Main ST #211
Worcester MA 01608

Project Mgr.: J. Curtis

Invoice To: Same

P.O. No.: K Cargill RQN:

Project No.: K-Cargill
Site Name: Cargill Energy
Location: Dorchester State: MA
Sampler(s): M Geiger

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= 4°C 10=

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

G=Grab C=Composite

Lab Id:	Sample Id:	Date:	Time:	Type	Matrix	Preservative	Containers: # of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	Analyses: Hex Chromium	QA Reporting Notes: (check if needed)
SA40988-01	GROUNDWATER1	20Feb06	1401	G	GW	9				1	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:

☒ Fax results when available to (508) 795-0510
☒ E-mail to mgeiger@spillmanager.com
EDD Format

Condition upon receipt: ☐ Iced ☐ Ambient ☒ 2°C

Relinquished by:	Received by:	Date:	Time:
	Mary Bernard	2/21/06	0715

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

This laboratory report is not valid without an authorized signature on the cover page.

* Reportable Detection Limit BRL = Below Reporting Limit