NEWFIELDS

NHG910030 GP

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OVERNIGHT DELIVERY

December 29, 2005

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

JAN 5 2006

RE: ***NPDES REMEDIATION GENERAL PERMIT – NOI Submittal***
Shell-Branded Service Station
137 First New Hampshire Turnpike
Northwood, Rockingham County, NH
NHDES 200201042-LUST-WLP3
GMP #200201042-N-001

To Whom It May Concern:

Motiva Enterprises LLC is operating a Shell branded retail gasoline service station at the above referenced facility. Remediation of the facility is being conducted under the oversight of NH DES. A groundwater remediation system is currently operating under EPA Permit Exclusion #NH-04I-016. The receiving stream is a tributary of the North River which flows to the North River (Class B). The North River is not listed on the 2002 USEPA List of Impaired Waters website, http://oaspub.epa.gov/waters/state_rept.control?p_state=NH (i.e. 303(d) list).

On September 9, 2005, the USEPA published the NPDES Remediation General Permit ("RGP") in the Federal Register. It stated the deadline for submittal of Notice of Intents ("NOI") or individual NPDES applications for those facilities currently discharging under USEPA Permit Exclusions was October 10, 2005. On September 19, 2005, NewFields requested, in writing, a 60-day extension to the October 10, 2005 deadline. On October 6, 2005, George Papadopoulos granted an extension until October 24, 2005 via electronic mail. The electronic mail stated that in cases where the permittee was unable to submit all the required information by October 24, 2005, the application should be submitted with as much information as possible and supplemental data provided when it becomes available. On October 24, 2005, NewFields Princeton LLC, on behalf of Motiva, electronically submitted an incomplete individual NPDES permit application package for the above referenced facility. In a letter dated December 29, 2005, Motiva withdrew, in writing, the individual NPDES permit application package. Enclosed herein is a complete NPDES RGP application package to replace the October 24, 2005 individual NPDES permit application.

Pursuant to the NPDES RGP requirements, samples of the influent to the remediation system were taken and analyzed by State of Massachusetts certified laboratories. The final data packages and associated quality control/ quality assurance ("QA/QC") documents are enclosed herein. The metal results from the influent sampling were compared to the Appendix III, and then the Appendix IV 0-5 dilution range, limitations. The cadmium, copper, lead nickel, zinc and iron were above the Appendix III and Appendix IV 0-5 dilution range limitations. It should be noted that these metals are naturally occurring in the groundwater and are not associated with the remediation project. Samples of cadmium, copper, iron, lead, nickel and zinc were taken in the receiving stream (North River). The results were 315 ug/l for iron and non-detect for the remaining parameters. The EPA should take the iron concentration into account when issuing the permit conditions.

NEWFIELDS PRINCETON, LLC.
22 West Street, Red Bank, NJ 07701
Tel: (732) 224-7066/ Fax: (732) 224-7633

The NPDES Remediation General Permit and associated *Response to Comments* document, allow the permittee to request revisions to the permit conditions based upon site-specific conditions. The following is a list of the requested revisions for this facility.

TEMPERATURE
In the *Response to Comments* document, the EPA agreed that "temperature limits should only apply if the water treatment contains a heating process that can alter the temperature of the discharge and therefore impact the receiving water body"....Therefore the EPA will review each NOI and determine whether the discharge has the potential to affect the temperature sufficiently enough to require monitoring". Since the existing groundwater treatment system does not, and will not, alter the temperature of the receiving waterbody, we are requesting that the EPA not impose monitoring and sampling requirements for temperature at the above referenced location.

EXEMPTION FROM INITIAL START-UP SAMPLING REQUIREMENTS
In the *Response to Comments* document, the EPA agreed that "treatment systems operating under the EPA Permit Exclusion that have been discharging for several years, unless the system has been down for 45 days or more as of the date that the final RGP becomes effective, can be exempted from the initial start-up sampling requirements." Since the referenced remediation system has been discharging under an EPA Permit Exclusion, and has not been down for greater than 45 days as of the date the RGP became effective (September 9, 2005), we are requesting exemption from the initial start-up sampling requirements listed in the RGP.

COMPLIANCE PERIOD
In the *Response to Comments* document, the EPA stated they "will make every effort to provide existing dischargers with sufficient transition time to make any necessary changes to the treatment system in order to comply with the RGP." Based on the influent sampling results enclosed herein, the EPA may impose sampling for parameters not previously required, or lower limitations on parameters currently required. In order to avoid ceasing operation of the groundwater remediation system due to the risk of Notice of Violations (NOVs) and monetary penalties, the EPA should permit a compliance period of 30 months years. During this compliance period the EPA should waive the limitations on those parameters not previously required and maintain the existing limit on those parameters currently required to be sampled on a monthly basis under the EPA Permit Exclusion for a period of 30 months from the effective date of the permit. Regulation 40 CFR Part 122.47 allows a maximum compliance period of three years.

A compliance period of 30 months years is requested for the following reasons:

- The permittee needs to collect additional influent, midpoint and effluent data from the existing remediation system over a period of 12 months in order to determine if a system modification is warranted; one year is needed to account for the temperature changes and groundwater table fluctuations.
- If the sampling results indicate a system modification is warranted, an additional 18 months years is needed in order for the following activities to be performed: redesign of the treatment system by a professional engineer, research of various treatment options, obtain local permits, obtain access agreements, obtain capital dollars for equipment purchase, purchase equipment, install equipment, power drop modifications, existing treatment shed expansions and pilot testing the new treatment equipment.

APPROVAL OF ALTERNATE METHODOLOGIES

HEXAVALENT CHROMIUM
In the *Response to Comments* document, the EPA agreed that "Method 7196A is a possible substitute" for the hexavalent chromium methods 218.6 and 1636. To use this method, permittees were instructed to request it individually as an alternative test procedure. The permittee was unable to locate any labs able to run hexavalent chromium by method 218.6 or 1636 since they are considered outdated methods. Method 7196A is currently utilized. The required ML of 10 ug/l is achievable by this method. Thus we are requesting the EPA approve method 7196A for hexavalent chromium for this facility.

TOTAL CHROMIUM

In the *Response to Comments* document, the EPA allowed methods 200.15, 200.7, 200.8, 200.9, 218.1 or 1620 to be utilized for the analysis of Total Chromium. Method 6010B is the SW846 approved equivalent method to 200.7. Therefore we are requesting approval of method 6010B for total chromium (see attached letter from Accutest Laboratories).

TOTAL CYANIDE

Appendix VI of the NPDES RGP specifies the test method for Total Cyanide is 335.4. This method has not been approved for use to date, therefore method 335.3 was utilized.

APPROVAL OF ALTERNATE MLs

TOTAL ZINC

The ML listed for Total Zinc using an ICP test method is 10 ug/l. A survey of laboratories showed that the lowest ML obtainable was 20 ug/l. Thus we are requesting the USEPA accept this alternate ML. The laboratory QA/QC data deliverable package has been enclosed for your convenience.

TOTAL COPPER

The ML listed for Total Copper using an ICP test method is 5 ug/l. A survey of laboratories showed that the lowest ML obtainable was 25 ug/l with an instrument detection level (IDL) of 5 ug/l. Thus we are requesting the USEPA accept this alternate ML. The laboratory QA/QC data deliverable package has been enclosed for your convenience.

ETHYLENE DIBROMIDE

The ML listed for Ethylene Dibromide using method 504.1 is 0.01 ug/l. A survey of laboratories showed that the lowest ML obtainable was 0.015 ug/l. Thus we are requesting the USEPA accept this alternate ML. The laboratory QA/QC data deliverable package has been enclosed for your convenience.

Motiva and NewFields appreciate your consideration of our requests. If you have any questions, or require any additional information, I may be contacted at (732) 224-7066 extension 17.

Respectfully,
NewFields Princeton LLC

Michelle L. Smith
Project Scientist

Enclosures:
Notice of Intent Form
Figures
Dilution Factor Calculations
Approved Massachusetts Year 2002 Integrated List of Waters, September 2003 (303(d) list)
Laboratory Analytical (Receiving Stream)
Laboratory Analytical (System Influent)

C: New Hampshire Department of Environmental Services
Water Division
Wastewater Engineering Bureau
P.O. Box 95
Concord, NH 03302-0095
(w/ enclosures)

Town of Northwood
818 First New Hampshire Turnpike
Northwood, NH 03261
(w/ enclosures)

David Weeks, Shell OPUS
(w/ enclosures) via electronic mail

Benjamin Rieger, GSC|Kleinfelder
(w/ enclosures) via electronic mail

NewFields File
(w/ enclosures)

NOI FORM

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**: Shell-Branded Service Station		**Facility/site** address:		
Location of **facility/site**: longitude: 71° 08' 56" latitude: 43° 11' 37"	Facility SIC code (s): 5541	Street: 137 First New Hampshire Turnpike		
b) Name of facility/site **owner**: Motiva Enterprises LLC		Town: Northwood		
Email address of owner: David.Weeks@Shell.com		State: NH	Zip: 03261	County: Rockingham
Telephone no. of facility/site **owner**: 845-462-5225				
Fax no. of facility/site **owner**: 845-462-4999		**Owner** is (check one) 1. Federal ☐ 2. State/Tribal ☐ 3. Private ☐ 4. other, ☒ if so, describe: Corporation		
Address of **owner** (if different from site):				
Street: 1830 South Road, Unit 24, PMB 301				
Town: Wappingers Falls	State: NY	Zip: 12590	County: Dutchess	
c.) Legal name of **operator**: Motiva Enterprises LLC	**Operator** telephone no.: 845-462-5225			
	Operator fax no.: 845-462-4999	**Operator** email: David.Weeks@Shell.com		
Operator contact name and title: David Weeks, Senior Environmental Engineer				
Address of **operator** (if different from owner):	Street: 1830 South Road, Unit 24, PMB 301			
Town: Wappingers Falls	State: NY	Zip: 12590	County: Dutchess	

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: NH-04I-016
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 ☐ N/A

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: 2. permit or license # assigned: 3. state agency contact information: name, location, and telephone number:	f) Is the site/facility covered by any other EP A permit, including: 1. multi-sector storm water general permit? Yes ☐ No ☒, if Y, number: 2. phase I or II construction storm water general permit? Yes ☐ No ☒, if Y, number: 3. individual NPDES permit? Yes ☐ No ☒, if Y, number: 4. any other water quality related permit? Yes ☐ No ☒, 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: Groundwater remediation project at retail gasoline service station.		
b) Provide the following information about each discharge:	1) Number of discharge points: One (1)	2) What is the **maximum** and **average flow rate** of discharge (in cubic feet per second, W/s)? Max. flow 0.067 ft^3/sec Average flow 0.033 ft^3/sec Is maximum flow a **design value**? Yes ☐ No ☒, For average flow, include the units and appropriate notation if this value is a design value or estimate if not available. Average flow 0.033 ft^3/sec (based on historical operations)
3) Latitude and longitude of each discharge within 100 feet: pt.1: long. 71° 08' 56" lat. 41° 11' 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 March 2005 end unknown	
d) Please attach a line drawing or flow schematic showing water flow through the facility including: See attached. 1. sources of intake water, 2. contributing flow from the operation, 3. treatment units, and 4. discharge points and receiving waters(s).	

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

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

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

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

PARAMETER	Believe Absent	Believe Present	#of Samples (1 min-imum)	Type of Sample (e.g., grab)	Analytical Method Used (method #)	Minimum Level (ML) of Test Method (ug/l)	Maximum daily value		Avg. daily value	
							concentration (ug/l)	mass (~~kg~~) (kg/day)	concentration (ug/l)	mass (~~kg~~) (kg/day)
1. Total Suspended Solids		√	1	GRAB	160.2	4000	59000	9.6623		
2. Total Residual Chlorine	√		1	GRAB	330.5	20	<20	<0.0033		
3. Total Petroleum Hydrocarbons	√		1	GRAB	1664	4100	<4100	<0.6714		
4. Cyanide	√		1	GRAB	335.3	10	<10	<0.0016		
5. Benzene		√	1	GRAB	8260B	0.5	<0.5	<0.0001		
6. Toluene		√	1	GRAB	8260B	1.0	<1.0	<0.0002		
7. Ethylbenzene		√	1	GRAB	8260B	1.0	<1.0	<0.0002		
8. (m,p,o) Xylenes		√	1	GRAB	8260B	1.0	<1.0	<0.0002		
9. Total BTEX[4]		√	1	GRAB	8260B	-----	<1.0	<0.0002		

[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 (ug/l)	Maximum daily value		Avg. daily value	
							concentration (ug/l)	mass ~~(kg)~~ (kg/day)	concentration (ug/l)	mass ~~(kg)~~ (kg/day)
10. Ethylene Dibromide (1,2- Dibromo-methane)	√		1	GRAB	504.1	0.015	<0.015	<2.4E-06		
11. Methyl-tert-Butyl Ether (MtBE)		√	1	GRAB	8260B	5.0	551	0.0902		
12. tert-Butyl Alcohol (TBA)		√	1	GRAB	8260B	100	<100	<0.0164		
13. tert-Amyl Methyl Ether (TAME)		√	1	GRAB	8260B	2.0	<2.0	<0.0003		
14. Naphthalene		√	1	GRAB	8270C SIM	0.11	0.16	2.62E-05		
15. Carbon Tetra-chloride	√		1	GRAB	8260B	1.0	<1.0	<0.0002		
16. 1,4 Dichlorobenzene	√		1	GRAB	8260B	1.0	<1.0	<0.0002		
17.1,2 Dichlorobenzene	√		1	GRAB	8260B	1.0	<1.0	<0.0002		
18. 1,3 Dichlorobenzene	√		1	GRAB	8260B	1.0	<1.0	<0.0002		
19. 1,1 Dichloroethane	√		1	GRAB	8260B	1.0	<1.0	<0.0002		
20. 1,2 Dichloroethane	√		1	GRAB	8260B	1.0	<1.0	<0.0002		
21. 1,1 Dichloroethylene	√		1	GRAB	8260B	1.0	<1.0	<0.0002		
22. cis-l,2 Dichloro-ethylene	√		1	GRAB	8260B	25.0	<25	<0.0041		
23. Dichloromethane (Methylene Chloride)	√		1	GRAB	8260B	2.0	<2.0	<0.0003		
24. Tetrachloroethylene	√		1	GRAB	8260B	1.0	<1.0	<0.0002		

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 (ug/l)	Maximum daily value		Avg. daily Value	
							concentration (ug/l)	mass ~~(kg)~~ (kg/day)	concentration (ug/l)	mass ~~(kg)~~ (kg/day)
25. 1,1,1 Trichloroethane	√		1	GRAB	8260B	1.0	<1.0	<0.0002		
26. 1,1,2 Trichloroethane	√		1	GRAB	8260B	1.0	<1.0	<0.0002		
27. Trichloroethylene	√		1	GRAB	8260B	1.0	<1.0	<0.0002		
28. Vinyl Chloride	√		1	GRAB	8260B	1.0	<1.0	<0.0002		
29. Acetone	√		1	GRAB	8260B	5.0	17.7	0.0029		
30. 1,4 Dioxane	√		1	GRAB	8260B	25	<25	<0.0041		
31. Total Phenols	√		1	GRAB	8270C	See lab data	See lab data (Not Detected)	----		
32. Pentachlorophenol	√		1	GRAB	8270C SIM	1.1	<1.1	<0.0002		
33. Total Phthalates [6] (phthalate esthers)	√		1	GRAB	8270C	11	<11	<0.0018		
34. Bis (2-Ethylhexyl) Phthalate [Di-(ethylhexyl) Phthalate]	√		1	GRAB	8270C	11	<11	<0.0018		
35. Total Group I Polycyclic Aromatic Hydrocarbons (PAH)	√		1	GRAB	8270C	See lab data	See lab data (Not Detected)	----		
a. Benzo(a) Anthracene	√		1	GRAB	8270C	0.056	<0.056	<9.17E-06		
b. Benzo(a) Pyrene	√		1	GRAB	8270C	0.11	<0.11	<1.80E-05		
c. Benzo(b)Fluoranthene	√		1	GRAB	8270C	0.056	<0.056	<9.17E-06		
d. Benzo(k) Fluoranthene	√		1	GRAB	8270C	0.11	<0.11	<1.80E-05		
e. Chrysene	√		1	GRAB	8270C	0.11	<0.11	<1.80E-05		

[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 (ug/l)	Maximum daily value		Average daily value	
							concentration (ug/l)	mass ~~(kg)~~ (kg/day)	concentration (ug/l)	mass ~~(kg)~~ (kg/day)
f. Dibenzo(a,h) anthracene	√		1	GRAB	8270C	0.11	<0.11	<1.80E-05		
g. Indeno(1,2,3-cd) Pyrene	√		1	GRAB	8270C	0.11	<0.11	<1.80E-05		
36. Total Group II Polycyclic Aromatic Hydrocarbons (pAR)	√		1	GRAB	8270C	0.11	0.16	2.62E-05		
h. Acenaphthene	√		1	GRAB	8270C	0.11	<0.11	<1.80E-05		
i. Acenaphthylene	√		1	GRAB	8270C	0.11	<0.11	<1.80E-05		
j. Anthracene	√		1	GRAB	8270C	0.11	<0.11	<1.80E-05		
k. Benzo(ghi) Perylene	√		1	GRAB	8270C	0.11	<0.11	<1.80E-05		
l. Fluoranthene	√		1	GRAB	8270C	0.11	<0.11	<1.80E-05		
m. Fluorene	√		1	GRAB	8270C	0.11	<0.11	<1.80E-05		
n. Naphthalene		√	1	GRAB	8270C	0.11	0.16	2.62E-05		
o. Phenanthrene	√		1	GRAB	8270C	0.11	<0.11	<1.80E-05		
p. Pyrene	√		1	GRAB	8270C	0.11	<0.11	<1.80E-05		
37. Total Polychlorinated Biphenyls (PCBs)	√		1	GRAB	608	0.55	<0.55	<9.01E-05		
38. Antimony	√		1	GRAB	3113B	5.0	<5.0	<8.19E-04		
39. Arsenic	√		1	GRAB	3010A-6010B	5.0	<5.0	<8.19E-04		
40. Cadmium		√	1	GRAB	3113B	0.5	2.4	0.0004		
41. Chromium III (1)	√		1	GRAB	Calculated	See lab data	See lab data (ND)	----		
42. Chromium VI	√		1	GRAB	7196A	500	<500	<0.0819		

NOTES: (1) Chromium III = Total Chromium – Hexavalent Chromium

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 (ug/l)	Maximum daily value		Avg. daily value	
							concentration (ug/l)	mass ~~(kg)~~ (kg/day)	concentration (ug/l)	mass ~~(kg)~~ (kg/day)
43. Copper (2)		√	1	GRAB	3010A-6010B	25	31.4	0.0051		
44. Lead		√	1	GRAB	3113B	2.0	9.0	0.0015		
45. Mercury	√		1	GRAB	7470A	0.20	<0.20	<3.28E-05		
46. Nickel		√	1	GRAB	200.7	5.0	49.0	0.0080		
47. Selenium	√		1	GRAB	3113B	5.0	<5.0	<8.19E-04		
48. Silver	√		1	GRAB	3113B	0.5	<0.5	<8.19E-05		
49. Zinc		√	1	GRAB	200.7	20	860	0.1408		
50. Iron		√	1	GRAB	3010A-6010B	100	133000	21.7810		
Other (describe):	----	----	----	----	----	----	----	----	----	----

NOTE: (2) Total Copper, Instrument Detection Level (IDL) = 5 ug/l.

NOTE: All daily maximum mass loadings calculated using design flow rate of 30 GPM.

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? Cd, Cu, Pb, Fe, Ni, Zn .
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: Cd, Cu, Pb, Fe, Ni, Zn . DF: 0.9 .	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: Cd, Cu, Pb, Fe, Ni, Zn .

4. Treat. system information. Please describe the treatment system using separate shee necessary, including:

a) A description of the treatment system, including a schematic of the proposed or existing treatment system:
The groundwater remediation system is treating water from multiple recovery wells which consists of a holding tank, bag filters and three granular activated carbon units.

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 15 GPM Maximum flow rate of treatment system 30 GPM Design flow rate of treatment system 30 GPM

d) A description of chemical additives being used or planned to be used (attach MSDS sheets): Not Applicable

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

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:
Discharge to detention pond to unnamed tributaries of the North River to the North River (Class B).
Piscataqua River Basin.

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. See Figures

d) Provide the state water quality classification of the receiving water Class B (freshwater) .

e) Provide the reported or calculated seven day-ten year low flow (7QlO) of the receiving water 0.00 cfs

Please attach any calculation sheets used to support stream flow and dilution calculations. See attached.

f) Is the receiving water a listed 303(d) water quality impaired or limited water? Yes ☐ No ☒ If yes, for which pollutant(s)?

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

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

a) Are any listed threatened or endangered species, or designated critical habitat, in proximity to the discharge? Yes ☐ No ☒
Has any consultation with the federal services been completed? 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): Not applicable

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. :

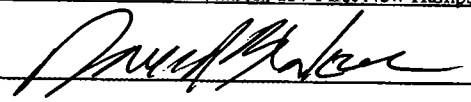
Please provide any supplemental information. **Attach any analytical data used to support the application**. Attach any certification(s) required by the general permit.

See cover letter.

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: Shell-Branded Service Station, 137 First New Hampshire Turnpike, Northwood, NH

Operator signature: 

Title: David Weeks, Senior Environmental Engineer

Date: 12/27/2008

FIGURES

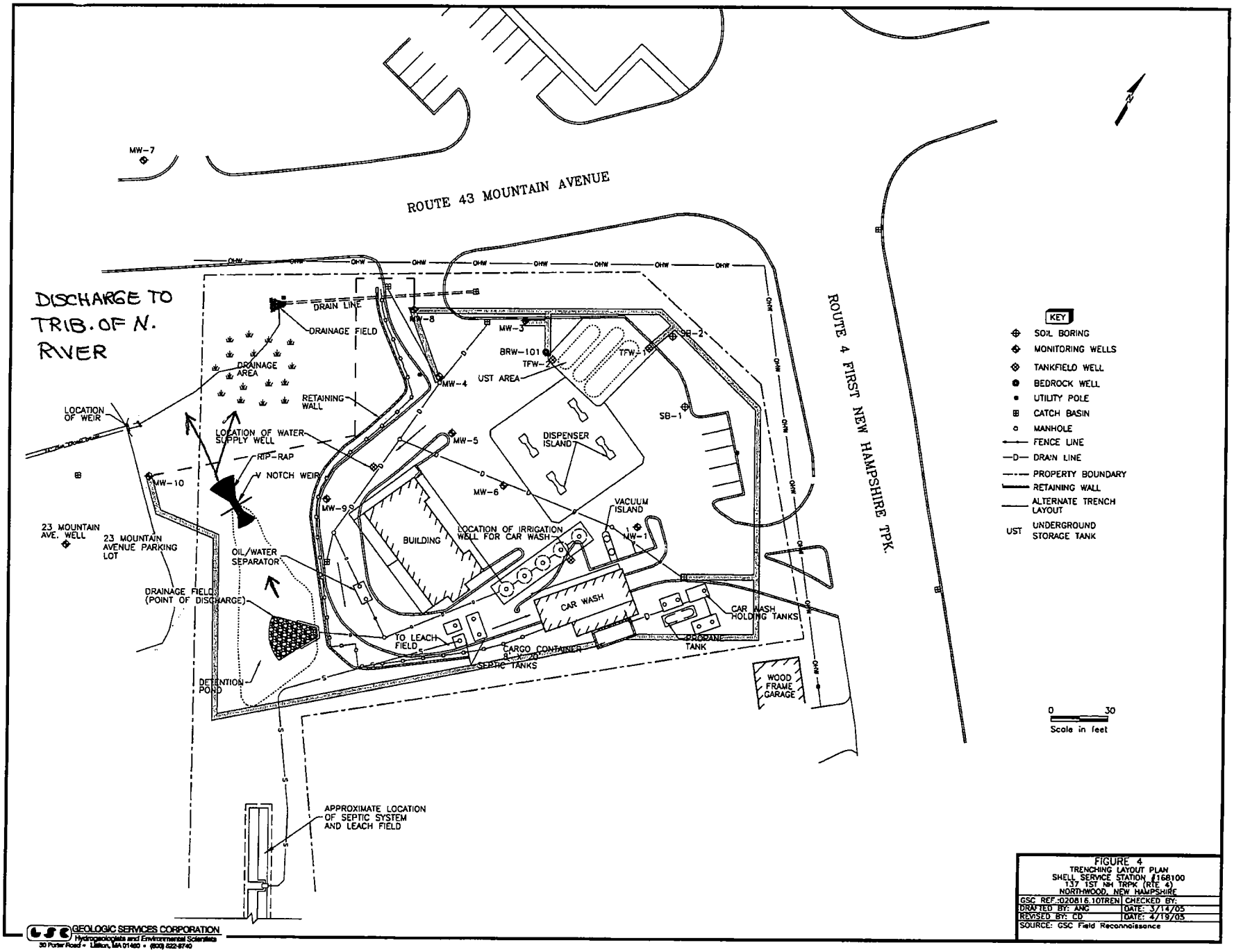
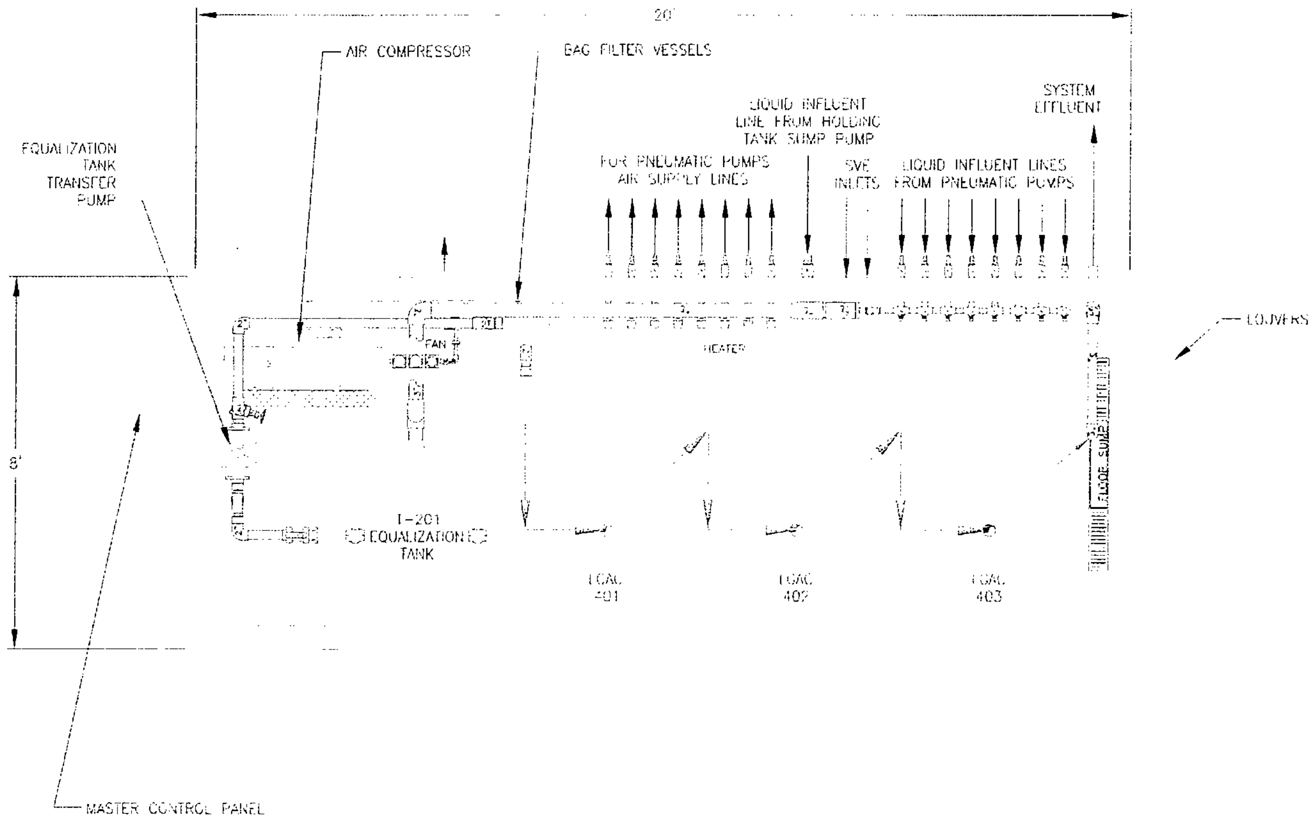


FIGURE 4
TRENCHING LAYOUT PLAN
SHELL SERVICE STATION #168100
137 1ST NH TRPK (RTE 4)
NORTHWOOD, NEW HAMPSHIRE

GSC REF.:D20016.10TREN	CHECKED BY:
DRAFTED BY: ANC	DATE: 3/14/05
REVISED BY: CD	DATE: 4/19/05
SOURCE: GSC Field Reconnaissance	

GEOLOGIC SERVICES CORPORATION
Hydrogeologists and Environmental Scientists
30 Porter Road • Littleton, MA 01460 • (800) 822-8740



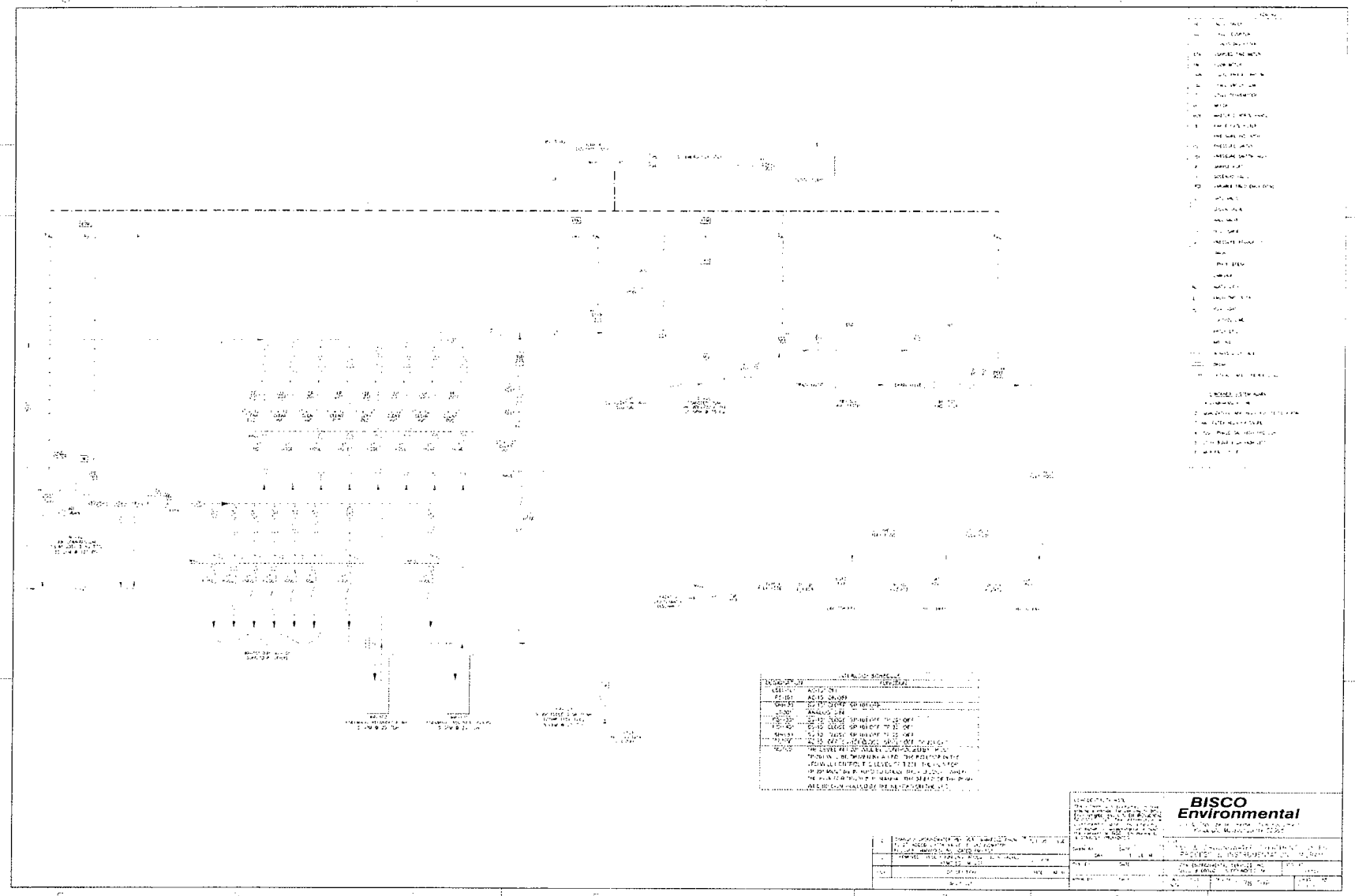
NOTES:
1) CONTAINER TO MATCH MOTIVA'S PAINT SCHEME. CONTAINER TO BE WHITE WITH 1 FOOT GRAY STRIP ALONG BOTTOM EDGE.
2) SVE INLETS ARE 2" PENETRATION CAPPED INSIDE CONTAINER

REV	DESCRIPTION	DATE	APPR
1	RECONFIGURED CONTAINER LAYOUT & ADDED FLOOR SUMP	11/15/04	JAD
2	RELOCATED FAN & LOUVER, ROTATED COMPRESSOR	11/30/04	JAD
REVISIONS			

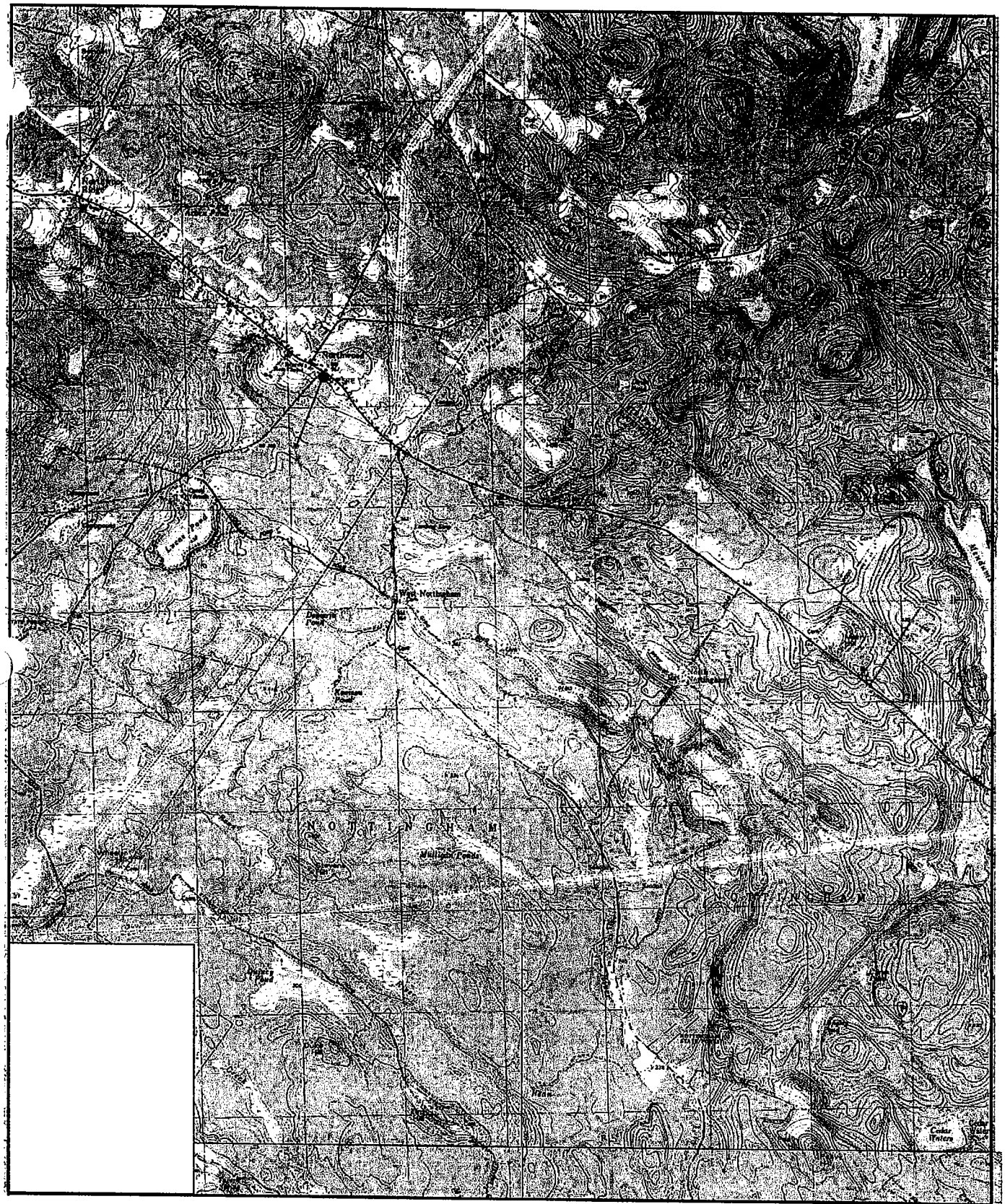
CONFIDENTIALITY NOTE: The information contained in this drawing is intended for use only by BISCO Environmental and CYN ENVIRONMENTAL SERVICES, INC. The information is confidential and any copying, distribution or dissemination without the consent of BISCO Environmental is STRICTLY PROHIBITED

BISCO Environmental
Soil & Groundwater Remediation Equipment
Randolph, Massachusetts 02368

DRWN BY: TJM	DATE: 11/1/04	TITLE: GROUNDWATER WATER TREATMENT SYSTEM, LAYOUT DRAWING			
CHK BY	DATE	CYN ENVIRONMENTAL SERVICES, INC. SHELL #169100 - NORTHWOODS, NH		JOB NO 11787	
APPR BY	DATE	SCALE 1"= 20'	SIZE C	DWG NO 11787Mc-01	SHEET 1 OF 1 / REV 2

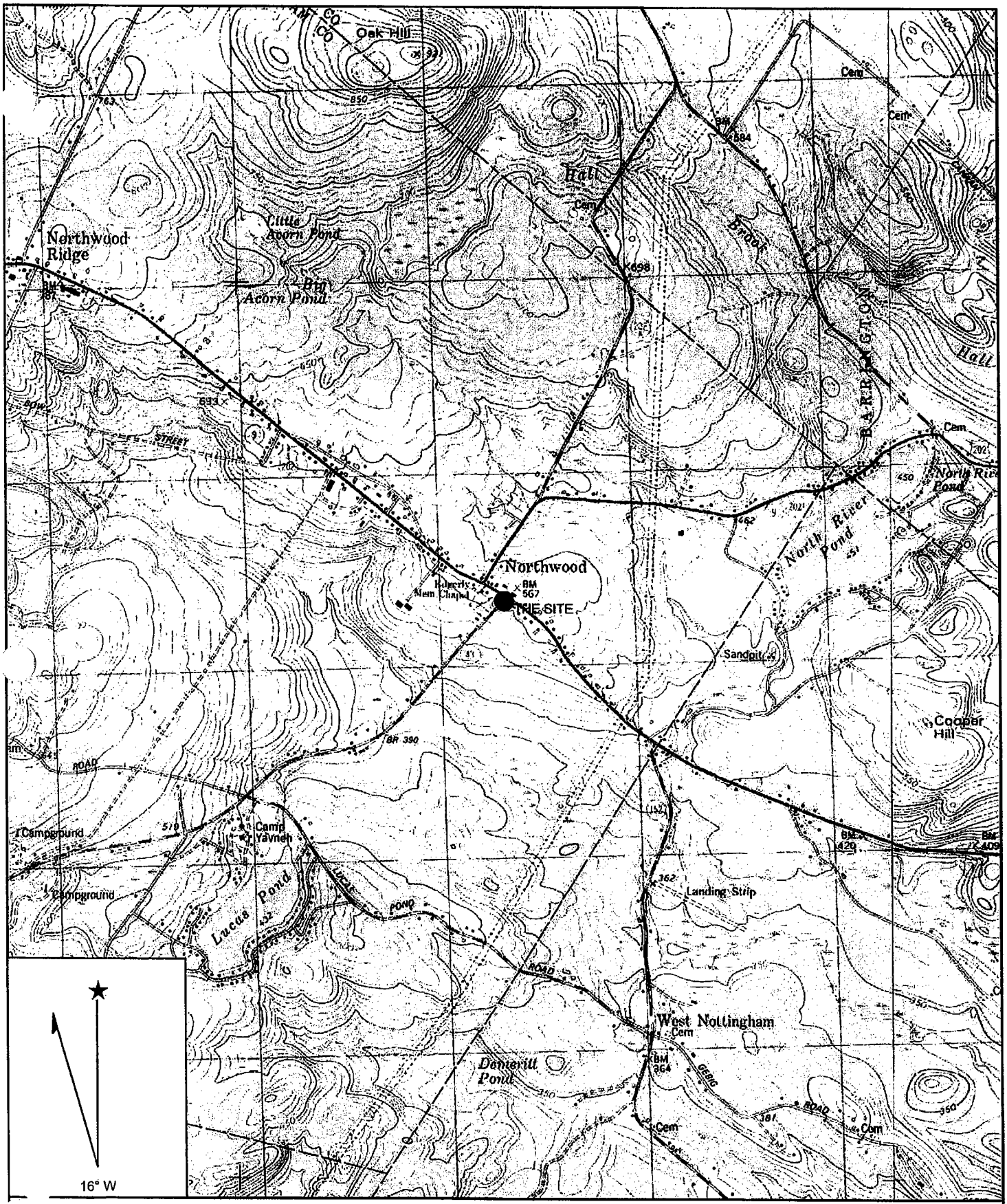


BISCO Environmental



Name: NORTHWOOD
Date: 10/21/2005
Scale: 1 inch equals 4000 feet

Location: 043° 10' 23.4" N 071° 07' 39.5" W
Caption: Figure 1 - Locus Plan
Shell Service Station #168100
137 1st NH Tmpk. (Rte. 4), Northwood, New Hampshire



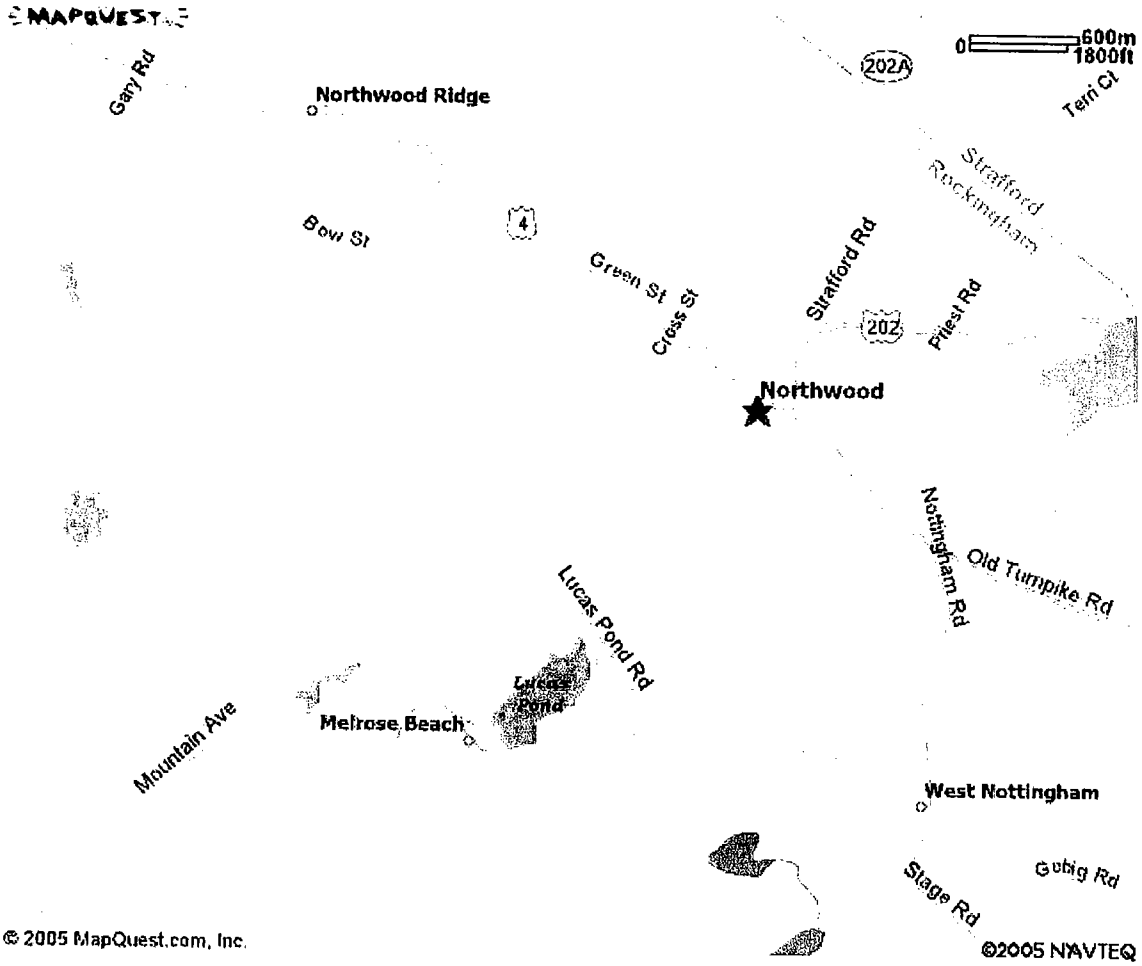
Name: NORTHWOOD
Date: 4/22/2005
Scale: 1 inch equals 2000 feet

Location: 043° 11' 36.3" N 071° 08' 58.7" W
Caption: Figure 1 - Locus Plan
Shell Service Station #168100
137 1st NH Trnpk. (Rte. 4), Northwood, New Hapshire

MAPQUEST

Northwood NH
US

Notes:



DILUTION FACTOR CALCULATIONS

DILUTION FACTOR CALCULATION WORKSHEET
INDIVIDUAL NPDES PERMIT APPLICATION

Site: Shell-Branded Service Station
Address: 137 First New Hampshire Turnpike, Northwood, NH
Receiving Stream: North River (Class B)

30 = Maximum flow rate of the discharge (gpm)

Qd = 0.0669 = Maximum flow rate of the discharge in cubic feet per second (cfs), 1.0 gpm = 0.00223 cfs

Qs = 0.00 = Receiving water 7Q10 flow (cfs) where,

7Q10 = The minimum flow (cfs) for 7 consecutive days with a recurrence interval of 10 years

0.9 = Allowance for reserving 10% of the assests in the receiving stream as per Chapter ENV-Ws 1700, Surface Water Quality Regulations

Maximum DF = [(Qd + Qs) / Qd] * 0.9

Maximum DF = Dilution Factor = 0.90

NOTE:
Source: Jeff Andrews, NHDES, Phone: 603-271-2984

LABORATORY ANALYTICAL

(SYSTEM INFLUENT)

NETLAB

REPORT OF ANALYTICAL RESULTS

NETLAB Case Number Q0922-19

Revised Report

Prepared for:

Geologic Services Corp.
30 Porter Road
Littleton, MA 01460
Attn: Trish Eliasson

Report Date: October 4, 2005

Lab # RI010

Electronic Copy

NEW ENGLAND TESTING LABORATORY, INC.
1254 Douglas Avenue, North Providence, RI 02904
(401) 353-3420

Total # of Pages: 13

ANALYTICAL METHOD REPORT CERTIFICATION FORM

Laboratory Name: New England Testing Laboratory, Inc. Project #:

Project Location: Shell Northwood RTN[1]:

This form provides certifications for the following data set: Q0922-19

Sample Matrices: Groundwater (X) Soil/Sediment ( ) Drinking Water ( ) Other:

SW-846 Methods Used					
	8260B ( )	8151A ( )	8330 ( )	6010B (X)	7470A/1A ( )
	8270C ( )	8081A ( )	VPH ( )	6020 ( )	9014M[2] ( )
	8082 ( )	8021B ( )	EPH ( )	7000 S[3] (X)	Other: (X)

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, and C 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 (X) No[1] ( )
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 (X) No[1] ( )
C	Does the analytical data included in this report meet all the requirements for "Presumptive Certainty", as described in Section 2.0 of the MADEP document CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?	Yes (X) No[1] ( ) Not Applicable ( )
D	***VPH and EPH Methods only***: Was the VPH and EPH Method conducted without significant modifications (see Section 11.3 of respective Methods)	Yes ( ) No[1] ( )

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

E	Were all QC performance standards and recommendations for the specified methods achieved?	Yes (X) No[1] ( )
F	Were results for all analyte-list compounds/elements for the specified method(s) reported?	Yes (X) No[1] ( )

[1]*All NO answers must be addressed in an attached Environmental Laboratory case narrative.*

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.

Signature: Jodi Lyons Position: Director, Inorganics

Printed Name: Jodi Lyons Date: 10/4/2005

STATEMENTS/CERTIFICATIONS REQUIRED BY THE NATIONAL ENVIRONMENTAL LABORATORY APPROVAL CONFERENCE (NELAC)

New England Testing Laboratory is certified under the National Environmental Laboratory Approval Program (NELAP). This certification requires the following statements and certifications be included in our report.

This report shall not be reproduced, except in full, without written approval of the laboratory.

New England Testing certifies that the test results contained within this report meet all NELAC requirements except as detailed in the Case Narrative section of this report.

SAMPLES SUBMITTED and REQUEST FOR ANALYSIS:

The samples listed in Table I were submitted to New England Testing Laboratory on September 22, 2005. The group of samples appearing in this report was assigned an internal identification number (case number) for laboratory information management purposes. The client's designations for the individual samples, along with our case numbers, are used to identify the samples in this report. The case number for this sample submission is Q0922-19.

Custody records are included in this report.

Site: Shell Northwood

TABLE I, Samples Submitted

Sample ID	Date Sampled	Matrix	Analysis Requested
GAC INFO1	9/22/05	Groundwater	Table II

TABLE II, Analysis and Methods

ANALYSIS	DETERMINATIVE METHOD
Total Residual Chlorine	330.5
Hexavalent Chromium	7196A
Total Metals	
Antimony	3113B
Cadmium	3113B
Lead	3113B
Nickel	200.7
Selenium	3113B
Silver	3113B
Zinc	200.7

These methods are documented in:

Standard Methods for the Examination of Water and Wastewater, 18th Edition, 1992, APHA, AWWA-WPCF.

Manual of Methods for Chemical Analysis of Water and Water Wastes, EPA-600/4-79-020 (Revised 1983), USEPA/EMSL.

CASE NARRATIVE:

Sample Receipt:

No sample for ms/msd/duplicate analysis was supplied. No field blank was supplied. (This does not qualify the analytical results but does prevent conducting these SW-846 {Chapter 1, Section 3.4} QA Audits.)

The samples were all appropriately cooled and preserved upon receipt.

The samples were received in the appropriate containers.

The chain of custody was adequately completed and corresponded to the samples submitted.

Metals:

All analyses were performed according to NETLAB's documented Standard Operating Procedures, within all required holding times, and with appropriate quality control measures. Additional sample for matrix spike sample analyses was not provided or requested by the client. All QC was within laboratory established acceptance criteria. The samples were received, processed, and reported with no anomalies.

General Chemistry:

Hexavalent Chromium: No anomalies or excursions from QC limits. As stated in Method 7196A, section 7.3, verification is required to ensure that there are no conditions interfering with the colorimetric process. This was not met with the sample, therefore a dilution was required.

Residual Chlorine: No anomalies or excursions from QC limits

Sample Results

Case No. Q0922-19

GACINFO1

Parameter	Result, mg/l	Reporting Limit	Date Analyzed
Total Residual Chlorine	N.D.	0.02	9/22/05
Hexavalent Chromium	N.D.	0.5	9/22/05 @ 18:00

N.D. = Not Detected

METALS RESULTS

The presence of the NETLAB LOGO in the top right corner of each page in this section indicates:

The Technical Manager of the Metals Analysis Department certifies that the results included in this section have been reviewed and approved. Any exceptions or qualifications of substance have been reported in the case narrative.

New England Testing Laboratory, Inc.

METALS RESULTS

NELAC

Case Number: Q0922-19
Sample ID: GAC INFO1
Date collected: 09/22/05
Matrix WATER
Sample Type: Total

Analyst CC/RM

Parameter	CAS Number	Preparative Method	Analytical Method	Result	Reporting Limit	Detection Limit	Units	Date of Preparation	Date Analyzed
Antimony	7440-36-0	NA	3113B	ND	0.005	0.005	mg/l	9/27/05	9/29/05
Cadmium	7440-43-9	NA	3113B	0.0024	0.0005	0.0005	mg/l	9/27/05	9/28/05
Lead	7439-92-1	NA	3113B	0.009	0.002	0.002	mg/l	9/27/05	10/3/05
Nickel	7440-02-0	NA	200.7	0.049	0.005	0.005	mg/l	9/23/05	10/4/05
Selenium	7782-49-2	NA	3113B	ND	0.005	0.005	mg/l	9/27/05	10/4/05
Silver	7440-22-4	NA	7761	ND	0.0005	0.0005	mg/l	9/23/05	10/19/05
Zinc	7440-66-6	NA	200.7	0.86	0.02	0.02	mg/l	9/23/05	10/4/05

ND indicates not Detected

METALS RESULTS

NETLLAB

Sample ID: METHOD BLANK

Matrix WATER

Sample Type: Preparation Blank

Analyst CC/RM

Parameter	CAS Number	Preparative Method	Analytical Method	Result	Reporting Limit	Detection Limit	Units	Date of Preparation	Date Analyzed
Antimony	7440-36-0	NA	3113B	ND	0.005	0.005	mg/l	9/27/05	9/29/05
Cadmium	7440-43-9	NA	3113B	ND	0.0005	0.0005	mg/l	9/27/05	9/28/05
Lead	7439-92-1	NA	3113B	ND	0.002	0.002	mg/l	9/27/05	10/3/05
Nickel	7440-02-0	NA	200.7	ND	0.005	0.005	mg/l	9/30/05	10/4/05
Selenium	7782-49-2	NA	3113B	ND	0.005	0.005	mg/l	9/27/05	10/4/05
Silver	7440-22-4	NA	7761	ND	0.0005	0.0005	mg/l	9/23/05	10/19/05
Zinc	7440-66-6	NA	200.7	ND	0.02	0.02	mg/l	9/30/05	10/4/05

ND indicates not Detected

LABORATORY CONTROL SAMPLE RECOVERY

Parameter	True Value	Result	Units	Recovery, %	LCL, %	UCL, %	Date Analyzed
Antimony	0.020	0.021	mg/l	105	89	108	9/29/05
Cadmium	0.005	0.0043	mg/l	85.6	80	122	9/28/05
Lead	0.020	0.0189	mg/l	94.6	87	112	10/3/05
Nickel	1	1.05	mg/l	105	89	109	10/4/05
Selenium	0.020	0.021	mg/l	104	83	113	10/4/05
Silver	0.005	0.0050	mg/l	101	71	118	10/19/05
Zinc	1	1.04	mg/l	104	91	110	10/4/05

Custody Records

JET LAB
ACCUTEST

Q0922-19

CHAIN O CUSTODY

495 TECHNOLOGY CENTER WEST • BUILDING ONE
MARLBOROUGH, MA 01752
TEL: 508-481-6200 • FAX: 508-481-7753

ACCUTEST JOB #:

ACCUTEST QUOTE #:

CLIENT INFORMATION

GSC / Kleinfelder
NAME
30 Porter Rd
ADDRESS
Littleton MA 01460
CITY, STATE ZIP
Trish ~~Ellison~~ Eliasson
SEND REPORT TO:
PHONE #

FACILITY INFORMATION

Shell Northwood
PROJECT NAME
137 1st NH Tpk Rt 4
LOCATION
020816
PROJECT NO.

FAX #

ANALYTICAL INFORMATION: Hex Chrom 218.6; Total / SS Cd, Pb, Ni, Se, Zn; TRC 330.5

MATRIX CODES

DW - DRINKING WATER
GW - GROUND WATER
WW - WASTE WATER
SO - SOIL
SL - SLUDGE
OI - OIL
LIQ - OTHER LIQUID
SOL - OTHER SOLID

ACCUTEST SAMPLE #	FIELD ID / POINT OF COLLECTION	DATE	TIME	SAMPLED BY:	MATRIX	# OF BOTTLES	HCl	NaOH	HNO3	H2SO4	NONE	Hex Chrom 218.6	Total / SS Cd, Pb, Ni, Se, Zn	TRC 330.5	LAB USE ONLY
	GACINF01	9/22/05	9:30	JPS	GW	2			X			X	X	X	

DATA TURNAROUND INFORMATION

☒ 14 DAYS STANDARD APPROVED BY:
☐ 7 DAYS *RUSH*
☐ 48 HOUR EMERGENCY
☐ OTHER

14 DAY TURNAROUND HARDCOPY. EMERGENCY OR RUSH IS FAX DATA UNLESS PREVIOUSLY APPROVED

DATA DELIVERABLE INFORMATION

☐ STANDARD
☐ COMMERCIAL "B"
☐ DISK DELIVERABLE
☐ STATE FORMS
☐ OTHER (SPECIFY)

COMMENTS/REMARKS

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESION, INCLUDING COURIER DELIVERY

RELINQUISHED BY	DATE TIME	RECEIVED BY	RELINQUISHED BY	DATE TIME	RECEIVED BY
1. [signature] Stapleton	9/22/05 1100	1. [signature]	2. [signature]	9/22 1:52	2. [signature]
3. [signature]	9/22/05 137	3. [signature]	4.		4. A Sweeny 9/22/05 1520
5.		5.	SEAL #	PRESERVE WHERE APPLICABLE ☐	ON ICE ☒ TEMPERATURE 4 C

ACCUTEST.

October 19, 2005

Michelle Smith
NewFields Princeton LLC
22 West Street
Red Bank, NJ 07701

Dear Ms. Smith

As per your request, here is a brief note regarding analysis of metals based on methods SW846-6010B, and EPA 200.7. Both are acceptable methods using same technology (Inductively Coupled Plasma, ICP), instrumentation, and optimization techniques. Calibration standards and digested samples are matrix matched and internal standard is utilized for the analysis, and the results are generally compatible.

Sincerely,

Brad Madadian
Laboratory Manager
Accutest laboratories of New England

New England ACCUTEST Laboratories

10/19/05

Technical Report for

Shell Oil

GSCMA:97451485 (GSCRMBNH) 137 1st NH Turnpike, Northwood, NH

GSC PO# MA02460

Accutest Job Number: M50895

Sampling Date: 09/19/05

Report to:

GSC-Kleinfelder

teliasson@kleinfelder.com

ATTN: Trish Eliasson

Total number of pages in report: 38

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Reza Tand
Lab Director

Certifications: MA (M-MA136) CT (PH-0109) NH (250204) RI (00071) ME (MA136) FL (E87579) NY (23346) NJ (MA926) NAVY USACE

Table of Contents

Sections: 1 2 3 4 5 6 7

Sample Summary

Shell Oil

Job No: M50895

GSCMA:97451485 (GSCRMBNH) 137 1st NH Turnpike, Northwood, NH
Project No: GSC PO# MA02460

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
M50895-1	09/19/05	18:45	JPS	09/20/05	AQ	Ground Water	LGACINF01
M50895-2	09/19/05	18:30	JPS	09/20/05	AQ	Ground Water	LGACEFF03

Accutest Laboratories

Report of Analysis

Client Sample ID:	LGACINF01		
Lab Sample ID:	M50895-1	Date Sampled:	09/19/05
Matrix:	AQ - Ground Water	Date Received:	09/20/05
Method:	SW846 8260B	Percent Solids:	n/a
Project:	GSCMA:97451485 (GSCRMBNH) 137 1st NH Turnpike, Northwood, NH		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	G53243.D	1	09/30/05	AA	n/a	n/a	MSG2124
Run #2	P1894.D	5	10/04/05	AMY	n/a	n/a	MSP64

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA NH Full List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	17.7	5.0	ug/l	
71-43-2	Benzene	ND	0.50	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	ug/l	
123-91-1	1,4-Dioxane	ND	25	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	551 [a]	5.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	ug/l	
994-05-8	tert-Amyl Methyl Ether	ND	2.0	ug/l	
75-65-0	Tert Butyl Alcohol	ND	100	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/l	
79-01-6	Trichloroethene	ND	1.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	ug/l	
1330-20-7	Xylene (total)	ND	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	106%	95%	84-121%
2037-26-5	Toluene-D8	98%	105%	88-110%
460-00-4	4-Bromofluorobenzene	99%	100%	83-114%

(a) Result is from Run# 2

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	LGACINF01		
Lab Sample ID:	M50895-1	Date Sampled:	09/19/05
Matrix:	AQ - Ground Water	Date Received:	09/20/05
Method:	EPA 504 EPA 504	Percent Solids:	n/a
Project:	GSCMA:97451485 (GSCRMBNH) 137 1st NH Turnpike, Northwood, NH		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB2418.D	1	09/23/05	CZ	09/21/05	OP9679	GBB117
Run #2							

	Initial Volume	Final Volume
Run #1	34.5 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.015	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	Bromofluorobenzene (S)	84%		26-158%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	LGACINF01		
Lab Sample ID:	M50895-1	Date Sampled:	09/19/05
Matrix:	AQ - Ground Water	Date Received:	09/20/05
		Percent Solids:	n/a
Project:	GSCMA:97451485 (GSCRMBNH) 137 1st NH Turnpike, Northwood, NH		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	< 5.0	5.0	ug/l	1	09/22/05	09/23/05	AC	SW846 6010B [1]	SW846 3010A [3]
Chromium	< 10	10	ug/l	1	09/22/05	09/23/05	AC	SW846 6010B [1]	SW846 3010A [3]
Copper	31.4	25	ug/l	1	09/22/05	09/23/05	AC	SW846 6010B [1]	SW846 3010A [3]
Iron	133000	100	ug/l	1	09/22/05	09/23/05	AC	SW846 6010B [1]	SW846 3010A [3]
Mercury	< 0.20	0.20	ug/l	1	09/23/05	09/26/05	LMN	SW846 7470A [2]	SW846 7470A [4]

(1) Instrument QC Batch: MA6281
(2) Instrument QC Batch: MA6284
(3) Prep QC Batch: MP7663
(4) Prep QC Batch: MP7664

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	LGACINF01		
Lab Sample ID:	M50895-1	Date Sampled:	09/19/05
Matrix:	AQ - Ground Water	Date Received:	09/20/05
		Percent Solids:	n/a
Project:	GSCMA:97451485 (GSCRMBNH) 137 1st NH Turnpike, Northwood, NH		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chromium, Hexavalent	< 0.010	0.010	mg/l	1	09/20/05 13:51	MA	SW846 7196A
Cyanide	< 0.010	0.010	mg/l	1	09/26/05 15:16	MA	EPA 335.3
Solids, Total Suspended	59.0	4.0	mg/l	1	09/22/05	BF	EPA 160.2
Total Residual Chlorine	< 0.050	0.050	mg/l	1	09/20/05 13:35	MA	EPA 330.4

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	LGACEFF03		
Lab Sample ID:	M50895-2	Date Sampled:	09/19/05
Matrix:	AQ - Ground Water	Date Received:	09/20/05
		Percent Solids:	n/a
Project:	GSCMA:97451485 (GSCRMBNH) 137 1st NH Turnpike, Northwood, NH		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Iron	58100	100	ug/l	1	09/22/05	09/23/05	AC	SW846 6010B [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA6281
(2) Prep QC Batch: MP7663

RL = Reporting Limit

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

CHAIN OF CUSTODY

ACCUTEST.

495 Tech Center West, Bldg. 1, Marlboro, MA 01752
(508) 481-6200 Fax: (508) 481-7753

Accutest Job #: M50895

Client Information / **Facility Information**

Consultants Name: Geologic Services Corporation	Project Name: Northwood
Address: 30 Porter Rd.	Street: 137 1st NH Trpk (Route 4)
City: Littleton State: MA Zip: 01460	City: Northwood State: NH
Project Contact: Trish Eliasson	Invoice Contact: Trish Eliasson
Phone #: 978-486-0060	Invoice Phone # 978-486-0060
Fax #: 978-486-0630	Location ID# 168100
AFE#	PO# MA02460

Analytical Information

Field ID / Point of Collection	Collection Date	Time	Sampled By	Matrix	# of bottles	Preservation: HCL	NaOH	HNO3	H2SO4	MEOH	Other	None	8260C with prep by 5030 - ONLY volatiles on attached RGP list	8270D with prep by 3535 or 3520C - ONLY Semivolatiles on attached RGP list	Hex Chrome (218.6)	Total CN (335.4)	TPH (1664)	Metals + Hg (6010 b/200.7 with prep by 3010)	TSS (160.2)	TRC (330.5)	PCBs (1668a)	Total Iron
LGACINF01 -1	9/19/2005	1845	JPS	GW	9	X	X	X			X	X	X	X	X	X	X	X	X	X	X	
LGACEFF03 -2	9/19/2005	1830	JPS	GW	1			X														X

Turnaround Information

- [x] Std. 14 Day Turnaround
- [ ] 7 Day *EMERGENCY*
- [ ] 4 Day *EMERGENCY*
- [ ] 3 Day *EMERGENCY*
- [ ] 2 Day *EMERGENCY*
- [ ] 1 Day *EMERGENCY*

Emergency T/A is for FAX or Lablink Data

Approved By:

Data Deliverable Information

- [ ] Commercial "A"
- [ ] Commercial "B"
- [ ] Full Deliverables
- [ ] Other
- [ ] FULL CLP
- [ ] State Forms
- [ ] Disk Deliverable Format____

Commercial "A" = Results Only

Accutest Log-in Information

NOTE: All minimum levels, test methods, and preparation methods must be in accordance with attached Appendix VI of the RGP Document.

4oc. 11D, 5C, 3DS

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler: 1 Jamie Stapleton	Date Time: 9/20/05 830	Received By: 1 [signature]	Relinquished By: 2 [signature]	Date Time: 9/20/05 1237	Received By: 2 [signature]
Relinquished by Sampler: 3	Date Time:	Received By: 3	Relinquished By: 4	Date Time:	Received By: 4
Relinquished by Sampler: 5	Date Time:	Received By: 5	Seal #	Preserve where applicable ☑ On Ice ☑	Temp. 4.2°C

M50895: Chain of Custody

Page 1 of 3

3.1

3

INTERNAL MEMO
SAMPLE MANAGEMENT

Client: GSC Point of contact: Nate Time of contact: 1420

Tel #_____ Fax #_____ Job #: M50895

Sample status: Cancel: ☐ Add: ☑ Change: ☐

Turn Around: ☐

Supply status: Bottles: ☐ COC: ☐ Preservative: ☐

Sample #	Detailed comments/request
-1	Please add EDB by 504.1 per
	Nate on Sep. 20, 2005 @ 1420
	9/20/05 IS

M50895: Chain of Custody
Page 2 of 3

Reza Tand M50895

From: Trish Eliasson [TEliasson@kleinfelder.com]
Sent: Wednesday, September 21, 2005 4:54 PM
To: Reza Tand
Subject: RGP samples - Northwood & Dover

Reza,

As we just discussed on the phone, we understand that not enough sample volume was submitted for TPH, 8270, and PCB analysis, which were marked on the COC. These samples are being collected and will be submitted to your lab on Thursday.

Also, please do NOT analyze for the following metals (ONLY the following metals):
Total Sb
Total Cd
Total Pb
Total Ni
Total Se
Total Ag
Total Zn

Thanks,

Trish Eliasson, PE
GSC|Kleinfelder
ph: 978.486.0060 x 308
fx: 978.486.0630
email: teliasson@kleinfelder.com
KLEINFELDER
EXPECT MORE

M50895: Chain of Custody
Page 3 of 3

GC/MS Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Surrogate Recovery Summaries

Method Blank Summary

Job Number: M50895
Account: SHELLWIC Shell Oil
Project: GSCMA:97451485 (GSCRMBNH) 137 1st NH Turnpike, Northwood, NH

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSG2124-MB	G53242.D	1	09/30/05	AA	n/a	n/a	MSG2124

The QC reported here applies to the following samples: Method: SW846 8260B

M50895-1

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	5.0	ug/l	
71-43-2	Benzene	ND	0.50	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	ug/l	
123-91-1	1,4-Dioxane	ND	25	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	ug/l	
994-05-8	tert-Amyl Methyl Ether	ND	2.0	ug/l	
75-65-0	Tert Butyl Alcohol	ND	100	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/l	
79-01-6	Trichloroethene	ND	1.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	ug/l	
1330-20-7	Xylene (total)	ND	1.0	ug/l	

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	106%	84-121%
2037-26-5	Toluene-D8	100%	88-110%
460-00-4	4-Bromofluorobenzene	97%	83-114%

Method Blank Summary

Job Number: M50895
Account: SHELLWIC Shell Oil
Project: GSCMA:97451485 (GSCRMBNH) 137 1st NH Turnpike, Northwood, NH

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSP64-MB2	P1882.D	1	10/04/05	AMY	n/a	n/a	MSP64

The QC reported here applies to the following samples: Method: SW846 8260B

M50895-1

CAS No.	Compound	Result	RL	Units	Q
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	103%	82-127%
2037-26-5	Toluene-D8	100%	88-112%
460-00-4	4-Bromofluorobenzene	105%	80-118%

Method Blank Summary

Job Number: M50895
Account: SHELLWIC Shell Oil
Project: GSCMA:97451485 (GSCRMBNH) 137 1st NH Turnpike, Northwood, NH

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSP64-MB1	P1868.D	1	10/03/05	AMY	n/a	n/a	MSP64

The QC reported here applies to the following samples: Method: SW846 8260B

MSP64-BS2

CAS No.	Compound	Result	RL	Units	Q
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	102%	82-127%
2037-26-5	Toluene-D8	99%	88-112%
460-00-4	4-Bromofluorobenzene	100%	80-118%

Blank Spike/Blank Spike Duplicate Summary

Job Number: M50895
Account: SHELLWIC Shell Oil
Project: GSCMA:97451485 (GSCRMBNH) 137 1st NH Turnpike, Northwood, NH

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSG2124-BS	G53239.D	1	09/30/05	AA	n/a	n/a	MSG2124
MSG2124-BSD	G53240.D	1	09/30/05	AA	n/a	n/a	MSG2124

The QC reported here applies to the following samples: Method: SW846 8260B

M50895-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	50	50.4	101	50.4	101	0	31-150/25
71-43-2	Benzene	50	55.9	112	54.0	108	3	73-127/25
56-23-5	Carbon tetrachloride	50	59.8	120	58.4	117	2	70-141/25
95-50-1	1,2-Dichlorobenzene	50	50.8	102	51.5	103	1	75-125/25
541-73-1	1,3-Dichlorobenzene	50	50.3	101	50.6	101	1	76-124/25
106-46-7	1,4-Dichlorobenzene	50	49.2	98	49.3	99	0	76-127/25
75-34-3	1,1-Dichloroethane	50	54.4	109	53.1	106	2	70-136/25
107-06-2	1,2-Dichloroethane	50	52.3	105	51.8	104	1	68-137/25
75-35-4	1,1-Dichloroethene	50	58.6	117	57.4	115	2	65-142/25
156-59-2	cis-1,2-Dichloroethene	50	51.9	104	51.5	103	1	72-130/25
123-91-1	1,4-Dioxane	250	220	88	251	100	13	50-140/25
100-41-4	Ethylbenzene	50	52.9	106	52.1	104	2	77-126/25
75-09-2	Methylene chloride	50	51.9	104	51.6	103	1	67-136/25
994-05-8	tert-Amyl Methyl Ether	50	55.6	111	55.2	110	1	61-139/25
75-65-0	Tert Butyl Alcohol	500	467	93	542	108	15	42-161/25
127-18-4	Tetrachloroethene	50	56.6	113	55.2	110	3	66-142/25
108-88-3	Toluene	50	51.2	102	50.6	101	1	76-124/25
71-55-6	1,1,1-Trichloroethane	50	57.7	115	56.6	113	2	71-137/25
79-00-5	1,1,2-Trichloroethane	50	51.6	103	51.4	103	0	68-134/25
79-01-6	Trichloroethene	50	54.4	109	53.5	107	2	71-130/25
75-01-4	Vinyl chloride	50	63.5	127	57.3	115	10	46-151/25
1330-20-7	Xylene (total)	150	159	106	157	105	1	78-129/25

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
1868-53-7	Dibromofluoromethane	102%	103%	84-121%
2037-26-5	Toluene-D8	100%	99%	88-110%
460-00-4	4-Bromofluorobenzene	98%	99%	83-114%

Blank Spike Summary

Job Number: M50895
Account: SHELLWIC Shell Oil
Project: GSCMA:97451485 (GSCRMBNH) 137 1st NH Turnpike, Northwood, NH

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSP64-BS2	P1880.D	1	10/04/05	AMY	n/a	n/a	MSP64

The QC reported here applies to the following samples: Method: SW846 8260B

M50895-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
1634-04-4	Methyl Tert Butyl Ether	50	64.3	129	65-135

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	94%	82-127%
2037-26-5	Toluene-D8	103%	88-112%
460-00-4	4-Bromofluorobenzene	101%	80-118%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: M50895
Account: SHELLWIC Shell Oil
Project: GSCMA:97451485 (GSCRMBNH) 137 1st NH Turnpike, Northwood, NH

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
M51197-6MS	G53260.D	1	09/30/05	AA	n/a	n/a	MSG2124
M51197-6MSD	G53261.D	1	09/30/05	AA	n/a	n/a	MSG2124
M51197-6	G53259.D	1	09/30/05	AA	n/a	n/a	MSG2124

The QC reported here applies to the following samples: Method: SW846 8260B

M50895-1

CAS No.	Compound	M51197-6 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND		50	55.1	110	54.3	109	1	30-150/35
71-43-2	Benzene	ND		50	57.9	116	54.8	110	6	67-132/20
56-23-5	Carbon tetrachloride	ND		50	64.5	129	60.9	122	6	63-144/20
95-50-1	1,2-Dichlorobenzene	ND		50	53.9	108	52.7	105	2	75-123/20
541-73-1	1,3-Dichlorobenzene	ND		50	51.3	103	50.6	101	1	75-122/20
106-46-7	1,4-Dichlorobenzene	ND		50	50.5	101	49.6	99	2	77-125/20
75-34-3	1,1-Dichloroethane	ND		50	57.5	115	54.5	109	5	66-141/20
107-06-2	1,2-Dichloroethane	ND		50	59.8	120	57.0	114	5	61-144/20
75-35-4	1,1-Dichloroethene	ND		50	58.8	118	56.8	114	3	57-150/20
156-59-2	cis-1,2-Dichloroethene	2.7		50	57.1	109	55.0	105	4	69-133/20
123-91-1	1,4-Dioxane	ND		250	249	100	343	137	32	43-141/32
100-41-4	Ethylbenzene	ND		50	54.3	109	52.5	105	3	72-129/20
75-09-2	Methylene chloride	ND		50	55.8	112	53.7	107	4	64-143/20
994-05-8	tert-Amyl Methyl Ether	ND		50	61.0	122	59.9	120	2	54-144/20
75-65-0	Tert Butyl Alcohol	ND		500	522	104	501	100	4	31-170/29
127-18-4	Tetrachloroethene	ND		50	56.4	113	55.1	110	2	57-145/20
108-88-3	Toluene	0.53	J	50	54.1	107	52.0	103	4	69-129/20
71-55-6	1,1,1-Trichloroethane	ND		50	63.7	127	59.0	118	8	65-144/20
79-00-5	1,1,2-Trichloroethane	ND		50	58.0	116	57.2	114	1	63-138/20
79-01-6	Trichloroethene	1.7		50	58.4	113	56.1	109	4	67-132/20
75-01-4	Vinyl chloride	1.4		50	67.9	133	62.8	123	8	39-150/23
1330-20-7	Xylene (total)	ND		150	162	108	157	105	3	72-133/20

CAS No.	Surrogate Recoveries	MS	MSD	M51197-6	Limits
1868-53-7	Dibromofluoromethane	108%	106%	113%	82-127%
2037-26-5	Toluene-D8	100%	99%	102%	88-112%
460-00-4	4-Bromofluorobenzene	96%	98%	97%	80-118%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: M50895
Account: SHELLWIC Shell Oil
Project: GSCMA:97451485 (GSCRMBNH) 137 1st NH Turnpike, Northwood, NH

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
M50968-10MS	P1898.D	5	10/04/05	AMY	n/a	n/a	MSP64
M50968-10MSD	P1899.D	5	10/04/05	AMY	n/a	n/a	MSP64
M50968-10	P1889.D	1	10/04/05	AMY	n/a	n/a	MSP64

The QC reported here applies to the following samples: Method: SW846 8260B

M50895-1

CAS No.	Compound	M50968-10 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
1634-04-4	Methyl Tert Butyl Ether	ND		250	361	144* a	332	133	8	61-137/20

CAS No.	Surrogate Recoveries	MS	MSD	M50968-10	Limits
1868-53-7	Dibromofluoromethane	101%	100%	87%	82-127%
2037-26-5	Toluene-D8	100%	102%	98%	88-112%
460-00-4	4-Bromofluorobenzene	102%	106%	104%	80-118%

(a) Outside control limits due to possible matrix interference. Refer to Blank Spike.

Volatile Surrogate Recovery Summary

Job Number: M50895
Account: SHELLWIC Shell Oil
Project: GSCMA:97451485 (GSCRMBNH) 137 1st NH Turnpike, Northwood, NH

Method: SW846 8260B Matrix: AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3
M50895-1	P1894.D	95.0	105.0	100.0
M50895-1	G53243.D	106.0	98.0	99.0
M50968-10MS	P1898.D	101.0	100.0	102.0
M50968-10MSD	P1899.D	100.0	102.0	106.0
M51197-6MS	G53260.D	108.0	100.0	96.0
M51197-6MSD	G53261.D	106.0	99.0	98.0
MSG2124-BS	G53239.D	102.0	100.0	98.0
MSG2124-BSD	G53240.D	103.0	99.0	99.0
MSG2124-MB	G53242.D	106.0	100.0	97.0
MSP64-BS2	P1880.D	94.0	103.0	101.0
MSP64-MB2	P1882.D	103.0	100.0	105.0
MSP64-MB1	P1868.D	102.0	99.0	100.0

Surrogate Compounds	Recovery Limits
S1 = Dibromofluoromethane	84-121%
S2 = Toluene-D8	88-110%
S3 = 4-Bromofluorobenzene	83-114%

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Surrogate Recovery Summaries

Method Blank Summary

Job Number: M50895
Account: SHELLWIC Shell Oil
Project: GSCMA:97451485 (GSCRMBNH) 137 1st NH Turnpike, Northwood, NH

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP9679-MB	BB2413.D	1	09/22/05	CZ	09/21/05	OP9679	GBB117

The QC reported here applies to the following samples: Method: EPA 504

M50895-1

CAS No.	Compound	Result	RL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.015	ug/l	

CAS No.	Surrogate Recoveries		Limits
460-00-4	Bromofluorobenzene (S)	125%	26-158%

Blank Spike Summary

Job Number: M50895
Account: SHELLWIC Shell Oil
Project: GSCMA:97451485 (GSCRMBNH) 137 1st NH Turnpike, Northwood, NH

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP9679-BS	BB2414.D	1	09/22/05	CZ	09/21/05	OP9679	GBB117

The QC reported here applies to the following samples: Method: EPA 504

M50895-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
106-93-4	1,2-Dibromoethane	0.071	0.055	77	70-130

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	Bromofluorobenzene (S)	78%	26-158%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: M50895
Account: SHELLWIC Shell Oil
Project: GSCMA:97451485 (GSCRMBNH) 137 1st NH Turnpike, Northwood, NH

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP9679-MS	BB2415.D	1	09/22/05	CZ	09/21/05	OP9679	GBB117
OP9679-MSD	BB2416.D	1	09/23/05	CZ	09/21/05	OP9679	GBB117
M50945-1	BB2417.D	1	09/23/05	CZ	09/21/05	OP9679	GBB117

The QC reported here applies to the following samples: Method: EPA 504

M50895-1

CAS No.	Compound	M50945-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
106-93-4	1,2-Dibromoethane	ND		0.071	0.087	123	0.086	121	1	65-135/30

CAS No.	Surrogate Recoveries	MS	MSD	M50945-1	Limits
460-00-4	Bromofluorobenzene (S)	88%	75%	112%	26-158%

Volatile Surrogate Recovery Summary

Job Number: M50895
Account: SHELLWIC Shell Oil
Project: GSCMA:97451485 (GSCRMBNH) 137 1st NH Turnpike, Northwood, NH

Method: EPA 504 Matrix: AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]
M50895-1	BB2418.D	84.0
OP9679-BS	BB2414.D	78.0
OP9679-MB	BB2413.D	125.0
OP9679-MS	BB2415.D	88.0
OP9679-MSD	BB2416.D	75.0

Surrogate Compounds	Recovery Limits
S1 = Bromofluorobenzene (S)	26-158%

(a) Recovery from GC signal #1

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries