NEWFIELDS

MA6910184
DC

OVERNIGHT DELIVERY

January 3, 2006

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
875 Highland Avenue
Needham, Norfolk County, MA
MADEP RTNs #3-2148 & 3-21502

To Whom It May Concern:

Motiva Enterprises LLC ("Motiva") is currently operating a Shell-branded gasoline service station at 875 Highland Avenue in Needham, MA. Remediation of the facility is being conducted under the Massachusetts Contingency Plan ("MCP") (310 CMR 40.0000). A groundwater remediation system is currently operating under Temporary NPDES Permit #MA-021-030. The discharge is to Rosemary Lake via a conveyance system. Rosemary Lake discharges to Rosemary Brook. Rosemary Brook leads to Longfellow Pond. Longfellow Pond discharges to the Charles River which is classified as a Class B waterbody. Rosemary Brook is listed on the approved 2002 State of Massachusetts 303(d) list however there have been no TMDLs established.

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 ("NewFields"), on behalf of Motiva, electronically submitted an incomplete individual NPDES permit application package for the above referenced facility. In a letter dated January 3, 2006, Motiva withdrew, in writing, the individual NPDES permit application package. Enclosed herein is a 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 >100 dilution range, limitations. The cadmium, copper, lead, zinc and iron were above the Appendix III limitations, however only iron was above the Appendix IV >100 dilution range limitations. It should be noted that iron is naturally occurring in the groundwater and is not associated with the remediation project. The permittee took samples of iron in the receiving stream, upstream of the discharge point. The results, enclosed herein, show 520 ug/l of total iron. The EPA should take into account the iron concentration in the receiving stream when issuing the permit conditions.

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

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

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. Since Method 6010B is the SW846 approved equivalent method to 200.7 we are requesting it also be approved for use.

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 20-25 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)
- Natural Heritage & Endangered Species Program – MA Div of Fisheries & Wildlife – Rare Species by Town
- Laboratory Analytical (Receiving Stream-Upstream)
- Laboratory Analytical (Receiving Stream-Downstream)
- Laboratory Analytical (System Influent)

C: Massachusetts Department of Environmental Protection
Division of Watershed Management
627 Main Street, 2nd Floor
Worcester, MA 01608
(w/ enclosures)

Town of Needham
1471 Highland Avenue
Needham, MA 02492
(w/ enclosures)

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

Sean Kennedy, Envirotrac
(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° 14' 07" latitude: 42° 17' 37"	Facility SIC code (s): 5541	Street: 875 Highland Avenue		
b) Name of facility/site **owner**: Motiva Enterprises LLC		Town: Needham		
Email address of owner: David.Weeks@Shell.com		State: MA	Zip: 02494	County: Norfolk
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: Permit Exclusion #00-179

2. Has a prior NPDES application (Form 1 & 2C) ever been filed for the discharge? Yes ☒ No ☐, if "yes," date and tracking #: Temporary NPDES Permit #MA-02I-030

3. Is the discharge a "new discharge" as defined by 40 CFR 122.2? Yes ☐ No ☒

4. For sites in Massachusetts, is the discharge covered under the MA Contingency Plan (MCP) and exempt from state permitting? Yes ☒ No ☐

e) Is site/facility subject to any State permitting or other action which is causing the generation of discharge? Yes ☐ No ☒, If "yes," please list: 1. site identification # assigned by the state of NH or MA: 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: MA-02I-030 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 Shell-Branded 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 0.0004 ft^3/sec Average flow 2.0E-5 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 2.0E-5 ft^3/sec (based on historical operations)
3) Latitude and longitude of each discharge within 100 feet: pt.1: long. 71° 14' 16" lat. 42° 17' 16" ; 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 Jan 2002 (Excl.) 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).	

NEWFIELDS

MAG910184

CERTIFIED MAIL #7004 2150 0001 8372 1625
RETURN RECEIPT REQUESTED

January 3, 2006

JAN 5 2006

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

RE: ***REQUEST TO WITHDRAW 10-24-05 INDIVIDUAL NPDES PERMIT APPLICATION***
Shell-Branded Service Station
875 Highland Avenue
Needham, Norfolk County, MA
MADEP RTNs #3-2148 & 3-21502

Dear Ms. Vergara:

Motiva Enterprises LLC is currently operating a Shell-branded gasoline service station at 875 Highland Avenue in Needham, MA. Remediation of the facility is being conducted under the Massachusetts Contingency Plan ("MCP") (310 CMR 40.0000). A groundwater remediation system is currently operating under Temporary NPDES Permit #MA-02I-030.

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. Thus on October 24, 2005 NewFields Princeton LLC, on behalf of Motiva, electronically submitted an incomplete application package for an individual NPDES permit. This letter serves as notification that the permittee is withdrawing the request for an individual NPDES permit and submitting an application package for the NPDES RGP.

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

C: Massachusetts Department of Environmental Protection
Division of Watershed Management
627 Main Street, 2nd Floor
Worcester, MA 01608

David Weeks, Shell OPUS (via electronic mail)

Don Maggioli, Envirotrac (via electronic mail)

NewFields File

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

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	1000	16000	0.4367		
2. Total Residual Chlorine	√		1	GRAB	330.5	20	<20	<0.0005		
3. Total Petroleum Hydrocarbons	√		1	GRAB	1664A	2000	<2000	<0.0546		
4. Cyanide	√		1	GRAB	335.3	10	<10	<0.0003		
5. Benzene		√	1	GRAB	8260B	0.5	<0.5	<1.36E-05		
6. Toluene		√	1	GRAB	8260B	1.0	<1.0	<2.73E-05		
7. Ethylbenzene		√	1	GRAB	8260B	1.0	<1.0	<2.73E-05		
8. (m,p,o) Xylenes		√	1	GRAB	8260B	1.0	<1.0	<2.73E-05		
9. Total BTEX[4]		√	1	GRAB	8260B	-----	<1.0	<2.73E-05		

[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	<4.09E-07		
11. Methyl-tert-Butyl Ether (MtBE)		√	1	GRAB	8260B	10	1490	0.0407		
12. tert-Butyl Alcohol (TBA)		√	1	GRAB	8260B	100	750	0.0205		
13. tert-Amyl Methyl Ether (TAME)		√	1	GRAB	8260B	2.0	12.2	3.33E-04		
14. Naphthalene	√		1	GRAB	8270C SIM	0.10	<0.10	<2.73E-06		
15. Carbon Tetra-chloride	√		1	GRAB	8260B	1.0	<1.0	<2.73E-05		
16. 1,4 Dichlorobenzene	√		1	GRAB	8260B	1.0	<1.0	<2.73E-05		
17.1,2 Dichlorobenzene	√		1	GRAB	8260B	1.0	<1.0	<2.73E-05		
18. 1,3 Dichlorobenzene	√		1	GRAB	8260B	1.0	<1.0	<2.73E-05		
19. 1,1 Dichloroethane	√		1	GRAB	8260B	1.0	<1.0	<2.73E-05		
20. 1,2 Dichloroethane	√		1	GRAB	8260B	1.0	<1.0	<2.73E-05		
21. 1,1 Dichloroethylene	√		1	GRAB	8260B	1.0	<1.0	<2.73E-05		
22. cis-l,2 Dichloro-ethylene	√		1	GRAB	8260B	1.0	<1.0	<2.73E-05		
23. Dichloromethane (Methylene Chloride)	√		1	GRAB	8260B	2.0	<2.0	<5.46E-05		
24. Tetrachloroethylene	√		1	GRAB	8260B	1.0	<1.0	<2.73E-05		

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	<2.73E-05		
26. 1,1,2 Trichloroethane	√		1	GRAB	8260B	1.0	<1.0	<2.73E-05		
27. Trichloroethylene	√		1	GRAB	8260B	1.0	<1.0	<2.73E-05		
28. Vinyl Chloride	√		1	GRAB	8260B	1.0	<1.0	<2.73E-05		
29. Acetone	√		1	GRAB	8260B	5.0	<5.0	<1.36E-04		
30. 1,4 Dioxane	√		1	GRAB	8260B	25	<25	<6.82E-04		
31. Total Phenols	√		1	GRAB	8270C	See lab data	See lab data (Not Detected)	-------		
32. Pentachlorophenol	√		1	GRAB	8270C SIM	1.0	<1.0	<2.73E-05		
33. Total Phthalates [6] (phthalate esthers)	√		1	GRAB	8270C	10	<10	<2.73E-04		
34. Bis (2-Ethylhexyl) Phthalate [Di-(ethylhexyl) Phthalate]	√		1	GRAB	8270C	10	<10	<2.73E-04		
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	0.050	<0.050	<1.36E-06		
b. Benzo(a) Pyrene	√		1	GRAB	8270C	0.10	<0.10	<2.73E-06		
c. Benzo(b)Fluoranthene	√		1	GRAB	8270C	0.050	<0.050	<1.36E-06		
d. Benzo(k) Fluoranthene	√		1	GRAB	8270C	0.10	<0.10	<2.73E-06		
e. Chrysene	√		1	GRAB	8270C	0.10	<0.10	<2.73E-06		

[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	0.10	<0.10	<2.73E-06		
g. Indeno(1,2,3-cd) Pyrene	√		1	GRAB	8270C	0.10	<0.10	<2.73E-06		
36. Total Group II Polycyclic Aromatic Hydrocarbons (pAR)	√		1	GRAB	8270C	0.10	<0.10	<2.73E-06		
h. Acenaphthene	√		1	GRAB	8270C	0.10	<0.10	<2.73E-06		
i. Acenaphthylene	√		1	GRAB	8270C	0.10	<0.10	<2.73E-06		
j. Anthracene	√		1	GRAB	8270C	0.10	<0.10	<2.73E-06		
k. Benzo(ghi) Perylene	√		1	GRAB	8270C	0.10	<0.10	<2.73E-06		
l. Fluoranthene	√		1	GRAB	8270C	0.10	<0.10	<2.73E-06		
m. Fluorene	√		1	GRAB	8270C	0.10	<0.10	<2.73E-06		
n. Naphthalene	√		1	GRAB	8270C	0.10	<0.10	<2.73E-06		
o. Phenanthrene	√		1	GRAB	8270C	0.10	<0.10	<2.73E-06		
p. Pyrene	√		1	GRAB	8270C	0.10	<0.10	<2.73E-06		
37. Total Polychlorinated Biphenyls (PCBs)	√		1	GRAB	608	0.2 - 0.4	<0.2 - <0.4	<5.46E-06 - <1.09E-05		
38. Antimony	√		1	GRAB	3113B	0.5	<0.5	<1.36E-05		
39. Arsenic		√	1	GRAB	3010A-6010B	5.0	6.2	1.69E-04		
40. Cadmium		√	1	GRAB	3113B	0.5	0.6	1.664E-05		
41. Chromium III (1)		√	1	GRAB	Calculated	See lab data	7.0	1.91E-04		
42. Chromium VI	√		1	GRAB	7196A	10	<10	<2.73E-04		

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		√	1	GRAB	200.7	20	40	0.0011		
44. Lead		√	1	GRAB	3113B	2.0	10	2.73E-04		
45. Mercury	√		1	GRAB	245.1	0.20	<0.20	<5.46E-06		
46. Nickel		√	1	GRAB	200.7	5.0	7.0	1.91E-04		
47. Selenium	√		1	GRAB	3113B	5.0	<5.0	<1.36E-04		
48. Silver		√	1	GRAB	3113B	0.5	0.7	1.91E-05		
49. Zinc		√	1	GRAB	200.7	20	80	0.0022		
50. Iron		√	1	GRAB	200.7	50	11000	0.3002		
Other (describe):	----	----	----	----	----	----	----	----	----	----

NOTE: All mass loadings calculated using design flow rate of 5 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, Zn, Fe
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, Zn, Fe DF: 113.11	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: Fe

4. Treatn system information. Please describe the treatment system using separate sheet necessary, including:

a) A description of the treatment system, including a schematic of the proposed or existing treatment system:
The remediation system is groundwater with two holding tanks, one low profile air stripper, two bag filters, and two 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 0.01 GPM Maximum flow rate of treatment system 0.2 GPM Design flow rate of treatment system 5 GPM

d) A description of chemical additives being used or planned to be used (attach MSDS sheets): 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 municipal storm system to Rosemary Lake. Rosemary Lake discharges to Rosemary Brook then to Longfellow Pond and finally to Charles River (Class B). Charles 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 0.05 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)? State Impairment - Nutrients, organic enrichment/ low DO, pathogens, taste, odor and color, suspended solids, turbidity

Is there a TMDL? Yes ☐ No ☒ If yes, for which pollutant(s)? There were no TMDLs reported to EPA by the state.

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. :

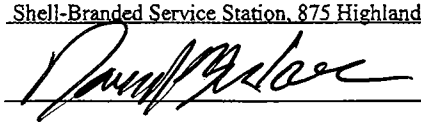
Please provide any supplemental information. **Attach any analytical data used to support the application**. Attach any certification(s) required by the general permit.

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, 875 Highland Avenue, Needham, MA

Operator signature: 

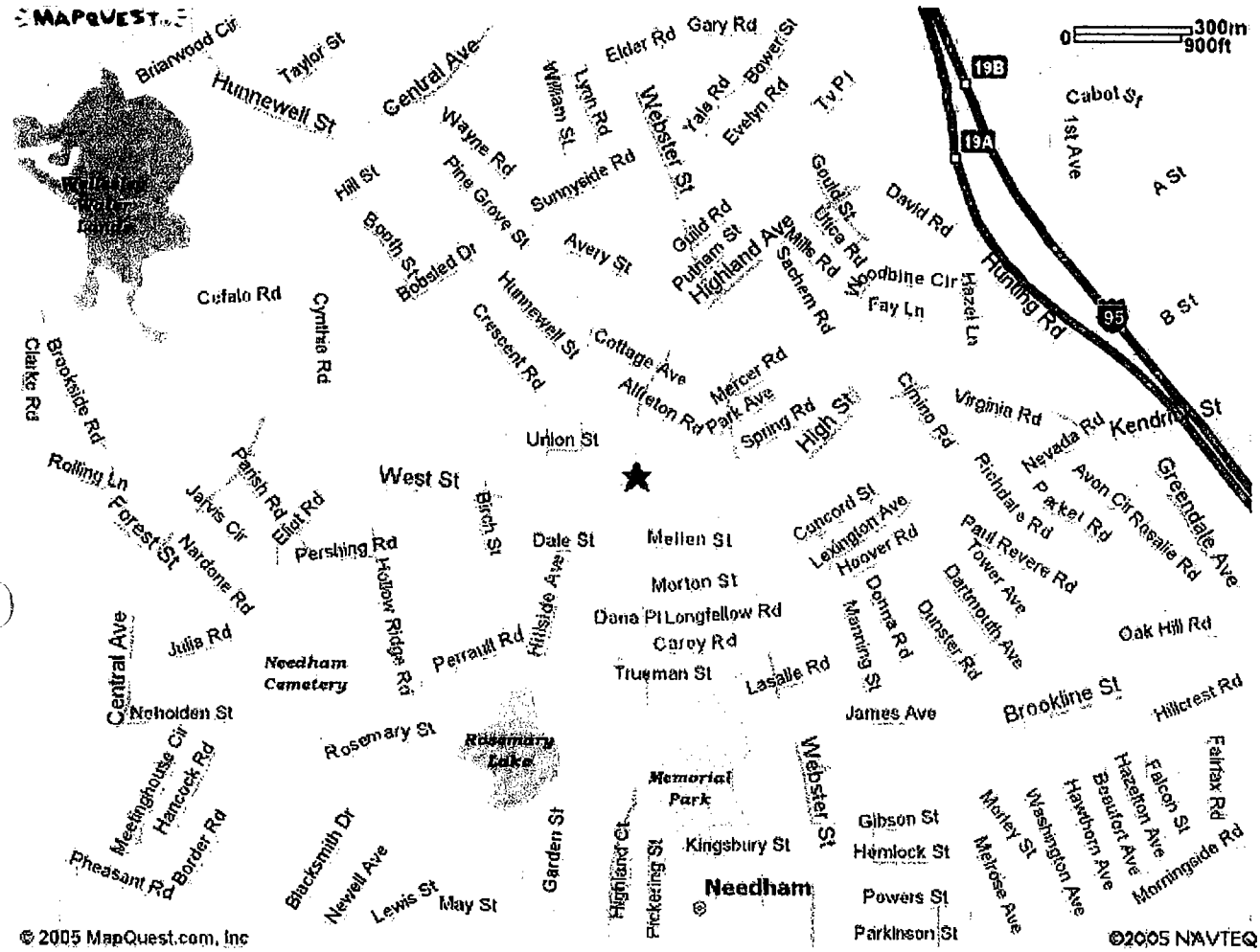
Title: David Weeks, Senior Environmental Engineer

Date: 12/29/2005

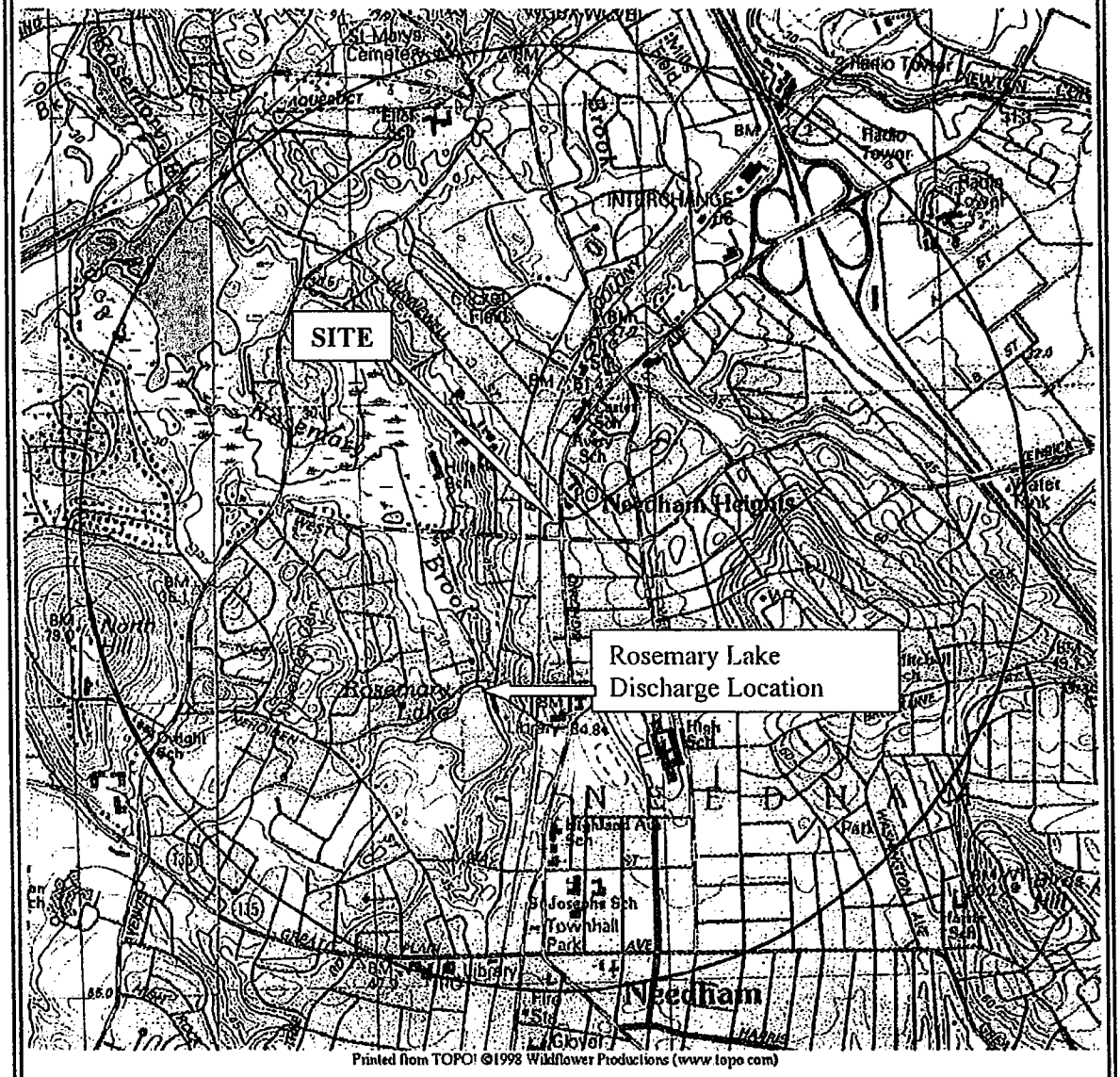
FIGURES

MAPQUEST

★ 875 Highland Ave Needham, MA 02494-1313, US



Web Offers:



Shell-Branded Service Station
875 Highland Avenue
Needham, Massachusetts

Contour Interval 3 Meters

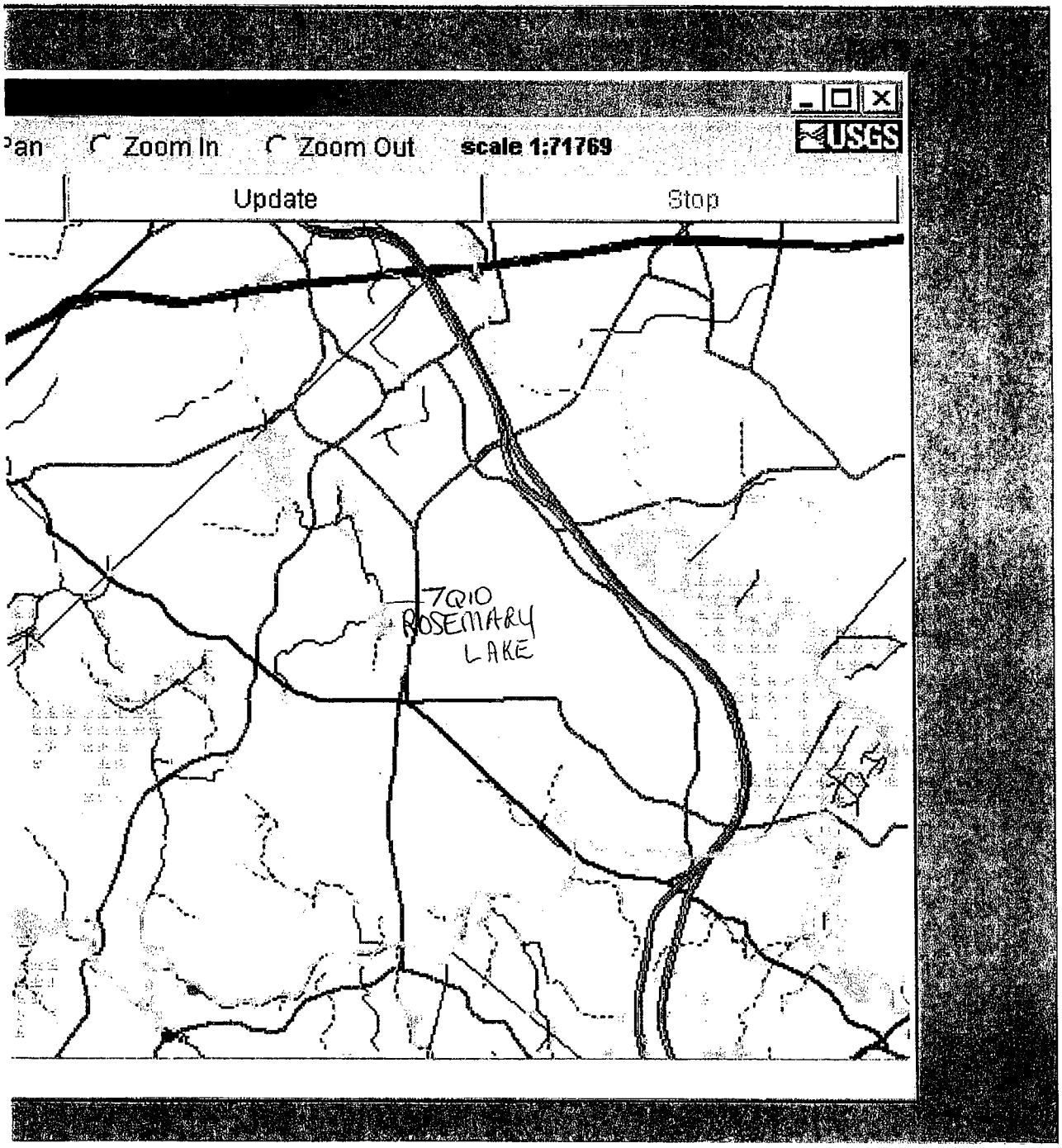
Long: 71°14'07"
Lat: 42°17'37"

FIGURE 1

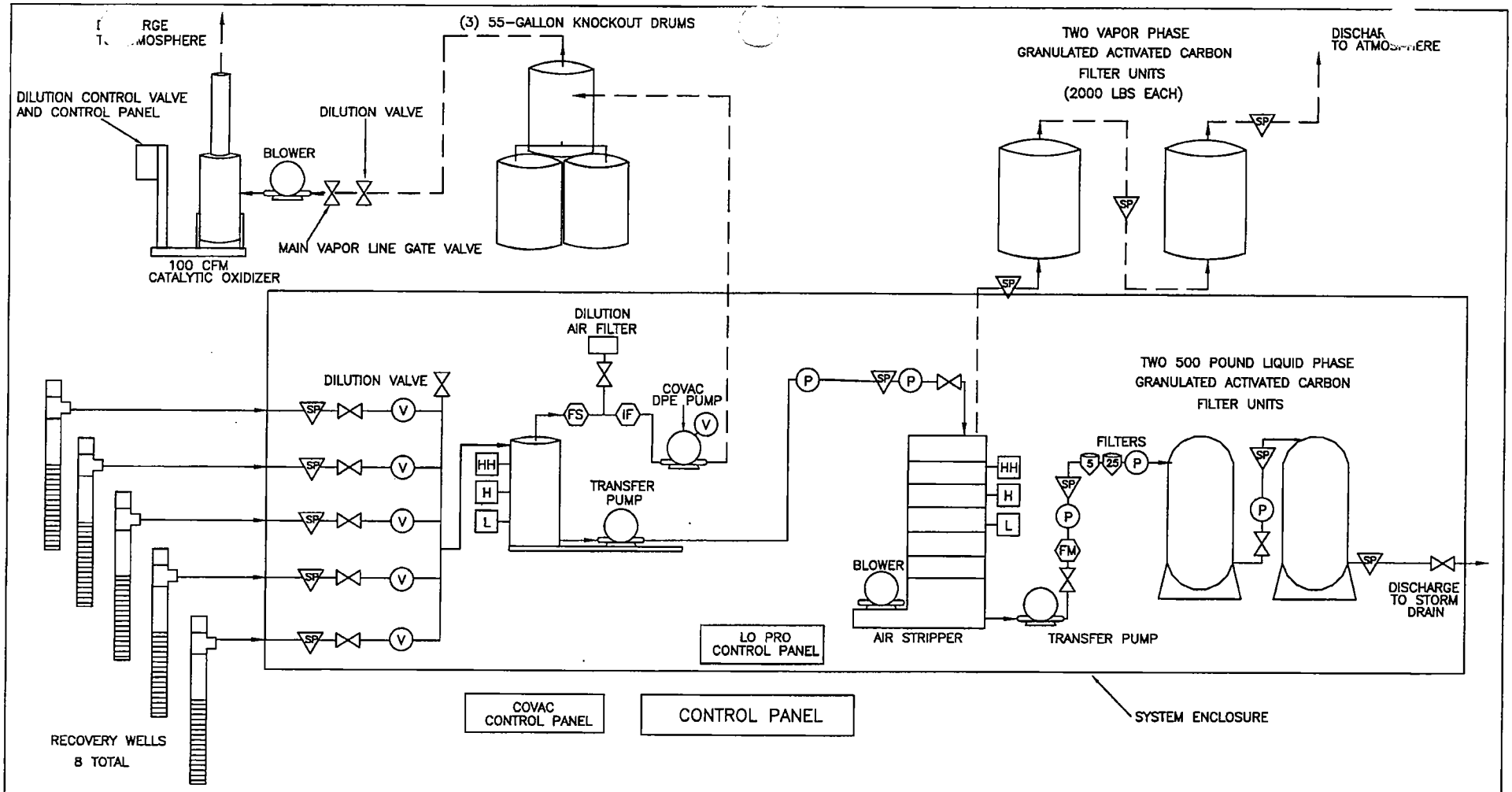
SITE LOCUS MAP
UNITED STATES GEOLOGICAL SURVEY
BOSTON SOUTH
MASSACHUSETTS
7.5 MINUTE SERIES

N
W E
S

USGS STREAM STATS - NEEDHAM, MA - 7Q10MAP



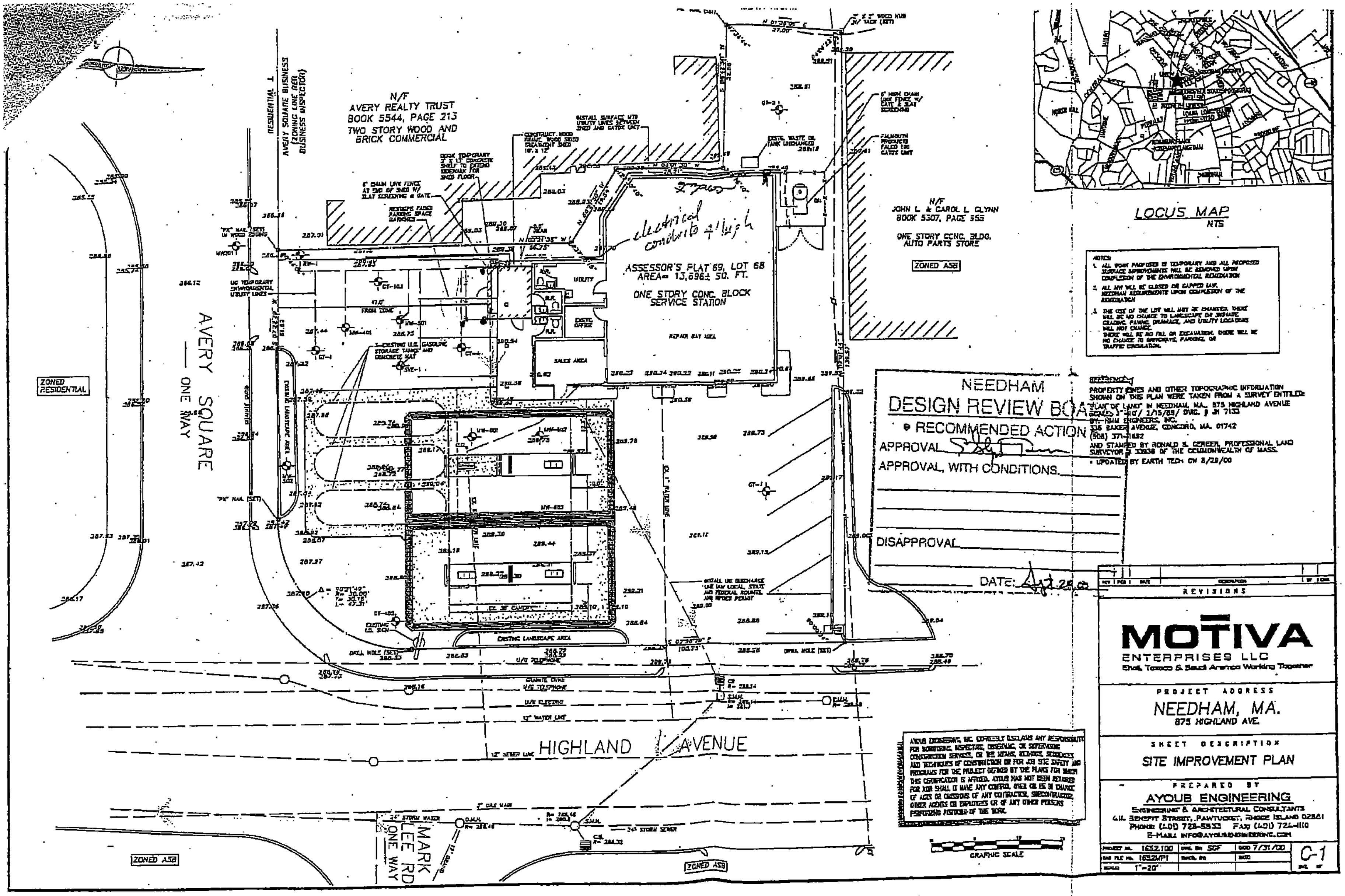
10-22-05



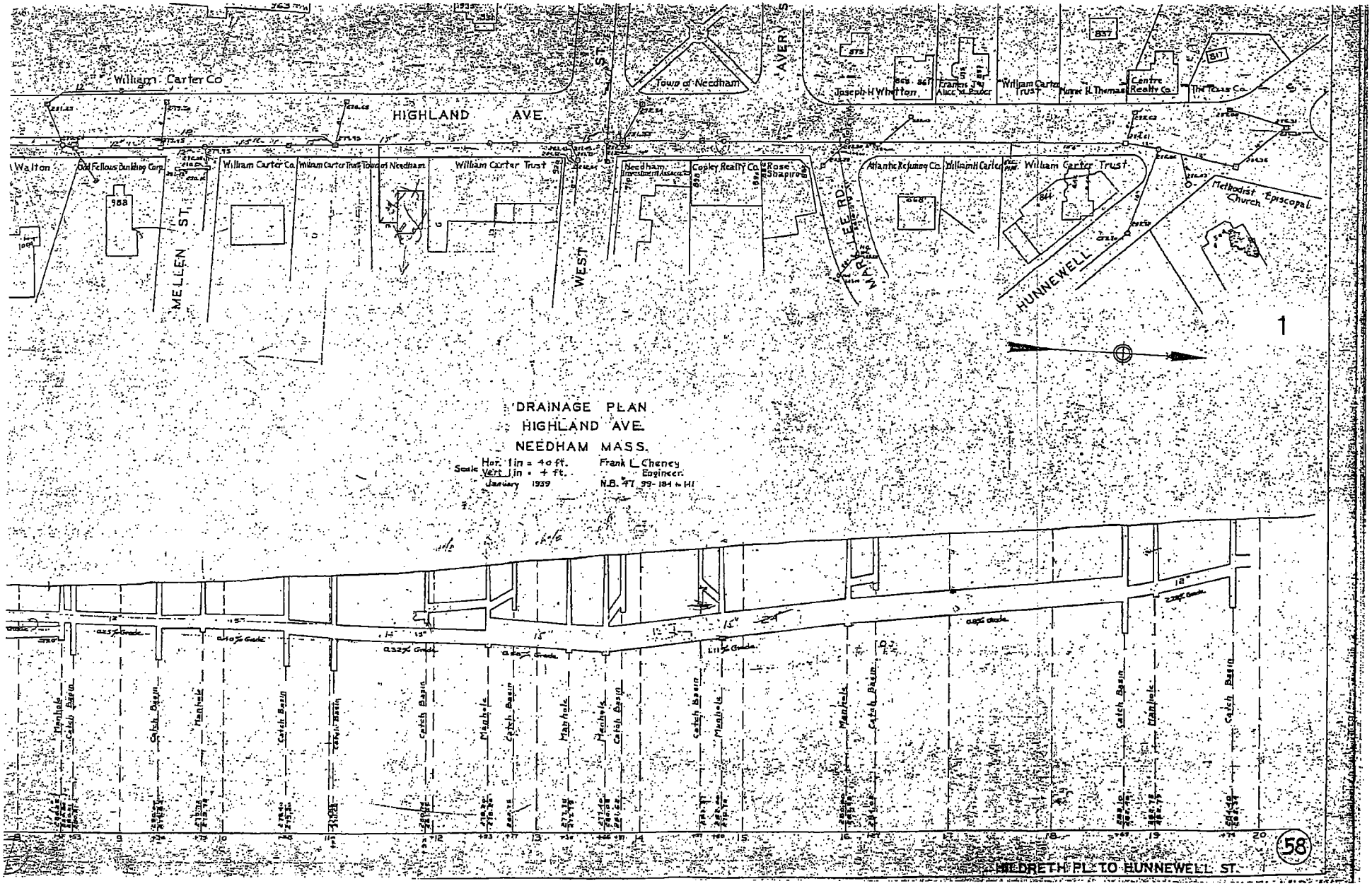
LEGEND

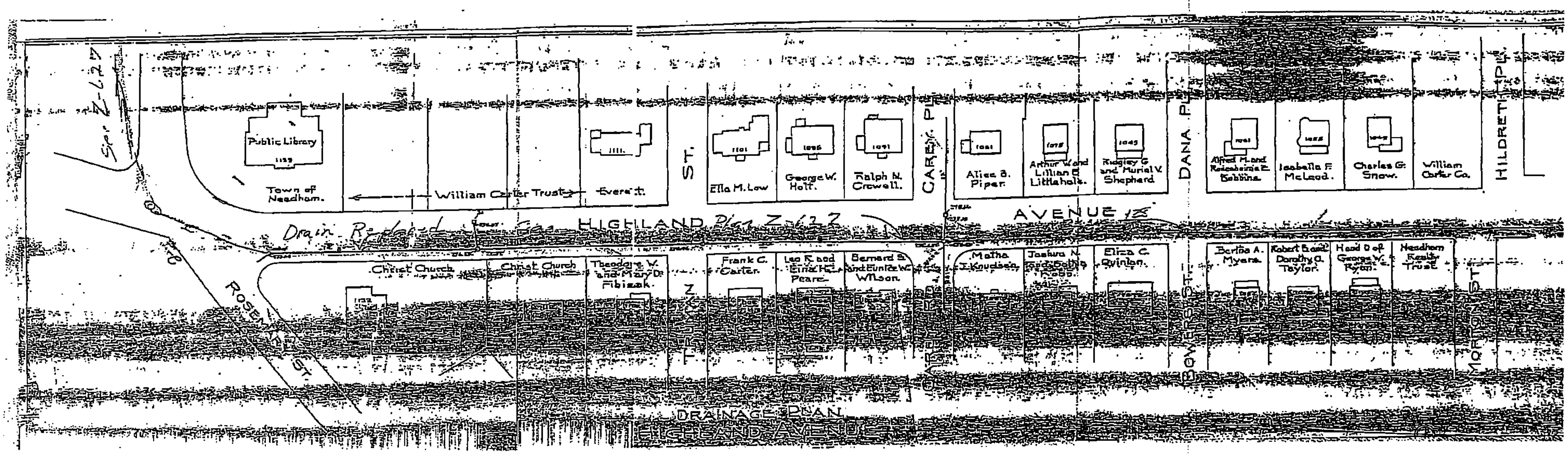
- (P) PRESSURE GAUGE
- (V) VACUUM GAUGE
- CONTROL VALVE
- (SP) SAMPLE / FLOW PORT
- WATER FLOW DIRECTION
- AIR FLOW DIRECTION
- [HH] HIGH/HIGH SAFETY SWITCH
- [H] HIGH SAFETY SWITCH
- [L] LOW SAFETY SWITCH
- (FM) FLOW METER
- (IF) INLET FILTER
- (FS) FINE SEPARATOR

FIGURE 4	PROCESS AND INSTRUMENTATION DIAGRAM	SHELL SERVICE STATION 875 HIGHLAND AVENUE NEEDHAM, MASSACHUSETTS	EnviroTrac
	REVISION DATE: 9/19/03	SCALE IN FEET: Not To Scale	

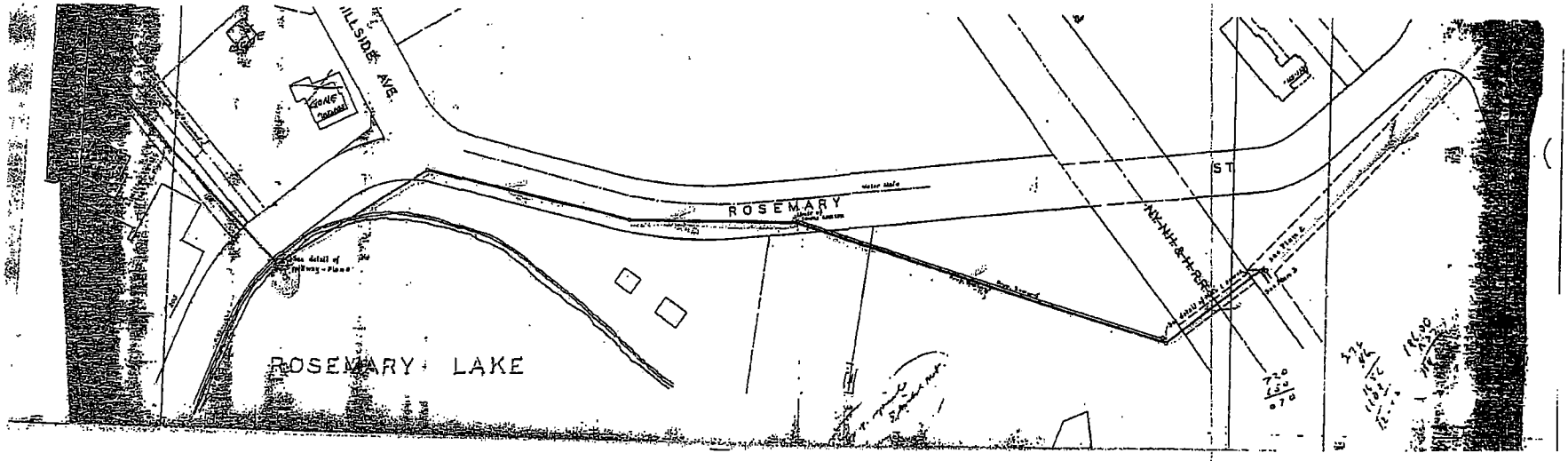


N/F
AVERY REALTY TRUST
BOOK 5544, PAGE 213
TWO STORY WOOD AND BRICK COMMERCIAL
RESIDENTIAL
AVERY SQUARE BUSINESS (ZONING LINE PER BUSINESS INSPECTOR)
ASSESSOR'S PLAT 69, LOT 68
AREA= 13,696± SQ. FT.
ONE STORY CONC. BLOCK SERVICE STATION
electrical conduits 4' high
UTILITY
SALES AREA
REPAIR BAY AREA
N/F
JOHN L. & CAROL L. GLYNN
BOOK 5307, PAGE 555
ONE STORY CONC. BLDG. AUTO PARTS STORE
ZONED ASB
ZONED RESIDENTIAL
AVERY SQUARE
ONE WAY
HIGHLAND AVENUE
MARK LEE RD
ONE WAY
EXISTING LANDSCAPE AREA
LOCUS MAP
NTS
NEEDHAM
DESIGN REVIEW BOA
RECOMMENDED ACTION
APPROVAL
APPROVAL, WITH CONDITIONS
DISAPPROVAL
DATE:
REVISIONS
MOTIVA
ENTERPRISES LLC
PROJECT ADDRESS
NEEDHAM, MA.
875 HIGHLAND AVE.
SHEET DESCRIPTION
SITE IMPROVEMENT PLAN
PREPARED BY
AYOUB ENGINEERING
ENGINEERING & ARCHITECTURAL CONSULTANTS
414 BENEFIT STREET, PAWTUCKET, RHODE ISLAND 02861
GRAPHIC SCALE
1"=20'
C-1


HIGHLAND AVE.
AVERY ST.
MELLEN ST.
WEST ST.
MARKLEE RD.
HUNNEWELL
William Carter Co
Town of Needham
William Carter Trust
Centre Realty Co.
Methodist Episcopal Church
DRAINAGE PLAN
HIGHLAND AVE.
NEEDHAM MASS.
Scale Hor. 1 in = 40 ft.
Vert 1 in = 4 ft.
January 1939
Frank L. Cheney
Engineer
N.B. 47 99-184 & 41
MEDRETH PL. TO HUNNEWELL ST.
58



Public Library
1139
Town of Needham.
William Carter Trust
Everett
ST.
Ella M. Low
George W. Holt.
Ralph N. Crowell.
Alice B. Piper.
Arthur W. and Lillian E. Littlehale.
Rudgley G. and Muriel V. Shepherd
DANA PL.
Isabella F. McLeod.
Charles G. Snow.
William Carter Co.
HILDRETH PL.
HIGHLAND
AVENUE
Christ Church
Theodore W. and Mary D. Fibiszak
Frank C. Carter.
Bernard S. and Eunice W. Wilson.
Eliza C. Quinlan.
Bertha A. Myers.
Robert B. and Dorothy O. Taylor.
Needham Realty Trust
ROSEMARY ST.
DRAINAGE PLAN
HIGHLAND AVENUE


ILLSIDE AVE.
ROSEMARY
ST
ROSEMARY LAKE

DILUTION FACTOR CALCULATIONS

DILUTION FACTOR CALCULATION WORKSHEET
INDIVIDUAL NPDES PERMIT APPLICATION

Site: Shell Service Station
Address: 875 Highland Avenue, Needham, MA
Receiving Stream: Rosemary Lake (Class B)

Qd = 0.2 = Maximum flow rate of the discharge (gpm)

Qd = 0.0004 = Maximum flow rate of the discharge in cubic feet per second (cfs), 1.0 gpm = 0.00223 cfs

Qs = 0.05 = Receiving water 7Q10 flow (cfs) where,

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

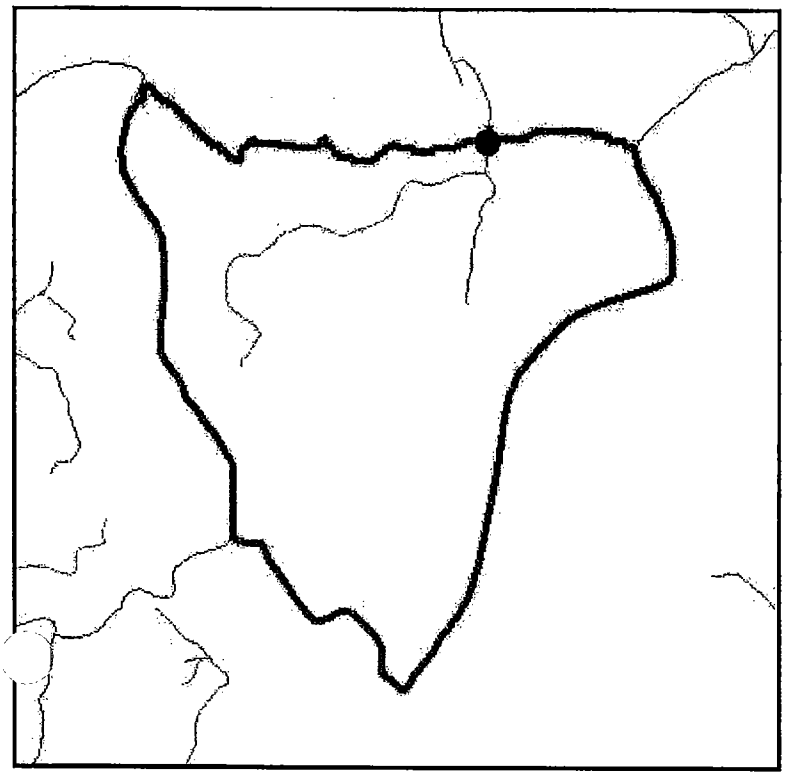
DF = (Qd + Qs) / Qd

DF = Dilution Factor = 1:131

NOTE:
Source: USGS, Streamflow Statistics Report, http://ststdmamrl.er.usgs.gov/streamstats/expert.htm

ROSEMARY LAKE

Streamflow Statistics Report



Date: Fri Oct 21 16:59:06 2005
Warning! Drainage Area outside allowable range. Prediction intervals not calculated.
Latitude: 42.2882
Longitude: -71.2389
Measured Basin Characteristics:
Drainage Area (square miles): 0.95
Stratified Drift Area (square miles): 0.61
Stream Length (miles): 1.39
Slope (percent): 1.60
Region: 0

Statistic	Estimated streamflow, ft^3/s	90% Prediction interval	
		Minimum	Maximum
99-percent duration flow	0.04		
-percent duration flow	0.07		
95-percent duration flow	0.11		

90-percent duration flow	0.20		
85-percent duration flow	0.24		
80-percent duration flow	0.34		
75-percent duration flow	0.37		
70-percent duration flow	0.46		
60-percent duration flow	0.67		
50-percent duration flow	0.91		
7-day, 2-year low flow	0.11		
7-day, 10-year low flow	0.05		
August median flow	0.27		

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

Maintainer: webmaster@mass1.er.usgs.gov

MASSACHUSETTS YEAR 2002 INTEGRATED LIST OF WATERS (303 (d) LIST)

Massachusetts Year 2002 Integrated List of Waters

Part 2 – Final Listing of Individual Categories of Waters

CN: 125.2

Commonwealth of Massachusetts
Executive Office of Environmental Affairs
Ellen Roy Herzfelder, Secretary
Massachusetts Department of Environmental Protection
Robert W. Golledge Jr., Commissioner
Bureau of Resource Protection
Cynthia Giles, Assistant Commissioner
Division of Watershed Management
Glenn Haas, Director

September, 2003

Massachusetts Category 5 Waters
"Waters requiring a TMDL"

*-non Pollutant

NAME	SEGMENT ID	DESCRIPTION	SIZE	ASSESS DATE	POLLUTANT NEEDING TMDL [EPA APPROVAL DATE/DOCUMENT CONTROL NUMBER]
Muddy River (7239075)	MA72-11_2002	Outlet of unnamed pond, Olmstead Park, Boston to confluence with Charles River, Boston.	4.2 miles	Dec-98	-Priority organics -Metals -Nutrients -Siltation -Organic enrichment/Low DO -(Other habitat alterations*) -Pathogens -Oil and grease -Taste, odor and color
Populatic Pond (72096)	MA72096_2002	Norfolk	40 acres	Oct-98	-Metals -Noxious aquatic plants -Turbidity
Rock Meadow Brook (7239500)	MA72-21_2002	Headwaters in Fisher Meadow, Westwood through Stevens Pond and Lee Pond, Westwood to confluence Charles River, Dedham.	3.8 miles	Dec-98	-Pathogens
Rosemary Brook (7239325)	MA72-25_2002	Headwaters, outlet Rosemary Lake, Needham to confluence with Charles River, Wellesley.	3.2 miles	Dec-98	-Nutrients -Organic enrichment/Low DO -Pathogens -Taste, odor and color -Suspended solids -Turbidity
Sawmill Brook (7239400)	MA72-23_2002	Headwaters, Newton to confluence with Charles River, Boston.	2.7 miles	Dec-98	-Other inorganics -Organic enrichment/Low DO -(Other habitat alterations*) -Pathogens -Taste, odor and color -Noxious aquatic plants
South Meadow Brook (7239375)	MA72-24_2002	Isolated, interrupted, urban brook with 'headwaters' south of Route 9, Newton to confluence of Charles River, Newton.	2.1 miles	Dec-98	-Nutrients -Siltation -Organic enrichment/Low DO -(Other habitat alterations*) -Pathogens -Taste, odor and color -Turbidity
Stop River (7239925)	MA72-09_2002	Headwaters, Wrentham to Norfolk-Walpole MCI, Norfolk. Miles 8.8-4.1	4.7 miles	Dec-98	-Cause Unknown -Organic enrichment/Low DO
Stop River (7239925)	MA72-10_2002	Norfolk-Walpole MCI, Norfolk to confluence with Charles River, Medfield. Miles 4.1-0.0	4.1 miles	May-03	-Cause Unknown -Organic enrichment/Low DO -Pathogens
Trout Brook (7239575)	MA72-19_2002	Headwaters, outlet Channings Pond to confluence with Charles River, Dover.	2.8 miles	Dec-98	-Cause Unknown

U.S. Environmental Protection Agency

Total Maximum Daily Loads

Listed Water Information

CYCLE : 2002

Click here to see metadata for this report.

Cycle: 2002 **State:** MA **List ID:** MA72-25
Waterbody Name: ROSEMARY BROOK
State Basin Name: CHARLES
Listed Water Map Link: MAP 303(d)

Comments:
HEADWATERS, OUTLET ROSEMARY LAKE, NEEDHAM TO CONFLUENCE WITH CHARLES RIVER, WELLESLEY.

State List IDs:

Cycle	State List ID
2002	MA72-25_2002

State Impairments:

State Impairment	Parent Impairment	Priority	Rank	Targeted Flag	Anticipated TMDL Submittal
NUTRIENTS					
ORGANIC ENRICHMENT/LOW DO					
PATHOGENS					
SUSPENDED SOLIDS					
TURBIDITY					
TASTE, ODOR AND COLOR	TASTE AND ODOR				

Potential Sources of Impairment:

There were no potential sources reported to EPA by the state.

Total Maximum Daily Load (TMDL) Information:

There were no TMDLs reported to EPA by the state.

Watershed Information:

Watershed Name	Watershed States
CHARLES	MASSACHUSETTS

ENDANGERED SPECIES ACT
TOWN SPECIES LIST

In accordance with Appendix VII of the NPDES Remediation General Permit, it was determined that the four species of concern (**shortnose sturgeon**, **dwarf wedge mussel**, **bog turtle** and the **northern redbelly cooter**) are not present at the facility pursuant to USEPA Endangered Species Act Review Procedures website (http://cfpub.epa.gov.npdes/stormwater/esa.cfm). See attached list.

Town		Taxonomic Group	Scientific Name	Common Name	State Rank	Federal Rank	Most Recent Obs
NEEDHAM	*	Amphibian	Ambystoma laterale	Blue-Spotted Salamander	SC		1980
NEEDHAM	*	Reptile	Clemmys guttata	Spotted Turtle	SC		2000
NEEDHAM		Reptile	Terrapene carolina	Eastern Box Turtle	SC		1936
NEEDHAM		Bird	Vermivora chrysoptera	Golden-Winged Warbler	E		1928
NEEDHAM		Mussel	Ligumia nasuta	Eastern Pondmussel	SC		1962
NEEDHAM		Vascular Plant	Aristida purpurascens	Purple Needlegrass	T		1883
NEEDHAM		Vascular Plant	Asclepias purpurascens	Purple Milkweed	E		1887
NEEDHAM		Vascular Plant	Carex oligosperma	Few-Fruited Sedge	E		1912
NEEDHAM		Vascular Plant	Conioselinum chinense	Hemlock Parsley	SC		1892
NEEDHAM		Vascular Plant	Galium boreale	Northern Bedstraw	E		1881
NEEDHAM		Vascular Plant	Gentiana andrewsii	Andrews' Bottle Gentian	E		1890
NEEDHAM		Vascular Plant	Houstonia longifolia var longifolia	Long-Leaved Bluet	E		1919
NEEDHAM		Vascular Plant	Liatris borealis	New England Blazing Star	SC		1883
NEEDHAM		Vascular Plant	Ophioglossum pusillum	Adder's-Tongue Fern	T		1890
NEEDHAM		Vascular Plant	Platanthera flava var herbiola	Pale Green Orchis	T		1891
NEEDHAM		Vascular Plant	Prenanthes serpentaria	Lion's Foot	E		1894
NEEDHAM	*	Vascular Plant	Scirpus longii	Long's Bulrush	T		1999
NEEDHAM		Vascular Plant	Sphenopholis nitida	Shining Wedgegrass	T		1884
NEEDHAM		Vascular Plant	Sphenopholis pensylvanica	Swamp Oats	T		1887

NEEDHAM	*	Vascular Plant	Spiranthes vernalis	Grass-Leaved Ladies'-Tresses	T		1985
NEEDHAM		Vascular Plant	Trisetum triflorum ssp molle	Spiked False Oats	E		1889
NEEDHAM		Vascular Plant	Viola brittoniana	Britton's Violet	T		1890

LABORATORY ANALYTICAL

(RECEIVING STREAM UPSTREAM)

up stream

NETLAB

REPORT OF ANALYTICAL RESULTS

NETLAB Case Number Q1017-02

Prepared for:

Attn: Sean Kennedy
Envirotrac Ltd.
1400 Providence Hwy, Suite 2100
Norwood, MA 02062

Report Date: October 20, 2005

Lab # RI010

Electronic Copy

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

Total # of Pages: 10

ANALYTICAL METHOD REPORT CERTIFICATION FORM

Laboratory Name: New England Testing Laboratory, Inc.	Project #:
Project Location: ECT Needham 875	RTN[1]:
This form provides certifications for the following data set: Q1017-02	
Sample Matrices: Groundwater (X) Soil/Sediment ( ) Drinking Water ( ) Other:	

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

1-1 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: 10/20/2005

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 October 17, 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 Q1017-02.

Custody records are included in this report.

Site: ECI Needham 875

TABLE I, Samples Submitted

Sample ID	Date Sampled	Matrix	Analysis Requested
Rosemary Lake	10/14/05	Water	Table II

TABLE II, Analysis and Methods

ANALYSIS	DETERMINATIVE METHOD
Total Hardness	200.7
Total Metals	
Copper	200.7
Iron	200.7
Lead	200.7
Zinc	200.7

This method is documented in:

40 CFR 136, *Guidelines Establishing Test Procedures for the Analysis of Pollutants Under the Clean Water Act*, Office of Federal Register National Archives and Records Administration.

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. All QC was within laboratory established acceptance criteria. The samples were received, processed, and reported with no anomalies.

Sample Results

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.

METALS RESULTS

Case Number: Q1017-02
Sample ID: ECI NEEDHAM 875
Date collected: 10/14/05
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
Hardness	NA	NA	200.7	57	0.33	0.33	mg/l	10/18/05	10/18/05
Copper	7440-50-8	NA	200.7	ND	0.02	0.02	mg/l	10/18/05	10/18/05
Iron	7439-89-6	NA	200.7	0.52	0.05	0.05	mg/l	10/18/05	10/18/05
Lead	7439-92-1	NA	200.7	ND	0.005	0.005	mg/l	10/18/05	10/18/05
Zinc	7440-66-6	NA	200.7	ND	0.02	0.02	mg/l	10/18/05	10/18/05

ND indicates not Detected

Custody Records

NEW ENGLAND TESTING LABORATORY, INC.
1254 Douglas Avenue
North Providence, RI 02904

CHAIN OF CUSTODY RECORD

Q1017.02

PROJ. NO.

PROJECT NAME: ECI Needham 875

CLIENT: EnviroTrac

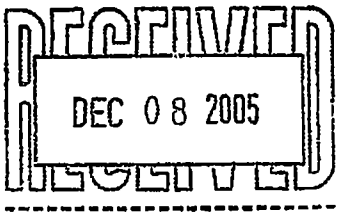
SAMPLE I. D.	DATE	TIME	COMP	GRAB	STATION LOCATION	NO. OF CON-TAINERS	TESTS: Total Hardness	TESTS: Copper	TESTS: Iron	TESTS: Lead	TESTS: Zinc	REMARKS
	10-14	0520 pm		X	Rosemary Lake	2	X	X				PM: Sean Kennedy Bill ET Direct
												* 72 hr TAT *

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Relinquished by: (Signature)	Date/Time	Received by: (Signature)
	10-1405 4:00 pm	Secured Fridge		10/17/05 9:00	Erik Dias
Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Relinquished by: (Signature)	Date/Time	Received for Laboratory by: (Signature)	Date/Time	Remarks	
			10/17/05 1030	Temp 4°	

LABORATORY ANALYTICAL

(RECEIVING STREAM DOWNSTREAM)

down stream



REPORT OF ANALYTICAL RESULTS

NETLAB Case Number Q1202-15

Prepared for:

Attn: Sean Kennedy
Envirotrac Ltd.
1400 Providence Hwy, Suite 2100
Norwood, MA 02062

Report Date: December 6, 2005

Lab # RI010

NEW ENGLAND TESTING LABORATORY, INC.
1254 Douglas Avenue, North Providence, Rhode Island 02904-5392
PROVIDENCE (401) 353-3420 TOLL FREE: 1-888-863-8522

Total # of Pages: 9

ANALYTICAL METHOD REPORT CERTIFICATION FORM

Laboratory Name: New England Testing Laboratory, Inc.	Project #:
Project Location: ECI Needham 875	RTN[1]:

This form provides certifications for the following data set: Q1202-15

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

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

Printed Name: _____ Date: 12/6/2005

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 December 2, 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 Q1202-15.

Custody records are included in this report.

Site: ECI – Needham 875

TABLE I, Samples Submitted

Sample ID	Date Sampled	Matrix	Analysis Requested
Rosemary Lake	12/2/05	Water	Table II

TABLE II, Analysis and Methods

ANALYSIS	PREPARATION METHOD	DETERMINATIVE METHOD
Total Hardness	200.7	200.7

This method is documented in:

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

40 CFR 136, *Guidelines Establishing Test Procedures for the Analysis of Pollutants Under the Clean Water Act*, Office of Federal Register National Archives and Records Administration.

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. All QC was within laboratory established acceptance criteria. The samples were received, processed, and reported with no anomalies.

Sample Results

Case No. Q1202-15

Rosemary Lake

Parameter	Result, mg/l	Reporting Limit	Date Analyzed
Total Hardness	54	0.33	12/6/05

Custody Records

NEW ENGLAND TESTING LABORATORY, INC.
1254 Douglas Avenue
North Providence, RI 02904

Q1202-15

CHAIN OF CUSTODY RECORD

PROJ. NO

PROJECT NAME: ECI - NEEDHAM 875 (SCAN KENNEDY)

CLIENT: ENVIROTRAC LTD

SAMPLE I. D.	DATE	TIME	COMP	GRAB	STATION LOCATION	NO. OF CON-TAINERS	TESTS: TOTAL HARDNESS	REMARKS
	12/1/05	8:30		X	ROSEMARY LAKE	1	X	- INCLUDE GAS CHROMOTOGRAMS W/ LAB REPORT - BILL ET DIRECT - "RGP AGREED UPON TAT'S"

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Relinquished by: (Signature)	Date/Time	Received by: (Signature)
	12/1/05 9:18				
Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Relinquished by: (Signature)	Date/Time	Received for Laboratory by: (Signature)	Date/Time	Remarks	
		Lynn Smith	12/2/05	3°C water	

LABORATORY ANALYTICAL

(SYSTEM INFLUENT)

NETLAB

REPORT OF ANALYTICAL RESULTS

NETLAB Case Number Q0929-07

Prepared for:

Attn: Sean Kennedy
Envirotrac Ltd.
1400 Providence Hwy, Suite 2100
Norwood, MA 02062

Report Date: October 11, 2005

Lab # RI010

Electronic Copy

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

Total # of Pages: 19

ANALYTICAL METHOD REPORT CERTIFICATION FORM

Laboratory Name: New England Testing Laboratory, Inc.	Project #:
Project Location: ECI Needham 875	RTN[1]:
This form provides certifications for the following data set: Q0929-07	
Sample Matrices: Groundwater (X) Soil/Sediment ( ) Drinking Water ( ) Other:	

SW-846 Methods Used					
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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.*

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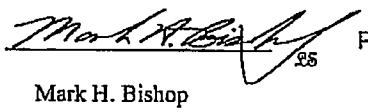
Signature:  Position: Laboratory Director

Printed Name: Mark H. Bishop Date: 10/11/2005

ANALYTICAL METHOD REPORT CERTIFICATION FORM

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Project Location: ECI Needham 875 RTN[1]:

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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: 11/10/2005

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