

Via USPS
Delivery Confirmation



CORPORATE ENVIRONMENTAL ADVISORS, INC.



February 3, 2006

US-EPA Region 1
RGP-NOC Processing
Municipal Assistance Unit (CMU)
One Congress Street
Boston, Massachusetts 02114-2023

**RE: EPA Remediation General Permit Notice of Intent
Mutual Oil Station No. 31
30 Rockdale Avenue
New Bedford, MA
RTN 4-0484**

FEB - 8 2006

To Whom It May Concern::

On behalf of Mutual Oil Inc. (Mutual), Corporate Environmental Advisors, Inc. (CEA) is submitting this Notice of Intent (NOI) for an EPA Remediation General Permit (RGP) to treat and discharge petroleum-impacted groundwater at the above referenced site. This work is being conducted as part of a Phase IV Remedy Implementation Plan (RIP) submitted for the site pursuant to 310 CMR 40.0874 of the Massachusetts Contingency Plan (MCP). **Figure 1**, Site Locus Map, shows the property location with respect to surrounding topography. **Figure 2**, Site Layout, depicts pertinent site features.

Groundwater and non-aqueous phase liquid (NAPL) will be generated during a soil excavation project scheduled to begin on February 7, 2006. Site Preparations and shoring activities are expected to take three weeks to complete. Soil excavation and off-site recycling has been selected as the primary source area reduction measure for the site.

Dewatering is scheduled to commence on February 27, 2006. Once groundwater and/or NAPL is encountered during excavation activities, a groundwater recovery sump will be installed to an approximate depth of 16 feet below surface grade; 4 feet below the anticipated maximum depth of the excavation and approximately 8 feet below the observed depth to groundwater. A pump will be placed in the sump to pump groundwater and NAPL from the excavation into a 21,000-gallon frac-tank. The groundwater treatment and NAPL recovery system configuration is further discussed below.

Groundwater and NAPL will be pumped from the excavation into an on-Site, 21,000-gallon frac-tank to remove suspended materials and to separate NAPL from groundwater. Groundwater will be pumped from the frac-tank using a submersible pump through an on-Site groundwater treatment system. Recovered groundwater will be pre-treated through two, 45-micron bag filters, in series, and then treated using two (2) 2,000-pound liquid-phase granular-activated-carbon-adsorption (GACA) vessels, piped in series. The groundwater treatment system will be designed to treat and discharge groundwater at a maximum flow rate of 50 gallons per minute (GPM). The flow meter and flow totalizer will be located immediately prior to discharge of the treated groundwater. Flow rates will be periodically monitored

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throughout discharging and total discharged gallons of treated groundwater will be recorded at the end of each day.

Generated groundwater will be treated and discharged to a stormwater drainage system located in Rockdale Avenue. The stormwater drainage system discharges to Clarks Cove which is approximately 400-feet east of the Site and a National Heritage & Endangered Species Program Area. CEA filed a *Section 7 Project Review* with the United States Department of the Interior Fish and Wildlife Service (FWS) on January 16, 2006, to determine if any federally listed or proposed endangered or threatened species would be affected by the project. The FWS opinion states that no endangered species are located in Clarks Cove. A summary of the Section 7 Project Review findings are attached.

Groundwater discharge will be monitored according to the guidelines described in the RGP. In-line sample ports for sample collection will be installed at the GACA influent, midpoint, and effluent discharge points. In addition, a totalizer and flow meter will be installed along the discharge line for proper recording of groundwater discharge volume and flow rates. The dewatering system is anticipated to be operated for a maximum period of approximately two months. A dewatering schematic is provided in **Figure 3**. The NOI forms, tables and supporting documentation are attached.

If you have any questions or require additional information, please do not hesitate to contact the undersigned at (508) 835-8822, Extension 224.

Sincerely,
CORPORATE ENVIRONMENTAL ADVISORS, INC.



Patrick J. Brown
Environmental Scientist I



Scott E. VanderSea, L.S.P., L.E.P.
Principal Hydrogeologist

cc: Mr. Edward A. Rachins, Mutual Oil Co., Inc., 863 Crescent Street, PO Box 250, Brockton, MA 02303

**NOTICE OF INTENT FORM
FOR THE
REMEDIATION GENERAL PERMIT**

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: Mutual Station No. 31		Facility/site address:	
Location of facility/site: longitude: 70°55'54" latitude: 41° 36' 47"	Facility SIC code (s):	Street: 30 Rockdale Avenue	
b) Name of facility/site owner: Mutual Oil Company, Inc.		Town: New Bedford	
Email address of owner:		State: MA	Zip: 02740
Telephone no. of facility/site owner: 508-583-5777		County: Bristol	
Fax no. of facility/site owner: 508-580-1859		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: 863 Crescent Street, PO BOX 250			
Town: Brockton	State: MA	Zip: 02303	County: Plymouth
c.) Legal name of operator: Corporate Environmental Advisors, Inc.		Operator telephone no.: 508-835-8822	
		Operator fax no.: 508-835-8812	Operator email: SVanderSea@cea-inc.com
Operator contact name and title: Scott VanderSea, Principal Hydrogeologist			
Address of operator (if different from owner): same as owner		Street: 127 Hartwell Street	
Town: West Boylston	State: MA	Zip: 01583	County: Worcester
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: May 6, 1997 - #97-126			
2. Has a prior NPDES application (Form 1 & 2C) ever been filed for the discharge? Yes ☐ No ☒ , if "yes," date and tracking #:			
3. Is the discharge a "new discharge" as defined by 40 CFR 122.2? Yes ☒ No ☐			
4. For sites in Massachusetts, is the discharge covered under the MA Contingency Plan (MCP) and exempt from state permitting? Yes ☒ No ☐			

e) Is site/facility subject to any State permitting or other action which is causing the generation of discharge? Yes ☒ No ☐. If "yes," please list: 1. site identification # assigned by the state of NH or MA: RTN 4-0484 2. permit or license # assigned: Tier II (MCP) 3. state agency contact information: name, location, and telephone number: MADEP, Gary Moran, SE Regional Office, Lakeville, MA	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:
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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: Dewatering during the excavation activities to remove gasoline contaminated soil.		
b) Provide the following information about each discharge:	1) Number of discharge points: 1	2) What is the maximum and average flow rate of discharge (in cubic feet per second, W/s)? Max. flow <u>0.111 ft³/sec</u> Average flow <u>0.111 ft³/sec</u> 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.
3) Latitude and longitude of each discharge within 100 feet: pt.1 :long. <u>70°55'54"</u> lat. <u>41° 36' 47"</u> ; 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 ☒ Discharge is only during construction activities
c) Expected dates of discharge (mm/dd/yy): start <u>02/27/06</u> end <u>4/20/2006</u>	
d) Please attach a line drawing or flow schematic showing water flow through the facility including: <u>See attached Figure 3.</u> 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/day)	concentration (ug/l)	mass (kg/day)
1. Total Suspended Solids			1	GRAB	SM 2540D	4,000	851,000	190.7		
2. Total Residual Chlorine		√	1	GRAB	SM 4500-Cl	50	<50	0.011		
3. Total Petroleum Hydrocarbons		√	1	GRAB	1664	4,100	< 4,100	0.92		
4. Cyanide	√		1	GRAB	9012A	10	<10	0.0002		
5. Benzene		√	1	GRAB	8260B	0.5	1.1	0.0002		
6. Toluene		√	1	GRAB	8260B	0.5	110	0.025		
7. Ethylbenzene		√	1	GRAB	8260B	0.5	54.6	0.012		
8. (m,p,o) Xylenes		√	1	GRAB	8260B	1.0	230	0.052		
9. Total BTEX ⁴		√	1	GRAB	8260B	-----	396	0.089		

⁴BTEX = Sum of Benzene, Toluene, Ethylbenzene, total Xylenes.

	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/day)	concentration (ug/l)	mass (kg/day)
10. Ethylene Dibromide (1,2- Dibromo-methane)	√		1	GRAB	504.1	2	-	-	-	-
11. Methyl-tert-Butyl Ether (MtBE)		√	1	GRAB	8260B	1	2.8	0.0006		
12. tert-Butyl Alcohol (TBA)	√		1	GRAB	8260B	100	-	-	-	-
13. tert-Amyl Methyl Ether (TAME)	√		1	GRAB	8260B	2	-	-	-	-
14. Naphthalene	√		1	GRAB	8270C	5	-	-	-	-
15. Carbon Tetra- chloride	√		1	GRAB	8260B	1	-	-	-	-
16. 1,4 Dichlorobenzene	√		1	GRAB	8260B	1	-	-	-	-
17.1,2 Dichlorobenzene	√		1	GRAB	8260B	1	-	-	-	-
18. 1,3 Dichlorobenzene	√		1	GRAB	8260B	1	-	-	-	-
19. 1,1 Dichloroethane	√		1	GRAB	8260B	1	-	-	-	-
20. 1,2 Dichloroethane	√		1	GRAB	8260B	1	-	-	-	-
21. 1,1 Dichloroethylene	√		1	GRAB	8260B	1	-	-	-	-
22. cis-1,2 Dichloro- ethylene	√		1	GRAB	8260B	1	-	-	-	-
23. Dichloromethane (Methylene Chloride)	√		1	GRAB	8260B	2	-	-	-	-
24. Tetrachloroethylene	√		1	GRAB	8260B	1	-	-	-	-

PARAMETER	Believe Absent	Believe Present	# of Samples (1 minimum)	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/day)	concentration (ug/l)	mass (kg/day)
25. 1,1,1 Trichloroethane	√		1	GRAB	8260B	1	-	-	-	-
26. 1,1,2 Trichloroethane	√		1	GRAB	8260B	1	-	-	-	-
27. Trichloroethylene	√		1	GRAB	8260B	1	-	-	-	-
28. Vinyl Chloride	√		1	GRAB	8260B	1	-	-	-	-
29. Acetone	√		1	GRAB	8260B	<5	-	-	-	-
30. 1,4 Dioxane	√		1	GRAB	8260B	25	-	-	-	-
31. Total Phenols	√		1	GRAB	8270C	5.1	-	-	-	-
32. Pentachlorophenol	√		1	GRAB	8270C	10	-	-	-	-
33. Total Phthalates ⁶ (phthalate esthers)	√		1	GRAB	8270C	11	-	-	-	-
34. Bis (2-Ethylhexyl) Phthalate [Di-(ethylhexyl) Phthalate]	√		1	GRAB	8270C	10	-	-	-	-
35. Total Group I Polycyclic Aromatic Hydrocarbons (PAH)	√		1	GRAB	8270C	35.7	-	-	-	-
a. Benzo(a) Anthracene	√		1	GRAB	8270C	5.1	-	-	-	-
b. Benzo(a) Pyrene	√		1	GRAB	8270C	5.1	-	-	-	-
c. Benzo(b) Fluoranthene	√		1	GRAB	8270C	5.1	-	-	-	-
d. Benzo(k) Fluoranthene	√		1	GRAB	8270C	5.1	-	-	-	-
e. Chrysene	√		1	GRAB	8270C	5.1	-	-	-	-

⁶The 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/day)	concentration (ug/l)	mass (kg/day)
f. Dibenzo(a,h) anthracene	√		1	GRAB	8270C	5.1	-	-	-	-
g. Indeno(1,2,3-cd) Pyrene	√		1	GRAB	8270C	5.1	-	-	-	-
36. Total Group II Polycyclic Aromatic Hydrocarbons (pAR)	√		1	GRAB	8270C	100	-	-	-	-
h. Acenaphthene	√		1	GRAB	8270C	5.1	-	-	-	-
i. Acenaphthylene	√		1	GRAB	8270C	5.1	-	-	-	-
j. Anthracene	√		1	GRAB	8270C	5.1	-	-	-	-
k. Benzo(ghi) Perylene	√		1	GRAB	8270C	5.1	-	-	-	-
l. Fluoranthene	√		1	GRAB	8270C	5.1	-	-	-	-
m. Fluorene	√		1	GRAB	8270C	5.1	-	-	-	-
n. Naphthalene-	√		1	GRAB	8270C	5.1	-	-	-	-
o. Phenanthrene	√		1	GRAB	8270C	5.1	-	-	-	-
p. Pyrene	√		1	GRAB	8270C	5.1	-	-	-	-
37. Total Polychlorinated Biphenyls (PCBs)	√		1	GRAB	8082	1.68	-	-	-	-
38. Antimony	√		1	GRAB	7041	6	-	-	-	-
39. Arsenic		√	1	GRAB	6010B	10	10.4	0.0023	-	-
40. Cadmium	√		1	GRAB	6010B	5	-	-	-	-
41. Chromium (Total)	√		1	GRAB	6010B	10	-	-	-	-
42. Chromium VI	√		1	GRAB	-	-	-	-	-	-

PARAMETER	Believe Absent	Believe Present	#of Samples (1 minimum)	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/day)	concentration (ug/l)	mass (kg/day)
43. Copper		√	1	GRAB	6010B	25	59.1	0.013		
44. Lead		√	1	GRAB	6010B	55	109	0.009		
45. Mercury	√		1	GRAB	7470A	0.20	-	-	-	-
46. Nickel	√		1	GRAB	6010B	40	-	-	-	-
47. Selenium	√		1	GRAB	6010B	10	-	-	-	-
48. Silver	√		1	GRAB	6010B	7	-	-	-	-
49. Zinc		√	1	GRAB	6010B	20	< 167	0.037		
50. Iron		√	1	GRAB	6010B	1000	18,400	4.12		
Other (describe):	----	----	----	----	----	----	----	----	----	----

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

c. For discharges where **metals** are believed present, please fill out the following:

<i>Step 1:</i> 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? <u>Arsenic, Copper, Lead, Iron, Zinc</u>
<i>Step 2:</i> 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: <u>Arsenic, Copper, Lead, Iron, Zinc</u> DF: <u>Not Applicable – Discharges to the ocean.</u>	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: <u>The treatment system discharges to the ocean.</u>

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

a) A description of the treatment system, including a schematic of the proposed or existing treatment system:
See Figure 3.

b) Identify each applicable treatment unit (check all that apply):	Frac. tank ☒	Air stripper ☐	Oil/water separator ☐	Equalization tanks ☐	Bag filter ☒	GAC filter ☒
	Chlorination ☐	Dechlorination ☐	Other (please describe):			

c) Proposed **average** and **maximum flow rates** (gallons per minute) for the discharge and the **design flow rate(s)** (gallons per minute) of the treatment system:
Average flow rate of discharge 25 GPM Maximum flow rate of treatment system 50 GPM Design flow rate of treatment system

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:
Attached

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. Attached

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

e) Provide the reported or calculated seven day-ten year low flow (7QIO) of the receiving water Not Applicable – Discharges to the Ocean

Please attach any calculation sheets used to support stream flow and dilution calculations. Not Applicable – Discharges to the Ocean

f) Is the receiving water a listed 303(d) water quality impaired or limited water? Yes ☒ No ☐ If yes, for which pollutant(s)? 0300 Priority organics 1700 Pathogens

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

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

- a) Are any listed threatened or endangered species, or designated critical habitat, in proximity to the discharge? Yes ☐ No ☒
Has any consultation with the federal services been completed? Yes ☒ No ☐ or is consultation underway? Yes ☐ No ☐

What were the results of the consultation with the U.S. Fish and Wildlife Service and/or National Marine Fisheries Service (check one):

a "no jeopardy" opinion? ☒ or written concurrence ☐ on a finding that the discharges are not likely to adversely affect any endangered species or critical habitat?

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

7. Supplemental information. :

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

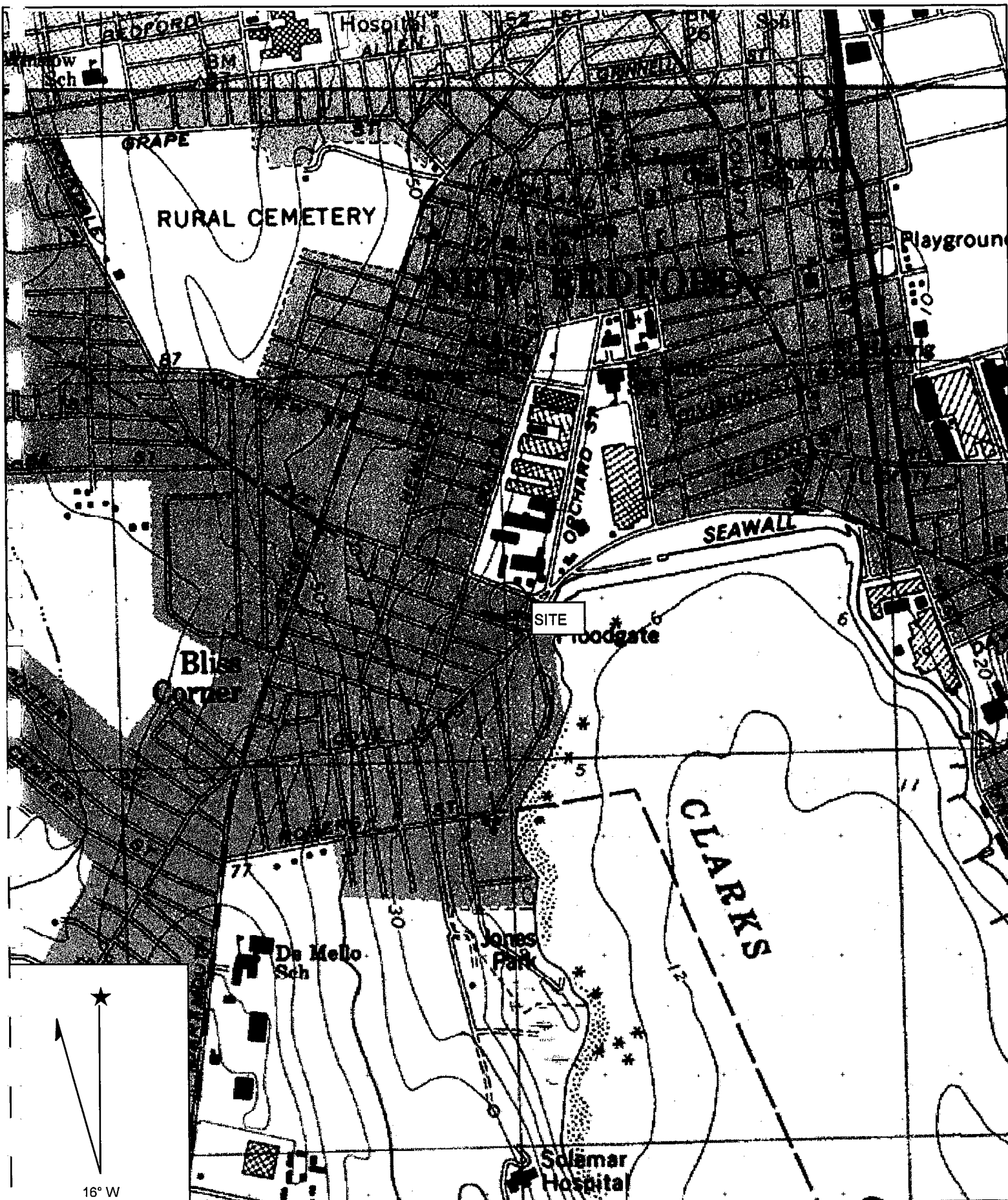
Facility/Site Name: Mutual Station No. 31, 30 Rockdale Avenue, New Bedford, MA

Operator signature: _____

Title: Scott VanderSea, Principal Hydrogeologist / Representative for Mutual Oil/Corporate Environmental Advisors, Inc.

Date: 2/3/90

FIGURES



Name: NEW BEDFORD SOUTH
Date: 1/12/2006
Scale: 1 inch equals 1000 feet

Location: 041° 36' 46.8" N 070° 55' 55.9" W
Caption: Site Locus
Mutual Oil
30 Rockdale Avenue, New Bedford, MA

MA DEP - Bureau of Waste Site Cleanup

Site Scoring Map: 500 feet & 0.5 Mile Radii

SITE NAME:

Mutual Oil Station No. 31
30 Rockdale Avenue
NEW BEDFORD, MA 02740
413648n 705555ew

Site Location



The information shown on this map is the best available at the date of printing. Please refer to the data source descriptions document.



Office of
Geographic and
Environmental
Information



Massachusetts Executive Office of Environmental Affairs - 2006



Roads: Limited Access, Divided, Major Road, Connector, Street, Track, Trail

Boundaries: Town, County, DEP Region; Train; Powerline; Pipeline; Aqueduct

Basins: Major, Sub; Streams: Perennial, Intermittent, Man Made Shore, Dams

Potentially Productive Aquifers: Medium, High Yield

Non-Potential Drinking Water Source Area: Medium, High Yield

EPA Sole Source Aquifer; FEMA 100-year floodplain

Public Water Supplies: Ground, Surface, Non Community

Approved Zone 2; IWPA; Surface Water Supply Zone A

Hydrography: Water Features, Public Surface Water Supply

Wetlands: Fresh, Salt, NHEP Wetlands Habitat

Protected Open Space; ACEC

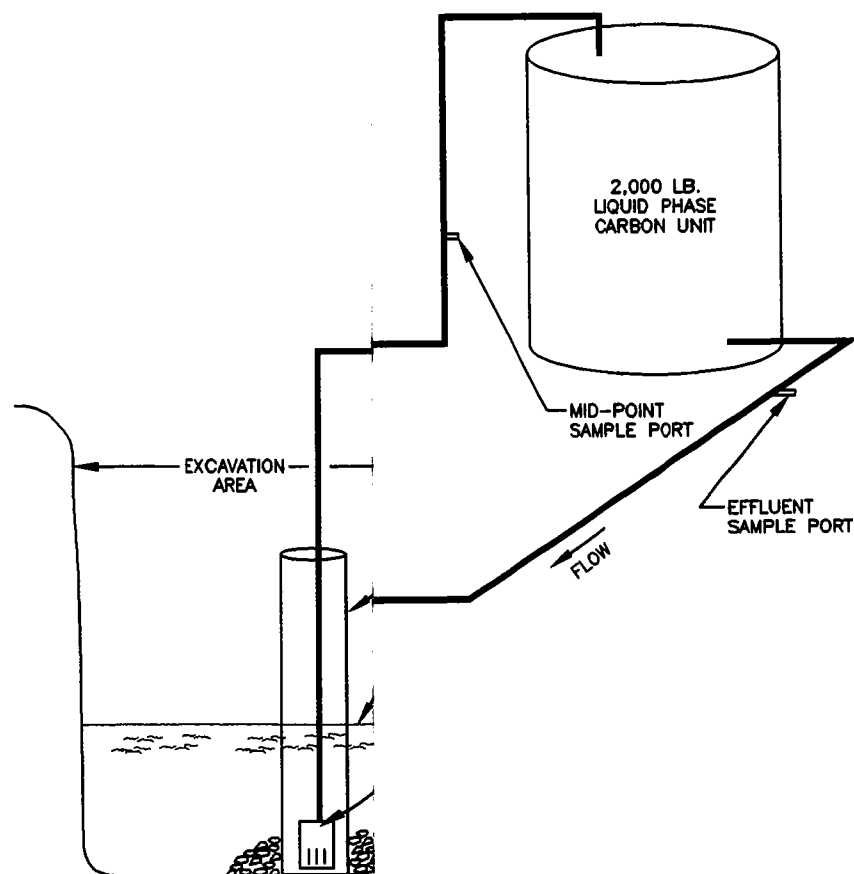
DEP Permitted Solid Waste Facilities; Certified Vernal Pools

SCALE 1:15000

0 1/2 1 KILOMETERS



January 12, 2006



CEA CORPORATE ENVIRONMENTAL
ADVISORS, INC.

Assessments - Remediation - Emergency Response
127 HARTWELL ST. W. BOYLSTON, MA.

SCALE: NOT TO SCALE

DR. BY: K. HAZEL

DATE: 2/3/06

APP. BY: SEV

JOB NO.: 4509-00

*EXCAVATION DEWATERING
PROCESS & INSTRUMENTATION DIAGRAM*

MUTUAL

30 ROCKDALE AVENUE, NEW BEDFORD, MA

FIGURE 3

TABLES

Table 1
Groundwater Analytical Results- VPH
Mutual Station #31
30 Rockdale Avenue
New Bedford, Massachusetts

Sample I.D.	Sample Date	Benzene (ug/l)	Toluene (ug/l)	Ethyl-Benzene (ug/l)	Total Xylenes (ug/l)	MTBE (ug/l)	Naphthalene (ug/l)	C5-C8 Aliphatics (ug/l)	C9-C12 Aliphatics (ug/l)	C9-C10 Aromatics (ug/l)	1,2-Dibromomethane (EDB) (ug/l)	Dissolved Lead (ug/l)	TPH (mg/L)
GW-2 Standards		2,000	6,000	30,000	6,000	50,000	6,000	1,000	1,000	5,000	3	*	1
GW-3 Standards		7,000	50,000	4,000	50,000	50,000	6,000	4,000	20,000	4,000	50,000	30	20
SVE-1 GW-2	15-Apr-96	ND	ND	ND	ND	43	NA	NA	NA	NA	NA	NA	NA
	12-Aug-96	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA
	11-Sep-96	24	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA
	23-Oct-96	150	18	5.9	21	1.1	NA	NA	NA	NA	NA	NA	NA
	09-Jan-97	48	3.6	1.9	19	3.9	NA	NA	NA	NA	NA	NA	NA
	16-Sep-97	86.8	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA
	22-Jan-98	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	21-May-98	67.7	ND	ND	ND	4.6	NA	NA	NA	NA	NA	NA	NA
	24-Sep-98	ND	ND	ND	1.9	6.1	NA	NA	NA	NA	NA	NA	NA
	02-Dec-98	ND	ND	ND	ND	11.1	NA	NA	NA	NA	NA	NA	ND
	07-Jul-00	ND< 1.0	ND< 1.0	ND< 1.0	1.2	2.1	NA	NA	NA	NA	NA	NA	ND< 0.10
	21-Nov-00	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<50	ND<50	ND<50	NA	NA	
SVE-3* GW-2	15-Apr-96	280	9,700	1,100	96,300	ND	NA	NA	NA	NA	NA	NA	NA
	12-Aug-96	2,300	9,800	4,100	8,600	ND	NA	NA	NA	NA	NA	NA	NA
	11-Sep-96	2,200	20,000	3,100	18,000	ND	NA	NA	NA	NA	NA	NA	NA
	23-Oct-96	1,900	19,000	4,400	13,000	85	NA	NA	NA	NA	NA	NA	NA
	09-Jan-97	796	32,100	2,050	15,600	60	NA	NA	NA	NA	NA	NA	NA
	07-May-97	899	17,600	1,890	11,200	ND	NA	NA	NA	NA	NA	NA	NA
	16-Sep-97	565	2,700	1,360	12,700	466	NA	NA	NA	NA	NA	NA	NA
	22-Jan-98	517	5,390	953	14,000	276	NA	NA	NA	NA	NA	NA	NA
	21-May-98	1,180	210	82	1,560	259	NA	NA	NA	NA	NA	NA	NA
	24-Sep-98	736	1,830	732	8,410	ND	NA	NA	NA	NA	NA	NA	NA
	02-Dec-98	1,960	1,610	1,460	11,610	270	358	11,100	1,720	8,460	ND	ND<10.0	ND
	03-Feb-99	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND< 0.014	13.4	NA
	04-Feb-00	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.08	ND<10.0	NA
	07-Jul-00	1,310	2,160	1,860	13,900	447	NA	NA	NA	NA	NA	NA	37
	21-Nov-00	1,050	6,160	1,730	9,930	268	473	10,600	3,150	7,140	NA	NA	
	31-May-01	300	1,600	517	4,430	29.9	238	3,850	4,380	3,870	NA	27.1	
	18-Oct-01	254	1,520	1,080	4,000	37.5	524	4,840	8,550	5,890	NA	12.6	
	07-Jan-03	60	797	569	3,440	<4.0	294	4,050	<100	3,190	NA	NA	NA
	22-May-03	36	529	368	2,083	<2.0	204	2,290	1,170	4,710	NA	NA	NA
	29-Sep-03	55	401	729	4,090	<16	397	5,680	610	3,700	NA	NA	NA
	07-Jul-04	11	58	332	1,785	<2	283	2,030	1,540	4,080	NA	NA	NA

Table 1
Groundwater Analytical Results- VPH
Mutual Station #31
30 Rockdale Avenue
New Bedford, Massachusetts

Sample I.D.	Sample Date	Benzene (ug/l)	Toluene (ug/l)	Ethyl-Benzene (ug/l)	Total Xylenes (ug/l)	MTBE (ug/l)	Naphthalene (ug/l)	C5-C8 Aliphatics (ug/l)	C9-C12 Aliphatics (ug/l)	C9-C10 Aromatics (ug/l)	1,2-Dibromomethane (EDB) (ug/l)	Dissolved Lead (ug/l)	TPH (mg/L)
GW-2 Standards		2,000	6,000	30,000	6,000	50,000	6,000	1,000	1,000	5,000	3	*	1
GW-3 Standards		7,000	50,000	4,000	50,000	50,000	6,000	4,000	20,000	4,000	50,000	30	20
SVE-4	02-Dec-98	2,270	ND	ND	18.9	244	NA	NA	NA	NA	NA	NA	5.09
	03-Feb-99	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND< 0.014	ND< 10	NA
	04-Feb-00	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.03	ND<10.0	NA
	21-Nov-00	ND<5	5	6	34.2	359	6	ND<50	ND<50	95.8	NA	NA	NA
	31-May-01	<5	<5	<5	<10	8.1	8.1	<50	<50	<50	NA	NA	NA
SVE-6	15-Apr-95	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA
	12-Aug-96	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	11-Sep-96	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	23-Oct-96	ND	ND	ND	5.8	ND	NA	NA	NA	NA	NA	NA	NA
	09-Jan-97	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA
	22-Jan-98	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	21-May-98	ND	ND	ND	ND	5.9	NA	NA	NA	NA	NA	NA	NA
	31-May-01	<5	5.8	<5	<10	<5	<5	<50	<50	<50	NA	NA	NA
SV-8	31-May-01	<5	<5	<5	17.7	<5	<5	<50	<50	<50	NA	NA	NA
SVE-11	15-Apr-96	5,700	6,400	960	4,400	3,900	NA	NA	NA	NA	NA	NA	NA
	12-Aug-96	13,000	9,400	3,200	5,900	1,100	NA	NA	NA	NA	NA	NA	NA
	11-Sep-96	7,500	10,000	1,400	6,900	1,100	NA	NA	NA	NA	NA	NA	NA
	23-Oct-96	12,000	8,500	2,100	5,500	760	NA	NA	NA	NA	NA	NA	NA
	09-Jan-97	480	928	151	1,010	344	NA	NA	NA	NA	NA	NA	NA
	07-May-97	6,930	8,350	1,240	5,930	9,110	NA	NA	NA	NA	NA	NA	NA
	16-Sep-97	5,350	13,300	2,430	15,700	549	NA	NA	NA	NA	NA	NA	NA
	22-Jan-98	8,740	13,300	3,060	19,100	676	NA	NA	NA	NA	NA	NA	NA
	21-May-98	4,250	6,550	1,000	8,040	316	NA	NA	NA	NA	NA	NA	NA
	24-Sep-98	3,720	4,050	1,370	8,150	ND	NA	NA	NA	NA	NA	NA	NA
	02-Dec-98	5,490	3,070	2,200	12,500	264	NA	NA	NA	NA	0.33	12.7	60.1
	03-Feb-99	4,190	1,680	1,390	8,690	316	422	6,150	ND< 2500	8,870	0.22	19.4	NA
	04-Feb-00	4,490	6,700	1,160	7,920	3,170	221	9,970	656	4,730	3.0	ND<10.0	NA
	07-Jul-00	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	11.2
	21-Nov-00	993	1,590	701	2,371	377	203	2,330	578	2,850	NA	NA	NA
	31-May-01	988	812	452	1,830	531	177	2,130	1,770	2,510	0.02	NA	NA
	18-Oct-01	1,020	231	789	1,714	440	385	2,370	6,850	4,060	NA	NA	NA
	22-May-03	973	252	526	1,362	573	219	2,230	498	2,680	NA	NA	NA
	29-Sep-03	1,800	95	965	1,642	1,250	428	4,590	<50	2,700	NA	NA	NA
	07-Jul-04	949	83	586	833	1,190	305	2,940	775	3,040	NA	NA	NA
	12-Aug-05	1,140	70.8	742	816.5	1,300	262	1,390	<100	3,400	NA	NA	NA

Table 1
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Mutual Station #31
30 Rockdale Avenue
New Bedford, Massachusetts

Sample I.D.	Sample Date	Benzene (ug/l)	Toluene (ug/l)	Ethyl-Benzene (ug/l)	Total Xylenes (ug/l)	MTBE (ug/l)	Naphthalene (ug/l)	C5-C8 Aliphatics (ug/l)	C9-C12 Aliphatics (ug/l)	C9-C10 Aromatics (ug/l)	1,2-Dibromomethane (EDB) (ug/l)	Dissolved Lead (ug/l)	TPH (mg/L)
GW-2 Standards		2,000	6,000	30,000	6,000	50,000	6,000	1,000	1,000	5,000	3	*	1
GW-3 Standards		7,000	50,000	4,000	50,000	50,000	6,000	4,000	20,000	4,000	50,000	30	20
SVE-12 GW-2	15-Apr-96	13,000	9,500	1,000	3,000	ND	NA	NA	NA	NA	NA	NA	NA
	12-Aug-96	12,000	1,200	5,000	5,400	110	NA	NA	NA	NA	NA	NA	NA
	11-Sep-96	6,400	6,000	1,500	6,100	160	NA	NA	NA	NA	NA	NA	NA
	23-Oct-96	11,000	4,600	2,300	5,000	160	NA	NA	NA	NA	NA	NA	NA
	09-Jan-97	3,350	5,380	874	5,770	75	NA	NA	NA	NA	NA	NA	NA
	07-May-97	6,250	4,700	1,140	4,700	ND	NA	NA	NA	NA	NA	NA	NA
	16-Sep-97	1,240	1,900	566	3,020	252	NA	NA	NA	NA	NA	NA	NA
	22-Jan-98	2,410	2,410	868	3,590	126	NA	NA	NA	NA	NA	NA	NA
	21-May-98	831	2,610	934	4,250	28.8	NA	NA	NA	NA	NA	NA	NA
	24-Sep-98	54.8	123	57.7	421	ND	NA	NA	NA	NA	NA	NA	NA
	2-Dec-98	919	1,820	682	2,616	92	128	4,580	464	2,690	6.1	ND<10.0	NA
	3-Feb-99	NA	NA	NA	NA	NA	NA	NA	NA	NA	12.9	12.20	NA
	4-Feb-00	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.9	ND<10.0	NA
	7-Jul-00	500	2,270	768	3,360	1,980	NA	NA	NA	NA	NA	NA	13.7
	21-Nov-00	70	167	215	727	190	72.6	807	ND<250	1430	NA	NA	NA
	31-May-01	98	1,070	372	1,576	13	91.6	1,390	1,530	1410	0.7	7.3	NA
	18-Oct-01	537	1,020	669	1,600	133	259	2,300	3,650	2,860	0.7	NA	NA
	07-Jan-03	100	1,150	664	2,569	239	181	2,800	<100	2,500	NA	NA	NA
	22-May-03	2.7	65	27	109	240	4	<50	<50	86	NA	NA	NA
	29-Sep-03	250	689	694	2,586	334	175	2,160	58	1,840	NA	NA	NA
	07-Jul-04	<2	<2	<2	<2	46.0	<3	<50	<50	<50	NA	NA	NA
	12-Aug-05	12.7	8.3	18.6	92.9	16.6	7.2	<50	<50	111	NA	NA	NA
SVE-14 GW-2	02-Dec-98	2,120	1,550	635	5,370	265	NA	NA	NA	NA	NA	NA	26.64
	03-Feb-99	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND<0.014	ND<10	NA
	04-Feb-00	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.02	ND<10.0	NA
	21-Nov-00	185	134	195	704	98.9	92.8	1,640	309	1,540	NA	NA	NA
	31-May-01	191	263	348	1,754	164	170	2,560	2,120	3,520	NA	NA	NA
	13-Sep-01	210	170	369	1,455	96	250	2,120	2,300	3,910	NA	NA	NA
	16-May-02	90	13	67	349	42	25	556	262	685	NA	NA	NA
	07-Jan-03	89	49	167	649	28	61	1,450	<100	1,390	NA	NA	NA
	22-May-03	234	84	270	1,203	78	134	2,130	371	3,040	NA	NA	NA
	29-Sep-03	257	57	302	1,479	46	169	2,450	<50	2,360	NA	NA	NA
	12-Aug-05	46.7	5.1	42.6	39.7	<2	22.1	164	<50	668	NA	NA	NA

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Groundwater Analytical Results- VPH
Mutual Station #31
30 Rockdale Avenue
New Bedford, Massachusetts

Sample I.D.	Sample Date	Benzene (ug/l)	Toluene (ug/l)	Ethyl-Benzene (ug/l)	Total Xylenes (ug/l)	MTBE (ug/l)	Naphthalene (ug/l)	C5-C8 Aliphatics (ug/l)	C9-C12 Aliphatics (ug/l)	C9-C10 Aromatics (ug/l)	1,2-Dibromomethane (EDB) (ug/l)	Dissolved Lead (ug/l)	TPH (mg/L)
GW-2 Standards		2,000	6,000	30,000	6,000	50,000	6,000	1,000	1,000	5,000	3	*	1
GW-3 Standards		7,000	50,000	4,000	50,000	50,000	6,000	4,000	20,000	4,000	50,000	30	20
SVE-15*	15-Apr-96	58	140	82	890	8.3	NA	NA	NA	NA	NA	NA	NA
	12-Aug-96	270	590	440	1,800	94	NA	NA	NA	NA	NA	NA	NA
	11-Sep-96	40	250	79	910	ND	NA	NA	NA	NA	NA	NA	NA
	23-Oct-96	500	410	350	1,000	41	NA	NA	NA	NA	NA	NA	NA
	09-Jan-97	4.9	34	9	157	6.6	NA	NA	NA	NA	NA	NA	NA
	07-May-97	15	94.8	10.7	110	ND	NA	NA	NA	NA	NA	NA	NA
	16-Sep-97	394	558	56.6	1,620	456	NA	NA	NA	NA	NA	NA	NA
	22-Jan-98	222	1,410	270	2,740	322	NA	NA	NA	NA	NA	NA	NA
	21-May-98	1,300	354	163	1,520	424	NA	NA	NA	NA	NA	NA	NA
	24-Sep-98	817	368	115	903	ND	NA	NA	NA	NA	NA	NA	NA
	02-Dec-98	1,420	266	292	2,370	221	NA	NA	NA	NA	NA	NA	20.08
	03-Feb-99	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.05	ND< 10	NA
	04-Feb-00	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.04	ND<10.0	NA
	07-Jul-00	262	15	70.8	519	265	NA	NA	NA	NA	NA	NA	8.3
	21-Nov-00	53	606	191	1,009	336	57.3	1,900	401	1,510	NA	NA	NA
	13-Sep-01	ND<5.0	25.8	ND<5.0	24	36	10	430	179	502	NA	NA	NA
	16-May-02	<5	<5	<5	12	18	7	910	239	655	NA	NA	NA
	07-Jan-03	<2.0	6.6	7.7	41	7	4	251	<50	240	NA	NA	NA
	22-May-03	<2	<2	4	15	3	4	286	<50	291	NA	NA	NA
	29-Sep-03	<2	<2	5	29	9	5	385	<50	303	NA	NA	NA
	07-Jul-04	<2	<2	<2	<2	3	5	174	<50	211	NA	NA	NA
	17-Jan-05	<2	<2	47.7	159.1	<2	37.4	380	87.3	3,430	NA	NA	NA
	12-Aug-05	<2	<2	6.9	11.6	<2	6.8	357	<50	500	NA	NA	NA
SVE-16*	15-Apr-96	630	250	1,000	1,400	370	NA	NA	NA	NA	NA	NA	NA
	12-Aug-96	54	18	120	110	5.9	NA	NA	NA	NA	NA	NA	NA
	11-Sep-96	240	160	150	370	ND	NA	NA	NA	NA	NA	NA	NA
	23-Oct-96	150	500	140	140	12	NA	NA	NA	NA	NA	NA	NA
	09-Jan-97	7.2	293	11	29	6.0	NA	NA	NA	NA	NA	NA	NA
	07-May-97	47.2	539	15.3	31.5	33.9	NA	NA	NA	NA	NA	NA	NA
	16-Sep-97	10.8	36.9	7.6	369	87.2	NA	NA	NA	NA	NA	NA	NA
	22-Jan-98	57.1	1,940	86	877	79.9	NA	NA	NA	NA	NA	NA	NA
	21-May-98	142	333	32.2	303	75.8	NA	NA	NA	NA	NA	NA	NA
	24-Sep-98	64.2	117	41.7	380	17.3	NA	NA	NA	NA	NA	NA	NA
	02-Dec-98	540	102	200	610	122	NA	NA	NA	NA	NA	NA	8.82
	07-Jul-00	16.6	4.9	9.5	31.4	11.6	NA	NA	NA	NA	NA	NA	0.285
	21-Nov-00	26.3	ND<5.0	29.3	38.6	94.2	14	96.3	ND<50	242	NA	NA	NA
	31-May-01	17.5	15.8	17	28.4	24.3	19.5	211	107	255	NA	NA	NA

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Sample I.D.	Sample Date	Benzene (ug/l)	Toluene (ug/l)	Ethyl-Benzene (ug/l)	Total Xylenes (ug/l)	MTBE (ug/l)	Naphthalene (ug/l)	C5-C8 Aliphatics (ug/l)	C9-C12 Aliphatics (ug/l)	C9-C10 Aromatics (ug/l)	1,2-Dibromomethane (EDB) (ug/l)	Dissolved Lead (ug/l)	TPH (mg/L)
GW-2 Standards		2,000	6,000	30,000	6,000	50,000	6,000	1,000	1,000	5,000	3	*	1
GW-3 Standards		7,000	50,000	4,000	50,000	50,000	6,000	4,000	20,000	4,000	50,000	30	20
SVE-17*	15-Apr-96	2,900	650	550	1,100	290	NA	NA	NA	NA	NA	NA	NA
	12-Aug-96	810	440	550	650	17	NA	NA	NA	NA	NA	NA	NA
	11-Sep-96	1,800	2,200	330	1,100	180	NA	NA	NA	NA	NA	NA	NA
	23-Oct-96	4,100	3,100	790	1,400	270	NA	NA	NA	NA	NA	NA	NA
	09-Jan-97	1,090	2,600	291	1,280	172	NA	NA	NA	NA	NA	NA	NA
	07-May-97	6,650	7,880	991	3,210	413	NA	NA	NA	NA	NA	NA	NA
	22-Jan-98	845	6.3	2.6	220	251	NA	NA	NA	NA	NA	NA	NA
	21-May-98	46	1.9	ND	4.60	33.2	NA	NA	NA	NA	NA	NA	NA
	25-Sep-98	441	379	278	1,120	ND	NA	NA	NA	NA	NA	NA	NA
	02-Dec-98	17.8	19.8	14.8	192	13.5	NA	NA	NA	NA	NA	NA	6.66
	03-Feb-99	31.0	7.6	7.7	63	17.6	ND< 5.0	250	ND< 100	239	NA	NA	NA
	04-Feb-00	162	441	156.0	1,019	116	40.2	821	ND	689	NA	NA	NA
	07-Jul-00	116	83	144.0	853	37.9	NA	NA	NA	NA	NA	NA	3.44
	18-Oct-01	10	<5.0	11.7	41	<5.0	23.4	145	56.6	215	NA	8.5	NA
	16-May-02	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<50	<50	<50	NA	NA	NA
	07-Jan-03	<2.0	3.7	4.9	25.5	<2.0	<3.0	<50	<50	<50	NA	NA	NA
	22-May-03	22	5	16	87	8	5	90	<50	128	NA	NA	NA
	29-Sep-03	<2	<2	8	49	<2	4	<50	<50	101	NA	NA	NA
	07-Jul-04	<2	<2	<2	<2	<2	<3	<50	<50	<50	NA	NA	NA
SVE-18	15-Apr-96	18,000	43,000	3,600	17,000	2,300	NA	NA	NA	NA	NA	NA	NA
	12-Aug-96	26,000	23,000	6,100	12,000	840	NA	NA	NA	NA	NA	NA	NA
	11-Sep-96	19,000	33,000	3,400	16,000	850	NA	NA	NA	NA	NA	NA	NA
	23-Oct-96	31,000	32,000	5,600	15,000	970	NA	NA	NA	NA	NA	NA	NA
	09-Jan-97	12,400	41,300	2,590	18,400	1,100	NA	NA	NA	NA	NA	NA	NA
	07-May-97	23,800	33,200	2,580	13,000	963	NA	NA	NA	NA	NA	NA	NA
	16-Sep-97	4,050	16,800	1,360	13,800	289	NA	NA	NA	NA	NA	NA	NA
	24-Sep-98	4,160	14,700	1,490	8,740	ND	NA	NA	NA	NA	NA	NA	NA
	02-Dec-98	11,100	39,900	3,480	21,130	386	1,060	40,400	3,840	18,200	0.29	28.9	NA
	07-Jul-00	2,070	10,800	1,860	13,200	581	NA	NA	NA	NA	NA	NA	43.3
	21-Nov-00	1,250	10,600	1,200	8,960	281	417	7,830	2,480	6,720	NA	NA	NA
	18-Oct-01	890	5,470	958	8,310	190	688	4,140	4,600	8,980	NA	10.5	NA
	07-Jan-03	1,190	6,020	2,050	14,290	938	588	11,500	<500	8,740	NA	NA	NA
	22-May-03	1,290	5,080	1,550	12,450	1,820	558	4,420	2,960	10,600	NA	NA	NA
	29-Sep-03	1,050	5,180	1,450	11,970	1,200	588	8,830	<250	7,380	NA	NA	NA
	07-Jul-04	516	4,350	483	9,520	1,030	626	6,870	5,620	6,440	NA	NA	NA
	12-Aug-05	381	1,180	352	7,530	5,890	410	<250	<250	7,370	NA	NA	NA

Table 1
Groundwater Analytical Results- VPH
Mutual Station #31
30 Rockdale Avenue
New Bedford, Massachusetts

Sample I.D.	Sample Date	Benzene (ug/l)	Toluene (ug/l)	Ethyl-Benzene (ug/l)	Total Xylenes (ug/l)	MTBE (ug/l)	Naphthalene (ug/l)	C5-C8 Aliphatics (ug/l)	C9-C12 Aliphatics (ug/l)	C9-C10 Aromatics (ug/l)	1,2-Dibromomethane (EDB) (ug/l)	Dissolved Lead (ug/l)	TPH (mg/L)
GW-2 Standards		2,000	6,000	30,000	6,000	50,000	6,000	1,000	1,000	5,000	3	*	1
GW-3 Standards		7,000	50,000	4,000	50,000	50,000	6,000	4,000	20,000	4,000	50,000	30	20
RW(BW)-1* Formerly BW-	15-Apr-96	2,500	2,700	560	2,200	2,800	NA	NA	NA	NA	NA	NA	NA
	12-Aug-96	8,300	5,600	2,700	4,700	1,200	NA	NA	NA	NA	NA	NA	NA
	11-Sep-96	750	1,500	220	1,600	ND	NA	NA	NA	NA	NA	NA	NA
	23-Oct-96	4,800	2,400	1,100	2,700	770	NA	NA	NA	NA	NA	NA	NA
	09-Jan-97	1,050	2,000	334	1,990	1,550	NA	NA	NA	NA	NA	NA	NA
	07-May-97	240	295	56.6	219	750	NA	NA	NA	NA	NA	NA	NA
	16-Sep-97	1,650	1,110	423	2,170	655	NA	NA	NA	NA	NA	NA	NA
	22-Jan-98	3,980	2,770	1,260	5,630	380	NA	NA	NA	NA	NA	NA	NA
	21-May-98	3,150	1,970	1,050	4,730	419	NA	NA	NA	NA	NA	NA	NA
	24-Sep-98	2,660	620	1,020	3,210	211	NA	NA	NA	NA	NA	NA	NA
MW-1	01-Jun-01	19.6	ND<5	ND<5	ND<10	ND<5	ND<5	ND<5	ND<5	ND<5	ND<0.015		
MW-15	01-Jun-01	236	145	45.2	652	ND<5	27.7	787	543	860	NA	NA	NA
MW-19 (GW-2 not applicable)	15-Apr-96	610	510	150	1,200	ND	NA	NA	NA	NA	NA	NA	NA
	12-Aug-96	9,300	4,200	1,800	3,700	250	NA	NA	NA	NA	NA	NA	NA
	11-Sep-96	1,100	1,500	200	1,500	ND	NA	NA	NA	NA	NA	NA	NA
	23-Oct-96	490	370	190	700	31	NA	NA	NA	NA	NA	NA	NA
	09-Jan-97	1,250	2,740	360	2,480	48	NA	NA	NA	NA	NA	NA	NA
	07-May-97	2,930	3,840	591	2,980	ND	NA	NA	NA	NA	NA	NA	NA
	16-Sep-97	661	374	155	467	11.5	NA	NA	NA	NA	NA	NA	NA
	22-Jan-98	136	315	72.8	610	53.1	NA	NA	NA	NA	NA	NA	NA
	21-May-98	628	610	222	1,410	211	NA	NA	NA	NA	NA	NA	NA
	24-Sep-98	66.1	13.4	6.7	34.1	ND	NA	NA	NA	NA	NA	NA	NA
	2-Dec-98	72.2	104	11.9	136	61	NA	NA	NA	NA	NA	NA	7.52
	3-Feb-99	101	212	18	324	16	27	1,650	ND< 100	945	1.80	14.60	NA
	4-Feb-00	215	338	50	522	ND<5	11.8	1,720	ND	944	0.17	20	NA
	7-Jul-00	256	601	47.6	857	13.8	NA	NA	NA	NA	NA	NA	3.25
	1-Jun-01	861	275	82.5	359	30.2	53.4	1,560	579	832	1.1	6.4	
	13-Sep-01	660	189	77	240	26.1	41.6	463	158	252	NA	NA	NA
	16-May-02	651	81.6	75.5	442	13.7	63.7	1,490	682	1,820	NA	NA	NA
	7-Jan-03	315	76.2	59	216	8.6	19.2	1,100	<50	522	NA	NA	NA
	22-May-03	1400	470	406	1,107	<2	165	4,370	518	2,890	NA	NA	NA
	29-Sep-03	929	35	64	223	10	56	1,630	<100	348	NA	NA	NA
	7-Jul-04	1140	83	32	519	<2	103	3,830	366	1,580	NA	NA	NA
	17-Jan-05	16.1	11.4	5	106.3	<2	4.7	716	<50	500	NA	NA	NA

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Sample I.D.	Sample Date	Benzene (ug/l)	Toluene (ug/l)	Ethyl-Benzene (ug/l)	Total Xylenes (ug/l)	MTBE (ug/l)	Naphthalene (ug/l)	C5-C8 Aliphatics (ug/l)	C9-C12 Aliphatics (ug/l)	C9-C10 Aromatics (ug/l)	1,2-Dibromomethane (EDB) (ug/l)	Dissolved Lead (ug/l)	TPH (mg/L)
GW-2 Standards		2,000	6,000	30,000	6,000	50,000	6,000	1,000	1,000	5,000	3	*	1
GW-3 Standards		7,000	50,000	4,000	50,000	50,000	6,000	4,000	20,000	4,000	50,000	30	20
MW-20 GW-2	15-Apr-96	990	4,100	580	4,400	ND	NA	NA	NA	NA	NA	NA	NA
	13-Sep-01	538	310	37.7	382	5.5	49.2	506	248	426		6.1	
	11-Sep-96	4,300	4,800	920	4,100	1,100	NA	NA	NA	NA	NA	NA	NA
	23-Oct-96	940	790	390	2,000	36	NA	NA	NA	NA	NA	NA	NA
	09-Jan-97	2,410	15,600	1,280	10,600	39	NA	NA	NA	NA	NA	NA	NA
	07-May-97	3,600	22,900	2,830	14,500	ND	NA	NA	NA	NA	NA	NA	NA
	16-Sep-97	813	10,200	6,320	42,500	800	NA	NA	NA	NA	NA	NA	NA
	22-Jan-98	2,020	10,600	1,570	12,600	166	NA	NA	NA	NA	NA	NA	NA
	24-Sep-98	1,000	1,300	385	2,950	ND	NA	NA	NA	NA	NA	NA	NA
	02-Dec-98	1,230	2,990	610	3,240	123	256	7,270	1,180	4,470	6.2	382	NA
	03-Feb-99	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.6	90.6	NA
	04-Feb-00	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.07	ND<10.0	NA
	07-Jul-00	112	740	70	1,050	2.6	NA	NA	NA	NA	NA	NA	3.34
	21-Nov-00	ND<5.0	ND<5.0	ND<5.0	17	ND<5.0	ND<5.0	ND<50	ND<50	64	NA	NA	NA
	01-Jun-01	ND<10	ND<10	NS<10	39.3	34.0	16	326	147	427	1.2	38.1	
	13-Sep-01	538	310	37.7	382	5.5	49	506	248	426		6.1	
	16-May-02	743	2,330	323	5,930	<10	82	1,710	2,510	3,920	NA	NA	NA
	07-Jan-03	199	1,320	144	1,613	<2.0	38	2,460	<50	884	NA	NA	NA
	22-May-03	704	8,100	774	9,960	<20	170	6,260	2,210	7,030	NA	NA	NA
	29-Sep-03	979	790	135	1,001	5.0	88	2,990	<100	1,160	NA	NA	NA
	07-Jul-04	485	13,800	1,600	11,680	<2	496	20,100	6,770	6,560	NA	NA	NA
	06-Aug-04	1,280	2,120	505	2,682	<20	179	6,480	1,740	2,710	NA	NA	NA
	12-Aug-05	329	8,680	1,160	7,670	<10	248	2,370	<250	5,930	NA	NA	NA
MW-21 GW-2	15-Apr-96	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA
	12-Aug-96	3.4	15	18	37	ND	NA	NA	NA	NA	NA	NA	NA
	11-Sep-96	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA
	23-Oct-96	5	23	18	24	ND	NA	NA	NA	NA	NA	NA	NA
	09-Jan-97	1.9	16	2.0	16	2.0	NA	NA	NA	NA	NA	NA	NA
	16-Sep-97	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA
	22-Jan-98	ND	ND	ND	ND	1.4	NA	NA	NA	NA	NA	NA	NA
	21-May-98	ND	ND	ND	2	7.0	NA	NA	NA	NA	NA	NA	NA
	24-Sep-98	ND	ND	ND	3.8	ND	NA	NA	NA	NA	NA	NA	NA
	02-Dec-98	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND<10.0	NA
	07-Jul-00	ND< 1.0	ND< 1.0	ND< 1.0	ND< 1.0	ND< 1.0	NA	NA	NA	NA	NA	NA	ND< 0.10
	21-Nov-00	ND<5.0	54	21	129	ND<5.0	6	90	ND<50	116	NA	NA	NA
	30-May-01	ND<5.0	ND<5.0	ND<5.0	ND< 1.0	40	ND<5.0	ND<50	ND<50	ND<50	NA	NA	NA

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GW-2 Standards		2,000	6,000	30,000	6,000	50,000	6,000	1,000	1,000	5,000	3	*	1
GW-3 Standards		7,000	50,000	4,000	50,000	50,000	6,000	4,000	20,000	4,000	50,000	30	20
MW-22	02-Dec-98	185	1.6	10.9	17.2	127	NA	NA	NA	NA	ND	ND<10.0	0.66
	03-Feb-99	47.2	ND< 5.0	ND< 5.0	ND< 5.0	65	ND< 5.0	323	ND< 100	218	NA	NA	NA
	04-Feb-00	35.9	88.2	19.6	126.8	59.6	ND	364	ND	291	NA	NA	NA
	30-May-01	ND<5.0	ND<5.0	ND<5.0	ND<10.0	5.9	ND<5.0	52.4	ND<50	69.7	NA	NA	NA
	13-Sep-01	ND<5.0	ND<5.0	ND<5.0	ND<10.0	10.4	ND<5.0	74.8	55.3	99.5	NA	NA	NA
	16-May-02	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<50	<50	<50	NA	NA	NA
	07-Jan-03	<2.0	<2.0	<2.0	<2.0	<2.0	<3.0	<50	<50	<50	NA	NA	NA
	22-May-03	<2.0	<2.0	<2.0	<2.0	<2.0	<3.0	<50	<50	<50	NA	NA	NA
MW-23	02-Dec-98	ND	ND	ND	6.7	33.8	ND	ND	ND	ND	ND	ND<10.0	NA
	03-Feb-99	ND< 5.0	ND< 5.0	ND< 5.0	ND< 5.0	15.5	ND< 5.0	ND< 100	ND< 100	ND< 100	NA	NA	NA
	04-Feb-00	93	146	28	192	27	ND	311	ND	231	NA	NA	NA
	30-May-01	9	ND<5.0	ND<5.0	ND<10.0	282	ND<5.0	ND<50	ND<50	ND<50	NA	NA	NA
	13-Sep-01	ND<5.0	ND<5.0	ND<5.0	ND<10.0	175	ND<5.0	ND<5.0	ND<5.0	ND<5.0	NA	NA	NA
	16-May-02	18	<5	<5	<5	2,730	<5	<50	<50	<50	NA	NA	NA
	07-Jan-03	9	<2.0	<2.0	<4.0	424	<3.0	<50	<50	<50	NA	NA	NA
	22-May-03	6	<2.0	<2.0	<2.0	73	<3.0	<50	<50	<50	NA	NA	NA
MW-24D	02-Dec-98	ND	ND	ND	12.9	ND	8.3	ND	ND	224	0.04	ND<10.0	NA
	30-May-01	ND<5.0	ND<5.0	ND<5.0	ND<10.0	ND<5.0	ND<5.0	ND<50	ND<50	ND<50	NA	NA	NA
MW-24S (GW-2 not applicable)	02-Dec-98	66.6	66	378	1,336	12	155	1,370	584	9,030	ND	ND<10.0	NA
	30-May-01	90.1	165	306	1,007	22	116	977	1,130	2,250	NA	NA	NA
	13-Sep-01	70	9.7	73	172	6.5	91	374	403	1,050	NA	NA	NA
	16-May-02	114	40.2	181	584	6.9	144	1,380	774	1,730	NA	NA	NA
	07-Jan-03	44.4	14	176	233	4.1	86.2	584	<50	1,350	NA	NA	NA
	22-May-03	103	153	505	1,190	<2.0	237	2,240	736	3,680	NA	NA	NA
	29-Sep-03	129	25	120	202	6	138	1,590	<50	1,160	NA	NA	NA
	07-Jul-04	<2	<2	<2	<2	<2	<3	<50	<50	<50	NA	NA	NA
MW-25	12-Aug-05	33.3	102	36.3	128.7	<2	24.8	309	<50	516	NA	NA	NA
	02-Dec-98	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND<10.0	NA
	30-May-01	ND<5.0	ND<5.0	NA<5.0	ND<10.0	ND<5.0	ND<5.0	ND<50	ND<50	ND<50	NA	NA	NA
MW-26	16-May-02	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<50	<50	<50	NA	NA	NA
	02-Dec-98	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND<10.0	NA
	30-May-01	ND<5.0	ND<5.0	ND<5.0	ND<10.0	ND<5.0	ND<5.0	ND<50	ND<50	ND<50	NA	NA	NA
MW-26	16-May-02	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<50	<50	<50			

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Sample I.D.	Sample Date	Benzene (ug/l)	Toluene (ug/l)	Ethyl-Benzene (ug/l)	Total Xylenes (ug/l)	MTBE (ug/l)	Naphthalene (ug/l)	C5-C8 Aliphatics (ug/l)	C9-C12 Aliphatics (ug/l)	C9-C10 Aromatics (ug/l)	1,2-Dibromomethane (EDB) (ug/l)	Dissolved Lead (ug/l)	TPH (mg/L)
GW-2 Standards		2,000	6,000	30,000	6,000	50,000	6,000	1,000	1,000	5,000	3	*	1
GW-3 Standards		7,000	50,000	4,000	50,000	50,000	6,000	4,000	20,000	4,000	50,000	30	20
MW-27	02-Dec-98	5.3	ND	ND	ND	ND	NA	NA	NA	NA	ND	ND<10.0	ND
	30-May-01	ND<5.0	ND<5.0	ND<5.0	ND<10.0	ND<5.0	ND<5.0	ND<50	ND<50	ND<50	NA	NA	NA
	16-May-02	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<50	<50	<50			
MW-28	02-Dec-98	30.9	ND	ND	ND	28.0	ND	ND	ND	ND	ND	ND<10.0	NA
	30-May-01	ND<5.0	ND<5.0	ND<5.0	ND<10.0	ND<5.0	ND<5.0	ND<50	ND<50	ND<50	NA	<5.0	NA
	13-Sep-01	ND<5.0	ND<5.0	ND<5.0	ND<10.0	ND<5.0	ND<5.0	ND<50	ND<50	ND<50			
	16-May-02	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<50	<50	<50			
MW-29	02-Dec-98	ND	ND	ND	ND	4.7	ND	ND	ND	ND	ND	ND<10.0	ND
	30-May-01	ND<5.0	ND<5.0	ND<5.0	ND<10.0	ND<5.0	ND<5.0	ND<50	ND<50	ND<50	NA	NA	NA
	13-Sep-01	ND<5.0	ND<5.0	ND<5.0	5.3	ND<5.0	ND<5.0	ND<50	ND<50	ND<50			
	16-May-02	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<50	<50	<50			
	07-Jan-03	<2.0	3.4	<2.0	7.3	<2.0	<3.0	<50	<50	<50	NA	NA	NA
	22-May-03	<2.0	<2.0	<2.0	<2.0	<2.0	<3.0	<50	<50	<50			
MW-30	02-Dec-98	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND<10.0	NA
	30-May-01	ND<5.0	ND<5.0	ND<5.0	ND<10.0	ND<5.0	ND<5.0	ND<50	ND<50	ND	NA	NA	NA
	13-Sep-01	ND<5.0	ND<5.0	ND<5.0	ND<10.0	ND<5.0	ND<5.0	ND<50	ND<50	ND<50			
	16-May-02	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<50	<50	<50			
	07-Jan-03	<2.0	<2.0	<2.0	<4.0	<2.0	<3.0	<50	<50	<50	NA	NA	NA
	22-May-03	<2.0	<2.0	<2.0	<4.0	<2.0	<3.0	<50	<50	<50			
NOTES: ND - Indicates Not Detected. NA indicates Not Analyzed. * - Indicates Method 1 groundwater standards not available. ug/l - Micrograms per liter or parts per billion (ppb). mg/l - Milligrams per liter or parts per million (ppm). * Bioremediation mixture applied to monitoring wells between June 26 and July 2, 1996.													
BOLD indicates concentration is above GW-3 standard Shading indicates concentration is above GW-2 groundwater standards. BTEXM samples analyzed via EPA Method 624. (EDB) 1-2 Dibromoethane analyzed via EPA method 501. Dissolved Lead analyzed via EPA Method 6010B.													

Table 2
Groundwater Analytical Results - EPA RGP NOI Sampling Requirements
Mutual Oil Station No. 31
30 Rockdale Avenue, New Bedford, MA

Parameter	Effluent Limit	Influent (MW 19)	Influent (SV 12)
		10/11/05	10/12/05
1. Total Suspended Solids (TSS)	30 milligrams/liter (mg/l) 50 mg/l for hydrostatic testing only	851,000.0	15,000.0
2. Total Residual Chlorine (TRC)	FW1 = 11 ug/12 SW3 = 7.5 ug/12	<50	<50
3. Total Petroleum Hydrocarbons (TPH)	5.0 mg/l	4,100.0	
4. Cyanide (CN)4	SW = 1.0 ug/15 FW = 5.2 ug/15	<10.0	<10.0
5. Benzene (B)	5.0 ug/1 50.0 ug/1 -hydrostatic testing only	1.1	39.8
6. Toluene (T)	(limited as ug/L total BTEX)	110	10
7. Ethylbenzene (E) - 100414	(limited as ug/L total BTEX)	54.6	14.8
8. (m,p,o) Xylenes (X)	(limited as ug/L total BTEX)	230	68
9. Total BTEX6	100 ug/l	396	132
10. Ethylene Dibromide (EDB) (1,2- Dibromo-methane)	0.05 ug/l	<2.0	<2.0
11. Methyl-tert-Butyl Ether (MtBE)	70.0 ug/l	2.8	<1.0
12. tert-Butyl Alcohol (TBA) (Tertiary-Butanol)	Monitor Only (ug/L)	<100	<100
13. tert-Amyl Methyl Ether (TAME)	Monitor Only (ug/L)	<2.0	<2.0
14. Naphthalene	20 ug/17	6.7	<5.0
15. Carbon Tetrachloride	4.4 ug/l	<1.0	<1.0
16. 1,4 Dichlorobenzene (p-DCB)	5.0 ug/l	<1.0	<1.0
17. 1,2 Dichlorobenzene (o-DCB)	600 ug/l	<1.0	<1.0
18. 1,3 Dichlorobenzene (m-DCB)	320 ug/l	<1.0	<1.0
19. Total dichlorobenzene	763 ug/l in NH only	<3.0	<3.0
20. 1,1 Dichloroethane (DCA)	70 ug/l	<1.0	<1.0
21. 1,2 Dichloroethane (DCA)	5.0 ug/l	<1.0	<1.0
22. 1,1 Dichloroethylene (DCE)	3.2 ug/l	<1.0	<1.0
23. cis-1,2 Dichloro-ethylene (DCE)	70 ug/l	<1.0	<1.0
24. Dichloromethane (Methylene Chloride)	4.6 ug/l	<2.0	<2.0
25. Tetrachloroethylene (PCE)	5.0 ug/l	<1.0	<1.0
26. 1,1,1 Trichloro-ethane (TCA)	200 ug/l	<1.0	<1.0
27. 1,1,2 Trichloro-ethane (TCA)	5.0 ug/l	<1.0	<1.0
28. Trichloroethylene (TCE)	5.0 ug/l	<1.0	<1.0
29. Vinyl Chloride (Chloroethene)	2.0 ug/l	<1.0	<1.0
30. Acetone	Monitor Only (ug/L)	<5.0	<5.0
31. 1,4 Dioxane	Monitor Only (ug/L)	<25	<25
32. Total Phenols	300 ug/l	<5.1	<5.1
33. Pentachlorophenol (PCP)	1.0 ug/l	<10	<11
34. Total Phthalates 8 (Phthalate esthers)	3.0 ug/L	<11	<11
35. Bis (2-Ethylhexyl) Phthalate [Di(ethylhexyl) Phthalate]	6.0 ug/l	<10	<11
36. Total Group I Polycyclic Aromatic Hydrocarbons (PAH)	10.0 ug/l	<35.7	<39.2
a. Benzo(a) Anthracene	0.0038 ug/19	<5.1	<5.6
b. Benzo(a) Pyrene	0.0038 ug/19	<5.1	<5.6
c. Benzo(b)Fluoranthene	0.0038 ug/19	<5.1	<5.6
d. Benzo(k)Fluoranthene	0.0038 ug/19	<5.1	<5.6
e. Chrysene	0.0038 ug/19	<5.1	<5.6
f. Dibenzof(a,h)anthracene	0.0038 ug/19	<5.1	<5.6
g. Indeno(1,2,3-cd) Pyrene	0.0038 ug/19	<5.1	<5.6
37. Total Group II Polycyclic Aromatic Hydrocarbons (PAH)	100 ug/l	<45.9	<50.4
h. Acenaphthene	(limited as total ug/L Group II PAHs)	<5.1	<5.6
i. Acenaphthylene	(limited as ug/L total Group II PAHs)	<5.1	<5.6
j. Anthracene	(limited as ug/L total Group II PAHs)	<5.1	<5.6
k. Benzo(ghi) Perylene	(limited as ug/L total Group II PAHs)	<5.1	<5.6
l. Fluoranthene	(limited as ug/L total Group II PAHs)	<5.1	<5.6
m. Fluorene	(limited as ug/L total Group II PAHs)	<5.1	<5.6
n. Naphthalene	20 ug/l	<5.1	<5.6
o. Phenanthrene	(limited as ug/L total Group II PAHs)	<5.1	<5.6
p. Pyrene	(limited as ug/L total Group II PAHs)	<5.1	<5.6

Laboratory Analytical Report
(November 30 & December 6, 2005 Groundwater Sampling)



New England
ACCUTEST.
Laboratories

01/10/06

Technical Report for

Mutual Oil Company

CEA:Mutual Oil Station #31 30 Rockdale Ave, New Bedford, MA

4509-00-01

Accutest Job Number: M53094

Sampling Date: 12/06/05

Report to:

Corporate Environmental Advisors

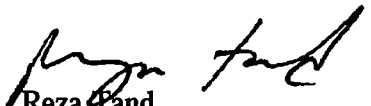
jmyers@cea-inc.com

ATTN: Jason Myers

Total number of pages in report: 9

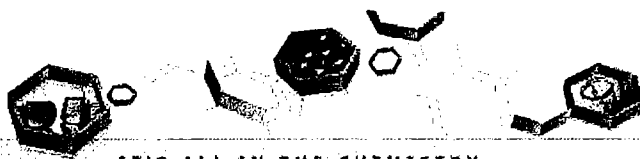


Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.


Reza Fand
Lab Director

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

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IT'S ALL IN THE CHEMISTRY

Sample Results

Report of Analysis

Report of Analysis

Page 2 of 3

Client Sample ID:	MW-19	Date Sampled:	11/30/05
Lab Sample ID:	M52989-1	Date Received:	12/01/05
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	CEA:Mutual Oil Station #31 30 Rockdale Ave, New Bedford, MA		

VOA 8260 List

CAS No.	Compound	Result	RL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	ug/l	
123-91-1	1,4-Dioxane	ND	25	ug/l	
100-41-4	Ethylbenzene	54.6	1.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	ug/l	
591-78-6	2-Hexanone	ND	5.0	ug/l	
74-88-4	Iodomethane	ND	5.0	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	2.8	1.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/l	
74-95-3	Methylene bromide	ND	5.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	ug/l	
91-20-3	Naphthalene	6.7	5.0	ug/l	
103-65-1	n-Propylbenzene	5.6	5.0	ug/l	
100-42-5	Styrene	ND	5.0	ug/l	
994-05-8	tert-Amyl Methyl Ether	ND	2.0	ug/l	
75-65-0	Tert Butyl Alcohol	ND	100	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	ug/l	
108-88-3	Toluene	110	1.0	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	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	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	46.2	5.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	9.3	5.0	ug/l	
108-05-4	Vinyl Acetate	ND	5.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	ug/l	
1330-20-7	Xylene (total)	230	1.0	ug/l	

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

Report of Analysis

Page 1 of 2

Client Sample ID:	MW-19	Date Sampled:	11/30/05
Lab Sample ID:	M52989-1	Date Received:	12/01/05
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8270C SW846 3510C		
Project:	CEA:Mutual Oil Station #31 30 Rockdale Ave, New Bedford, MA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	E26383.D	1	12/14/05	DRY	12/03/05	OP10147	MSE1335
Run #2							

Run #	Initial Volume	Final Volume
Run #1	990 ml	1.0 ml
Run #2		

ABN PPL List

CAS No.	Compound	Result	RL	Units	Q
95-57-8	2-Chlorophenol	ND	5.1	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	10	ug/l	
120-83-2	2,4-Dichlorophenol	ND	10	ug/l	
105-67-9	2,4-Dimethylphenol	ND	10	ug/l	
51-28-5	2,4-Dinitrophenol	ND	20	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	10	ug/l	
88-75-5	2-Nitrophenol	ND	10	ug/l	
100-02-7	4-Nitrophenol	ND	20	ug/l	
87-86-5	Pentachlorophenol	ND	10	ug/l	
108-95-2	Phenol	ND	5.1	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	10	ug/l	
83-32-9	Acenaphthene	ND	5.1	ug/l	
208-96-8	Acenaphthylene	ND	5.1	ug/l	
120-12-7	Anthracene	ND	5.1	ug/l	
92-87-5	Benzidine	ND	20	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.1	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.1	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.1	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.1	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.1	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	5.1	ug/l	
85-68-7	Butyl benzyl phthalate	ND	10	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.1	ug/l	
106-47-8	4-Chloroaniline	ND	10	ug/l	
218-01-9	Chrysene	ND	5.1	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	5.1	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	5.1	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	5.1	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	5.1	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	5.1	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	5.1	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	5.1	ug/l	

ND = Not detected

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Report of Analysis

Page 1 of 1

Client Sample ID:	MW-19	Date Sampled:	11/30/05
Lab Sample ID:	M52989-1	Date Received:	12/01/05
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	EPA 504 EPA 504		
Project:	CEA:Mutual Oil Station #31 30 Rockdale Ave, New Bedford, MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YZ30551.D	1	12/04/05	CZ	12/02/05	OP10142	GYZ1259
Run #2							

	Initial Volume	Final Volume
Run #1	34.8 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)	90%		26-158%
460-00-4	Bromofluorobenzene (S)	92%		26-158%

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Report of Analysis

Page 1 of 1

Client Sample ID:	MW-19	Date Sampled:	11/30/05
Lab Sample ID:	M52989-1	Date Received:	12/01/05
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	CEA:Mutual Oil Station #31 30 Rockdale Ave, New Bedford, MA		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Cyanide	< 0.010	0.010	mg/l	1	12/05/05 16:04	MA	EPA 335.3
Oil And Grease, Gravimetric	< 4.1	4.1	mg/l	1	12/02/05	BF	EPA 1664
Solids, Total Suspended	851	4.0	mg/l	1	12/01/05	BF	EPA 160.2
Total Residual Chlorine	< 0.050	0.050	mg/l	1	12/01/05 13:05	MA	EPA 330.4

RL = Reporting Limit

Report of Analysis

Page 1 of 3

Client Sample ID:	SV-12	Date Sampled:	11/30/05
Lab Sample ID:	M52989-2	Date Received:	12/01/05
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	CEA:Mutual Oil Station #31 30 Rockdale Ave, New Bedford, MA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	G54960.D	1	12/02/05	AA	n/a	n/a	MSG2190
Run #2							

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

VOA 8260 List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	5.0	ug/l	
71-43-2	Benzene	39.8	0.50	ug/l	
108-86-1	Bromobenzene	ND	5.0	ug/l	
74-97-5	Bromochloromethane	ND	5.0	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	ug/l	
75-25-2	Bromoform	ND	1.0	ug/l	
74-83-9	Bromomethane	ND	2.0	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	ug/l	
75-15-0	Carbon disulfide	ND	5.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	ug/l	
108-90-7	Chlorobenzene	ND	1.0	ug/l	
75-00-3	Chloroethane	ND	2.0	ug/l	
67-66-3	Chloroform	ND	1.0	ug/l	
74-87-3	Chloromethane	ND	2.0	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	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	
75-71-8	Dichlorodifluoromethane	ND	2.0	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	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	ug/l	

ND = Not detected

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Report of Analysis

Page 3 of 3

Client Sample ID:	SV-12	Date Sampled:	11/30/05
Lab Sample ID:	M52989-2	Date Received:	12/01/05
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	CEA:Mutual Oil Station #31 30 Rockdale Ave, New Bedford, MA		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	102%		82-127%
2037-26-5	Toluene-D8	99%		88-112%
460-00-4	4-Bromofluorobenzene	94%		80-118%

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Report of Analysis

Page 2 of 2

Client Sample ID:	SV-12	Date Sampled:	11/30/05
Lab Sample ID:	M52989-2	Date Received:	12/01/05
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8270C SW846 3510C		
Project:	CEA:Mutual Oil Station #31 30 Rockdale Ave, New Bedford, MA		

ABN PPL List

CAS No.	Compound	Result	RL	Units	Q
106-46-7	1,4-Dichlorobenzene	ND	5.6	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	11	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	11	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.6	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	5.6	ug/l	
84-74-2	Di-n-butyl phthalate	ND	11	ug/l	
117-84-0	Di-n-octyl phthalate	ND	11	ug/l	
84-66-2	Diethyl phthalate	ND	11	ug/l	
131-11-3	Dimethyl phthalate	ND	11	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	11	ug/l	
206-44-0	Fluoranthene	ND	5.6	ug/l	
86-73-7	Fluorene	ND	5.6	ug/l	
118-74-1	Hexachlorobenzene	ND	5.6	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.6	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	11	ug/l	
67-72-1	Hexachloroethane	ND	5.6	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.6	ug/l	
78-59-1	Isophorone	ND	5.6	ug/l	
91-20-3	Naphthalene	ND	5.6	ug/l	
98-95-3	Nitrobenzene	ND	5.6	ug/l	
62-75-9	n-Nitrosodimethylamine	ND	5.6	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	5.6	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.6	ug/l	
85-01-8	Phenanthrene	ND	5.6	ug/l	
129-00-0	Pyrene	ND	5.6	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.6	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	52%		10-120%
4165-62-2	Phenol-d5	39%		10-120%
118-79-6	2,4,6-Tribromophenol	82%		31-123%
4165-60-0	Nitrobenzene-d5	84%		32-120%
321-60-8	2-Fluorobiphenyl	84%		32-120%
1718-51-0	Terphenyl-d14	82%		33-123%

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Report of Analysis

Page 1 of 1

Client Sample ID:	SV-12	Date Sampled:	11/30/05
Lab Sample ID:	M52989-2	Date Received:	12/01/05
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	CEA:Mutual Oil Station #31 30 Rockdale Ave, New Bedford, MA		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Antimony	< 6.0	6.0	ug/l	1	12/05/05	12/07/05 AC	EPA 200.7 ²	EPA 200.7 ⁴
Arsenic	< 5.0	5.0	ug/l	1	12/05/05	12/07/05 AC	EPA 200.7 ²	EPA 200.7 ⁴
Cadmium	< 4.0	4.0	ug/l	1	12/05/05	12/07/05 AC	EPA 200.7 ²	EPA 200.7 ⁴
Chromium	< 10	10	ug/l	1	12/05/05	12/07/05 AC	EPA 200.7 ²	EPA 200.7 ⁴
Copper	< 25	25	ug/l	1	12/05/05	12/07/05 AC	EPA 200.7 ²	EPA 200.7 ⁴
Iron	3070	100	ug/l	1	12/05/05	12/07/05 AC	EPA 200.7 ²	EPA 200.7 ⁴
Lead	< 5.0	5.0	ug/l	1	12/05/05	12/07/05 AC	EPA 200.7 ²	EPA 200.7 ⁴
Mercury	< 0.20	0.20	ug/l	1	12/02/05	12/02/05 LMN	EPA 245.1 ¹	EPA 245.1 ³
Nickel	< 40	40	ug/l	1	12/05/05	12/07/05 AC	EPA 200.7 ²	EPA 200.7 ⁴
Selenium	< 10	10	ug/l	1	12/05/05	12/07/05 AC	EPA 200.7 ²	EPA 200.7 ⁴
Silver	< 5.0	5.0	ug/l	1	12/05/05	12/07/05 AC	EPA 200.7 ²	EPA 200.7 ⁴
Zinc	< 20	20	ug/l	1	12/05/05	12/07/05 AC	EPA 200.7 ²	EPA 200.7 ⁴

- (1) Instrument QC Batch: MA6514
 (2) Instrument QC Batch: MA6530
 (3) Prep QC Batch: MP7986
 (4) Prep QC Batch: MP7996

 RL = Reporting Limit

Report of Analysis

Page 1 of 1

Client Sample ID:	SV-12	Date Sampled:	11/30/05
Lab Sample ID:	M52989-2A	Date Received:	12/01/05
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8270C BY SIM SW846 3510C		
Project:	CEA:Mutual Oil Station #31 30 Rockdale Ave, New Bedford, MA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	E26247.D	1	12/09/05	PN	12/03/05	OP10149	MSE1330
Run #2							

Run #	Initial Volume	Final Volume
Run #1	900 ml	1.0 ml
Run #2		

ABN Special List

CAS No.	Compound	Result	RL	Units	Q
87-86-5	Pentachlorophenol	ND	1.1	ug/l	
83-32-9	Acenaphthene	ND	0.11	ug/l	
208-96-8	Acenaphthylene	ND	0.11	ug/l	
120-12-7	Anthracene	ND	0.11	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.056	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.11	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.056	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.11	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.11	ug/l	
218-01-9	Chrysene	ND	0.11	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.11	ug/l	
206-44-0	Fluoranthene	0.13	0.11	ug/l	
86-73-7	Fluorene	ND	0.11	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.11	ug/l	
91-57-6	2-Methylnaphthalene	ND	0.22	ug/l	
91-20-3	Naphthalene	ND	0.11	ug/l	
85-01-8	Phenanthrene	ND	0.11	ug/l	
129-00-0	Pyrene	ND	0.11	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	65%		10-120%
4165-62-2	Phenol-d5	52%		10-120%
118-79-6	2,4,6-Tribromophenol	74%		23-135%
4165-60-0	Nitrobenzene-d5	106%		30-120%
321-60-8	2-Fluorobiphenyl	79%		25-120%
1718-51-0	Terphenyl-d14	98%		24-132%

ND = Not detected

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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

CHAIN OF CUSTODY

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

ACCUTEST JOB #: M52989

[illegible]3-1
3-1

M52989: Chain of Custody

Page 1 of 12

INTERNAL MEMO
SAMPLE MANAGEMENT

Client: CEA Point of contact: Patrick Time of contact: AM
Tel # _____ Fax # _____ Job #: M 52989

Sample status: Cancel: ☐ Add: ☐ Change: ☐
Turn Around: ☐

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

Sample #	Detailed comments/request
M52989-1	Chrome G (Hex Cr.) Recd. PAST HOLD T. PROCEED?
-2	↓
	No. will RESAMPLE / will FAX
	No Volume Submitted for PCB's
	(1-950ml NP. (E) NEEDED FOR 8270)
	What tot: Phenol. Method?
	will FAX
	AP. Patrick
	12/1/05
	DATE _____

M52989: Chain of Custody
Page 3 of 12

Betty Baer

From: Patrick Brown [PBrown@cea-inc.com]
Sent: Thursday, December 01, 2005 1:51 PM
To: Betty Baer
Subject: [BULK] Mutual Oil - New Bedford
Importance: Low

Betty

Please cancel running the groundwater samples for PCBs.

Thank you,

Patrick Brown
Environmental Scientist

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PARAMETER - CAS No. -	Minimum Levels and Test Methods (40 CFR 136)				
	GC	GCMS	LC	FAA	Other
11. Methyl-tert-Butyl Ether (MtBE)	0.5 ug/l Method 602 ^a	5.0 ug/l Method 524.2			Method 8260C ²
12. tert-Butyl Alcohol (TBA) (Tertiary-Butanol) - 75650 -	0.5 ug/l Method 602 ^a	100 ug/l Method 1666			Method 8260C ²
13. tert-Amyl Methyl Ether (TAME) - 994058 -	0.5 ug/l Method 602 ^a				Method 8260C ²
14. Naphthalene - 91203 -	10 ug/l Method 610 GC/FID	2 ug/l Method 625 5.0 ug/l Method 524.2	0.2 ug/l Method 610 HPLC		Method 8270D ³
15. Carbon Tetrachloride - 56235 -	0.5 ug/l Method 601	2 ug/l Methods 624, 1624			Method 8260C ²
16. 1,4 Dichlorobenzene (p-DCB) - 106467 -	0.5 ug/l Methods 601, 602	2 ug/l Methods 624, 625			Method 8260C ²
17. 1,2 Dichlorobenzene (o-DCB) - 95501 -	0.5 ug/l Methods 601, 602	2 ug/l Methods 624, 625			Method 8260C ²
18. 1,3 Dichlorobenzene (m-DCB) - 541731 -	0.5 ug/l Methods 601, 602	2 ug/l Methods 624, 625			Method 8260C ²
19. 1,1 Dichloroethane (DCA) - 75343 -	0.5 ug/l Method 601	1 ug/l Method 624			Method 8260C ²
20. 1,2 Dichloroethane (DCA)- 107062 -	0.5 ug/l Method 601	2 ug/l Method 624			Method 8260C ²

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PARAMETER - CAS No. -	Minimum Levels and Test Methods (40 CFR 136)				
	GC	GCMS	LC	FAA	Other
33. Total Phthalates ¹ (Phthalate esters)		5 ug/l Method 625			Method 8270D ³
34. Bis (2-Ethylhexyl) Phthalate (Di-(ethylhexyl) Phthalate) - 117817 -	10 ug/l Method 606	5 ug/l Method 625			Method 8270D ³
35. Total Group I Polynuclear Aromatic Hydrocarbons (PAH)					Method 8270D ³
a. Benzo(a) Anthracene - 56553 -	10 ug/l Method 610 GC	5 ug/l Method 625	0.05 ug/l Method 610 HPLC		Method 8270D ³
b. Benzo(a) Pyrene - 50328 -		10 ug/l Method 625	2 ug/l Method 610 HPLC		Method 8270D ³
c. Benzo(b) Fluoranthene - 205992 -		10 ug/l Method 625	0.1 ug/l Method 610 HPLC		Method 8270D ³
d. Benzo(k) Fluoranthene - 207039 -		10 ug/l Method 625	2 ug/l Method 610 HPLC		Method 8270D ³
e. Chrysene - 218019 -		10 ug/l Method 625	5 ug/l Method 610 HPLC		Method 8270D ³
f. Dibenzo(a,h) anthracene		10 ug/l Method 625	0.1 ug/l Method 610 HPLC		Method 8270D ³
g. Indeno(1,2,3-cd) Pyrene - 193395 -		10 ug/l Method 625	0.15 ug/l Method 610		Method 8270D ³
36. Total Group II Polynuclear Aromatic Hydrocarbons (PAH)					Method 8270D ³
h. Acenaphthene - 83329 -	1 ug/l Method 610 GC/FID	1 ug/l Method 625	0.5 ug/l Method 610 HPLC		Method 8270D ³
i. Acenaphthylene - 208968 -		10 ug/l Method 625	0.2 ug/l Method 610 HPLC		Method 8270D ³

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Inorganic parameters:	Minimum Levels (ug/l) and Test Methods			
	Flame Atomic Absorption	Inductively Coupled Plasma	Furnace Atomic Absorption	Other
41. Chromium (total)	Method 218.1	10 ug/l Methods 200.7 ¹¹ , 200.8, 200.15, 1620	5 ug/l Method 200.9	50 ug/l
42. Chromium (hexavalent)				10 ug/l Method 218.6 Method 1636
43. Copper	20 ug/l	5 ug/l	3 ug/l	
44. Lead	100 ug/l	40 ug/l	3 ug/l	
45. Mercury				0.2 ug/l
46. Nickel	30 ug/l	10 ug/l	5 ug/l	
47. Selenium		50 ug/l	5 ug/l	
48. Silver	50 ug/l	10 ug/l	2 ug/l	
49. Zinc	30 ug/l	10 ug/l		
50. Iron		Methods 6010b 200.7 ¹¹		

1.-Minimum Level (ML) is the lowest level at which the analytical system gives a recognizable signal and acceptable calibration point for the analyte. The ML represents the lowest concentration at which an analyte can be measured with a known level of confidence. The ML is calculated by multiplying the laboratory-determined method detection limit by 3.18 (see 40 CFR Part 136, Appendix B). Where a minimum level (ML) is listed but a test method is not specified, permittee may use any of the available methods approved for use under 40 CFR 136, including alternatives approved by this permit, that meets that ML. See EPA's "Methods and Guidance for the Analysis of Water" at www.epa.gov/water/owrcatalog.nsf. Where test method is specified but ML not listed for that method, the lowest ML for listed methods must be used before concentration can be considered as "non-detect."

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