



ENVIRONMENTAL  
PROTECTION

98 JUL 16 PM 3:52

July 15, 1998

Ms. Susan Hugo  
Alameda County Health Services  
1131 Harbor Bay Parkway  
Alameda, California 94502-6700

Alton Project No. 41-0123

RE: FORMER MOBIL STATION 99-105  
6301 SAN PABLO AVENUE  
OAKLAND, CALIFORNIA

Dear Ms. Hugo:

Please find enclosed the Second Quarter 1998 Progress Report for the subject location prepared for Mobil Business Resources Corporation by Alton Geoscience. The contents of this report include:

Quarterly Progress Report Summary Sheet

- Exhibit 1: Sampling Schedule
- Exhibit 2: Groundwater Levels and Chemical Analysis Table
- Exhibit 3: Figures 1 through 3 (Vicinity Map, Groundwater Elevation Contour Map, Dissolved-Phase Benzene Concentrations)
- Exhibit 4: Benzene vs. Groundwater Elevation Graphs
- Exhibit 5: Well Purging and Groundwater Sampling Protocol
- Exhibit 6: Monitoring Well Sampling Forms
- Exhibit 7: Analytical Laboratory Data Sheets
- Exhibit 8: Waste Disposal Manifest

If you have any questions regarding this report, please call Cherine Foutch, Mobil Engineer, at (925) 625-1173, or Kathleen Racke, Alton Geoscience Project Manager, at (925) 606-9150.

Sincerely,

Kathleen Racke  
Project Manager

cc: Ms. Cherine Foutch, Mobil Business Resources Corporation  
Mr. Chuck Headlee, Regional Water Quality Control Board, San Francisco Bay Region

M:\...\99-105R08.QMS

ALTON GEOSCIENCE

Quarterly Progress Report Summary Sheet  
Second Quarter 1998

Former Mobil Station 99-105  
6301 San Pablo Avenue  
Oakland, California

LOP: Alameda County Health Services

Number of water zones:	1	This Page	1
<b>FIELD ACTIVITY:</b>		Date Sampled:	22-Apr-98
Number of groundwater wells on-site:	4	Groundwater wells monitored:	4
Number of groundwater wells off-site:	0	Groundwater wells sampled:	3
Phase of Investigation: Vadose Zone:	N/A	Groundwater wells with free product:	1
		Groundwater phase:	Monitor & Sample
<b>SITE HYDROGEOLOGY:</b>			
Approximate depth to ground water below ground surface:			5.97 ft
Approximate elevation of potentiometric surface above Mean Sea Level:			26.53 ft
Average Increase/Decrease in ground water elevations since last sampling episode:		Decrease:	0.47 ft
Approximate flow direction and hydraulic gradient:		Southwest at:	0.005 ft/ft
<b>GROUND WATER CONTAMINATION (BENZENE MCL=1.0 ppb):</b>			
Wells containing free product:	1	Range in Thickness of Free Product:	0.14 ft
Number of wells with concentrations below MCL:	1	Volume of Free Product Recovered This Period:	0.25 gals
Number of wells with concentrations at or above MCL:	2	Volume of Free Product Recovered To Date:	2.25 gals
Nature of contamination:	Gasoline	Range in Concentrations:	Benzene: ND<0.3 to 140 ppb TPH-G: ND<50 to 4,900 ppb TPH-D: ND<500 to 2,600 ppb
<b>ADDITIONAL INFORMATION:</b>			
Monitoring Well MW-4 contained 0.14 feet of free product on 4-22-98. The well was not sampled; however, the free product was removed and is currently onsite pending proper disposal.			

Prepared by: Kathleen Racke Kathleen Racke Alton Project No: 41-0123  
Project Manager

Approved by: Matthew W. Katen Matthew W. Katen, RG, CHG Submittal date: 7/15/98  
California RG# 5167 Senior Associate



**EXHIBIT 1**  
**SAMPLING SCHEDULE**

MONITORING WELL SAMPLING SCHEDULE 1998  
Former Mobil Station 99-105

Well Number	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
MW-1	X	X	X	X
MW-2	X	X	X	X
MW-3	X	X	X	X
MW-4	X	X	X	X

NOTES: X = well scheduled for sampling

**EXHIBIT 2**

**GROUNDWATER LEVELS AND CHEMICAL ANALYSIS TABLE**

Table  
Summary of Groundwater Sample Analysis  
Former Mobil Station 99-105

Well ID	Date	Top of Casing Elevation (feet)	Depth to Water (feet)	Groundwater Elevation (feet)	Product Thickness (feet)	TPH-G (ppb)	TPH-D (ppb)	Benzene (ppb)	Toluene (ppb)	Ethylbenzene (ppb)	Total Xylenes (ppb)	MTBE 8020 (ppb)	MTBE 8240 or 8260 (ppb)	TOG (ppb)	Lead (ppb)	Dissolved Oxygen (mg/L)
TW-1	01/04/96	—	6.00	—	0.00	ND	700	ND	ND	ND	ND	—	—	—	—	—
WW-1	01/04/96	—	3.00	—	0.00	ND	—	ND	ND	ND	ND	—	—	ND	—	—
MW-1	03/14/96	32.79	4.50	28.29	0.00	610	450	0.75	0.54	1.5	59	—	—	—	ND	—
MW-1	05/21/96	32.79	5.64	27.15	0.00	ND	ND	ND	ND	ND	ND	—	—	—	—	—
MW-1	08/13/96	32.79	9.76	23.03	0.00	ND	ND	ND	ND	ND	ND	—	—	—	—	—
MW-1	11/08/96	32.79	10.24	22.55	0.00	ND	ND	ND	0.92	ND	2.1	ND	—	—	—	—
MW-1	01/31/97	32.79	3.83	28.96	0.00	ND	ND	ND	0.85	ND	ND	2.6	ND	—	—	—
MW-1	04/22/97	32.79	9.14	23.65	0.00	ND	ND	ND	ND	ND	ND	—	—	—	—	—
MW-1†	07/29/97	32.79	10.18	22.61	0.00	ND	60****	0.84	0.95	ND	1.6	36	—	—	—	—
MW-1†	10/09/97	32.79	10.46	22.33	0.00	ND	56****	ND	ND	ND	ND	—	—	—	—	—
MW-1†	01/23/98	32.79	3.95	28.84	0.00	ND	33	ND	ND	ND	ND	—	—	—	—	—
MW-1	04/22/98	32.79	5.33	27.46	0.00	ND	ND	ND	ND	ND	ND	—	—	—	—	1.25
MW-2	03/14/96	32.80	4.51	28.29	0.00	560	250	2.0	0.96	4.3	11	—	—	—	ND	—
MW-2	05/21/96	32.80	5.65	27.15	0.00	730	560	5.1	1.4	6.7	5.9	—	—	—	—	—
MW-2	08/13/96	32.80	10.14	22.66	0.00	490	380*	25	3.5	7.2	13	—	—	—	—	—
MW-2	11/08/96	32.80	10.70	22.10	0.00	520	160****	80	2.7	14	66	6.1	—	—	—	—
MW-2	01/31/97	32.80	3.84	28.96	0.00	74	130*	ND	ND	ND	ND	—	—	—	—	—
MW-2	04/22/97	32.80	9.61	23.19	0.00	260	430	2.7	ND	2.5	ND	ND	—	—	—	—
MW-2†	07/29/97	32.80	10.53	22.27	0.00	320	150*****	28	1.2	10	ND	ND	—	—	—	—
MW-2†	10/09/97	32.80	10.87	21.93	0.00	460	160*	43	2.8	2.0	2.6	2.6	—	—	—	—
MW-2†	01/23/98	32.80	3.75	29.05	0.00	ND	54	ND	ND	ND	ND	—	—	—	—	—
MW-2	04/22/98	32.80	5.36	27.44	0.00	180	540	1.2	0.3	0.4	ND	ND	—	—	—	0.85
MW-3	03/14/96	32.80	9.55	23.25	0.00	4,200	1,200	220	30	140	520	—	—	ND	ND	—
MW-3	05/21/96	32.80	10.16	22.64	0.00	8,500	2,800	710	110	440	1,700	—	—	—	—	—
MW-3	08/13/96	32.80	11.18	21.62	0.00	5,000	2,300**	430	ND	200	360	—	—	—	—	—
MW-3	11/08/96	32.80	11.51	21.29	0.00	8,400	2,900*	890	82	790	1,700	73	ND	—	—	—
MW-3	01/31/97	32.80	7.90	24.90	0.00	16,000	7,500*	660	85	960	1,800	ND	—	—	—	—
MW-3	04/22/97	32.80	10.64	22.16	0.00	8,000	2,700	340	33	400	490	200	ND	—	—	—
MW-3†	07/29/97	32.80	11.36	21.44	0.00	9,800	2,300*	330	ND	530	530	ND	—	—	—	—
MW-3†	10/09/97	32.80	11.52	21.28	0.00	7,300	2,600*	300	ND	430	460	270	ND	—	—	—
MW-3†	01/23/98	32.80	7.50	25.30	0.00	6,100	2,300	190	23	330	320	ND	—	—	—	—
MW-3	04/22/98	32.80	6.81	25.99	0.00	4,900	2,600	140	12	250	230	ND	ND	—	—	0.45
MW-4	03/14/96	31.50	4.92	26.58	0.00	12,000	3,500	2,200	140	880	2,000	—	—	—	ND	—
MW-4	05/21/96	31.50	8.60	22.90	0.00	11,000	4,200	1,700	ND	930	470	—	—	—	—	—
MW-4	08/13/96	31.50	10.02	21.50	0.02	—	—	—	—	—	—	—	—	—	—	—
MW-4	11/08/96	31.50	10.28	21.33	0.15	—	—	—	—	—	—	—	—	—	—	—
MW-4	01/31/97	31.50	7.88	23.62	0.00	23,000	8,200*	980	68	1,100	1,400	ND	—	—	—	—
MW-4	04/22/97	31.50	7.40	24.10	0.00	8,800	4,500	950	ND	610	130	ND	—	—	—	—
MW-4	07/29/97	31.50	9.85	21.74	0.12	—	—	—	—	—	—	—	—	—	—	—
MW-4	10/09/97	31.50	10.35	21.38	0.30	—	—	—	—	—	—	—	—	—	—	—
MW-4	01/23/98	31.50	4.68	27.51	0.92	—	—	—	—	—	—	—	—	—	—	—

### Summary of Groundwater Sample Analysis

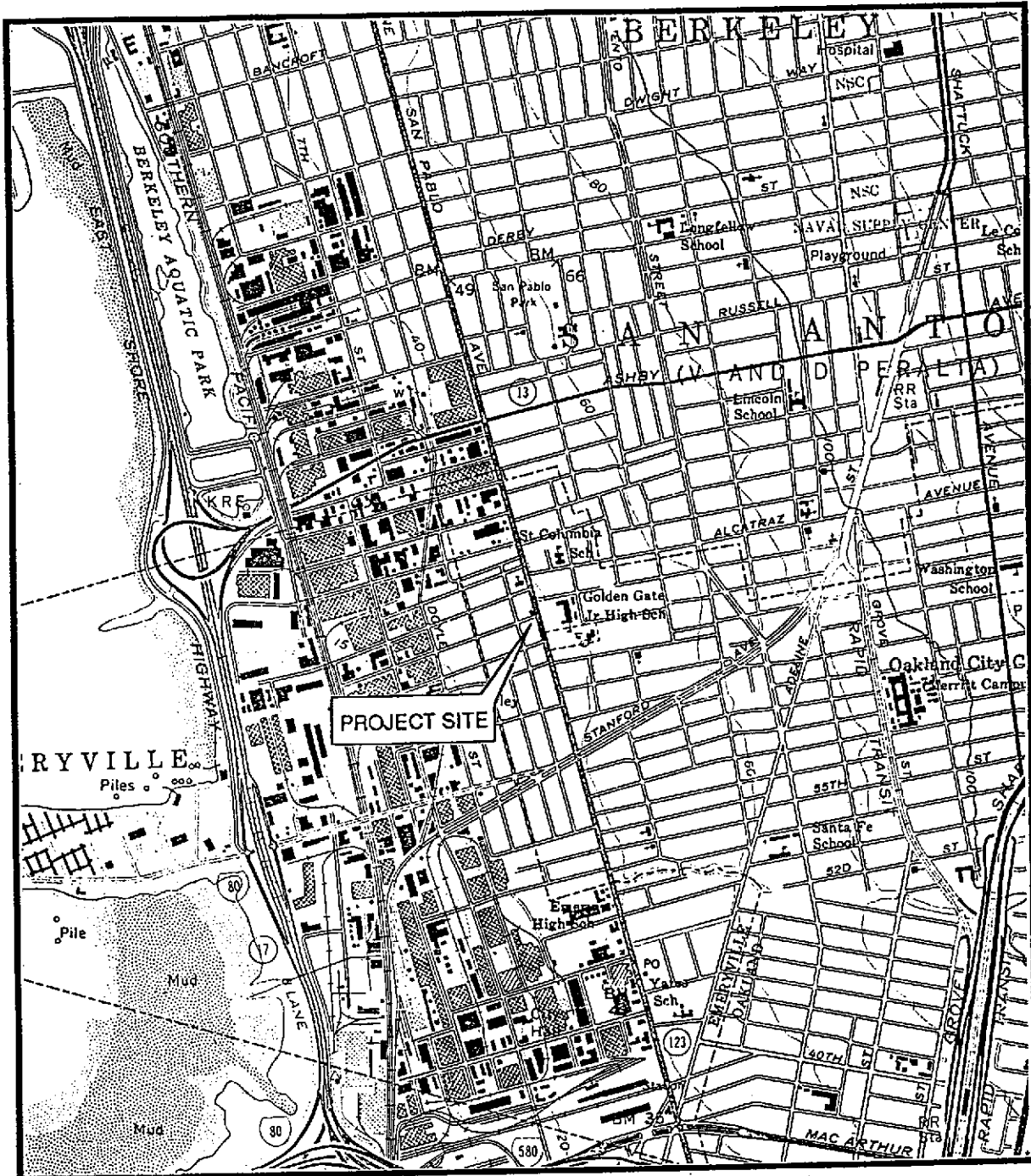
Former Mobil Station 99-105

Well ID	Date	Top of Casing Elevation (feet)	Depth to Water (feet)	Groundwater Elevation (feet)	Product Thickness (feet)	TPH-G (ppb)	TPH-D (ppb)	Benzene (ppb)	Toluene (ppb)	Ethyl-benzene (ppb)	Total Xylenes (ppb)	MTBE 8020 (ppb)	MTBE 8240 or 8260 (ppb)	TOG (ppb)	Lead (ppb)	Dissolved Oxygen (mg/L)
MW-4	04/22/98	31.50	6.39	25.22	0.14	—	—	—	—	—	—	—	—	—	—	—
AB-1	03/05/98	—	—	—	—	1,600	—	31	5.3	79	130	ND	—	—	—	—
AB-2	03/05/98	—	—	—	—	ND	—	ND	2.9	0.9	5.7	ND	—	—	—	—
AB-3	03/05/98	—	—	—	—	6,800	—	680	100	1,500	2,300	230	—	—	—	—
AB-4	03/05/98	—	—	—	—	8,500	—	240	ND	260	720	ND	—	—	—	—
AB-6	03/05/98	—	—	—	—	12,000	—	350	ND	310	100	ND	—	—	—	—
AB-9	03/05/98	—	—	—	—	1,000	—	57	12	44	93	ND	—	—	—	—
AB-10	03/05/98	—	—	—	—	200	—	3.0	1.2	3.2	2.8	ND	—	—	—	—
AB-11	03/05/98	—	—	—	—	ND	—	ND	ND	ND	ND	ND	—	—	—	—
AB-12	03/05/98	—	—	—	—	8,800	—	660	50	630	940	37	—	—	—	—
AB-13	03/05/98	—	—	—	—	210	—	11	0.8	10	15	ND	—	—	—	—

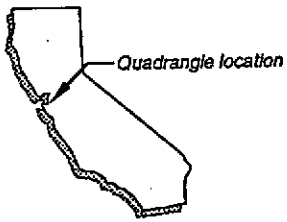
NOTES:

ppb = parts per billion  
 mg/L = milligrams per liter  
 TPH-G = total petroleum hydrocarbons as gasoline  
 TPH-D = total petroleum hydrocarbons as diesel  
 TOG = total oil and grease  
 MTBE = methyl-tert butyl ether  
 — = not measured/not analyzed  
 ND = not detected at or above method detection limit

\*\* = diesel and unidentified hydrocarbons <C15>C25  
 \*\*\* = diesel and unidentified hydrocarbons <C20  
 \*\*\*\* = unidentified hydrocarbons >C18  
 \*\*\*\*\* = diesel and unidentified hydrocarbons >C20  
 † = well sampled using no-purge method



SCALE 1:24,000



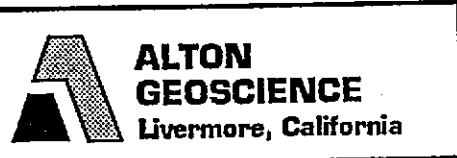
Quadrangle location

Source: U.S.G.S. Map  
Oakland West Quadrangle  
California  
7.5 Minute Series

**VICINITY MAP**

Former Mobil Station 99-105  
6301 San Pablo Avenue  
Oakland, California

**FIGURE 1**







FORMER 350-GALLON WASTE OIL TANK

MW-3  
25.99

MW-2  
27.44

FORMER 2,000-GALLON GASOLINE USTs

MW-1  
27.46

27.00

26.50

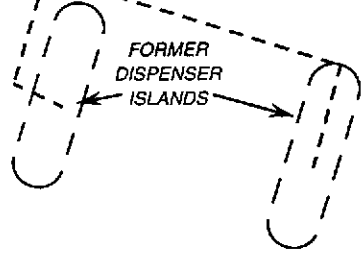
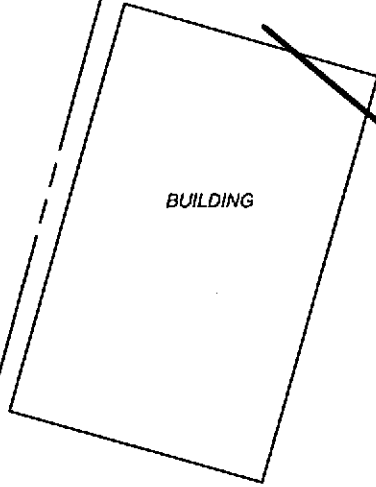
26.00

25.50

MW-4  
25.22

FORMER PRODUCT LINES




FORMER DISPENSER ISLANDS



SAN PABLO AVENUE

63RD STREET

**LEGEND**

-  MW-4 Groundwater monitoring well
- 25.22 Groundwater elevation (feet relative to mean sea level [NGVD-1929])
-  Groundwater elevation contour line
-  General direction of groundwater gradient

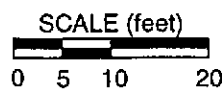
**NOTES:**

Contour lines are interpretive based on fluid level measurements collected April 22, 1998. Contour interval = 0.5 foot.

**GROUNDWATER ELEVATION CONTOUR MAP**  
April 22, 1998

Former Mobil Station 99-105  
6301 San Pablo Avenue  
Oakland, California

**FIGURE 2**



Source: ALISTO Engineering



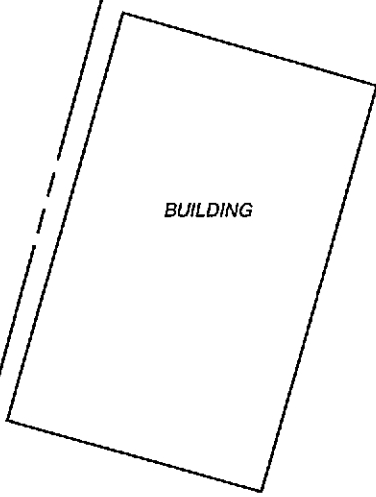
FORMER 350-GALLON  
WASTE OIL TANK

MW-3	
TPH-G	4,900
TPH-D	2,600
B	140

MW-2	
TPH-G	180
TPH-D	540
B	1.2

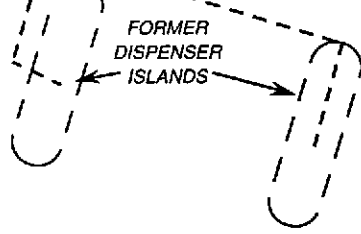
MW-1	
TPH-G	ND
TPH-D	ND
B	ND

FORMER  
2,000-GALLON  
GASOLINE  
USTs



MW-4  
FP

FORMER  
PRODUCT  
LINES



SAN PABLO AVENUE

63RD STREET

**LEGEND**

MW-1	
TPH-G	ND
TPH-D	60
B	0.84

Groundwater monitoring well showing dissolved-phase hydrocarbon concentrations in ppb

**NOTES:**

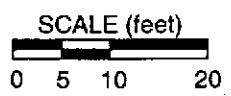
Results are based on analysis of groundwater samples collected April 22, 1998. TPH-G = total petroleum hydrocarbons as gasoline. TPH-D = total petroleum hydrocarbons as diesel. B = benzene. ppb = parts per billion. ND = not detected at or above method detection limit. FP = free phase product.

**DISSOLVED-PHASE  
HYDROCARBON  
CONCENTRATIONS  
April 22, 1998**

Former Mobil Station 99-105  
6301 San Pablo Avenue  
Oakland, California



**ALTON  
GEOSCIENCE**  
Livermore, California



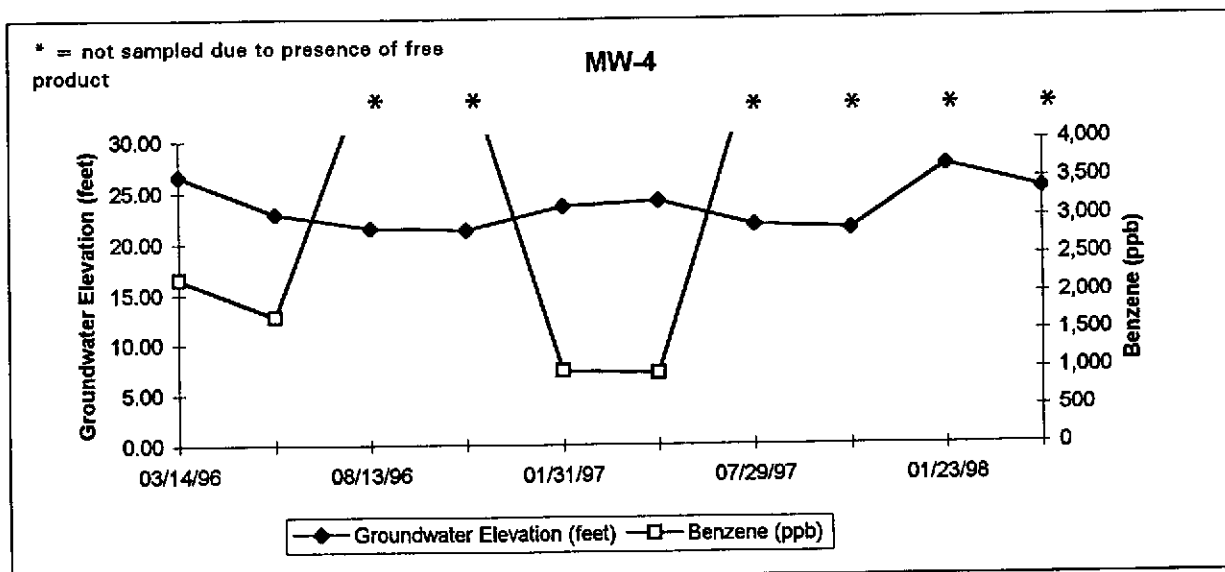
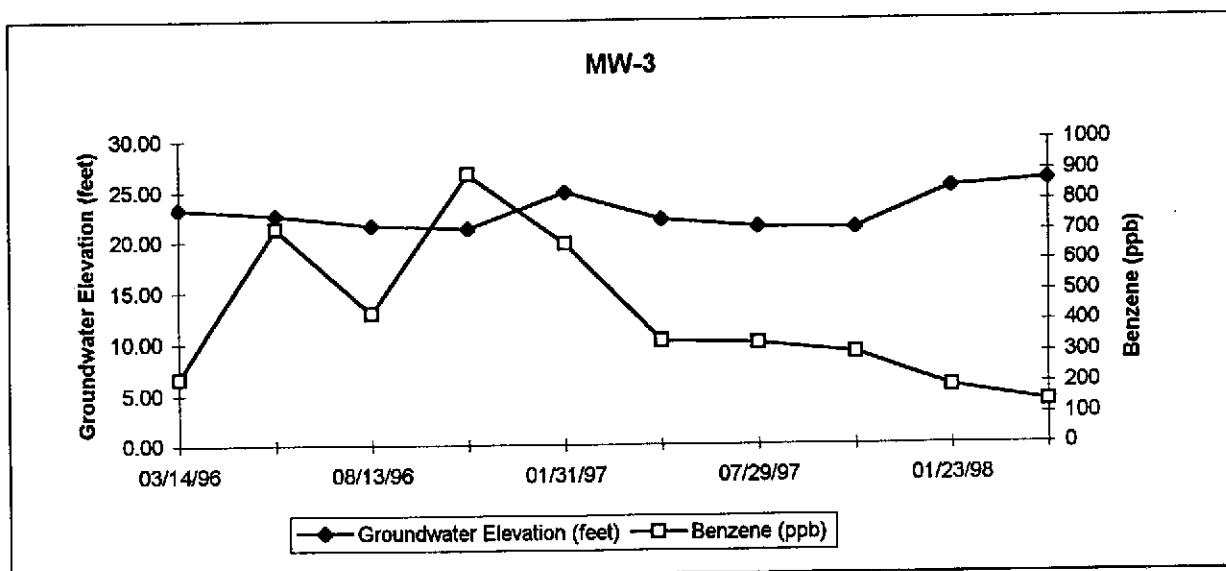
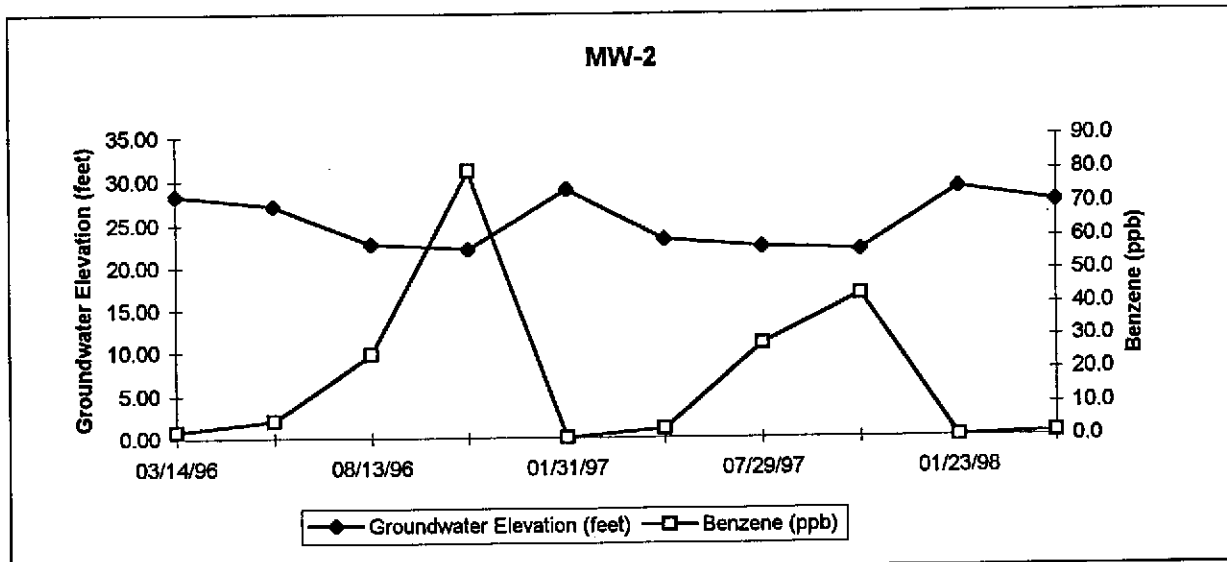
Source: ALISTO Engineering

**FIGURE 3**

**EXHIBIT 4**

**BENZENE VS. GROUNDWATER ELEVATION GRAPHS**

## Benzene vs. Groundwater Elevation Graphs



NOTE: ND values are plotted as zero.

**EXHIBIT 5**

**WELL PURGING AND GROUNDWATER SAMPLING PROTOCOL**

## WELL PURGING AND GROUNDWATER SAMPLING PROTOCOL

### FLUID-LEVEL MONITORING

Fluid-levels are monitored in the wells using an electronic interface probe with conductance sensors. The presence of liquid-phase hydrocarbons is verified using a hydrocarbon-reactive paste.

The depth to liquid-phase hydrocarbons and water is measured to the nearest 0.01 foot relative to the well box top or top of casing. Well box or casing elevations are surveyed to within 0.02 foot relative to a county or city bench mark.

### GROUNDWATER SAMPLING

Currently, 'pre-purge' and 'non-purge' methods of sampling both comply with regulatory standards.

#### *NON-PURGE METHOD:*

Alton Geoscience utilizes the 'non-purge' method of sampling for all qualifying groundwater monitoring wells. Groundwater samples are collected by lowering a 1.5-inch-diameter, bottom-fill, disposable polyethylene bailer just below the static water level in the well. The samples are carefully transferred from the check-valve-equipped bailer to 1-liter and 40-milliliter glass containers. The sample containers are filled to zero headspace and fitted with Teflon-sealed caps. Each sample is labeled with the project number, well number, sample date, and sampler's initials. Samples remain chilled at approximately 4°C prior to analysis by a state-certified laboratory.

The following criteria necessary for a well to qualify for 'non-purge' sampling are taken from a letter issued by San Francisco Bay Regional Water Quality Control Board on January 31, 1997:

1. The non-purging approach shall be used only for monitoring wells where groundwater has been impacted by petroleum hydrocarbons, BTEX, and MTBE.
2. Non-purge sampling shall be utilized for unconfined aquifers only.
3. The monitoring well shall be properly permitted, constructed (in this case, screened across the water table), and developed.
4. The well is presently in use for groundwater or soil vapor extraction.
5. The well does not contain free product.

6. For new wells or wells brought into monitoring for the first time, the first round of groundwater sampling performed at a site shall be with both non-purged and purged samples. The purging and sampling method used shall be documented. This shall include the rate of purge and sampling details. For these wells we require measurements of dissolved oxygen, specific conductance, pH, and temperature whether purged or not purged. Also, if biodegradation is being tracked at the well, our requirements do not preclude the measurement of other parameters.
7. Existing wells which have already been routinely purged in previous sampling events immediate to being switched to a non-purging mode do not require an initial duplicate non-purged and purged sample.
8. Monitoring data frequency shall be as required by the appropriate regulatory oversight agency.
9. Should site closure be requested where the non-purged approach has been used, the final confirmation sampling event shall include both non-purged and purged samples from each well or as agreed upon with the appropriate regulatory oversight agency.

#### *PURGE METHOD:*

Groundwater monitoring wells that do not qualify for the 'non-purge' method are purged and sampled in accordance with standard regulatory protocol. Typically, monitoring wells that contain no liquid-phase hydrocarbons are purged of groundwater prior to sampling so that fluids sampled are representative of fluids within the formation. Temperature, pH, and specific conductance are typically measured after each well casing volume has been removed. Purging is considered complete when these parameters vary less than 10% from the previous readings, or when four casing volumes of fluid have been removed. Samples are collected without further purging if the well does not recharge within 2 hours to 80% of its volume before purging.

The purged water is either pumped directly into a licensed vacuum truck or temporarily stored in labeled drums prior to transport to an appropriate treatment or recycling facility. If an automatic recovery system (ARS) is operating at the site, purged water may be pumped into the ARS for treatment.

Groundwater samples are collected by lowering a 1.5-inch-diameter, bottom-fill, disposable polyethylene bailer just below the static water level in the well. The samples are carefully transferred from the check-valve-equipped bailer to 1-liter and 40-milliliter glass containers. The sample containers are filled to zero headspace and fitted with Teflon-sealed caps. Each sample is labeled with the project number, well number, sample date, and sampler's initials. Samples remain chilled at approximately 4°C prior to analysis by a state-certified laboratory.

**EXHIBIT 6**

**MONITORING WELL SAMPLING FORMS**



**MOBIL UNIT COST FIELD FORM  
GROUND WATER MONITORING AND SAMPLING**

PROJECT NUMBER 41-0123-50  
STATION NUMBER 99-105  
WEATHER Sunny

ALTON PERSONNEL SL  
DATE 4/22/98  
DAY Wednesday

**HOURS**

Hours spent travelling to and from site (return): 2  
Hours spent on site: 3.5  
Number of mob/demobs to and from site: 1

**MILEAGE**

Roundtrip mileage from Alton's office to site (1 man): 80  
Roundtrip mileage from Alton's office to site (2 man): \_\_\_\_\_

**WELLS MONITORED AND SAMPLED**

Number of wells monitored but not sampled: 1  
Number of wells monitored and sampled (depth to water < 25 feet): 3  
Number of wells monitored and sampled (depth to water > 25): \_\_\_\_\_  
Number of wells monitored and sampled using No Purge Method: \_\_\_\_\_

**DRUM INVENTORY**

Number of drums of ground water disposed into onsite ARS: 97  
Number of gallons of groundwater purged and transported: \_\_\_\_\_

**TRAFFIC CONTROL**

Number of days for major street traffic control: \_\_\_\_\_  
Number of days for non-major street traffic control: \_\_\_\_\_  
Cost for Caltrans lane closure: \_\_\_\_\_

**FREE PRODUCT PUMP-OUTS**

Free product pump-out discipline travel (cap of 200 miles): \_\_\_\_\_  
Number of free product pump-out equipment mob/demobs: \_\_\_\_\_  
Number of wells (manual pump-outs): \_\_\_\_\_

**FIELD NOTES:**

Runoff in all well boxes

- high sheen on MW1, MW2, M3, M4

Free product found in MW-4

- not sampled



# GROUND WATER SAMPLING FIELD NOTES

Site: 99-105 Project No.: 41-0123-50 Sampled By: SL Date: 4/22

Well No. MW1 Purge Method: Sub  
 Total Depth (feet): 19.84 Depth to Product (feet): \_\_\_\_\_  
 Depth to Water (feet): 5.33 Product Recovered (gallons): \_\_\_\_\_  
 Water Column (feet): 14.5 Casing Diameter (Inches): 4"  
 80% Recharge Depth (feet): 8.23 1 Well Volume (gallons): 9.43

Well No. MW2 Purge Method: Sub  
 Total Depth (feet): 19.47 Depth to Product (feet): \_\_\_\_\_  
 Depth to Water (feet): 5.36 Product Recovered (gallons): \_\_\_\_\_  
 Water Column (feet): 14.11 Casing Diameter (Inches): 4"  
 80% Recharge Depth (feet): 8.18 1 Well Volume (gallons): 9.17

Time Start	Time Stop	Depth To Water (feet)	Volume Purged (gallons)	Conductivity (uS/cm)	Temperature (F, C)	pH
9:32			10	.72	66.5	7.20
			20	.69	65.4	7.20
	9:39		30	.68	65.5	7.18
Total Purged			30	Time Sampled		9:49

Comments: \_\_\_\_\_  
Turbidity = \_\_\_\_\_

Time Start	Time Stop	Depth To Water (feet)	Volume Purged (gallons)	Conductivity (uS/cm)	Temperature (F, C)	pH
10:03			10	.52	63.2	7.00
			20	.40	63.6	6.80
	10:10		30	.46	64.1	6.71
Total Purged			30	Time Sampled		10:20

Comments: \_\_\_\_\_  
Turbidity = \_\_\_\_\_

Well No. MW3 Purge Method: Sub  
 Total Depth (feet): 20.01 Depth to Product (feet): \_\_\_\_\_  
 Depth to Water (feet): 6.61 Product Recovered (gallons): \_\_\_\_\_  
 Water Column (feet): 13.23 Casing Diameter (Inches): 4"  
 80% Recharge Depth (feet): 9.46 1 Well Volume (gallons): 8.60

Well No. MW4 Purge Method: φ  
 Total Depth (feet): \_\_\_\_\_ Depth to Product (feet): 6.25  
 Depth to Water (feet): 6.39 Product Recovered (gallons): .25  
 Water Column (feet): \_\_\_\_\_ Casing Diameter (Inches): 4"  
 80% Recharge Depth (feet): \_\_\_\_\_ 1 Well Volume (gallons): \_\_\_\_\_

Time Start	Time Stop	Depth To Water (feet)	Volume Purged (gallons)	Conductivity (uS/cm)	Temperature (F, C)	pH
10:34			9	.62	62.5	6.14
			18	1.09	62.9	6.04
	10:40		27	1.16	63.1	5.68
Total Purged			27	Time Sampled		10:50

Comments: \_\_\_\_\_  
Turbidity = \_\_\_\_\_

Time Start	Time Stop	Depth To Water (feet)	Volume Purged (gallons)	Conductivity (uS/cm)	Temperature (F, C)	pH
Total Purged				Time Sampled		9:00

Comments: \_\_\_\_\_  
Turbidity = \_\_\_\_\_

Well No. \_\_\_\_\_ Purge Method: \_\_\_\_\_  
 Total Depth (feet): \_\_\_\_\_ Depth to Product (feet): \_\_\_\_\_  
 Depth to Water (feet): \_\_\_\_\_ Product Recovered (gallons): \_\_\_\_\_  
 Water Column (feet): \_\_\_\_\_ Casing Diameter (Inches): \_\_\_\_\_  
 80% Recharge Depth (feet): \_\_\_\_\_ 1 Well Volume (gallons): \_\_\_\_\_

Well No. \_\_\_\_\_ Purge Method: \_\_\_\_\_  
 Total Depth (feet): \_\_\_\_\_ Depth to Product (feet): \_\_\_\_\_  
 Depth to Water (feet): \_\_\_\_\_ Product Recovered (gallons): \_\_\_\_\_  
 Water Column (feet): \_\_\_\_\_ Casing Diameter (Inches): \_\_\_\_\_  
 80% Recharge Depth (feet): \_\_\_\_\_ 1 Well Volume (gallons): \_\_\_\_\_

Time Start	Time Stop	Depth To Water (feet)	Volume Purged (gallons)	Conductivity (uS/cm)	Temperature (F, C)	pH
Total Purged				Time Sampled		

Comments: \_\_\_\_\_  
Turbidity = \_\_\_\_\_

Time Start	Time Stop	Depth To Water (feet)	Volume Purged (gallons)	Conductivity (uS/cm)	Temperature (F, C)	pH
Total Purged				Time Sampled		

Comments: \_\_\_\_\_  
Turbidity = \_\_\_\_\_

**EXHIBIT 7**

**ANALYTICAL LABORATORY DATA SHEETS**



LLI Sample No. WW 2916646  
 Collected: 4/22/98 at 09:49 by SL

Submitted: 4/24/98 Reported: 5/10/98  
 Discard: 6/10/98

MW-1 Grab Water Sample  
 LOC# 99-105 PRCA# 960135 PHC# 6L  
 Mobil: 6301 San Pablo Ave., Oakland, CA

Account No: 09728  
 Mobil Business Resources Corp.  
 2063 Main Street  
 Suite 501  
 Oakley CA 94561

P.O. 99-105  
 ReI.

**RECEIVED**  
 MAY 15 1998  
 BY: \_\_\_\_\_

CAT NO.	ANALYSIS NAME	AS RECEIVED		
		RESULTS	REPORTING LIMIT	UNITS
5553	8015 Mod. for Diesel	N.D.	0.50	mg/l
According to the California LUFT Protocol, the quantitation for Diesel Range Organics was performed by peak area comparison of the sample pattern to that of our #2 fuel oil reference standard (between C10 and C28 normal hydrocarbons).				
8209	BTEX, MTBE (8020)			
0776	Benzene	N.D.	0.3	ug/l
0777	Toluene	N.D.	0.3	ug/l
0778	Ethylbenzene	N.D.	0.3	ug/l
0779	Total Xylenes	N.D.	0.6	ug/l
0780	Methyl tert-Butyl Ether	N.D.	10.	ug/l
8268	8015 Mod. for Gasoline			
5554	TPH-GRO (CA LUFT)	N.D.	50.	ug/l

QUALITY CONTROL REPORT

SAMPLE RPT LIM	SAMPLE UNITS	BLANK	DUP RPD	MS	MSD	MS RPD	LCS	LCS DUP	LCS RPD	LCS LIMITS		
										LOW	HIGH	
5553	8015 Mod. for Diesel	Batch: 981170002A										
0.50	mg/l	N.D.					92	94	3	50	120	
8209	BTEX, MTBE (8020)	Batch: 98117A02										
0776	Benzene	N.D.		108	104	4	94			78	138	
0777	Toluene	N.D.		105	100	4	92			78	118	
0778	Ethylbenzene	N.D.		104	99	5	92			77	119	
0779	Total Xylenes											

#=Laboratory Method Detection Limit exceeded State Regulatory Limit  
 N.D.=Not detected at or above the Reporting Limit

1 COPY TO Alton Geoscience ATTN: Tom Seeliger

Questions? Contact your Client Services Representative  
 Melissa A. McDermott at (717) 656-2300  
 19:45:25 D 0001 3 133857 612226  
 417 0.00 00010900 ASR000

*Barbara J. Huntz*  
 for

Respectfully Submitted  
 Michele Turner, B.A.  
 Manager, Volatiles



LLI Sample No. **WW 2916646**  
 Collected: 4/22/98 at 09:49 by SL

Submitted: 4/24/98 Reported: 5/10/98  
 Discard: 6/10/98

MW-1 Grab Water Sample  
 LOC# 99-105 PRCA# 960135 PHC# 6L  
 Mobil: 6301 San Pablo Ave., Oakland, CA

Account No: 09728  
 Mobil Business Resources Corp.  
 2063 Main Street  
 Suite 501  
 Oakley CA 94561

P.O. 99-105  
 Rel.

SAMPLE RPT	SAMPLE LIM	SAMPLE UNITS	BLANK	DUP RPD	MS	MSD	MS RPD	LCS	LCS DUP	LCS RPD	LCS LOW	LCS LIMITS HIGH
0780	0.6	ug/l	N.D.		107	102	4	96			76	116
	10.	ug/l	N.D.		98	96	2	94			76	144
-----												
8268 8015 Mod. for Gasoline			Batch: 98117A02									
-----												
5554	50.	TPH-GRO (CA LUFT) ug/l	N.D.		116	107	7	89			75	125
-----												

SURROGATE SUMMARY

TRIAL ID	SURROGATE	RECOVERY %	SURROGATE LIMITS	
			LOW	HIGH
5553 8015 Mod. for Diesel	Chlorobenz	80	50	135
	o-Terpheny	118	75	135
8209 BTEX, MTBE (8020)	TFT	98	70	130
8268 8015 Mod. for Gasoline	TFT	87	70	130

LABORATORY CHRONICLE

CAT NO	ANALYSIS NAME	METHOD	TRIAL ID	ANALYSIS DATE AND TIME	ANALYST
5553	8015 Mod. for Diesel	CA LUFT Diesel Range Organics	1	04/28/98 1413	M. Susan Kreider
7003	Extraction - DRO (Waters)	SW-846 3510B	1	04/27/98 1130	Roxanne M. Roth
8209	BTEX, MTBE (8020)	SW-846 8020A	1	04/27/98 1656	Donald L. Shelly, Jr.
8268	8015 Mod. for Gasoline	CA LUFT Gasoline Method	1	04/27/98 1656	Donald L. Shelly, Jr.

State of California Lab Certification No. 2116

#=Laboratory Method Detection Limit exceeded State Regulatory Limit  
 N.D.=Not detected at or above the Reporting Limit

*Barbara + Franky for*

Questions? Contact your Client Services Representative  
 Melissa A. McDermott at (717) 656-2300

Respectfully Submitted  
 Michele Turner, B.A.  
 Manager, Volatiles



Lancaster Laboratories  
 2425 New Holland Pike  
 PO Box 12425  
 Lancaster, PA 17605-2425  
 717-656-2300 Fax: 717-656-2681



LLI Sample No. WW 2916647

Collected: 4/22/98 at 10:20 by SL

Submitted: 4/24/98 Reported: 5/10/98

Discard: 6/10/98

MW-2 Grab Water Sample

LOC# 99-105 PRCA# 960135 PHC# 6L

Mobil: 6301 San Pablo Ave., Oakland, CA

Account No: 09728  
 Mobil Business Resources Corp.  
 2063 Main Street  
 Suite 501  
 Oakley CA 94561

P.O. 99-105  
 Rel.

CAT NO.	ANALYSIS NAME	AS RECEIVED		UNITS
		RESULTS	REPORTING LIMIT	
5553	8015 Mod. for Diesel	0.54	0.50	mg/l
According to the California LUFT Protocol, the quantitation for Diesel Range Organics was performed by peak area comparison of the sample pattern to that of our #2 fuel oil reference standard (between C10 and C28 normal hydrocarbons).				
8209	BTEX, MTBE (8020)			
0776	Benzene	1.2	0.3	ug/l
0777	Toluene	0.3	0.3	ug/l
0778	Ethylbenzene	0.4	0.3	ug/l
0779	Total Xylenes	N.D.	0.6	ug/l
0780	Methyl tert-Butyl Ether	N.D.	10.	ug/l
8268	8015 Mod. for Gasoline			
5554	TPH-GRO (CA LUFT)	180.	50.	ug/l

QUALITY CONTROL REPORT

SAMPLE RPT LIM	SAMPLE UNITS	BLANK	DUP RPD	MS	MSD	MS RPD	LCS	LCS DUP	LCS RPD	LCS LIMITS	
										LOW	HIGH
5553	8015 Mod. for Diesel	Batch: 981170002A L118					92	94	3	50	120
	0.50 mg/l	N.D.									
8209	BTEX, MTBE (8020)	Batch: 98117A02									
0776	Benzene			108	104	4	94			78	138
	0.3 ug/l	N.D.									
0777	Toluene			105	100	4	92			78	118
	0.3 ug/l	N.D.									
0778	Ethylbenzene			104	99	5	92			77	119
	0.3 ug/l	N.D.									
0779	Total Xylenes										

#=Laboratory Method Detection Limit exceeded State Regulatory Limit  
 N.D.=Not detected at or above the Reporting Limit

1 COPY TO Alton Geoscience

ATTN: Tom Seeliger

Questions? Contact your Client Services Representative  
 Melissa A. McDermott at (717) 656-2300  
 19:45:59 D 0001 3 133857 612226  
 417 0.00 00010900 ASR000

*Barbara F. Huntz*  
 for

Respectfully Submitted  
 Michele Turner, B.A.  
 Manager, Volatiles



Lancaster Laboratories  
 2425 New Holland Pike  
 PO Box 12425  
 Lancaster, PA 17605-2425  
 717-656-2300 Fax: 717-656-2681



LLI Sample No. **WW 2916647**  
 Collected: 4/22/98 at 10:20 by SL

Submitted: 4/24/98 Reported: 5/10/98  
 Discard: 6/10/98

MW-2 Grab Water Sample  
 LOC# 99-105 PRCA# 960135 PHC# 6L  
 Mobil: 6301 San Pablo Ave., Oakland, CA

Account No: 09728  
 Mobil Business Resources Corp.  
 2063 Main Street  
 Suite 501  
 Oakley CA 94561

P.O. 99-105  
 Rel.

SAMPLE RPT LIM	SAMPLE UNITS	BLANK	DUP RPD	MS	MSD	MS RPD	LCS	LCS DUP	LCS RPD	LCS LOW	LCS HIGH
0.6	ug/l	N.D.		107	102	4	96			76	116
0780	Methyl tert-Butyl Ether										
10.	ug/l	N.D.		98	96	2	94			76	144
-----											
8268	8015 Mod. for Gasoline										
Batch: 98117A02											
-----											
5554	TPH-GRO (CA LUFT)										
50.	ug/l	N.D.		116	107	7	89			75	125
-----											

SURROGATE SUMMARY

TRIAL ID	SURROGATE	RECOVERY %	SURROGATE LIMITS	
			LOW	HIGH
5553	8015 Mod. for Diesel	78	50	135
	Chlorobenz	101	75	135
8209	BTEX, MTBE (8020)	102	70	130
8268	8015 Mod. for Gasoline	98	70	130
	TFT			

LABORATORY CHRONICLE

CAT NO	ANALYSIS NAME	METHOD	ANALYSIS		
			TRIAL ID	DATE AND TIME	ANALYST
5553	8015 Mod. for Diesel	CA LUFT Diesel Range Organics	1	04/28/98 1433	M. Susan Kreider
7003	Extraction - DRO (Waters)	SW-846 3510B	1	04/27/98 1130	Roxanne M. Roth
8209	BTEX, MTBE (8020)	SW-846 8020A	1	04/27/98 1838	Donald L. Shelly., Jr.
8268	8015 Mod. for Gasoline	CA LUFT Gasoline Method	1	04/27/98 1838	Donald L. Shelly., Jr.

State of California Lab Certification No. 2116

#=Laboratory Method Detection Limit exceeded State Regulatory Limit  
 N.D.=Not detected at or above the Reporting Limit

*Barbara F. Hunt*  
 for

Questions? Contact your Client Services Representative  
 Melissa A. McDermott at (717) 656-2300

Respectfully Submitted  
 Michele Turner, B.A.  
 Manager, Volatiles



Lancaster Laboratories  
 2425 New Holland Pike  
 PO Box 12425  
 Lancaster, PA 17605-2425  
 717-656-2300 Fax: 717-656-2681





**Lancaster Laboratories**  
A division of Thermo Analytical Inc.

LLI Sample No. **WW 2916648**  
Collected: 4/22/98 at 10:50 by SL

Submitted: 4/24/98 Reported: 5/10/98  
Discard: 6/10/98

MW-3 Grab Water Sample  
LOC# 99-105 PRCA# 960135 PHC# 6L  
Mobil: 6301 San Pablo Ave., Oakland, CA

Account No: 09728  
Mobil Business Resources Corp.  
2063 Main Street  
Suite 501  
Oakley CA 94561

P.O. 99-105  
ReI.

CAT NO.	ANALYSIS NAME	AS RECEIVED		UNITS
		RESULTS	REPORTING LIMIT	
5553	8015 Mod. for Diesel According to the California LUFT Protocol, the quantitation for Diesel Range Organics was performed by peak area comparison of the sample pattern to that of our #2 fuel oil reference standard (between C10 and C28 normal hydrocarbons). Due to dilution of the sample made necessary by the high levels of TPH-DRO, normal quantitation limits were not attained.	2.6	2.5	mg/l
2306	MTBE by GC/MS			
2010	Methyl t-butyl ether	N.D.	5.	ug/l
8209	BTEX, MTBE (8020)			
0776	Benzene	140.	2.	ug/l
0777	Toluene	12.	2.	ug/l
0778	Ethylbenzene	250.	2.	ug/l
0779	Total Xylenes	230.	6.	ug/l
0780	Methyl tert-Butyl Ether Due to the presence of an interferent near its retention time, the normal reporting limit was not attained for methyl t-butyl ether.	N.D. #	50.	ug/l
8268	8015 Mod. for Gasoline			
5554	TPH-GRO (CA LUFT)	4,900.	200.	ug/l

QUALITY CONTROL REPORT

SAMPLE RPT LIM	SAMPLE UNITS	BLANK	DUP RPD	MS	MSD	MS RPD	LCS	LCS	LCS	LCS	LIMITS LOW	LIMITS HIGH
								DUP	RPD	LOW		
5553	8015 Mod. for Diesel	Batch: 981170002A L119						92	94	3	50	120
	2.5 mg/l	N.D.										
2306	MTBE by GC/MS	Batch: 98125A70										

#=Laboratory Method Detection Limit exceeded State Regulatory Limit  
N.D.=Not detected at or above the Reporting Limit

1 COPY TO Alton Geoscience

ATTN: Tom Seeliger

*Barbara F. Huntz for*

Questions? Contact your Client Services Representative  
Melissa A. McDermott at (717) 656-2300  
19:46:34 D 0001 3 133857 612226  
417 0.00 00022600 ASR000

Respectfully Submitted  
Michele Turner, B.A.  
Manager, Volatiles



Lancaster Laboratories  
2425 New Holland Pike  
PO Box 12425  
Lancaster, PA 17605-2425  
717-656-2300 Fax: 717-656-2681



LLI Sample No. WW 2916648  
Collected: 4/22/98 at 10:50 by SL  
Submitted: 4/24/98 Reported: 5/10/98  
Discard: 6/10/98

Account No: 09728  
Mobil Business Resources Corp.  
2063 Main Street  
Suite 501  
Oakley CA 94561

P.O. 99-105  
Rel.

MW-3 Grab Water Sample  
LOC# 99-105 PRCA# 960135 PHC# 6L  
Mobil: 6301 San Pablo Ave., Oakland, CA

SAMPLE RPT	SAMPLE LIM	SAMPLE UNITS	BLANK	DUP RPD	MS	MSD	MS RPD	LCS	LCS DUP	LCS RPD	LCS LOW	LCS HIGH
2010	Methyl t-butyl ether	5. ug/l	N.D.		113	109	2	109			70	130
8209 BTEX, MTBE (8020)			Batch: 98117A02									
0776	Benzene	2. ug/l	N.D.		108	104	4	94			78	138
0777	Toluene	2. ug/l	N.D.		105	100	4	92			78	118
0778	Ethylbenzene	2. ug/l	N.D.		104	99	5	92			77	119
0779	Total Xylenes	6. ug/l	N.D.		107	102	4	96			76	116
0780	Methyl tert-Butyl Ether	50. ug/l	N.D.		98	96	2	94			76	144
8268 8015 Mod. for Gasoline			Batch: 98117A02									
5554	TPH-GRO (CA LUFT)	200. ug/l	N.D.		116	107	7	89			75	125

SURROGATE SUMMARY

TRIAL ID	SURROGATE	RECOVERY %	SURROGATE LIMITS	
			LOW	HIGH
2306 MTBE by GC/MS	DBFM	94	86	118
	d4-1,2-DCA	93	80	120
	d8-toluene	101	88	110
	4-BFB	91	86	115
	Chlorobenz	52	50	135
5553 8015 Mod. for Diesel	o-Terpheny	82	75	135
	TFT	102	70	130
8209 BTEX, MTBE (8020)	TFT	126	70	130

LABORATORY CHRONICLE

#=Laboratory Method Detection Limit exceeded State Regulatory Limit  
N.D.=Not detected at or above the Reporting Limit

Questions? Contact your Client Services Representative  
Melissa A. McDermott at (717) 656-2300

*Barbara J. Huntz*  
for

Respectfully Submitted  
Michele Turner, B.A.  
Manager, Volatiles



Lancaster Laboratories  
2425 New Holland Pike  
PO Box 12425  
Lancaster, PA 17605-2425  
717-656-2300 Fax: 717-656-2681



LLI Sample No. WW 2916648  
 Collected: 4/22/98 at 10:50 by SL

Submitted: 4/24/98 Reported: 5/10/98  
 Discard: 6/10/98

MW-3 Grab Water Sample  
 LOC# 99-105 PRCA# 960135 PHC# 6L  
 Mobil: 6301 San Pablo Ave., Oakland, CA

Account No: 09728  
 Mobil Business Resources Corp.  
 2063 Main Street  
 Suite 501  
 Oakley CA 94561

P.O. 99-105  
 Rel.

CAT NO.	ANALYSIS NAME	RESULTS	AS RECEIVED		UNITS	ANALYSIS		
				REPORTING LIMIT		TRIAL ID	DATE AND TIME	ANALYST
5553	8015 Mod. for Diesel	CA LUFT Diesel Range Organics				1	04/30/98 1425	M. Susan Kreider
7003	Extraction - DRO (Waters)	SW-846 3510B				1	04/27/98 1130	Roxanne M. Roth
2306	MTBE by GC/MS	SW-846 8260B				1	05/06/98 0232	Abul I. Siddiqui
8209	BTEX, MTBE (8020)	SW-846 8020A				1	04/28/98 2120	Donald L. Shelly, Jr.
8268	8015 Mod. for Gasoline	CA LUFT Gasoline Method				1	04/28/98 2120	Donald L. Shelly, Jr.

State of California Lab Certification No. 2116

#=Laboratory Method Detection Limit exceeded State Regulatory Limit  
 N.D.=Not detected at or above the Reporting Limit

Questions? Contact your Client Services Representative  
 Melissa A. McDermott at (717) 656-2300

*Barbara F. Krantz*  
 for

Respectfully Submitted  
 Michele Turner, B.A.  
 Manager, Volatiles



Lancaster Laboratories  
 2425 New Holland Pike  
 PO Box 12425  
 Lancaster, PA 17605-2425  
 717-656-2300 Fax: 717-656-2681

# Mobil Western Region Analysis Request/Chain of Custody



For Lancaster Laboratories use only  
 Acct. #: 9728 Sample #: 2916646-648

Please print.

SCR#: \_\_\_\_\_

Mobil Consultant/Office: ALTON GEOSCIENCE  
 Consultant Prj. Mgr: Tom Seeliger Prj. #: 41-0123-50  
 Consultant Phone #: 925-606-9150 Fax #: 925-606-9260  
 Location Code #: 99-105 PRCA/AFE/Release #: 960135  
 Commitment Code #: \_\_\_\_\_ Phase Code: 6L  
 Site Address: 6301 San Pablo Ave, Oakland State: CA  
 Sampler: Sarah Larese  
 Mobil Engineer: Cherini Foutch

Sample Identification	Date Collected	Time Collected	Grab	Composite	Matrix			Total # of Containers	Analyses Requested												Remarks	Temperature of samples upon receipt (if requested)					
					Soil	Water	Air		TPH-6 BTEX (8020)	MTBE* (8020)	TPHD 8070																
MW-1	4/22	9:49	X		X			6	X	X	X															* Confirm	10°
MW-2	↓	10:20	X		X			6	X	X	X															highest concentration	↓
MW-3	↓	16:50	X		X			6	X	X	X															on 8260	↓

<b>Turnaround Time Requested (TAT)</b> (please circle): <input checked="" type="radio"/> <b>MOBIL STD. TAT</b> 72 hour 48 hour 24 hour other ____ day	Relinquished by: <u>Sarah Larese</u>	Date: <u>4/22</u>	Time: <u>1:45</u>	Received by: _____	Date: _____	Time: _____
	Relinquished by: _____	Date: _____	Time: _____	Received by: _____	Date: _____	Time: _____
	Relinquished by: _____	Date: _____	Time: _____	Received by: _____	Date: _____	Time: _____
	Relinquished by: _____	Date: _____	Time: _____	Received by: <u>Cherini Foutch</u>	Date: <u>4/24/08</u>	Time: <u>08:55</u>
<b>Data Package Options</b> (please circle if requested) QC Summary <input type="radio"/> GLP <input type="radio"/> Other <input type="radio"/> Type I (Tier I) <input type="radio"/> Disk <input type="radio"/> Type III (NJ Red. Del.) <input type="radio"/> Type IV (CLP) <input type="radio"/> Type VI (Raw Data) <input type="radio"/> WIP <input type="radio"/>	SDG Complete? Yes <input type="radio"/> No <input checked="" type="radio"/>	Site-specific QC required? Yes <input type="radio"/> No <input checked="" type="radio"/> If yes, indicate QC sample and submit triplicate volume.	Internal Chain of Custody required? Yes <input type="radio"/> No <input checked="" type="radio"/>			

**EXHIBIT 8**

**WASTE DISPOSAL MANIFEST**

**NON-HAZARDOUS  
WASTE MANIFEST**

1. Generator's US EPA ID No.

2. Page 1  
of 1

3. Document Number

NH- No 43704

4. Generator's Name and Mailing Address

Mobil Oil  
3700 W. 190th Street TPT. 2  
Torrance, CA 90509-2929  
Generator's Phone 310-212-1877

1297-1335-PS

5. Transporter Company Name

6. US EPA ID Number

7. Transporter Phone

Clearwater Environmental Care 000007013

510-797-8511

8. Designated Facility Name and Site Address

9. US EPA ID Number

10. Facility's Phone

Mck. H. Rick Waste Treatment Site  
56533 Hwy 58, West  
Mck. H. Rick, CA 93257 CAD980636831

805-762-7607

11. Waste Shipping Name and Description

12. Containers  
No. Type

13. Total  
Quantity

14. Unit  
Wt/Vol

a. NON HAZARDOUS WASTE LIQUID

001 TT 1205 G

15. Special Handling Instructions and Additional Information

Handling Codes for Wastes Listed Above

11a.

11b.

wear PPE  
Emergency contact  
510-797-8511  
ATTN: Rick Hayward

site Altos Geoscience  
308 Lindbergh  
Livermore, CA

16. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to state or federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name

Signature

Month Day Year  
04 29 98

George Madross for Mobil

*George Madross*

17. Transporter Acknowledgement of Receipt of Materials

Printed/Typed Name

Signature

Month Day Year  
04 27 98

Steven R. Stone

*Steven R. Stone*

18. Discrepancy Indication Space

MUTS

19. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in item 18.

Printed/Typed Name

Signature

Month Day Year  
14 29 98

KATHY MAY

*Kathy May*