

**TRC**

#1683

November 20, 2000

Project No. 41-0123

Mr. Barney Chan  
Alameda County Health Services  
1131 Harbor Bay Parkway  
Alameda, California 94502-6700

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

Dear Mr. Chan:

Please find enclosed the Fourth Quarter 2000 Progress Report for the subject location prepared for ExxonMobil Remediation Services (representing Mobil Oil Corporation) by TRC. The contents of this report include:

Quarterly Progress Report Summary Sheet

- Exhibit 1: Sampling Schedule
- Exhibit 2: Summary of Groundwater Levels and Chemical Analysis
- Exhibit 3: Figures 1 through 3 (Vicinity Map, Groundwater Elevations, Dissolved-Phase Hydrocarbon 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 me at (925) 688-2473. You may also call Mr. Darin L. Rouse, ExxonMobil Environmental Engineer, at (925) 246-8768.

Sincerely,



Jonathan Scheiner  
Associate

*2400 Saratoga Valley Blvd  
94583*

cc: Mr. Darin Rouse, ExxonMobil Remediation Services  
Mr. Chuck Headlee, Regional Water Quality Control Board, San Francisco Bay Region  
Ms. Connie Lamb, Property Owner

TRC

Quarterly Progress Report Summary Sheet  
Fourth Quarter 2000

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

LOP: Alameda County Health Services

<b>Number of water zones:</b>		<b>1</b>	<b>This Page</b>	<b>1</b>
<b>FIELD ACTIVITY:</b>		<b>Date Sampled: 25-Oct-00</b>		
Number of groundwater wells on-site:	<b>3 *</b>	Groundwater wells monitored:	<b>3</b>	
Number of groundwater wells off-site:	<b>0</b>	Groundwater wells sampled:	<b>3</b>	
		Groundwater wells with free product:	<b>0</b>	
Phase of Investigation: Vadose Zone:	<b>N/A</b>	Groundwater phase:	<b>Monitor &amp; Sample</b>	
<b>SITE HYDROGEOLOGY:</b>				
Approximate depth to ground water below ground surface:		<b>11.43 ft</b>		
Approximate elevation of potentiometric surface above Mean Sea Level:		<b>27.83 ft</b>		
Average Increase/Decrease in ground water elevations since last sampling episode:		<b>Decrease:</b>	<b>5.34 ft**</b>	
Approximate flow direction and hydraulic gradient:		<b>Southwest at:</b>	<b>0.06 ft/ft</b>	
<b>GROUND WATER CONTAMINATION (BENZENE MCL=1.0 ppb):</b>				
Wells containing free product:	<b>0</b>	Range in Thickness of Free Product:	<b>NA</b>	
Number of wells with concentrations below MCL:	<b>0</b>	Volume of Free Product Recovered This Period:	<b>0 gals</b>	
Number of wells with concentrations at or above MCL:	<b>3</b>	Volume of Free Product Recovered To Date:	<b>2.65 gals</b>	
		Range in Concentrations:	<b>Benzene: 2.0 to 79 ppb</b>	
Nature of contamination:	<b>Gasoline</b>		<b>TPH-G: ND&lt;20 to 3,800 ppb</b>	
<b>ADDITIONAL INFORMATION:</b>				
* During April 1999 construction activities, MW-1 and MW-4 were destroyed, and MW-2 and MW-3 were damaged. MW-2 and MW-3 were repaired, and MW-5 was installed by Alisto Engineering in September 2000 as required by Alameda County Health Services.				
** The previous sampling event was on 12/8/99.				
Purged water was transferred to McKittrick Waste Water Treatment Facility.				

Prepared by: Jonathan Scheiner

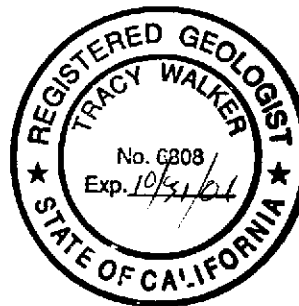
Jonathan Scheiner  
Associate

Project No: 41-0123

Approved by: Tracy L. Walker  
California RG #6808

Tracy L. Walker, RG  
Associate

Submittal Date: 11/20/00



**MONITORING WELL SAMPLING SCHEDULE 2000**  
**Former Mobil Station 99-105**

Well Number	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
MW-2				X
MW-3				X
MW-5				X

NOTES: X = well scheduled for sampling

**EXHIBIT 2**

**SUMMARY OF GROUNDWATER LEVELS AND CHEMICAL ANALYSIS**

## Summary of Groundwater Levels and Chemical Analysis

Former Mobil Station 99-105

Well ID	Date	Top of Casing	Depth to	Groundwater	Product						Ethyl-	Total	MTBE	MTBE	TOG	Lead	Dissolved
		Elevation (feet)	Water (feet)	Elevation (feet)	Thickness (feet)	TPH-G (ppb)	TPH-D (ppb)	Benzene (ppb)	Toluene (ppb)	benzene (ppb)	Xylenes (ppb)	8020 (ppb)	8240 or 8260 (ppb)	(ppb)	(ppb)	(ppb)	(ppb)
TW-1	01/04/96	—	6.00	—	0.00	ND	700	ND	ND	ND	ND	—	—	—	—	—	—
VW-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	—	—	—	—	—	—	—
MW-1	08/13/96	32.79	9.76	23.03	0.00	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-1	07/21/98	32.79	9.17	23.62	0.00	ND	—	ND	ND	ND	ND	—	—	—	—	—	4.34
MW-1	10/20/98	32.79	10.41	22.38	0.00	ND	—	ND	ND	ND	ND	—	—	—	—	—	2.49
MW-1	01/27/99	32.79	5.51	27.28	0.00	ND	—	ND	ND	ND	ND	—	—	—	—	—	5.25
MW-1	Destroyed during construction activities in April 1999																
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	—	—	—	—	—	—
MW-2†	07/29/97	32.80	10.53	22.27	0.00	320	150***	28	1.2	10	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	—	—	—	—	—	0.85
MW-2	07/21/98	32.80	9.55	23.25	0.00	80	—	8.9	2.1	0.6	2.5	ND	—	—	—	—	1.04
MW-2	10/20/98	32.80	10.75	22.05	0.00	50	—	0.8	0.7	ND	0.8	—	—	—	—	—	1.12
MW-2	01/27/99	32.80	5.53	27.27	0.00	ND	—	0.6	ND	ND	ND	—	—	—	—	—	0.99
MW-2	07/27/99	32.80	6.20	26.60	0.00	ND	—	ND	0.6	ND	ND	—	—	—	—	—	0.30
MW-2	12/08/99	32.80	9.98	22.82	0.00	ND	—	1.2	0.43	ND	ND	—	—	—	—	—	1.83
MW-2	Sep-00	39.34	Well resurveyed after repair by Alisto Engineering														
MW-2	10/25/00	39.34	11.30	28.04	0.00	<20	—	2.0	0.59	0.46	1.3	<0.30	—	—	—	—	0.35
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	—	—	—	—

## Summary of Groundwater Levels and Chemical Analysis

Former Mobil Station 99-105

Well ID	Date	Top of Casing Elevation (feet)	Depth to Water (feet)	Groundwater Elevation (feet)	Product Thickness (feet)	Product					Ethyl- benzene (ppb)	Total Xylenes (ppb)	MTBE 8020 (ppb)	MTBE 8240 or 8260 (ppb)	TOG (ppb)	Lead (ppb)	Dissolved Oxygen (mg/L)
						TPH-G (ppb)	TPH-D (ppb)	Benzene (ppb)	Toluene (ppb)								
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-3	07/21/98	32.80	10.65	22.15	0.00	7,400	—	250	16	400	370	74	ND	—	—	0.78	
MW-3	10/20/98	32.80	11.57	21.23	0.00	6,700	—	200	18	350	350	ND	ND	—	—	0.69	
MW-3	01/27/99	32.80	9.11	23.69	0.00	3,100	—	74	4	94	39	13	—	—	—	1.20	
MW-3	07/27/99	32.80	7.27	25.53	0.00	8,900	—	170	21	360	440	ND	—	—	—	0.33	
MW-3	12/08/99	32.80	10.63	22.17	0.00	4,800	—	94	13	170	210	ND	—	—	—	1.12	
MW-3	Sep-00	39.27	Well resurveyed after repair by Alisto Engineering														
MW-3	10/25/00	39.27	12.08	27.19	0.00	3,800	—	63	2.9	100	65	<50	<5	—	—	0.96	
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	—	—	—	—	—	—	—	—	—	—	—	
MW-4	04/22/98	31.50	6.39	25.22	0.14	—	—	—	—	—	—	—	—	—	—	—	
MW-4	07/21/98	31.50	7.10	24.55	0.20	—	—	—	—	—	—	—	—	—	—	—	
MW-4	10/20/98	31.50	9.03	22.60	0.17	—	—	—	—	—	—	—	—	—	—	—	
MW-4	01/27/99	31.50	5.37	26.18	0.07	—	—	—	—	—	—	—	—	—	—	—	
MW-4	Destroyed during construction activities in April 1999																
MW-5	Sep-00	39.18	Well surveyed after installation by Alisto Engineering														
MW-5	10/25/00	39.18	10.92	28.26	0.00	2,500	—	79	3.8	66	<20	<20	—	—	—	0.50	
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	—	—	—	—	

## Summary of Groundwater Levels and Chemical 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)
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	—	—	—	—
HA-1	01/25/00	—	—	—	—	ND<500	—	ND<0.3	ND<0.3	ND<0.3	ND<0.6	ND<5.0	—	—	—	—

**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  
 \*\* = diesel and unidentified hydrocarbons <C15>C25  
 \*\*\* = diesel and unidentified hydrocarbons >C20  
 \*\*\*\* = unidentified hydrocarbons >C18

† = well sampled using no-purge method



1 MILE 3/4 1/2 1/4 0 1 MILE



SCALE 1 : 24,000



QUADRANGLE  
LOCATION

SOURCE:  
United States Geological Survey  
7.5 Minute Topographic Maps:  
Oakland West Quadrangle

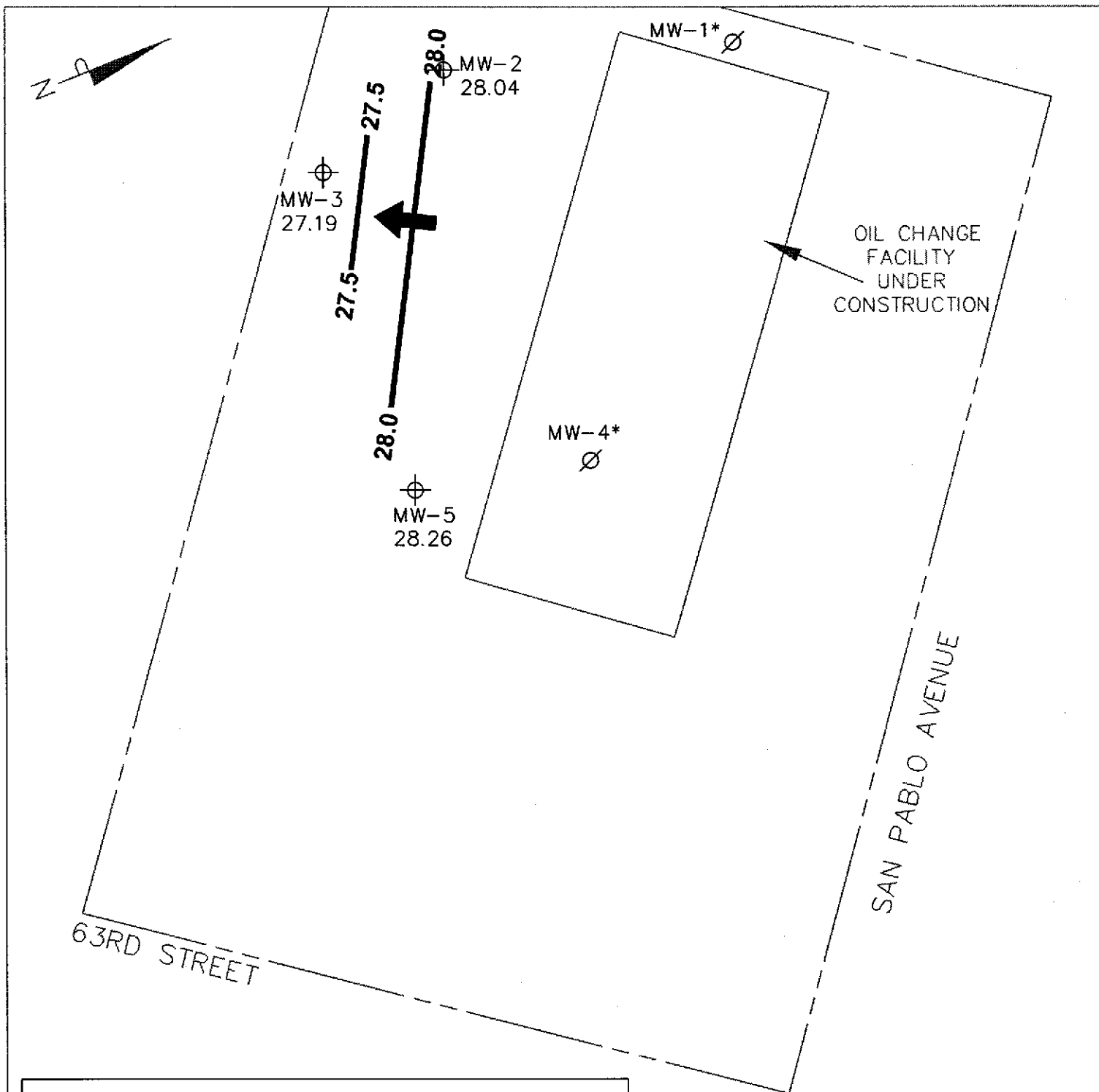
**VICINITY MAP**

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





**TRC**

**FIGURE 1**





**LEGEND**

-  MW-2 Monitoring Well Showing Groundwater Elevation 28.04 (Feet Relative to Mean Sea Level - NGVD-1929)
-  Destroyed Well
-  Groundwater Elevation Contour Line
-  General Direction of Groundwater Gradient



NOTES: Contour lines are interpretive based on fluid-level measurements taken on October 25, 2000. \* = well destroyed during construction activities in April 1999.

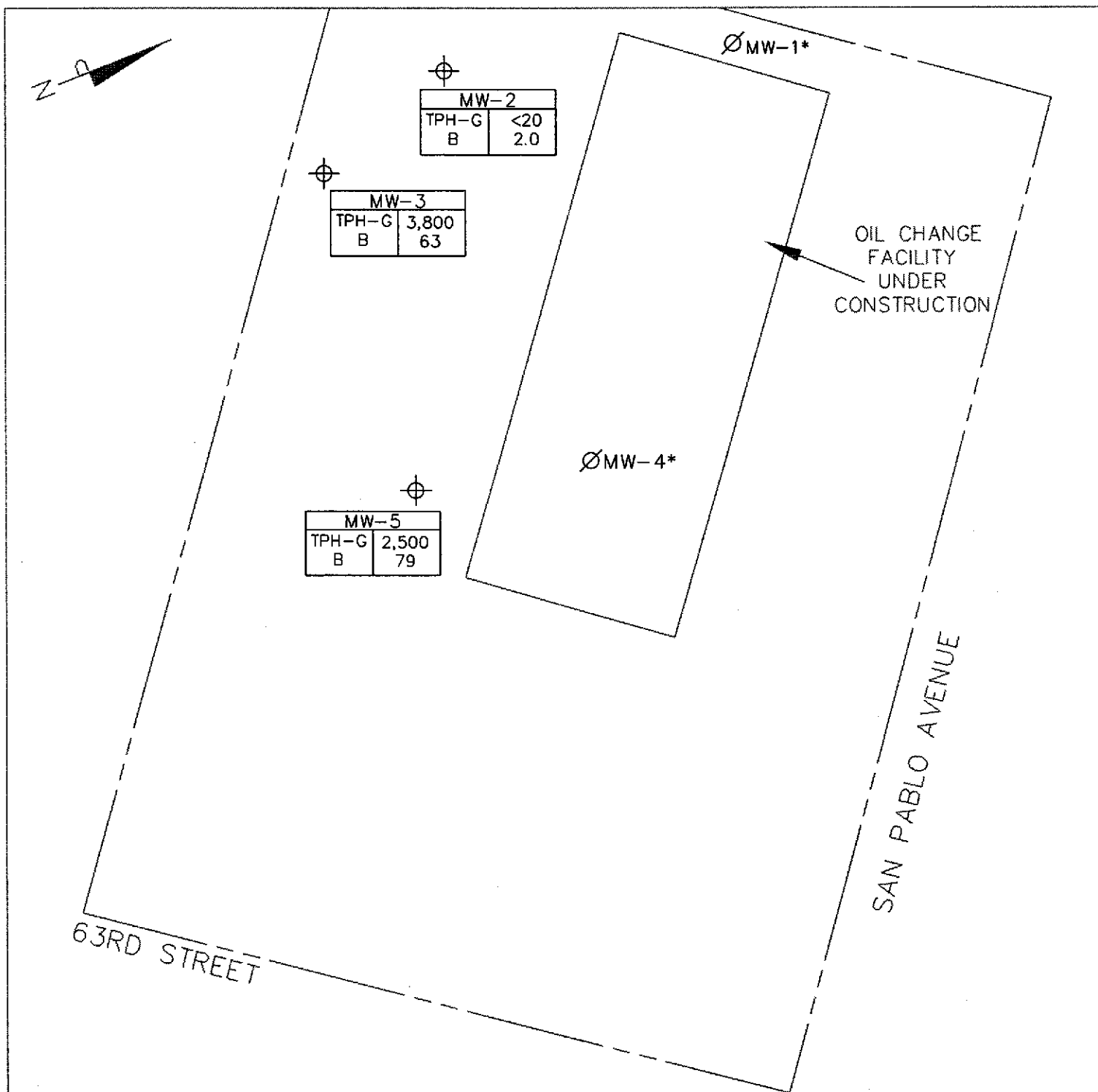
Source: ALISTO Engineering


**GROUNDWATER ELEVATION  
CONTOUR MAP  
October 25, 2000**

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

**TRC**

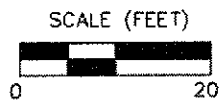
**FIGURE 2**




**LEGEND**  

MW-2	
TPH-G	
B	

 Monitoring Well Showing Dissolved-Phase Hydrocarbon Concentrations (ppb)



**NOTES:**  
 Hydrocarbon concentrations are based on results of laboratory samples collected October 25, 2000. TPH-G = total petroleum hydrocarbons as gasoline; B = benzene; ppb = parts per billion; < = not detected at or above the stated method detection limit. \* = well destroyed during construction activities in April 1999.

**DISSOLVED-PHASE HYDROCARBON CONCENTRATIONS**  
**October 25, 2000**  
 Former Mobil Station 99-105  
 6301 San Pablo Avenue  
 Oakland, California

Source: ALISTO Engineering

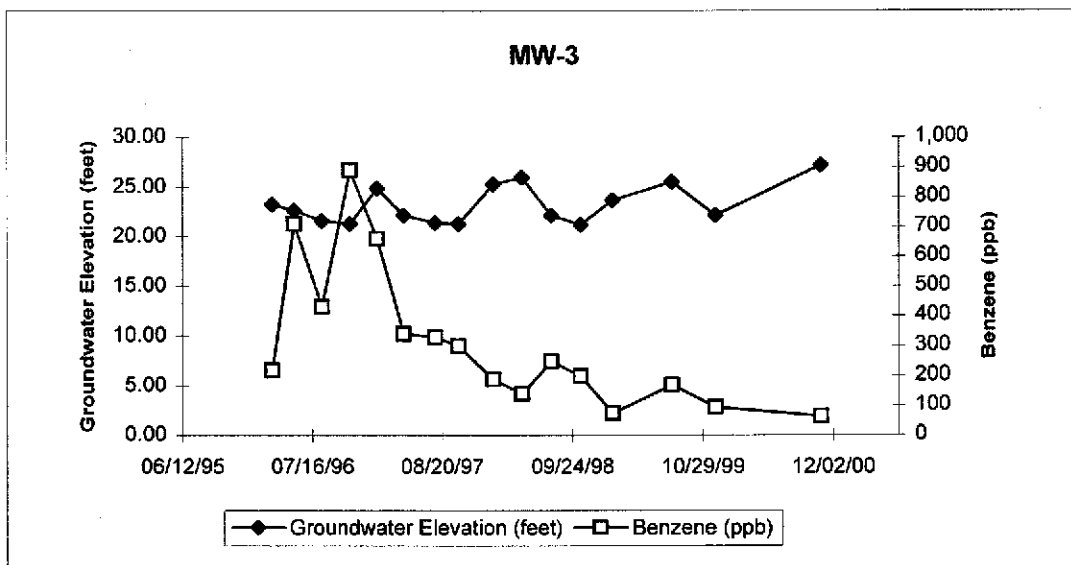
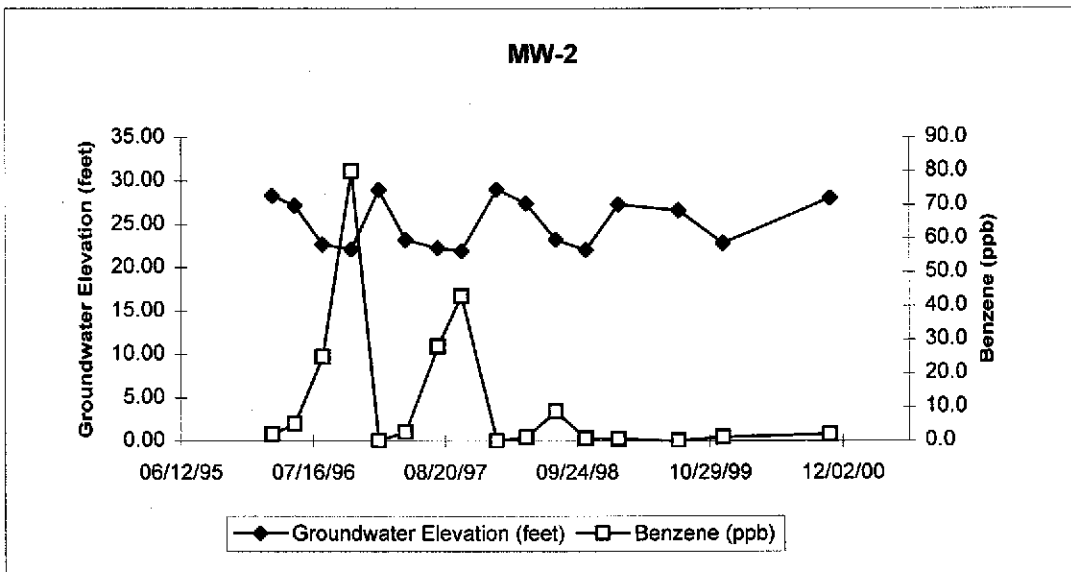
**TRC**

**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 benchmark.

### GROUNDWATER SAMPLING

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

#### *NON-PURGE METHOD:*

TRC 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**



# GROUND WATER MONITORING AND SAMPLING

PROJECT NUMBER 41-D123-70  
STATION NUMBER 99-105  
WEATHER Rainy

ALTON PERSONNEL S. Kemnitz  
DATE 10/25/00  
DAY Wednesday

HOURS  
Hours spent travelling to and from site (return): 2.5  
Hours spent on site: 3  
Number of mob/demobs to and from site: 1

MILEAGE  
Roundtrip mileage from Alton's office to site (1 man): 60  
Roundtrip mileage from Alton's office to site (2 man): \_\_\_\_\_

WELLS MONITORED AND SAMPLED  
Number of wells monitored but not sampled: ~  
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: ~  
Number of gallons of groundwater purged and transported: 40

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:  
Arrived on site at 09:00  
Mw-2, Mw-3, Mw-5 monitored for depth to water and D.O.  
Mw-2, Mw-3, Mw-5 purged three times well volume, allowed  
80% recharge, then sampled.  
Left site 1200

### FLUID MEASUREMENT FIELD FORM

Project No.: 41-023-70

Alton Personnel: S. Kemnitz

Station No.: 94-105

Date: 10/25/00

Well Number	Screen Interval	Depth to Water	Depth to Product	Free Product Thickness (ft)	Free Product Recovery	Total Depth	Dissolved O <sub>2</sub> (mg/L)	Comments
MW-2		11.30				18.96	0.35	4"
MW-3		12.08				20.08	0.96	4"
MW-5		10.92				20.67	0.50	4"

# GROUND WATER SAMPLING FIELD NOTES

Site: 99-105 Project No.: 41-0123-70 Sampled By: S. Kemnitz Date: 10/25/00

Well No. MW-2 6-13 Purge Method: 2" elect  
 Total Depth (feet) 18.46 Depth to Product (feet): \_\_\_\_\_  
 Depth to Water (feet): 11.30 Product Recovered (gallons): \_\_\_\_\_  
 Water Column (feet): 7.66 Casing Diameter (Inches): 4"  
 80% Recharge Depth (feet): 12.83 1 Well Volume (gallons): 5.13

Well No. MW-3 6-40 Purge Method: 2" elect.  
 Total Depth (feet) 20.08 Depth to Product (feet): \_\_\_\_\_  
 Depth to Water (feet): 12.08 Product Recovered (gallons): \_\_\_\_\_  
 Water Column (feet): 8.00 Casing Diameter (Inches): 4"  
 80% Recharge Depth (feet): 13.60 1 Well Volume (gallons): 5.36

Time Start	Time Stop	Depth To Water (feet)	Volume Purged gallons	Conduc-tivity (uS/cm)	Temper-ature (F, C)	pH
1025				0.51	64.6	5.53
				0.41	65.5	5.82
	1031			0.38	66.0	5.84
			10.0			
Total Purged			<u>480</u>	Time Sampled		<u>114</u>
Comments: <u>Run dry @ 10.0</u>						
Turbidity=						

Time Start	Time Stop	Depth To Water (feet)	Volume Purged gallons	Conduc-tivity (uS/cm)	Temper-ature (F, C)	pH
1038				0.67	65.1	6.18
				0.66	65.2	6.23
	1044			0.67	65.2	6.20
			8.0			
Total Purged			<u>160</u>	Time Sampled		<u>120</u>
Comments: <u>Run dry @ 8.0</u>						
Turbidity=						

Well No. MW-5 7-80 Purge Method: 2" elect  
 Total Depth (feet) 20.67 Depth to Product (feet): \_\_\_\_\_  
 Depth to Water (feet): 10.92 Product Recovered (gallons): \_\_\_\_\_  
 Water Column (feet): 9.75 Casing Diameter (Inches): 4"  
 80% Recharge Depth (feet): 12.87 1 Well Volume (gallons): 6.53

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	Conduc-tivity (uS/cm)	Temper-ature (F, C)	pH
1047				0.84	65.4	7.01
				0.78	66.3	6.69
	1057			0.78	66.9	6.62
			18.0			
Total Purged			<u>200</u>	Time Sampled		<u>135</u>
Comments: <u>Run dry @ 18.0</u>						
Turbidity=						

Time Start	Time Stop	Depth To Water (feet)	Volume Purged gallons	Conduc-tivity (uS/cm)	Temper-ature (F, C)	pH
Total Purged				Time Sampled		
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	Conduc-tivity (uS/cm)	Temper-ature (F, C)	pH
Total Purged				Time Sampled		
Comments:						
Turbidity=						

Time Start	Time Stop	Depth To Water (feet)	Volume Purged gallons	Conduc-tivity (uS/cm)	Temper-ature (F, C)	pH
Total Purged				Time Sampled		
Comments:						
Turbidity=						

**EXHIBIT 7**

**ANALYTICAL LABORATORY DATA SHEETS**



## ANALYTICAL RESULTS

Prepared for:

ExxonMobil  
2300 Clayton Road  
Suite 1250  
Concord CA 94520

Prepared by:

Lancaster Laboratories  
2425 New Holland Pike  
Lancaster, PA 17605-2425

## SAMPLE GROUP

The sample group for this submittal is 737002. Samples arrived at the laboratory on Friday, October 27, 2000. The PO# for this group is 4500446506-0509 and the release number is 00260.

<u>Client Description</u>	<u>Lancaster Labs Number</u>
MW-2 Grab Water Sample	3488535
MW-3 Grab Water Sample	3488536
MW-5 Grab Water Sample	3488537

## METHODOLOGY

The specific methodologies used in obtaining the enclosed analytical results are indicated on the laboratory chronicles.

1 COPY TO TRC/Alton

Attn: Jonathan Scheiner

Questions? Contact your Client Services Representative  
Teresa M. Lis at (717) 656-2300.

Respectfully Submitted,

  
\_\_\_\_\_



Lancaster Laboratories Sample No. WW 3488535

Collected: 10/25/2000 11:11 by SK through 10/25/2000 11:11 Submitted: 10/27/2000 09:10 Reported: 11/10/00 at 05:54 PM Discard: 12/11/00 MW-2 Grab Water Sample LOC# 99-105 WBS# 56 MOBIL: 6301 San Pablo Ave. - Oakland, CA	Account Number: 10589  ExxonMobil 2300 Clayton Road Suite 1250 Concord CA 94520
--	--

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
08209	BTEX, MTBE (8020)					
00776	Benzene	71-43-2	2.0	0.20	ug/l	1
00777	Toluene	108-88-3	0.59	0.20	ug/l	1
00778	Ethylbenzene	100-41-4	0.46	0.20	ug/l	1
00779	Total Xylenes	1330-20-7	1.3	0.60	ug/l	1
00780	Methyl tert-Butyl Ether	1634-04-4	N.D.	0.30	ug/l	1
The vial submitted for volatile analysis did not have a pH < 2 at the time of analysis. Due to the volatile nature of the analytes, it is not appropriate for the laboratory to adjust the pH at the time of sample receipt.						
08268	TPH-GRO (CA LUFT)					
05554	TPH-GRO (CA LUFT)	n.a.	N.D.	0.020	mg/l	1

State of California Lab Certification No. 2116

### Laboratory Chronicle

CAT No.	Analysis Name	Method	Analysis		Analyst	Dilution Factor
			Trial#	Date and Time		
08209	BTEX, MTBE (8020)	SW-846 8020A/5030A	1	10/31/2000 18:06	Stephanie A. Selis	1
08268	TPH-GRO (CA LUFT)	CA LUFT Gasoline Method	1	10/31/2000 18:06	Stephanie A. Selis	1

#=Laboratory Method Detection Limit exceeded target detection limit  
 N.D.=Not detected at or above the Reporting Limit



Lancaster Laboratories Sample No. WW 3488536

Collected: 10/25/2000 11:20 by SK  
 through 10/25/2000 11:20  
 Submitted: 10/27/2000 09:10  
 Reported: 11/10/00 at 05:54 PM  
 Discard: 12/11/00  
 MW-3 Grab Water Sample  
 LOC# 99-105 WBS# 56  
 MOBIL: 6301 San Pablo Ave. - Oakland, CA

Account Number: 10589

ExxonMobil  
 2300 Clayton Road  
 Suite 1250  
 Concord CA 94520

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
02306	MTBE by GC/MS					
02010	Methyl t-butyl ether Site-specific MS/MSD samples were not submitted for the project. A LCS/LCSD was performed to demonstrate precision and accuracy at a batch level.	1634-04-4	N.D.	5.	ug/l	1
08209	BTEX, MTBE (8020)					
00776	Benzene	71-43-2	63.	0.20	ug/l	1
00777	Toluene	108-88-3	2.9	0.20	ug/l	1
00778	Ethylbenzene	100-41-4	100.	0.20	ug/l	1
00779	Total Xylenes	1330-20-7	65.	0.60	ug/l	1
00780	Methyl tert-Butyl Ether Due to the presence of an interferent near its retention time, the normal reporting limit was not attained for MTBE. The presence or concentration of MTBE cannot be determined below the reporting limit due to the presence of this interferent.	1634-04-4	N.D.	50.	ug/l	1
08268	TPH-GRO (CA LUFT)					
05554	TPH-GRO (CA LUFT) Due to the nature of the sample matrix, the surrogate standard recovery is above the range of specifications.	n.a.	3.8	0.020	mg/l	1

State of California Lab Certification No. 2116

### Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
02306	MTBE by GC/MS	SW-846 8260B/5030B	1	11/04/2000 05:57	Michael C. Wehn	1

#=Laboratory Method Detection Limit exceeded target detection limit  
 N.D.=Not detected at or above the Reporting Limit



Lancaster Laboratories Sample No. WW 3488536

Collected: 10/25/2000 11:20 by SK  
through 10/25/2000 11:20  
Submitted: 10/27/2000 09:10  
Reported: 11/10/00 at 05:54 PM  
Discard: 12/11/00  
MW-3 Grab Water Sample  
LOC# 99-105 WBS# 56  
MOBIL: 6301 San Pablo Ave. - Oakland, CA

Account Number: 10589

ExxonMobil  
2300 Clayton Road  
Suite 1250  
Concord CA 94520

08209	BTEX, MTBE (8020)	SW-846 8020A/5030A	1	11/01/2000 01:13	Stephanie A. Selis	1
08268	TPH-GRO (CA LUFT)	CA LUFT Gasoline Method	1	11/01/2000 01:13	Stephanie A. Selis	1





Lancaster Laboratories Sample No. WW 3488537

Collected: 10/25/2000 11:35 by SK  
 through 10/25/2000 11:35  
 Submitted: 10/27/2000 09:10  
 Reported: 11/10/00 at 05:54 PM  
 Discard: 12/11/00  
 MW-5 Grab Water Sample  
 LOC# 99-105 WBS# 56  
 MOBIL: 6301 San Pablo Ave. - Oakland, CA

Account Number: 10589  
 ExxonMobil  
 2300 Clayton Road  
 Suite 1250  
 Concord CA 94520

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
08209	BTEX, MTBE (8020)					
00776	Benzene	71-43-2	79.	0.20	ug/l	1
00777	Toluene	108-88-3	3.8	0.20	ug/l	1
00778	Ethylbenzene	100-41-4	66.	0.20	ug/l	1
00779	Total Xylenes	1330-20-7	N.D.	20.	ug/l	1
00780	Methyl tert-Butyl Ether	1634-04-4	N.D.	20.	ug/l	1
Due to the presence of interferents near their retention times, normal reporting limits were not attained for MTBE and total xylenes. The presence or concentration of MTBE and total xylenes cannot be determined below their reporting limits due to the presence of the interferents.						
08268	TPH-GRO (CA LUFT)					
05554	TPH-GRO (CA LUFT)	n.a.	2.5	0.020	mg/l	1

State of California Lab Certification No. 2116

### Laboratory Chronicle

CAT No.	Analysis Name	Method	Analysis		Analyst	Dilution Factor
			Trial#	Date and Time		
08209	BTEX, MTBE (8020)	SW-846 8020A/5030A	1	11/01/2000 02:22	Stephanie A. Selis	1
08268	TPH-GRO (CA LUFT)	CA LUFT Gasoline Method	1	11/01/2000 02:22	Stephanie A. Selis	1

#-Laboratory Method Detection Limit exceeded target detection limit  
 N.D.=Not detected at or above the Reporting Limit



## Lancaster Laboratories

Where quality is a science.

### Quality Control Summary

Client Name: ExxonMobil

Group Number: 737002

Reported: 11/09/00 at 06:46 AM

#### Laboratory Compliance Quality Control

<u>Analysis Name</u>	<u>Blank Result</u>	<u>Blank MDL</u>	<u>Report Units</u>	<u>LCS %REC</u>	<u>LCSD %REC</u>	<u>LCS/LCSD Limits</u>	<u>RPD</u>	<u>RPD Max</u>
Batch number: 00304A65	Sample number(s): 3488535-3488537							
Benzene	N.D.	.2	ug/l	105	110	79-119	5	30
Toluene	N.D.	.2	ug/l	101	108	81-118	6	30
Ethylbenzene	N.D.	.2	ug/l	97	103	80-118	6	30
Total Xylenes	N.D.	.6	ug/l	103	109	81-118	6	30
Methyl tert-Butyl Ether	N.D.	.3	ug/l	120	122	77-123	2	30
TPH-GRO (CA LUFT)	N.D.	.02	mg/l	103	106	63-130	2	30
Batch number: 00308B70	Sample number(s): 3488536							
Methyl t-butyl ether	N.D.	5.	ug/l	104	106	71-122	2	30

#### Sample Matrix Quality Control

<u>Analysis Name</u>	<u>MS %REC</u>	<u>MSD %REC</u>	<u>MS/MSD Limits</u>	<u>RPD</u>	<u>MAX</u>	<u>BKG Conc</u>	<u>DUP Conc</u>	<u>RPD</u>	<u>Dup RPD Max</u>
Batch number: 00304A65	Sample number(s): 3488535-3488537								
Benzene	116	116	77-129	0	30				
Toluene	113	113	77-131	1	30				
Ethylbenzene	105	99	80-130	4	30				
Total Xylenes	119	115	75-133	3	30				
Methyl tert-Butyl Ether	123	128	58-143	4	30				
TPH-GRO (CA LUFT)	106	107	73-126	1	30				

#### Surrogate Quality Control

Analysis Name: BTEX, MTBE (8020)

Batch number: 00304A65

	Trifluorotoluene-P	Trifluorotoluene-F
3488535	98	89
3488536	119	222*
3488537	84	111
Blank	95	91
LCS	100	92
LCSD	98	92
MS	99	89
MSD	100	92
Limits:	69-132	65-131

Analysis Name: MTBE by GC/MS

Batch number: 00308B70

Dibromofluoromethane

\*- Outside of specification.

- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The background result was more than four times the spike added.



## Lancaster Laboratories

Where quality is a science.

### Quality Control Summary

Page 2 of 2

Client Name: ExxonMobil

Group Number: 737002

Reported: 11/09/00 at 06:46 AM

### Surrogate Quality Control

3488536	103
Blank	101
LCS	105
LCSD	103

---

Limits: 86-118

\*- Outside of specification

- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The background result was more than four times the spike added.

Lancaster Laboratories  
1000 Lancaster Road  
Lancaster, PA 17602  
Tel: 717-397-1000  
Fax: 717-397-1001  
www.lancasterlab.com

Please print.

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

Mobil Consultant/Office: <u>TRC</u>				<b>Matrix</b> <input type="checkbox"/> Potable Water <input type="checkbox"/> NPDES <input type="checkbox"/> Soil <input type="checkbox"/> Air <input type="checkbox"/> Composite Total Number of Containers		<b>Analyses Requested</b> <small>List total number of containers in the box under each analysis.</small>												<b>Preservative Codes</b> H = HCl      T = Thiosulfate N = HNO <sub>3</sub> B = NaOH S = H <sub>2</sub> SO <sub>4</sub> O = Other																		
Consultant Prj. Mgr: <u>Jonathan Scheiner</u> Prj. #: <u>41-0123-70</u>						<b>Preservative Codes</b>																														
Consultant Phone #: <u>(925)688-1200</u> Fax #: <u>(925)688-0388</u>						<input checked="" type="checkbox"/> BTEX 8020 <input checked="" type="checkbox"/> 8021 <input type="checkbox"/> + MTBE <input checked="" type="checkbox"/> * <input type="checkbox"/> H <input type="checkbox"/> TPH 8015 MOD <input checked="" type="checkbox"/> GRO <input checked="" type="checkbox"/> DRO <input type="checkbox"/> H <input type="checkbox"/> NWTPH <input type="checkbox"/> GX <input type="checkbox"/> DX <input type="checkbox"/> <input type="checkbox"/> TPHAZ Title 22 Metals Lead 7420 <input type="checkbox"/> 7421 <input type="checkbox"/>																														
Location Code #: <u>Mobil 99-105</u> WBS #: <u>56</u>																																				
Site Address: <u>6301 San Pablo Ave, Oakland</u> State: <u>CA</u>																																				
Sampler: <u>Steve Kemnitz</u> Mobil Engineer: <u>Darin Rouse</u>																																				
Sample Identification		Date Collected	Time Collected	Grab	Composite	Soil	Water	Oil	Air	Total Number of Containers	BTEX 8020	8021	+ MTBE	* H	TPH 8015 MOD	GRO	DRO	H	NWTPH	GX	DX	TPHAZ	Title 22 Metals	Lead 7420	7421	7422	7423	7424	7425	7426	7427	7428	7429	7430	Remarks	
<u>MW-2</u>		<u>10/25/00</u>	<u>1111</u>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>			<u>4</u>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>																				<u>* Confirm highest MTBE by 8260</u>		
<u>MW-3</u>		<u>↓</u>	<u>1120</u>	<u>↓</u>			<u>↓</u>			<u>↓</u>	<u>↓</u>	<u>↓</u>		<u>↓</u>																						
<u>MW-5</u>		<u>↓</u>	<u>1135</u>	<u>↓</u>			<u>↓</u>			<u>↓</u>	<u>↓</u>	<u>↓</u>		<u>↓</u>																						
Turnaround Time Requested (TAT) (please circle): <input checked="" type="radio"/> <b>MOBIL STD. TAT</b> 72 hour      48 hour 24 hour      other _____ day				Relinquished by: <u>Steve Kemnitz</u> Date: <u>10/25/00</u> Time: <u>1430</u>				Received by: _____ Date: _____ Time: _____		Relinquished by: _____ Date: _____ Time: _____				Received by: _____ Date: _____ Time: _____		Relinquished by: _____ Date: _____ Time: _____				Received by: _____ Date: _____ Time: _____																
Data Package Options (please circle if requested) QC Summary      GLP Type I (Tier I)      Other Type III (NJ Red. Del.)      Disk Type IV (CLP) Type VI (Raw Data) WIP				SDG Complete? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>				Site-specific QC required? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> <small>(If yes, indicate QC sample and submit triplicate volume.)</small>				Internal Chain of Custody required? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>				Relinquished by Commercial Carrier: UPS <input type="checkbox"/> <input checked="" type="checkbox"/> <b>FedEx</b> Other _____				Received by: <u>Miss Zook</u> Date: <u>10/27/00</u> Time: <u>0910</u>																
Temperature Upon Receipt <u>2.0</u> °C										Custody Seals Intact? <input checked="" type="checkbox"/> Yes      No      N/A																										

**EXHIBIT 8**

**WASTE DISPOSAL MANIFEST**

**TO BE SENT UPON RECEIPT**