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MAY 17 1998

April 15, 1998

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

Alton Project No. 41-0123

1683

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

Dear Ms. Hugo:

Please find enclosed the First 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

If you have any questions regarding this report, please call Ms. Cherine Foutch, Mobil Engineer, at (925) 625-1173, or Mr. Tom Seeliger, Alton Geoscience Project Geologist, at (925) 606-9150.

Sincerely,

ALTON GEOSCIENCE

*Tom Seeliger For TES*

Tom Seeliger  
Project Geologist

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

M:\99-105R07.QMS

ALTON GEOSCIENCE

Quarterly Progress Report Summary Sheet  
First Quarter 1998

Former Mobil Statio 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:	23-Jan-98
Number of ground water wells on-site:	4	Ground Water Wells monitored:	4
Number of ground water wells off-site:	0	Ground Water Wells sampled:	3
		Ground Water Wells with Free Product:	1
Phase of Investigation: Vadose Zone:	N/A	Ground Water Phase:	Monitor & Sample
<b>SITE HYDROGEOLOGY:</b>			
Approximate depth to ground water below ground surface:			4.97 feet
Approximate elevation of potentiometric surface above Mean Sea Level:			27.00 feet
Average Increase/Decrease in ground water elevations since last sampling episode:			5.25 foot increase
Approximate flow direction and hydraulic gradient:			Southwest at 0.10 ft/ft
<b>GROUND WATER CONTAMINATION (BENZENE MCL=1.0 ppb):</b>			
Wells containing free product:	1	Range in Thickness of Free Product:	0.0 to 0.92 ft.
Number of wells with concentrations below MCL:	2	Volume of Free Product Recovered This Period:	2.0 gallons
Number of wells with concentrations at or above MCL:	1	Volume of Free Product Recovered To Date:	2.0 gallons
		Range in Concentrations:	Benzene: ND to 190 TPH-G: ND to 6,100 TPH-D: 33 ppb to 2,300
Nature of contamination:	Gasoline		
<b>ADDITIONAL INFORMATION:</b>			
Monitoring Well MW-4 contained 0.92 feet of free product on 1-23-98.			
Monitoring Wells MW-1, MW-2, and MW-3 were all sampled using the non-purge method.			
Monitoring Well MW-4 contained 1.12 feet of free product on 1-30-98. Approximately 2.0 gallons of free product was removed and is currently on site pending proper disposal.			

Prepared by: Chris Smiga

Chris K. Smiga  
Staff Scientist

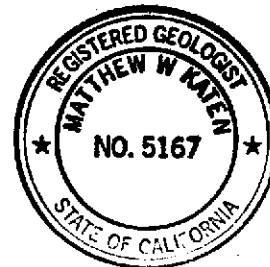
Alton Project No: 41-0123

Approved by: Matthew W. Katen

California RG# 5167

Matt W. Katen, RG  
Senior Associate

Submittal date: 4/15/98



**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**

### 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)
						TPH-G (ppb)	TPH-D (ppb)	Benzene (ppb)	Toluene (ppb)						
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	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	ND	—	—	—
MW-1†	01/23/98	32.79	3.95	28.84	0.00	ND	33	ND	ND	ND	ND	ND	—	—	—
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	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	ND	—	—	—
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-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	—	—	—	—	—	—	—	—	—	—

## Groundwater Levels and Chemical Analysis

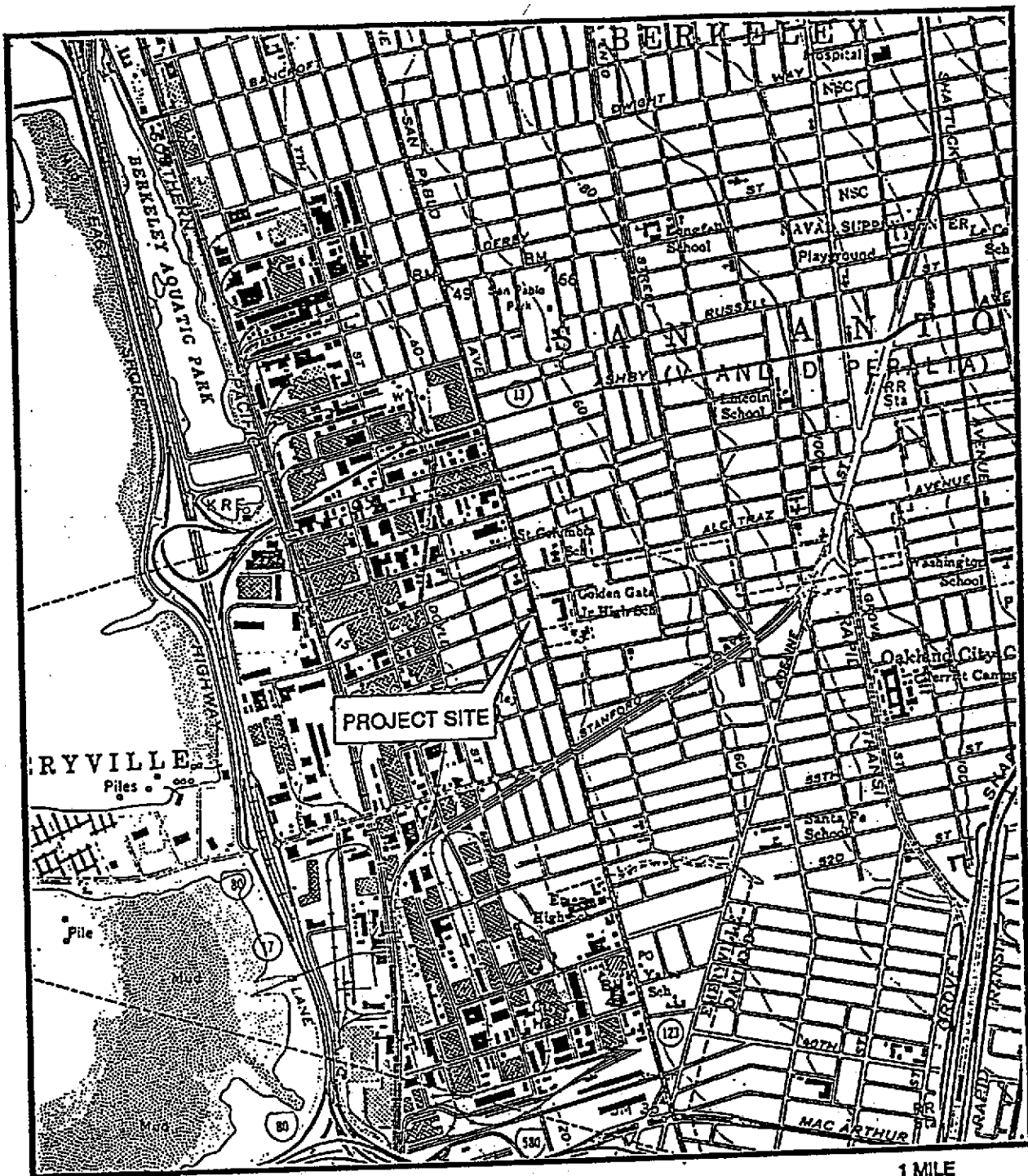
Former Mobil Station 99-105

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)
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**NOTES:**

ppb = parts per billion  
 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  
 \*\*\*\*\* = diesel and unidentified hydrocarbons >C20  
 † = well sampled using no-purge method



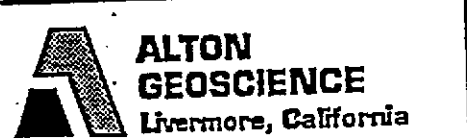
1 MILE 3/4 1/2 1/4 0 1 MILE  
SCALE 124,000

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**





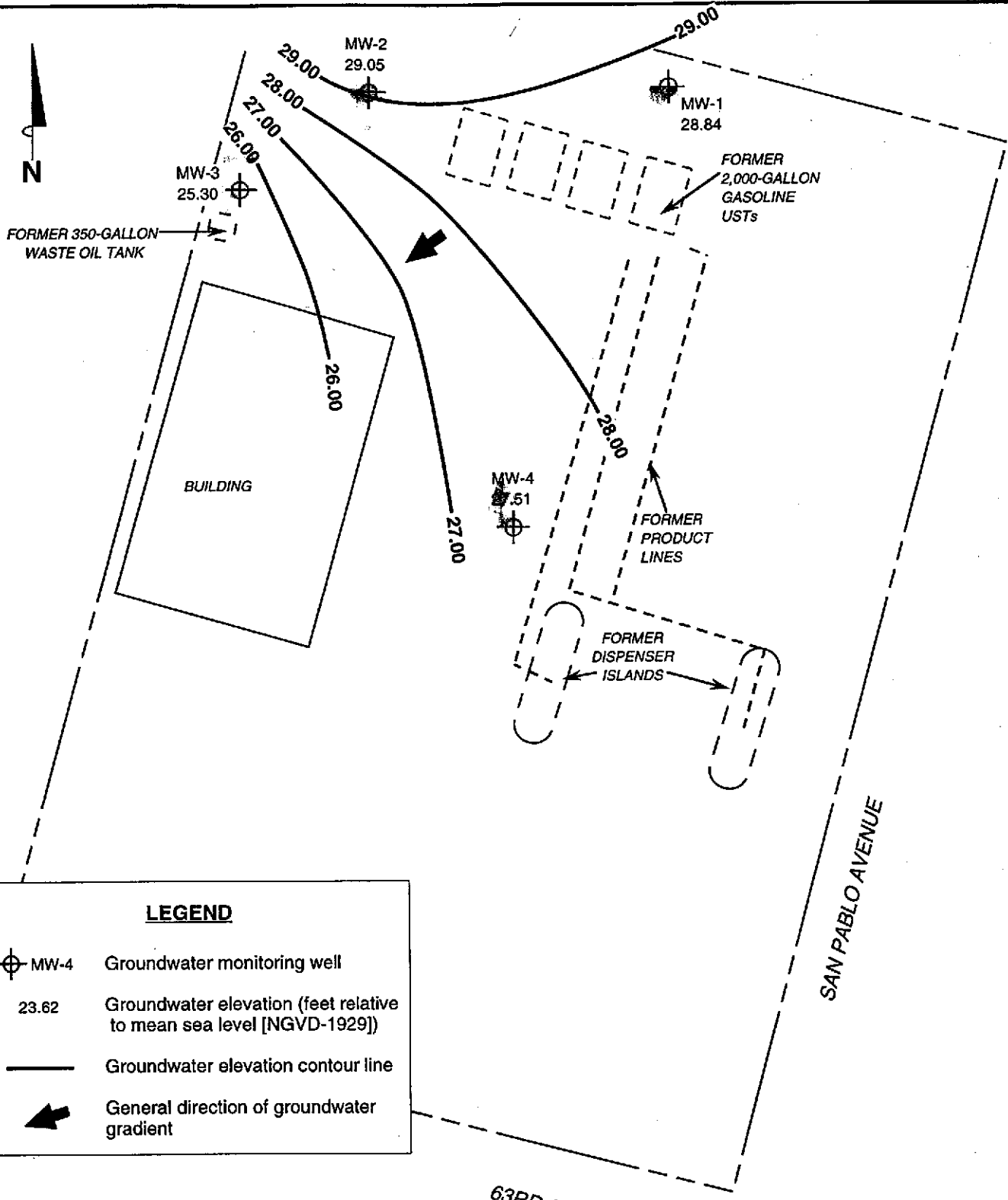
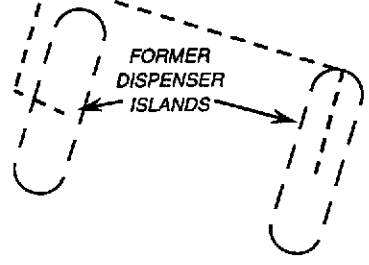
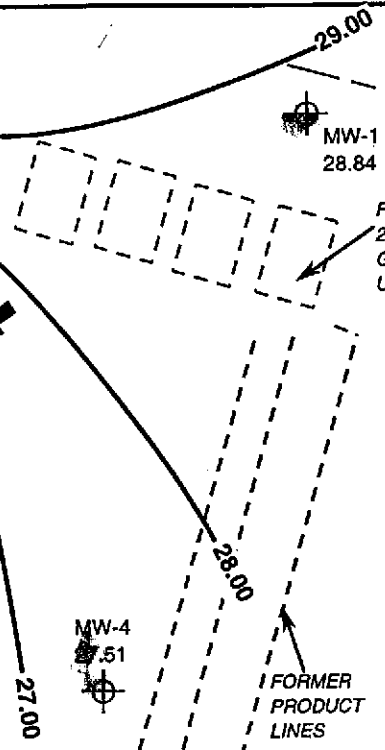
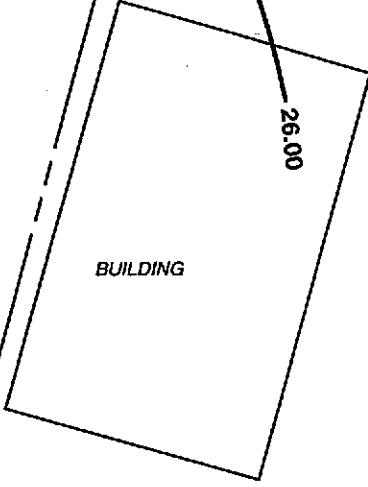
FORMER 350-GALLON WASTE OIL TANK

MW-3  
25.30

MW-2  
29.05

MW-1  
28.84




MW-4  
27.51



SAN PABLO AVENUE

63RD STREET

**LEGEND**

-  MW-4 Groundwater monitoring well
- 23.62 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 January 23, 1998.  
.Contour interval = 1.0 foot.

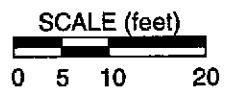
**GROUNDWATER ELEVATION CONTOUR MAP  
January 23, 1998**

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

**FIGURE 2**



**ALTON  
GEOSCIENCE**  
Livermore, California



Source: ALISTO Engineering



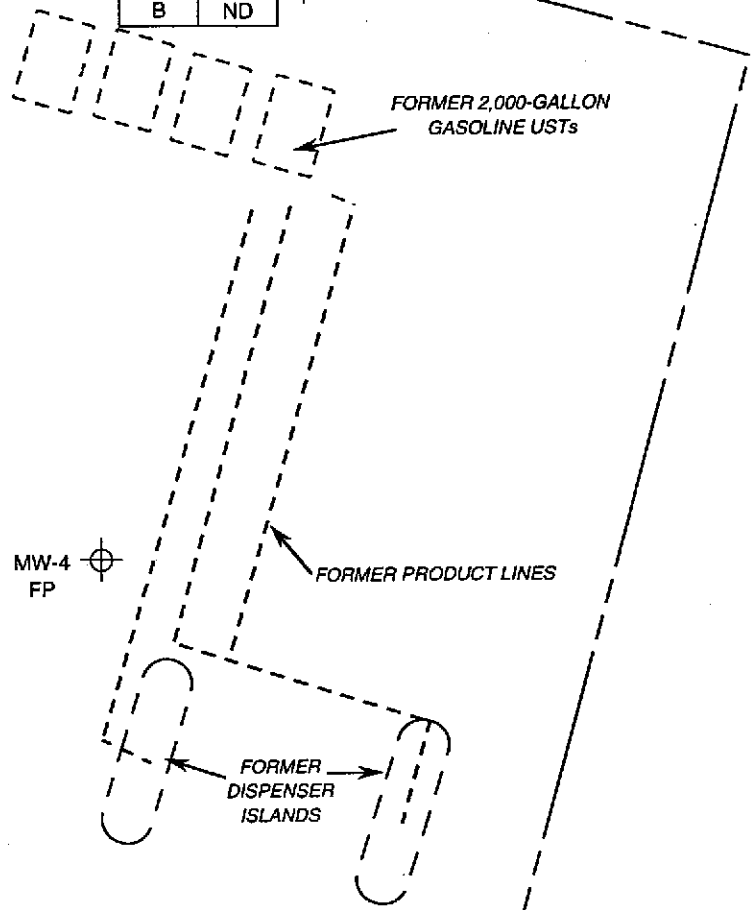
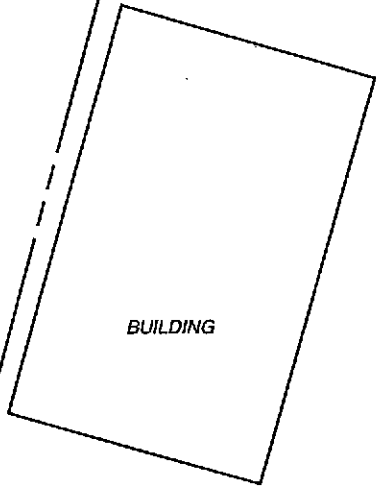
MW-2	
TPH-G	ND
TPH-D	54
B	ND

MW-3	
TPH-G	6,100
TPH-D	2,300
B	190

MW-1	
TPH-G	ND
TPH-D	33
B	ND

FORMER 350-GALLON  
WASTE OIL TANK



MW-4  
FP

SAN PABLO AVENUE

63RD STREET

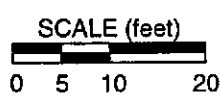
LEGEND	
	Groundwater monitoring well showing dissolved-phase hydrocarbon concentrations in ppb
MW-1	
TPH-G	ND
TPH-D	60
B	0.84

**NOTES:**

Results are based on analysis of groundwater samples collected January 23, 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  
January 23, 1998**

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



**ALTON  
GEOSCIENCE**  
Livermore, California

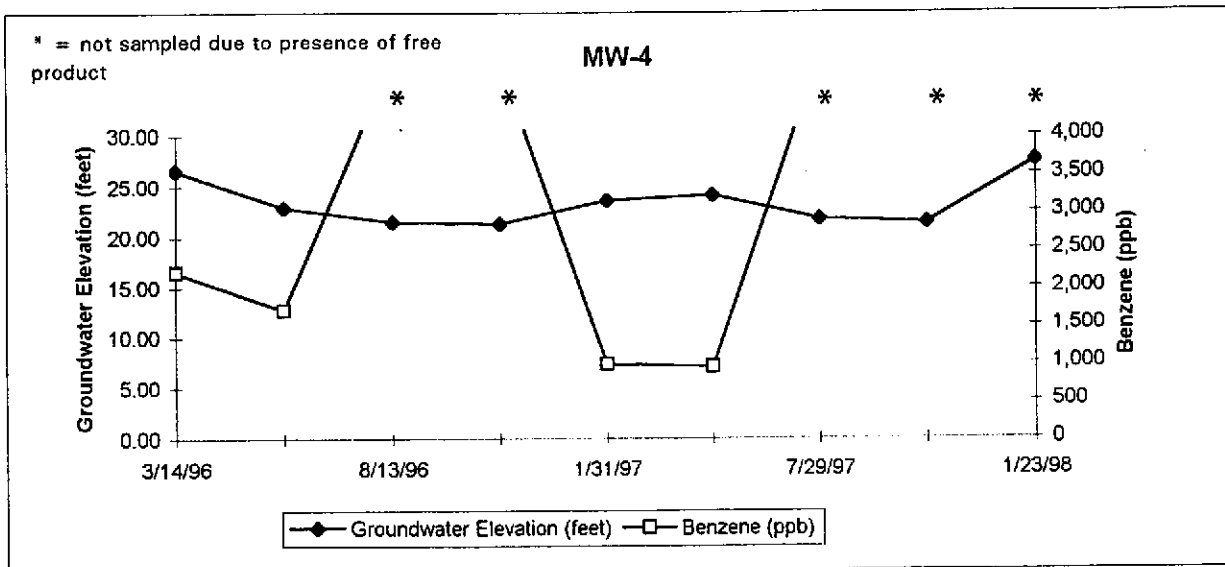
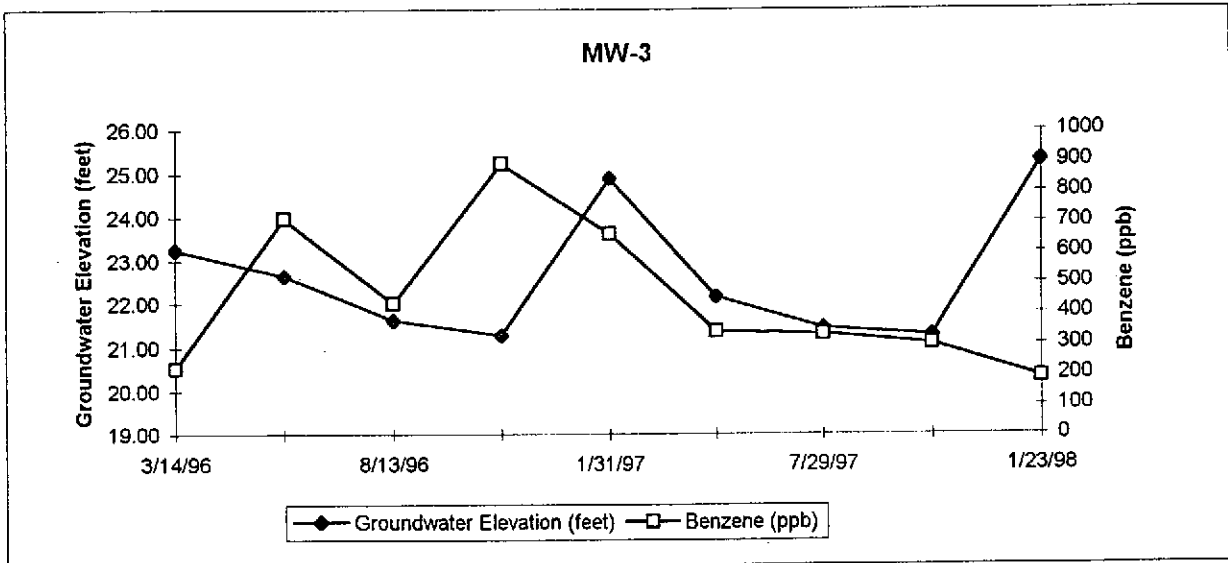
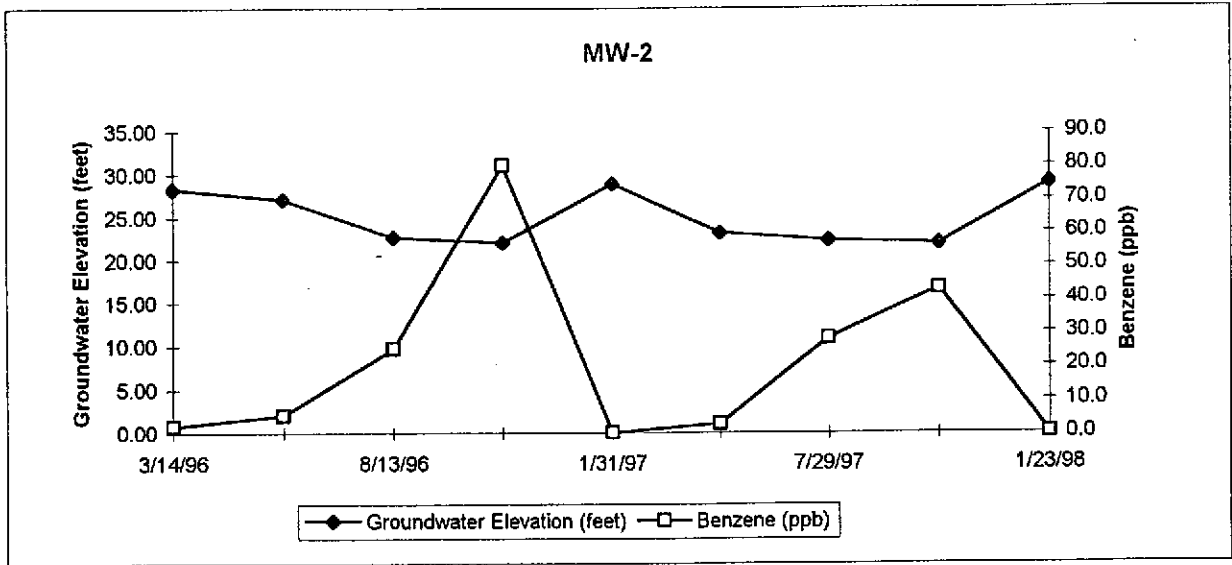
Source: ALISTO Engineering

**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**



### FLUID MEASUREMENT FIELD FORM

Project No.: 41-0123-50  
 Station No.: 99-105

Alton Personnel: JM  
 Date: 1-23-98

Well Number	Well Elevation	Depth to Water	Depth to Product	Free Product Thickness (ft)	Free Product Recovery	Total Depth	Comments
Mw-1		3.95				19.24	
Mw-2		3.75				19.47	
Mw-3		7.50				20.09	
Mw-4		4.68	3.60	.92	/		No sample

# GROUND WATER SAMPLING FIELD NOTES

Site: 99-105 Project No.: 41-0123 Sampled By: Jim Date: 1-23-98

Well No. MW-1 Purge Method: No  
 Total Depth (feet) \_\_\_\_\_  
 Depth to Product (feet): \_\_\_\_\_  
 Depth to Water (feet): 3.95 Product Recovered (gallons): \_\_\_\_\_  
 Water Column (feet): \_\_\_\_\_ Casing Diameter (Inches): 4  
 80% Recharge Depth (feet): \_\_\_\_\_ 1 Well Volume (gallons): \_\_\_\_\_

Well No. MW-2 Purge Method: No  
 Total Depth (feet) \_\_\_\_\_  
 Depth to Product (feet): \_\_\_\_\_  
 Depth to Water (feet): 3.75 Product Recovered (gallons): \_\_\_\_\_  
 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
				1.48	68.5	7.71
Total Purged				Time Sampled		100

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

Time Start	Time Stop	Depth To Water (feet)	Volume Purged (gallons)	Conductivity (uS/cm)	Temperature (F, C)	pH
				1.36	62.1	7.68
Total Purged				Time Sampled		1530

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

Well No. MW-3 Purge Method: No  
 Total Depth (feet) \_\_\_\_\_  
 Depth to Product (feet): \_\_\_\_\_  
 Depth to Water (feet): 7.50 Product Recovered (gallons): \_\_\_\_\_  
 Water Column (feet): \_\_\_\_\_ Casing Diameter (Inches): 4  
 80% Recharge Depth (feet): \_\_\_\_\_ 1 Well Volume (gallons): \_\_\_\_\_

Well No. MW-4 Purge Method: \_\_\_\_\_  
 Total Depth (feet) \_\_\_\_\_  
 Depth to Product (feet): 3.60  
 Depth to Water (feet): 4.68 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
				1.27	68.2	7.42
Total Purged				Time Sampled		1600

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

Time Start	Time Stop	Depth To Water (feet)	Volume Purged (gallons)	Conductivity (uS/cm)	Temperature (F, C)	pH
Total Purged				Time Sampled		1630

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 = \_\_\_\_\_

.92 feet of Product

## FLUID MEASUREMENT FIELD FORM

Project No.: 41-0123-50  
 Station No.: 99-105

Alton Personnel: CA / JB / JM  
 Date: 1-30-98

Well Number	Screen Interval	Depth to Water	Depth to Product	Free Product Thickness (ft)	Free Product Recovery	Total Depth	Comments
Mw-1		3.78					
Mw-2		3.86					
Mw-3		7.69					
Mw-4		4.72	3.60	1.12	2.0 gal F.P. recovered		

**EXHIBIT 7**

**ANALYTICAL LABORATORY DATA SHEETS**



LLI Sample No. WW 2864981  
Collected: 1/23/98 at 15:00 by JM

Submitted: 1/28/98 Reported: 2/15/98  
Discard: 3/18/98

MW-1 Grab Water Sample  
LOC# 99-105 PRCA# 980044 PHC# 1  
Mobil: 6301 San Pablo, CA

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

P.O. 99-105  
Rel.

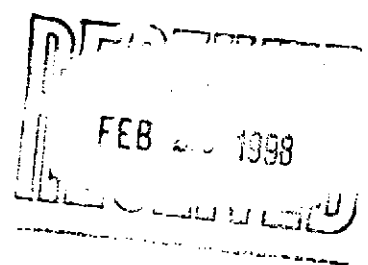
CAT NO.	ANALYSIS NAME	AS RECEIVED		
		RESULTS	REPORTING LIMIT	UNITS
5553	8015 Mod. for Diesel According to the California LUFT Protocol, the quantitation for Diesel Range Organics was performed by peak area comparison of the sample pattern to that of our #2 fuel oil reference standard (between C10 and C28 normal hydrocarbons). The limit of quantitation for TPH-DRO was increased due to insufficient sample volume.	0.33	0.20	mg/l
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	0.20 mg/l	Batch: 980350005A L036 N.D.					89	95	7	50	120
8209 BTEX, MTBE (8020)		Batch: 98030A53									
0776 Benzene	0.3 ug/l	N.D.		97	96	1	86			78	138
0777 Toluene	0.3 ug/l	N.D.		98	98	0	88			78	118
0778 Ethylbenzene											

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

1 COPY TO Alton Geoscience                      ATTN: Mr. Tom Seeliger



Questions? Contact your Client Services Representative  
Brian R. Boyles at (717) 656-2300  
20:55:17 D 0001 3 133857 600359  
547 0.00 00010900 ASR000

Respectfully Submitted  
Michele McClarin, 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 2864981**

Collected: 1/23/98 at 15:00 by JM

Submitted: 1/28/98 Reported: 2/15/98

Discard: 3/18/98

MW-1 Grab Water Sample  
 LOC# 99-105 PRCA# 980044 PHC# 1  
 Mobil: 6301 San Pablo, CA

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

P.O. 99-105  
 Re1.

SAMPLE RPT LIM	SAMPLE UNITS	BLANK	DUP RPD	MS	MSD	MS RPD	LCS	LCS DUP	LCS RPD	LCS LIMITS LOW	LCS LIMITS HIGH
0779	0.3 ug/l Total Xylenes	N.D.		99	99	0	88			77	119
0780	0.6 ug/l Methyl tert-Butyl Ether	N.D.		99	97	1	88			76	116
	10. ug/l	N.D.		102	102	1	101			76	144
8268 8015 Mod. for Gasoline		Batch: 98030A53									
5554	50. TPH-GRO (CA LUFT) ug/l	N.D.		108	104	3	89			75	125

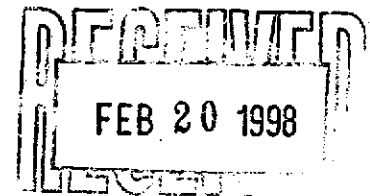
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 SURROGATE SUMMARY

TRIAL ID	SURROGATE	RECOVERY %	SURROGATE LIMITS	
			LOW	HIGH
5553 8015 Mod. for Diesel	Chlorobenz	50	50	135
	o-Terpheny	76	75	135
	TFT	91	70	130
8209 BTEX, MTBE (8020)	TFT	92	70	130
8268 8015 Mod. for Gasoline	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	02/06/98 0258	M. Susan Kreider
7003	Extraction - DRO (Waters)	SW-846 3510C	2	02/05/98 0800	Denise L. Trimby
8209	BTEX, MTBE (8020)	SW-846 8020A	1	01/30/98 2341	Steven A. Skiles
8268	8015 Mod. for Gasoline	CA LUFT Gasoline Method	1	01/30/98 2341	Steven A. Skiles

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



Questions? Contact your Client Services Representative  
 Brian R. Boyles at (717) 656-2300

Respectfully Submitted  
 Michele McClarin, 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 2864982**  
Collected: 1/23/98 at 15:30 by JM

Submitted: 1/28/98 Reported: 2/15/98  
Discard: 3/18/98

MW-2 Grab Water Sample  
LOC# 99-105 PRCA# PHC# 1  
Mobil: 6301 San Pablo, CA

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

P.O. 99-105  
Rel.

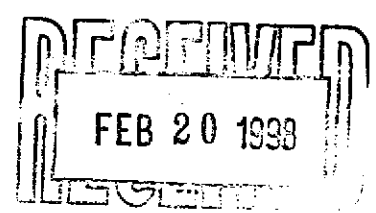
CAT NO.	ANALYSIS NAME	AS RECEIVED		
		RESULTS	REPORTING LIMIT	UNITS
5553	8015 Mod. for Diesel According to the California LUFT Protocol, the quantitation for Diesel Range Organics was performed by peak area comparison of the sample pattern to that of our #2 fuel oil reference standard (between C10 and C28 normal hydrocarbons). The limit of quantitation for TPH-DRO was increased due to insufficient sample volume.	0.54	0.20	mg/l
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 0.20 mg/l		Batch: 980350005A L036 N.D.						89	95	7	50	120
8209 BTEX, MTBE (8020)		Batch: 98030A53										
0776 Benzene 0.3 ug/l		N.D.			97	96	1	86			78	138
0777 Toluene 0.3 ug/l		N.D.			98	98	0	88			78	118
0778 Ethylbenzene												

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

1 COPY TO Alton Geoscience ATTN: Mr. Tom Seeliger



Questions? Contact your Client Services Representative  
Brian R. Boyles at (717) 656-2300  
20:55:58 D 0001 3 133857 600359  
547 0.00 00010900 ASR000

Respectfully Submitted  
Michele McClarin, 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 2864982**  
 Collected: 1/23/98 at 15:30 by JM

Submitted: 1/28/98 Reported: 2/15/98  
 Discard: 3/18/98

MW-2 Grab Water Sample  
 LOC# 99-105 PRCA# PHC# 1  
 Mobil: 6301 San Pablo, 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 LIMITS LOW	LCS LIMITS HIGH
0779	0.3 ug/l Total Xylenes	N.D.		99	99	0	88			77	119
0780	0.6 ug/l Methyl tert-Butyl Ether	N.D.		99	97	1	88			76	116
10.	10. ug/l	N.D.		102	102	1	101			76	144
-----											
8268	8015 Mod. for Gasoline		Batch: 98030A53								
-----											
5554	50. TPH-GRO (CA LUFT)	N.D.		108	104	3	89			75	125
-----											

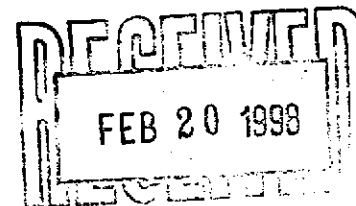
**SURROGATE SUMMARY**

TRIAL ID	SURROGATE	RECOVERY %	SURROGATE LIMITS	
			LOW	HIGH
5553 8015 Mod. for Diesel	Chlorobenz	59	50	135
	o-Terpheny	80	75	135
8209 BTEX, MTBE (8020)	TFT	91	70	130
8268 8015 Mod. for Gasoline	TFT	92	70	130

**LABORATORY CHRONICLE**

CAT	ANALYSIS NAME	METHOD	TRIAL ID	ANALYSIS DATE AND TIME	ANALYST
5553	8015 Mod. for Diesel	CA LUFT Diesel Range Organics	1	02/06/98 0317	M. Susan Kreider
7003	Extraction - DRO (Waters)	SW-846 3510C	2	02/05/98 0800	Denise L. Trimby
8209	BTEX, MTBE (8020)	SW-846 8020A	1	01/31/98 0139	Steven A. Skiles
8268	8015 Mod. for Gasoline	CA LUFT Gasoline Method	1	01/31/98 0139	Steven A. Skiles

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



Questions? Contact your Client Services Representative  
 Brian R. Boyles at (717) 656-2300

Respectfully Submitted  
 Michele McClarin, 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 2864983**

Collected: 1/23/98 at 16:00 by JM

Submitted: 1/28/98 Reported: 2/15/98  
Discard: 3/18/98

MW-3 Grab Water Sample  
LOC# 99-105 PRCA# PHC# 1  
Mobil: 6301 San Pablo, 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		
		RESULTS	REPORTING LIMIT	UNITS
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). The limit of quantitation for TPH-DRO was increased due to insufficient sample volume.	2.3	0.20	mg/l
8209	BTEX, MTBE (8020)			
0776	Benzene	190.	1.	ug/l
0777	Toluene	23.	1.	ug/l
0778	Ethylbenzene	330.	1.	ug/l
0779	Total Xylenes	320.	3.	ug/l
0780	Methyl tert-Butyl Ether	N.D.	10.	ug/l
8268	8015 Mod. for Gasoline			
5554	TPH-GRO (CA LUFT)	6,100.	100.	ug/l

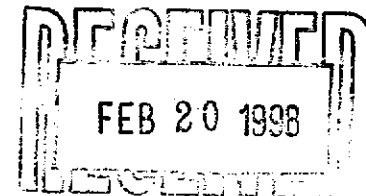
**QUALITY CONTROL REPORT**

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 0.20 mg/l	Batch: 980350005A L036 N.D.					89	95	7	50	120
8209	BTEX, MTBE (8020)	Batch: 98032A53									
0776	Benzene 1. ug/l	N.D.		98	96	2	87			78	138
0777	Toluene 1. ug/l	N.D.		100	97	3	89			78	118
0778	Ethylbenzene										

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

1 COPY TO Alton Geoscience

ATTN: Mr. Tom Seeliger



Questions? Contact your Client Services Representative  
Brian R. Boyles at (717) 656-2300  
20:56:37 D 0001 3 133857 600359  
547 0.00 00010900 ASR000

Respectfully Submitted  
Michele McClarin, 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 2864983**

Collected: 1/23/98 at 16:00 by JM

Submitted: 1/28/98 Reported: 2/15/98

Discard: 3/18/98

MW-3 Grab Water Sample  
 LOC# 99-105 PRCA# PHC# 1  
 Mobil: 6301 San Pablo, CA

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

P.O. 99-105  
 Re1.

SAMPLE RPT LIM	SAMPLE UNITS	BLANK	DUP RPD	MS	MSD	MS RPD	LCS	LCS DUP	LCS RPD	LCS LOW	LCS LIMITS HIGH
0779	1. ug/l	N.D.		100	98	2	88			77	119
	Total Xylenes										
0780	3. ug/l	N.D.		99	97	2	88			76	116
	Methyl tert-Butyl Ether										
	10. ug/l	N.D.		101	101	1	98			76	144
-----											
8268	8015 Mod. for Gasoline Batch: 98032A53										
-----											
5554	TPH-GRO (CA LUFT)										
	100. ug/l	N.D.		111	108	3	87			75	125

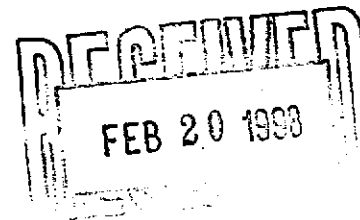
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 SURROGATE SUMMARY  
 -----

TRIAL ID	SURROGATE	RECOVERY %	SURROGATE LIMITS	
			LOW	HIGH
5553 8015 Mod. for Diesel	Chlorobenz	71	50	135
	o-Terpheny	75	75	135
	TFT	95	70	130
8209 BTEX, MTBE (8020)	TFT	111	70	130
8268 8015 Mod. for Gasoline	TFT			

-----  
 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	02/06/98 0336	M. Susan Kreider
7003	Extraction - DRO (Waters)	SW-846 3510C	2	02/05/98 0800	Denise L. Trimby
8209	BTEX, MTBE (8020)	SW-846 8020A	1	02/02/98 1226	Patrick N. Evans
8268	8015 Mod. for Gasoline	CA LUFT Gasoline Method	1	02/02/98 1226	Patrick N. Evans

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



Questions? Contact your Client Services Representative  
 Brian R. Boyles at (717) 656-2300

Respectfully Submitted  
 Michele McClarin, 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 #: 8864981-983

Please print.

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

Mobil Consultant/Office: <u>Alton Geoscience / Livermore</u>				<b>Matrix</b>		<b>Analyses Requested</b>										List total number of containers in the box under each analysis	Remarks	Temperature of samples upon receipt (if requested)	
Consultant Prj. Mgr: <u>Tom Seelyer</u> Prj. #: <u>41-0123-50</u>				<input type="checkbox"/> Potable <input type="checkbox"/> NPDES <input type="checkbox"/> Water <input type="checkbox"/> Oil <input type="checkbox"/> Air		Total # of Containers: <u>8000</u> TPH-G / STEX / MTBE TPH-D MTBE*													
Consultant Phone #: <u>(510) 606-9150</u> Fax #: <u>(510) 606-9260</u>																			
Location Code #: <u>99-105</u> PRC/AFE/Release #: <u>960135</u>																			
Commitment Code #: _____ Phase Code: <u>1</u>																			
Site Address: <u>6301 San Pablo, Oakland, CA</u>																			
Sampler: <u>Jake Madden</u>																			
Mobil Engineer: <u>Cherine Foutch</u>																			

<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>[Signature]</u> Date: _____ Time: _____		Received by: _____      Date: _____ Time: _____			
<b>Data Package Options</b> (please circle if requested)		SDG Complete? Yes <input type="radio"/> No <input checked="" type="radio"/>		Relinquished by: _____      Date: _____ Time: _____		Received by: _____      Date: _____ Time: _____	
QC Summary      GLP Type I (Tier I)      Other Type III (NJ Red. Del.)      Disk Type IV (CLP) Type VI (Raw Data) WIP		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"/>		Relinquished by: _____      Date: _____ Time: _____		Received by: <u>[Signature]</u> Date: <u>11/28/98</u> Time: <u>0840</u>	