



October 15, 1998

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

Brown's case

ENVIRONMENTAL
PROTECTION

98 OCT 22 PM 3:44

Alton Project No. 41-0123

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

Dear Ms. Hugo:

Please find enclosed the Third 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.

X110

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:\...\99-105R09.QMS

ALTON GEOSCIENCE

Quarterly Progress Report Summary Sheet
Third 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
FIELD ACTIVITY:		Date Sampled:	21-Jul-98
Number of groundwater wells on-site:	4	Groundwater wells monitored:	4
Number of groundwater wells off-site:	0	Groundwater wells sampled:	3
		Groundwater wells with free product:	1
Phase of Investigation: Vadose Zone:	N/A	Groundwater phase:	Monitor & Sample
SITE HYDROGEOLOGY:			
Approximate depth to ground water below ground surface:			9.12 ft
Approximate elevation of potentiometric surface above Mean Sea Level:			23.39 ft
Average Increase/Decrease in ground water elevations since last sampling episode:		Decrease:	3.14 ft
Approximate flow direction and hydraulic gradient:			ft/ft
GROUND WATER CONTAMINATION (BENZENE MCL=1.0 ppb):			
Wells containing free product:	1	Range in Thickness of Free Product:	0.20 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
		Range in Concentrations:	Benzene: ND<0.3 to 250 ppb TPH-G: ND<50 to 7,400 ppb TPH-D: not sampled this event
Nature of contamination:	Gasoline		
ADDITIONAL INFORMATION:			
Monitoring Well MW-4 contained 0.20 feet of free product on 7-21-98. The well was not sampled; however, the free product was removed and is currently onsite pending proper disposal.			

Prepared by: Kathleen Racke

Kathleen Racke
Project Manager

Alton Project No: 41-0123

Approved by: Matthew W Katen
California RG# 5167

Matthew W. Katen, RG, CHG
Senior Associate

Submittal Date: 10/15/98

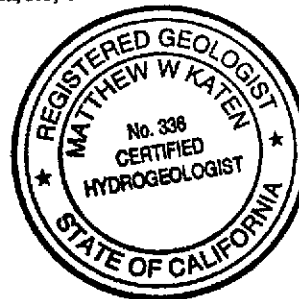


EXHIBIT 1
SAMPLING SCHEDULE

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

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)	Ethyl-benzene (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-1	07/21/98	32.79	9.17	23.62	0.00	ND	—	ND	ND	ND	ND	—	—	—	—	4.34
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	—	—	—	—	1.04
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	—	—	—	—	—
MW-3	04/22/97	32.80	10.64	22.16	0.00	8,000	2,700	340	33	400	490	200	—	—	—	—
MW-3†	07/29/97	32.80	11.36	21.44	0.00	9,800	2,300*	330	ND	530	530	—	—	—	—	—
MW-3†	10/09/97	32.80	11.52	21.28	0.00	7,300	2,600*	300	ND	430	460	270	—	—	—	—
MW-3†	01/23/98	32.80	7.50	25.30	0.00	6,100	2,300	190	23	330	320	—	—	—	—	—
MW-3	04/22/98	32.80	6.81	25.99	0.00	4,900	2,600	140	12	250	230	—	—	—	—	0.45
MW-3	07/21/98	32.80	10.65	22.15	0.00	7,400	—	250	16	400	370	74	—	—	—	0.78
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	—	—	—	—	—
MW-4	04/22/97	31.50	7.40	24.10	0.00	8,800	4,500	950	ND	610	130	—	—	—	—	—

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	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	—	—	—	—	—	—	—	—	—	—	—
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



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



SCALE 1 : 24,000



SOURCE:

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



QUADRANGLE
LOCATION

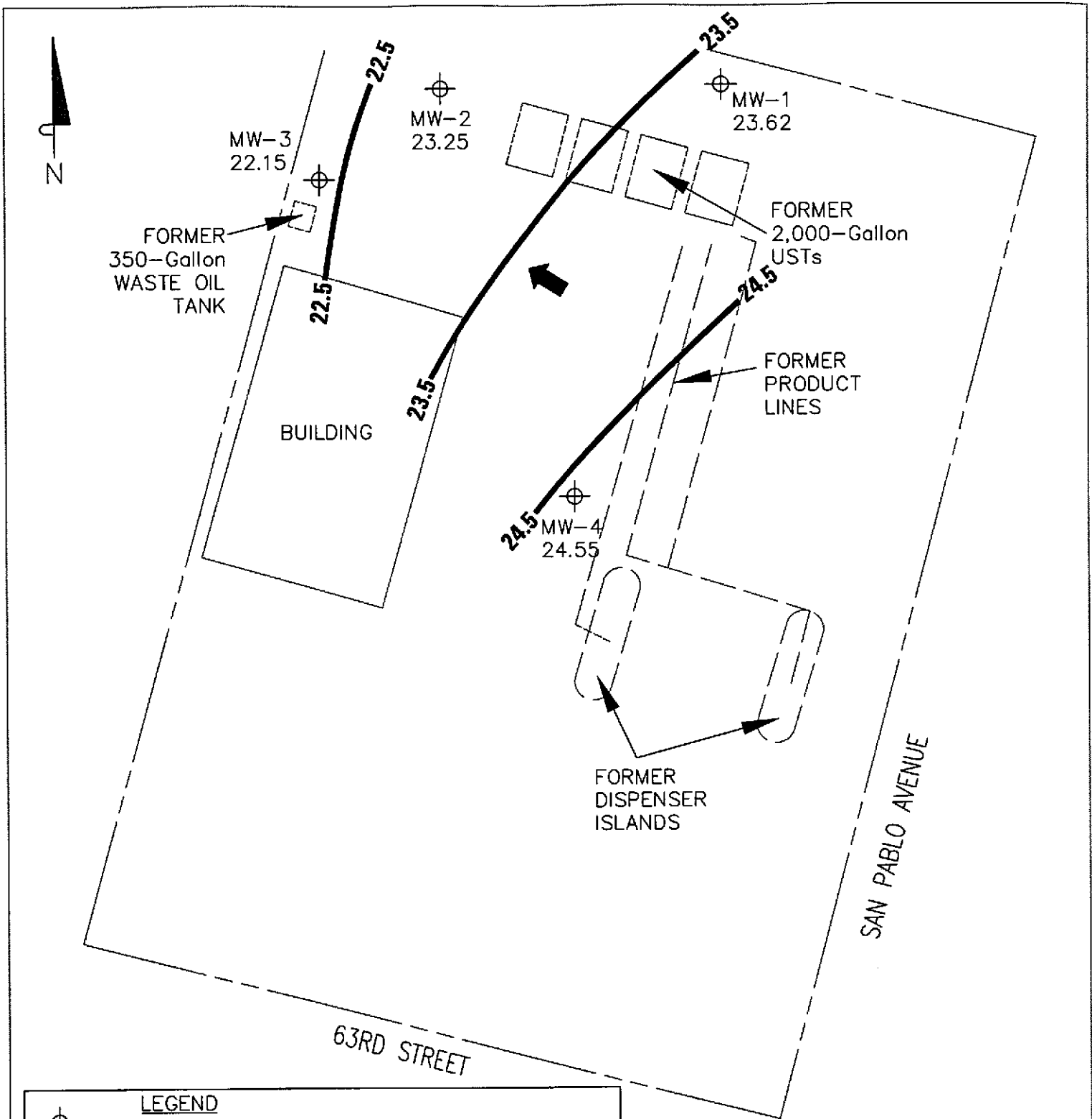
VICINITY MAP

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






**ALTON
GEOSCIENCE**
Livermore, California

FIGURE 1



LEGEND

-  MW-4 25.22 Monitoring Well Showing 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 on July 21, 1998.
 Contour interval = 1.0 foot.


GROUNDWATER ELEVATION
 CONTOUR MAP
 July 21, 1998

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



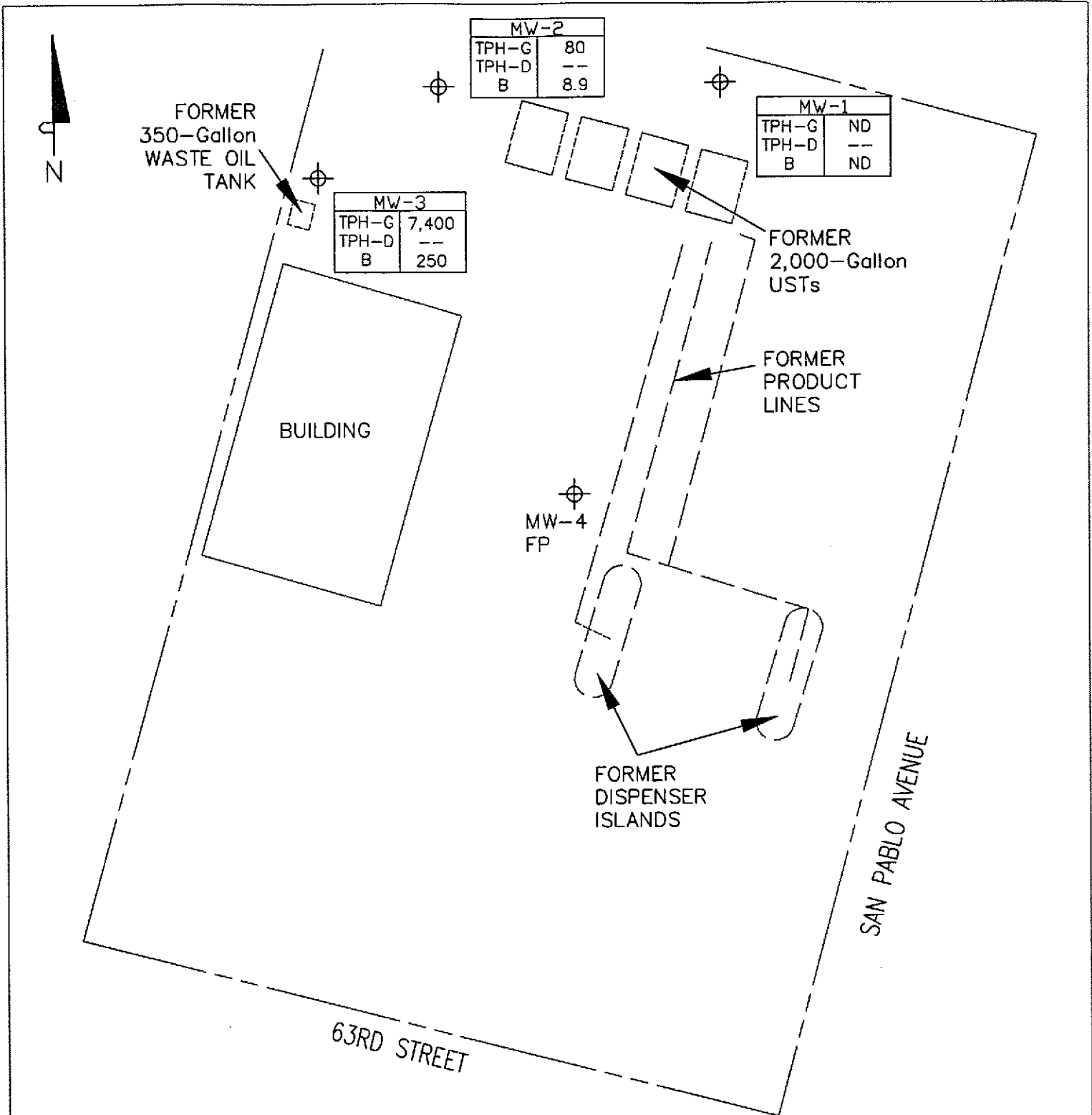
**ALTON
 GEOSCIENCE**
 Livermore, California

SCALE (FEET)



0 20
 Source: AJUSTO Engineering

FIGURE 2



DISSOLVED-PHASE HYDROCARBON CONCENTRATIONS
July 21, 1998

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

FIGURE 3

LEGEND									
	Monitoring Well Showing Dissolved-Phase Hydrocarbon Concentrations (ppb)								
<table border="1"><tr><th colspan="2">MW-2</th></tr><tr><td>TPH-G</td><td></td></tr><tr><td>TPH-D</td><td></td></tr><tr><td>B</td><td></td></tr></table>	MW-2		TPH-G		TPH-D		B		
MW-2									
TPH-G									
TPH-D									
B									

NOTES:
Hydrocarbon concentrations are based on results of laboratory samples collected July 21, 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; -- = not analyzed at this sampling event; FP = free product.

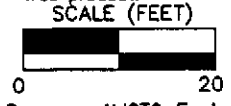
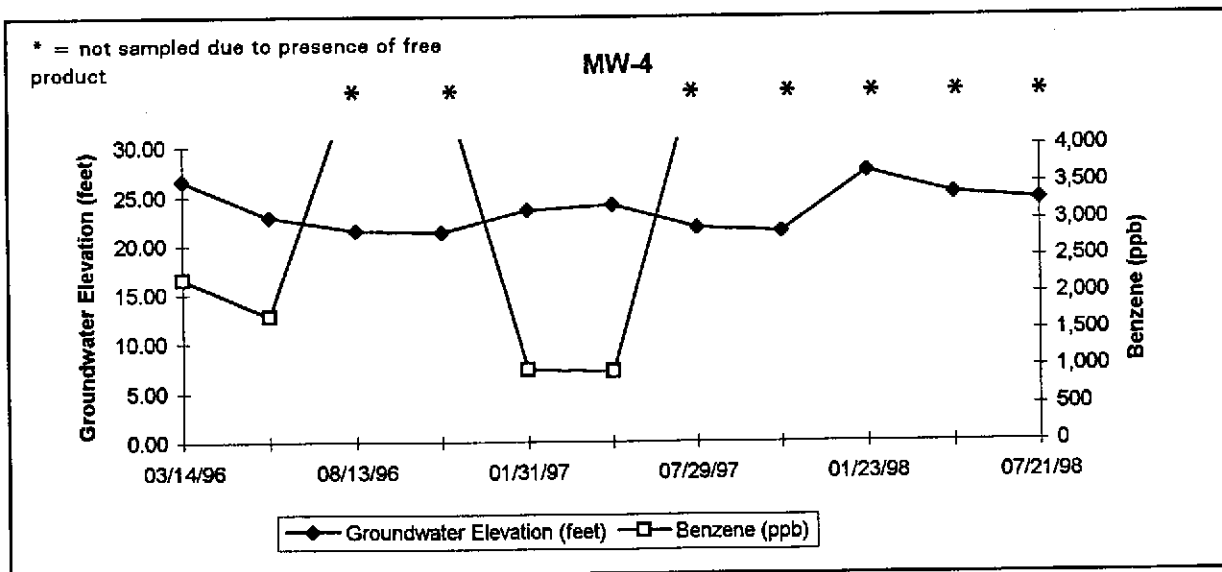
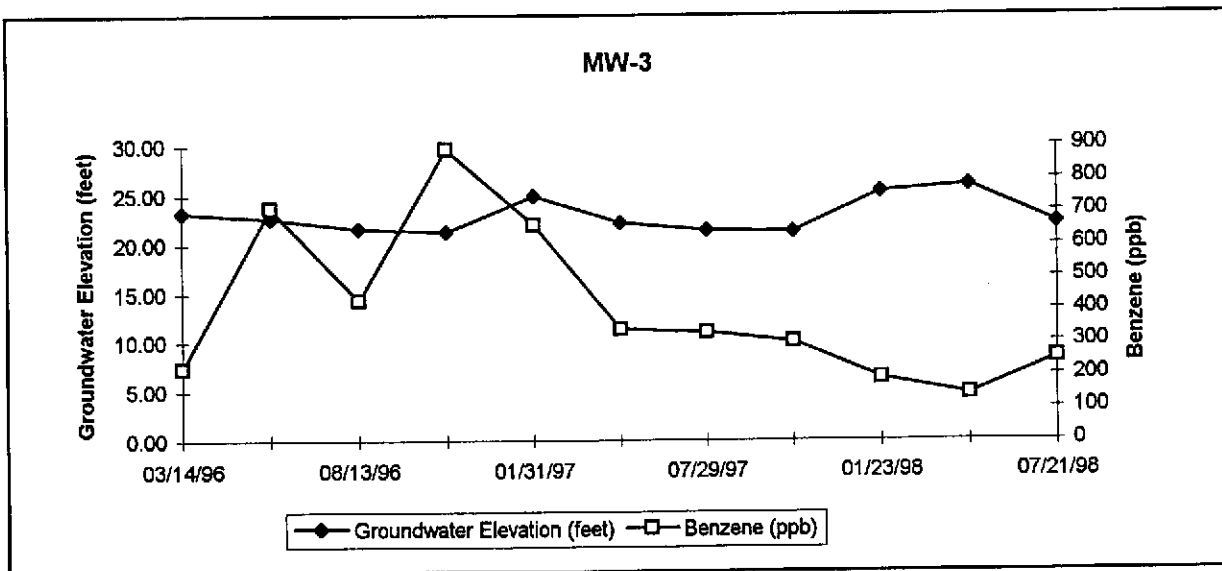
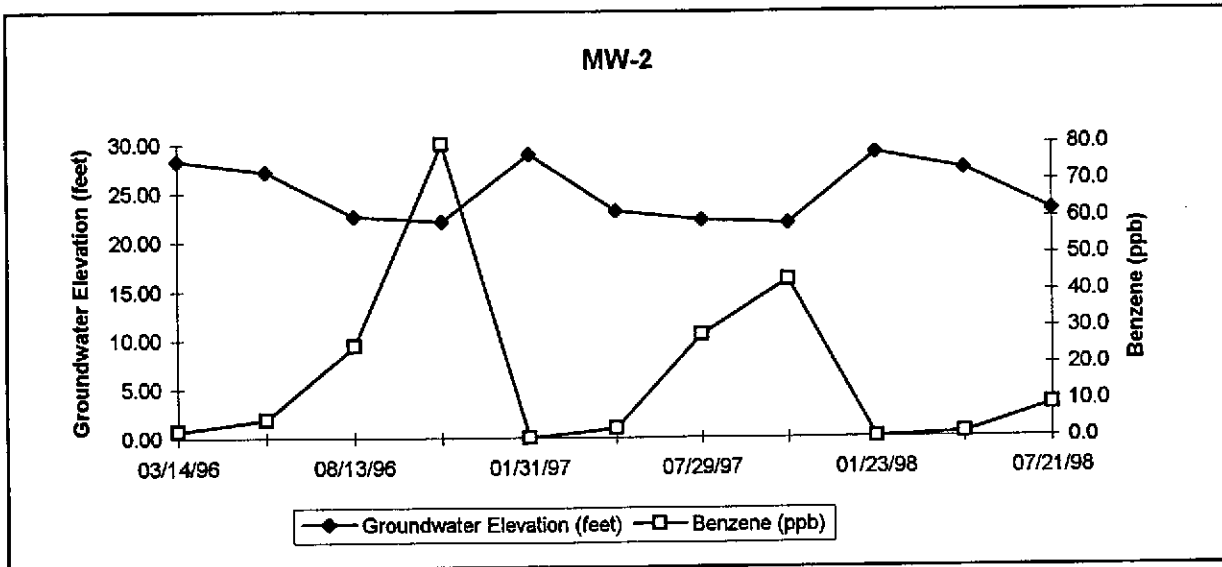


EXHIBIT 4

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: S. Larese
Date: 7/21/98

Well Number	Screen Interval	Depth to Water	Depth to Product	Free Product Thickness (ft)	Free Product Recovery	Total Depth	D.O. mg/L Comments
MW-1		9.17				19.84	4.34 H ₂ O in W.B.
MW-2		9.55				19.47	1.04 "
MW-3		10.65				20.04	.78 "
MW-4		7.10	6.90	.20	.25 gal.	/	Free Product

≈ 10 gallons of product in drum on site

Alton Geoscience, Northern California Operations

GROUND WATER SAMPLING FIELD NOTES

Site: 99-105 Project No.: 41-0123-50 Sampled By: S. Lavese Date: 7/22/98

Well No. MW1
 Total Depth (feet): 19.84
 Depth to Water (feet): 9.17
 Water Column (feet): 10.67
 80% Recharge Depth (feet): 11.30

Purge Method: SUB
 Depth to Product (feet): _____
 Product Recovered (gallons): _____
 Casing Diameter (Inches): 4"
 1 Well Volume (gallons): 6.94

Well No. MW2
 Total Depth (feet): 19.47
 Depth to Water (feet): 9.55
 Water Column (feet): 9.92
 80% Recharge Depth (feet): 11.53

Purge Method: SUB
 Depth to Product (feet): _____
 Product Recovered (gallons): _____
 Casing Diameter (Inches): 4"
 1 Well Volume (gallons): 6.94

Time Start	Time Stop	Depth To Water (feet)	Volume Purged (gallons)	Conductivity (uS/cm)	Temperature (F, C)	pH
11:17			7	.74	19.5	8.01
			14	.86	20.9	7.90
	11:22		21	.85	22.3	7.70
Total Purged			21	Time Sampled 11:32		

Comments: 5 mins H₂O very murky brown after 3 mins of purging
 Turbidity = _____

Time Start	Time Stop	Depth To Water (feet)	Volume Purged (gallons)	Conductivity (uS/cm)	Temperature (F, C)	pH
11:42			7	1.33	76.3	6.95
			14	1.34	76.8	6.90
	11:46		20	1.39	77.8	6.81
Total Purged			20	Time Sampled 11:46		

Comments: 4.5 mins
 Turbidity = _____

Well No. MW3
 Total Depth (feet): 20.04
 Depth to Water (feet): 10.65
 Water Column (feet): 9.39
 80% Recharge Depth (feet): 12.53

Purge Method: SUB
 Depth to Product (feet): _____
 Product Recovered (gallons): _____
 Casing Diameter (Inches): 4"
 1 Well Volume (gallons): 6.10

Well No. MW4
 Total Depth (feet): _____
 Depth to Water (feet): _____
 Water Column (feet): _____
 80% Recharge Depth (feet): _____

Purge Method: none
 Depth to Product (feet): _____
 Product Recovered (gallons): _____
 Casing Diameter (Inches): 4"
 1 Well Volume (gallons): _____

Time Start	Time Stop	Depth To Water (feet)	Volume Purged (gallons)	Conductivity (uS/cm)	Temperature (F, C)	pH
12:04			6	1.54	73.5	6.13
			12	1.56	71.8	5.96
	12:08		19	1.61	72.2	5.80
Total Purged			19	Time Sampled 12:15		

Comments: 4 mins
 Turbidity = _____

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

Comments: _____
 Turbidity = _____

Well No. _____
 Total Depth (feet): _____
 Depth to Water (feet): _____
 Water Column (feet): _____
 80% Recharge Depth (feet): _____

Purge Method: _____
 Depth to Product (feet): _____
 Product Recovered (gallons): _____
 Casing Diameter (Inches): _____
 1 Well Volume (gallons): _____

Well No. _____
 Total Depth (feet): _____
 Depth to Water (feet): _____
 Water Column (feet): _____
 80% Recharge Depth (feet): _____

Purge Method: _____
 Depth to Product (feet): _____
 Product Recovered (gallons): _____
 Casing Diameter (Inches): _____
 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 2969184**
 Collected: 7/21/98 at 11:32 by SL

Submitted: 7/23/98 Reported: 8/ 2/98
 Discard: 9/ 2/98

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.

RECEIVED
AUG - 3 1998
 BY: _____

CAT NO.	ANALYSIS NAME	AS RECEIVED		
		RESULTS	REPORTING LIMIT	UNITS
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	LCS LIMITS HIGH
8209 BTEX, MTBE (8020)		Batch: 98205A51									
0776	Benzene	N.D.									
	0.3 ug/l			117	120	2	115			81	124
0777	Toluene	N.D.									
	0.3 ug/l			115	117	2	114			84	119
0778	Ethylbenzene	N.D.									
	0.3 ug/l			115	116	0	114			82	118
0779	Total Xylenes	N.D.									
	0.6 ug/l			115	116	0	114			81	120
0780	Methyl tert-Butyl Ether	N.D.									
	10. ug/l			103	113	7	111			79	125
8268 8015 Mod. for Gasoline		Batch: 98205A51									
5554	TPH-GRO (CA LUFT)	N.D.									
	50. ug/l			101	99	2	104			72	124

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

1 COPY TO Alton Geoscience

ATTN: Kathleen Racke

Questions? Contact your Client Services Representative
 Melissa A. McDermott at (717) 656-2300
 08:34:02 D 0001 3 134751 624537
 673 0.00 00004500 ASR000

Martelli 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: 717-656-2631



LLI Sample No. WW 2969184
 Collected: 7/21/98 at 11:32 by SL

Submitted: 7/23/98 Reported: 8/ 2/98
 Discard: 9/ 2/98

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	SAMPLE		DUP			MS		LCS	LCS	LCS	LCS LIMITS
RPT LIM	UNITS	BLANK	RPD	MS	MSD	RPD	LCS	DUP	RPD	LOW	HIGH

SURROGATE SUMMARY

	TRIAL ID	SURROGATE	RECOVERY %	SURROGATE LIMITS	
				LOW	HIGH
8209 BTEX, MTBE (8020)		TFT	101	77	125
8268 8015 Mod. for Gasoline		TFT	93	61	133

LABORATORY CHRONICLE

CAT	ANALYSIS NAME	METHOD	TRIAL ID	DATE AND TIME	ANALYST
8209	BTEX, MTBE (8020)	SW-846 8020A	1	07/25/98 0335	Gordon A. Lodde
8268	8015 Mod. for Gasoline	CA LUFT Gasoline Method	1	07/25/98 0335	Gordon A. Lodde

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

Martell 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 2969185
 Collected: 7/21/98 at 11:56 by SL
 Submitted: 7/23/98 Reported: 8/ 2/98
 Discard: 9/ 2/98
 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	
8209	BTEX, MTBE (8020)			
0776	Benzene	8.9	0.3	ug/l
0777	Toluene	2.1	0.3	ug/l
0778	Ethylbenzene	0.6	0.3	ug/l
0779	Total Xylenes	2.5	0.6	ug/l
0780	Methyl tert-Butyl Ether	N.D.	10.	ug/l
8268	8015 Mod. for Gasoline			
5554	TPH-GRO (CA LUFT)	80.	50.	ug/l

QUALITY CONTROL REPORT

SAMPLE RPT LIM	SAMPLE UNITS	BLANK	DUP RPD	MS	MSD	MS RPD	LCS	LCS DUP	LCS RPD	LCS LOW	LCS HIGH	
8209 BTEX, MTBE (8020)		Batch: 98205A51										
0776	Benzene	N.D.		117	120	2	115			81	124	
0.3	ug/l											
0777	Toluene	N.D.		115	117	2	114			84	119	
0.3	ug/l											
0778	Ethylbenzene	N.D.		115	116	0	114			82	118	
0.3	ug/l											
0779	Total Xylenes	N.D.		115	116	0	114			81	120	
0.6	ug/l											
0780	Methyl tert-Butyl Ether	N.D.		103	113	7	111			79	125	
10.	ug/l											
8268 8015 Mod. for Gasoline		Batch: 98205A51										
5554	TPH-GRO (CA LUFT)	N.D.		101	99	2	104			72	124	
50.	ug/l											

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

1 COPY TO Alton Geoscience ATTN: Kathleen Racke

Questions? Contact your Client Services Representative
 Melissa A. McDermott at (717) 656-2300
 08:34:39 D 0001 3 134751 624537
 673 0.00 00004500 ASR000

Martell 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 2969185

Collected: 7/21/98 at 11:56 by SL

Submitted: 7/23/98 Reported: 8/ 2/98
Discard: 9/ 2/98

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 LIMITS LOW	LCS LIMITS HIGH
----------------	--------------	-------	---------	----	-----	--------	-----	---------	---------	----------------	-----------------

SURROGATE SUMMARY

TRIAL ID	SURROGATE	RECOVERY %	SURROGATE LIMITS	
			LOW	HIGH
8209	BTEX, MTBE (8020)	TFT 101	77	125
8268	8015 Mod. for Gasoline	TFT 90	61	133

LABORATORY CHRONICLE

CAT NO	ANALYSIS NAME	METHOD	ANALYSIS		
			TRIAL ID	DATE AND TIME	ANALYST
8209	BTEX, MTBE (8020)	SW-846 8020A	1	07/25/98 0411	Gordon A. Lodde
8268	8015 Mod. for Gasoline	CA LUFT Gasoline Method	1	07/25/98 0411	Gordon A. Lodde

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

Martell 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 2969186

Collected: 7/21/98 at 12:18 by SL

Submitted: 7/23/98 Reported: 8/ 2/98
Discard: 9/ 2/98

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	AS RECEIVED		
		RESULTS	REPORTING LIMIT	UNITS
2306	MTBE by GC/MS			
2010	Methyl t-butyl ether	N.D.	5.	ug/l
8209	BTEX, MTBE (8020)			
0776	Benzene	250.	1.	ug/l
0777	Toluene	16.	1.	ug/l
0778	Ethylbenzene	400.	1.	ug/l
0779	Total Xylenes	370.	3.	ug/l
0780	Methyl tert-Butyl Ether	74.	10.	ug/l
8268	8015 Mod. for Gasoline			
5554	TPH-GRO (CA LUFT)	7,400.	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	LCS LIMITS HIGH	
2306	MTBE by GC/MS	Batch: 98209A70										
2010	Methyl t-butyl ether	N.D.		97	98	1	99			70	130	
	5. ug/l											
8209	BTEX, MTBE (8020)	Batch: 98205A51										
0776	Benzene	N.D.		117	120	2	115			81	124	
	1. ug/l											
0777	Toluene	N.D.		115	117	2	114			84	119	
	1. ug/l											
0778	Ethylbenzene	N.D.		115	116	0	114			82	118	
	1. ug/l											

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

1 COPY TO Alton Geoscience

ATTN: Kathleen Racke

Questions? Contact your Client Services Representative
Melissa A. McDermott at (717) 656-2300
08:35:21 D 0001 3 134751 624537
673 0.00 00016200 ASR000

Martell 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 2969186**
 Collected: 7/21/98 at 12:18 by SL
 Submitted: 7/23/98 Reported: 8/ 2/98
 Discard: 9/ 2/98

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 LIM	SAMPLE UNITS	BLANK	DUP RPD	MS	MSD	MS RPD	LCS	LCS DUP	LCS RPD	LCS LIMITS LOW	LCS LIMITS HIGH
0779	Total Xylenes										
3.	ug/l	N.D.		115	116	0	114			81	120
0780	Methyl tert-Butyl Ether										
10.	ug/l	N.D.		103	113	7	111			79	125

8268	8015 Mod. for Gasoline	Batch: 98205A51									

5554	TPH-GRO (CA LUFT)										
100.	ug/l	N.D.		101	99	2	104			72	124

SURROGATE SUMMARY

TRIAL ID	SURROGATE	RECOVERY %	SURROGATE LIMITS	
			LOW	HIGH
2306 MTBE by GC/MS	DBFM	98	86	118
	d4-1,2-DCA	81	80	120
	d8-toluene	101	88	110
	4-BFB	91	86	115
	TFT	109	77	125
8209 BTEX, MTBE (8020)	TFT	98	61	133
	8268 8015 Mod. for Gasoline			

LABORATORY CHRONICLE

CAT NO	ANALYSIS NAME	METHOD	TRIAL ID	ANALYSIS DATE AND TIME	ANALYST
2306	MTBE by GC/MS	SW-846 8260B	1	07/28/98 2207	Karen L. Baney
8209	BTEX, MTBE (8020)	SW-846 8020A	1	07/25/98 0448	Gordon A. Lodde
8268	8015 Mod. for Gasoline	CA LUFT Gasoline Method	1	07/25/98 0448	Gordon A. Lodde

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

Amartell 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

See reverse side for explanation of symbols and abbreviations.

Mobil Western Region Analysis Request/Chain of Custody



For Lancaster Laboratories use only
 Acct. #: 9728 Sample #: 2969184-86

Please print.

SCR#: _____

Mobil Consultant/Office: <u>ALTON GEOSCIENCE</u> Consultant Prj. Mgr: <u>KATHLEEN RACK</u> Prj. #: <u>41-0123-50</u> Consultant Phone #: <u>925-606-4150</u> Fax #: <u>925-606-4260</u> Location Code #: <u>99-105</u> PRCA/AFE/Release #: <u>960135</u> Phase Code: <u>6L</u> Site Address: <u>6301 San Pablo Ave, Oakland</u> State: <u>CA</u> Sampler: <u>Sarah Levese</u> Mobil Engineer: <u>Cherine Foutch</u>				Matrix <input type="checkbox"/> Potable Water <input type="checkbox"/> NPDES <input type="checkbox"/> Air <input type="checkbox"/> Soil <input type="checkbox"/> Composite		Analyses Requested <small>List total number of containers in the box under each analysis:</small>										Remarks									
						<input checked="" type="checkbox"/> BTEX 8020 <input checked="" type="checkbox"/> TPH 8015 MOD <input type="checkbox"/> NWTPH Gx Title 22 Metals Lead 7420	<input checked="" type="checkbox"/> + MTBE <input checked="" type="checkbox"/> DROD <input type="checkbox"/> Dx 7421																		
Sample Identification	Date Collected	Time Collected	Grab	Composite	Soil	Water	Oil	Air	BTEX 8020	TPH 8015 MOD	NWTPH Gx	Title 22 Metals	Lead 7420	7421											
MW-1	7/21/98	11:32	X			X	X		X	X					* please confirm highest MTBE concentration by 8260. Temp 2.5°C TB 7-23-98										
MW-2	↓	11:56	↓			↓	↓		↓	↓															
MW-3	↓	12:18	↓			↓	↓		↓	↓															
				Relinquished by: <u>Sarah Levese</u> Date: <u>7/22/98</u> Time: <u>9:00am</u>				Received by: _____ Date: _____ Time: _____																	
				Relinquished by: _____ Date: _____ Time: _____				Received by: _____ Date: _____ Time: _____																	
				Relinquished by: _____ Date: _____ Time: _____				Received by: _____ Date: _____ Time: _____																	
Turnaround Time Requested (TAT) (please circle): MOBIL STD. TAT <u>72</u> hour 48 hour 24 hour other _____ day				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"/> (If yes, indicate QC sample and submit triplicate volume.) Internal Chain of Custody required? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>				Relinquished by Commercial Carrier: <input checked="" type="checkbox"/> UPS FedEx Other _____ Temperature Upon Receipt <u>25</u> °C		Received by: <u>Harlan Collins</u> <u>7/23/98</u> <u>0900</u> Custody Seals Intact? <input checked="" type="checkbox"/> No N/A															

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 43691

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

Profile #
1297-1335-PS

5. Transporter Company Name

6. US EPA ID Number

7. Transporter Phone

Clearwater Environmental, CARU00007013

510-797-8511

8. Designated Facility Name and Site Address

9. US EPA ID Number

10. Facility's Phone

McKittick Waste Treatment Site
56533 Hwy 58, West
McKittick, CA 93251 (CA098063683)

805-762-7366

11. Waste Shipping Name and Description

12. Containers

13. Total Quantity

14. Unit Wt/Vol

a. NON HAZARDOUS WASTE LIQUID

No. Type Quantity Unit
001 II 1250 G

b. 30 98 04 FCY SL
71-272
7309 04-2911

15. Special Handling Instructions and Additional Information

Handling Codes for Wastes Listed Above

WEAR Goggles 04-2911
Emergency contact
510-797-8511
ATTN: Kirk Hayward

11a. 11b.

site ALTON Geoscience
301 Lindbergh
Livermore, CA

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

Printed/Typed Name

Signature

Chris Dennis

C.B. Dennis for Mobil

Month Day Year
9 11 98

17. Transporter Acknowledgement of Receipt of Materials

Printed/Typed Name

Signature

STEVEN R. Stone

Steven R. Stone 08/11/98

Month Day Year

18. Discrepancy Indication Space

Printed/Typed Name

Signature

Month Day Year

Monitoring Well Purge Water Transport Form

Generator Information Profile #1297-1335-PS

Name: Mobil Oil Corporation
 Address: 3700 West 190th Street, TPT-2
 City, State, Zip: Torrance, CA 90509-2929 Phone: (310) 212-1877
 Description of Water: Monitoring well purge water
 The generator certifies that this water as described is non-hazardous. Jay Madden George Montross for Mobil Oil [Signature] 8-11-98
(Date)

Site Information

Date Generated	Site Number	Amount Generated	Sampler's Initials		Date Generated	Site Number	Amount Generated	Sampler's Initials
-1	7/14/98	99319	80	SL	16			
-2	7/16/98	1069B	260	SL/GM	17			
-3	7/22/98	99-105	60	SL	18			
-4	7-30-98	04-FE4	70	SL	19			
-5	8-4-98	99-272	100	GM	20			
-6	7-30-98	04-374	235	GM	21			
-7	8/4/98	10-HMG	15	SL	22			
-8	8/6/98	04-374	400	GM	23			
-9	8/10/98	04-FE2	8	GM	24			
10					25			
11					26			
12					27			
13					28			
14					29			
15					30			
→ 1,350 ←					Total: 1,250			

Transporter Information

Name: Clearwater Environmental Management
 Address: P.O. Box 7420
 City, State, Zip: Fremont, CA 94555 Phone: (800) 499-3676
 Truck ID No.: 110/111
Steven R. Stone [Signature] 8/11/98
(Date)
 (Typed or printed full name & signature)

Receiving Facility

Name: McKittrick Waste Treatment Site
 Address: 56533 Highway 58 West
 City, State, Zip: McKittrick, CA 93251 Phone: (805) 762-7607
 Approval No.: 1297-1335-PS
(Date)
 (Typed or printed full name & signature)