



ENVIRONMENTAL
PROTECTION

99 JAN 20 PM 4:06

January 15, 1999

STD 1683

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

Alton Project No. 41-0123

*MTS mobile treatment system
11/19/98*

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

*This event 10/20/98, prior to
MTS dual phase extraction.*

Dear Ms. Hugo:

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

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

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

Sincerely,

Kathleen Racke

Kathleen Racke
Project Manager

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

ALTON GEOSCIENCE

Quarterly Progress Report Summary Sheet
Fourth 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:	20-Oct-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:			10.44 ft
Approximate elevation of potentiometric surface above Mean Sea Level:			22.07 ft
Average Increase/Decrease in ground water elevations since last sampling episode:		Decrease:	1.33 ft
Approximate flow direction and hydraulic gradient:		Westerly at:	0.02 ft/ft
GROUND WATER CONTAMINATION (BENZENE MCL=1.0 ppb):			
Wells containing free product:	1	Range in Thickness of Free Product:	0.17 ft
Number of wells with concentrations below MCL:	2	Volume of Free Product Recovered This Period:	0.25 gals
Number of wells with concentrations at or above MCL:	1	Volume of Free Product Recovered To Date:	2.50 gals
		Range in Concentrations:	Benzene: ND<0.3 to 200 ppb TPH-G: ND<50 to 6,700 ppb
Nature of contamination:	Gasoline		
ADDITIONAL INFORMATION:			
Monitoring Well MW-4 contained 0.17 feet of free product on 10/20/98. The well was not sampled; however, the free product (approximately 0.25 gallons) was removed and is currently stored onsite in a 55-gallon drum pending proper disposal.			

Prepared by: Kathleen Racke

Kathleen Racke
Project Manager

Alton Project No: 41-0123

Approved by: Matthew Katen
California RG# 5167

Matthew W. Katen, RG, CHG
Senior Associate

Submittal Date: 1/15/99

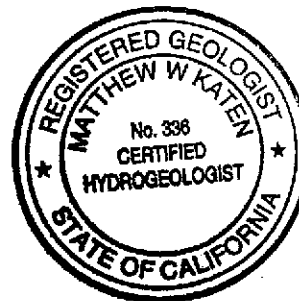


EXHIBIT 1
SAMPLING SCHEDULE

MONITORING WELL SAMPLING SCHEDULE 1999
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)	Dissolved Oxygen (mg/L)
						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	5.84	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-1	04/22/98	32.79	5.33	27.46	0.00	ND	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	ND	—	—	—	4.34	
MW-1	10/20/98	32.79	10.41	22.38	0.00	ND	—	ND	ND	ND	ND	ND	—	—	—	2.49	
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-2	04/22/98	32.80	5.36	27.44	0.00	180	540	1.2	0.3	0.4	ND	ND	—	—	—	0.85	
MW-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	ND	—	—	—	1.12	
MW-3	03/14/96	32.80	9.55	23.25	0.00	4,200	1,200	220	30	140	520	—	—	ND	ND	—	
MW-3	05/21/96	32.80	10.16	22.64	0.00	8,500	2,800	710	110	440	1,700	—	—	—	—	—	
MW-3	08/13/96	32.80	11.18	21.62	0.00	5,000	2,300**	430	ND	200	360	—	—	—	—	—	
MW-3	11/08/96	32.80	11.51	21.29	0.00	8,400	2,900*	890	82	790	1,700	73	ND	—	—	—	
MW-3	01/31/97	32.80	7.90	24.90	0.00	16,000	7,500*	660	85	960	1,800	ND	—	—	—	—	
MW-3	04/22/97	32.80	10.64	22.16	0.00	8,000	2,700	340	33	400	490	200	ND	—	—	—	
MW-3†	07/29/97	32.80	11.36	21.44	0.00	9,800	2,300*	330	ND	530	530	ND	—	—	—	—	
MW-3†	10/09/97	32.80	11.52	21.28	0.00	7,300	2,600*	300	ND	430	460	270	ND	—	—	—	
MW-3†	01/23/98	32.80	7.50	25.30	0.00	6,100	2,300	190	23	330	320	ND	—	—	—	—	
MW-3	04/22/98	32.80	6.81	25.99	0.00	4,900	2,600	140	12	250	230	ND	ND	—	—	0.45	
MW-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	

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)	Chemical Analysis										
						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	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	—	—	—	—	—	—	—	—	—	—	—
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 — = not measured/not analyzed † = well sampled using no-purge method
 mg/L = milligrams per liter ND = not detected at or above method detection limit
 TPH-G = total petroleum hydrocarbons as gasoline ** = diesel and unidentified hydrocarbons <C15>C25
 TPH-D = total petroleum hydrocarbons as diesel *** = diesel and unidentified hydrocarbons <C20
 TOG = total oil and grease **** = unidentified hydrocarbons >C18
 MTBE = methyl-tert butyl ether ***** = diesel and unidentified hydrocarbons >C20



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

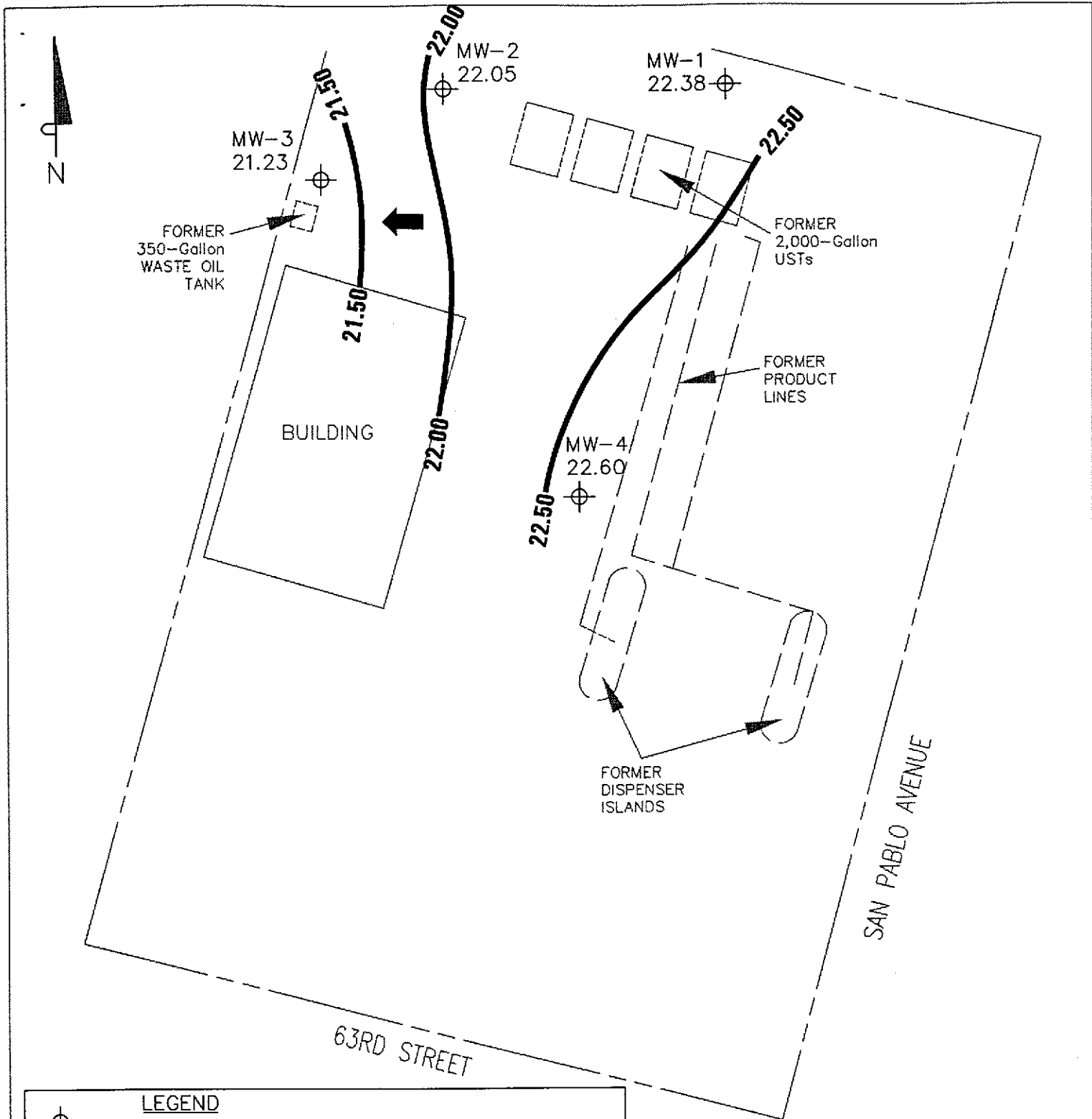


VICINITY MAP




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

FIGURE 1





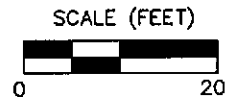
LEGEND

-  MW-4 25.22 Monitoring Well Showing Groundwater Elevation (Feet Relative to Mean Sea Level - NGVD-1929)
-  24.5 Groundwater Elevation Contour Line
-  General Direction of Groundwater Gradient

NOTES:
 Contour lines are interpretive based on fluid level measurements collected on October 20, 1998.
 Contour interval = 0.5 foot.

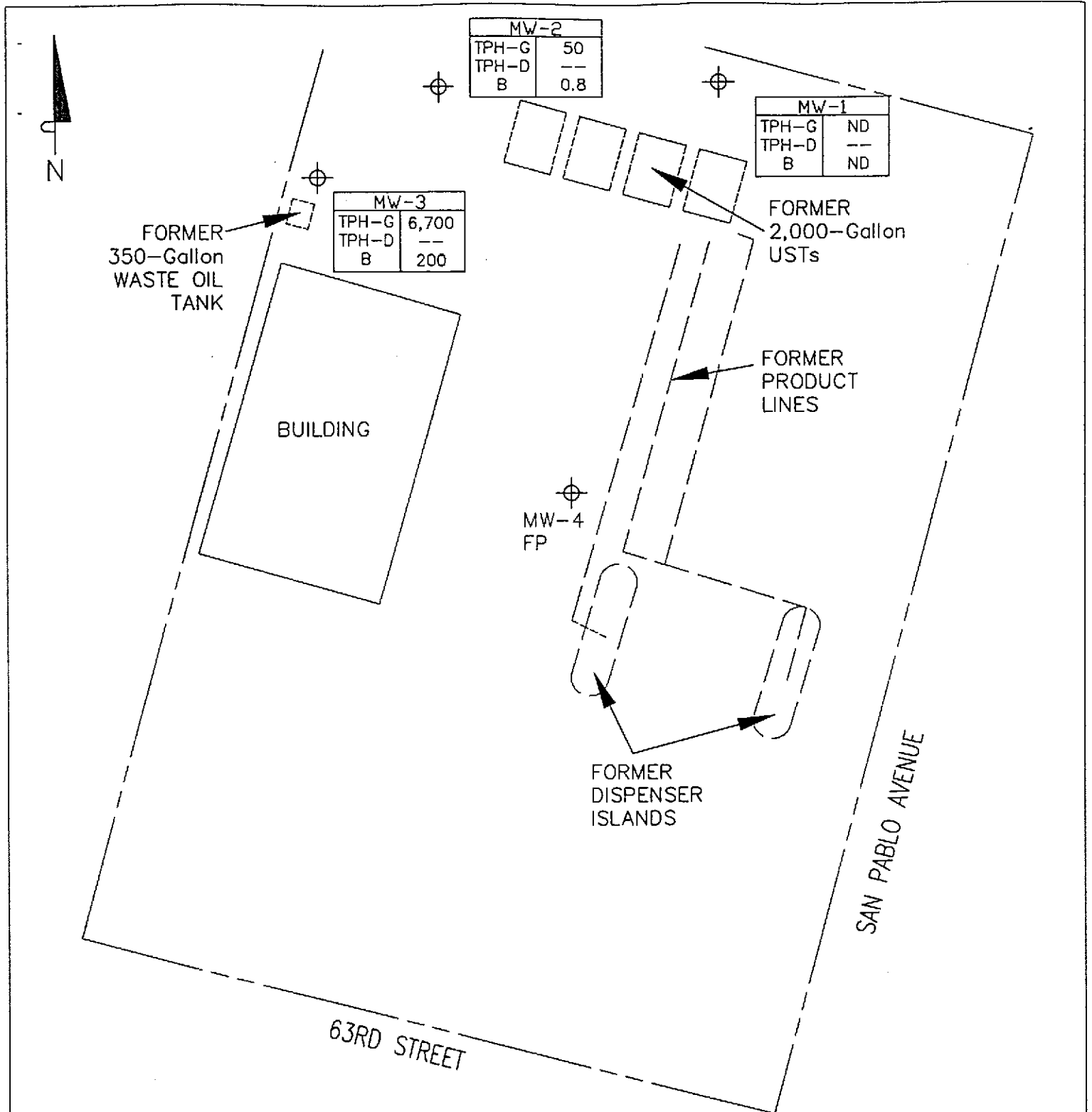
**GROUNDWATER ELEVATION
 CONTOUR MAP
 October 20, 1998**

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




Source: ALJSTO Engineering

FIGURE 2



LEGEND



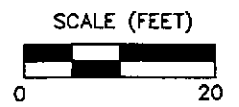
MW-2	
TPH-G	
TPH-D	
B	

Monitoring Well Showing Dissolved-Phase Hydrocarbon Concentrations (ppb)

DISSOLVED-PHASE HYDROCARBON CONCENTRATIONS
October 20, 1998

NOTES:
Hydrocarbon concentrations are based on results of laboratory samples collected October 20, 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.

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



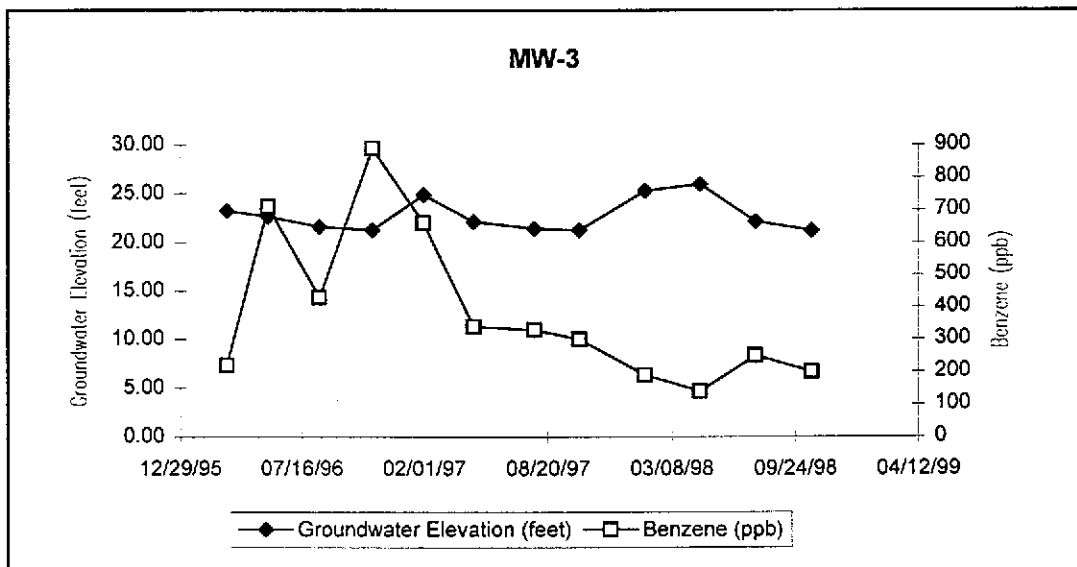
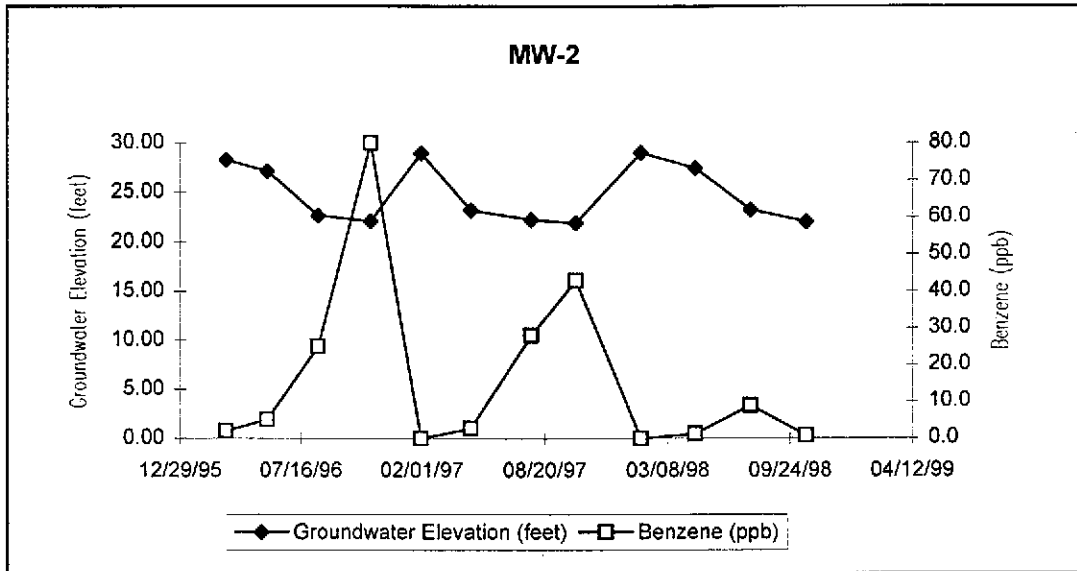
Source: ALISTO Engineering

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

Alton Geoscience, Northern California Operations
GROUND WATER SAMPLING FIELD NOTES

Site: 99-105 Project No.: 41-0123-50 Sampled By: S. Larrick Date: 10/22/98

Well No. MW-1 Purge Method: Sub
 Total Depth (feet) 19.84 Depth to Product (feet): _____
 Depth to Water (feet): 10.41 Product Recovered (gallons): _____
 Water Column (feet): 9.43 Casing Diameter (Inches): 4
 80% Recharge Depth (feet): 12.20 1 Well Volume (gallons): 16.13

Well No. MW-2 Purge Method: Sub
 Total Depth (feet) 19.47 Depth to Product (feet): _____
 Depth to Water (feet): 10.75 Product Recovered (gallons): _____
 Water Column (feet): 8.72 Casing Diameter (Inches): 4
 80% Recharge Depth (feet): 12.49 1 Well Volume (gallons): 5.67

Time Start	Time Stop	Depth To Water (feet)	Volume Purged (gallons)	Conductivity (uS/cm)	Temperature (F, C)	pH	
1320			6	160	78.0	7.80	
			12	149	76.7	7.54	
	1324		19	147	78.1	7.21	
Total Purged			19	Time Sampled			1334

Comments: 4 mins @ 300 l/h
 Turbidity = H₂O in w. b.

Time Start	Time Stop	Depth To Water (feet)	Volume Purged (gallons)	Conductivity (uS/cm)	Temperature (F, C)	pH	
1337			6	71	77.0	6.90	
			12	51	74.9	6.71	
	1341		17	51	75.0	6.32	
Total Purged			17	Time Sampled			1351

Comments: 4 mins @ 300 l/h
 Turbidity = Well almost dry after purging

Well No. MW-3 Purge Method: Sub
 Total Depth (feet) 20.04 Depth to Product (feet): _____
 Depth to Water (feet): 16.57 Product Recovered (gallons): _____
 Water Column (feet): 8.47 Casing Diameter (Inches): 4
 80% Recharge Depth (feet): 13.20 1 Well Volume (gallons): 5.51

Well No. MW-4 Purge Method: Hand Bail
 Total Depth (feet) _____ Depth to Product (feet): 8.80
 Depth to Water (feet): 9.03 Product Recovered (gallons): .25
 Water Column (feet): _____ Casing Diameter (Inches): 4
 80% Recharge Depth (feet): _____ 1 Well Volume (gallons): _____

Time Start	Time Stop	Depth To Water (feet)	Volume Purged (gallons)	Conductivity (uS/cm)	Temperature (F, C)	pH	
1352			6	94	72.0	6.77	
			12	89	71.4	6.09	
	13:56		17	280	69.9	6.22	
Total Purged			17	Time Sampled			14:06

Comments: 4 mins @ 300 l/h
 Turbidity = _____

Time Start	Time Stop	Depth To Water (feet)	Volume Purged (gallons)	Conductivity (uS/cm)	Temperature (F, C)	pH	
<u>Free product</u>							
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)	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 3024587
 Collected: 10/20/98 at 13:34 by SL

Submitted: 10/23/98 Reported: 11/ 6/98
 Discard: 12/ 7/98

MW-1 Water Sample
 LOC# 99-105 PRCA# 980044 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
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 LOW	LCS HIGH
8209 BTEX, MTBE (8020)		Batch: 98299A02									
0776	Benzene										
	0.3 ug/l	N.D.		104	98	6	106			81	124
0777	Toluene										
	0.3 ug/l	N.D.		107	101	5	109			84	119
0778	Ethylbenzene										
	0.3 ug/l	N.D.		105	99	5	110			82	118
0779	Total Xylenes										
	0.6 ug/l	N.D.		105	100	5	111			81	120
0780	Methyl tert-Butyl Ether										
	10. ug/l	N.D.		99	97	2	103			79	125
8268 8015 Mod. for Gasoline		Batch: 98299A02									
5554	TPH-GRO (CA LUFT)										
	50. ug/l	N.D.		105	98	8	98			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: Katy Racke

RECEIVED
 NOV - 9 1998
 BY:

Questions? Contact your Client Services Representative
 Jedidiah E. Turzi at (717) 656-2300
 10:54:46 D 0001 3 134751 637654
 673 0.00 00004500 ASR000

Donald J. Shady Jr.
 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 3024587

Collected: 10/20/98 at 13:34 by SL

Submitted: 10/23/98 Reported: 11/ 6/98

Discard: 12/ 7/98

MW-1 Water Sample

LOC# 99-105 PRCA# 980044 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	98	77	125
8268 8015 Mod. for Gasoline	TFT	90	61	133

LABORATORY CHRONICLE

CAT NO	ANALYSIS NAME	METHOD	TRIAL ID	ANALYSIS DATE AND TIME	ANALYST
8209	BTEX, MTBE (8020)	SW-846 8020A	1	10/27/98 1013	Donald L. Shelly, Jr.
8268	8015 Mod. for Gasoline	CA LUFT Gasoline Method	1	10/27/98 1013	Donald L. Shelly, Jr.

State of California Lab Certification No. 2116

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

Questions? Contact your Client Services Representative
 Jedidiah E. Turzi at (717) 656-2300

Donald L. Shelly Jr.
 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 717-656-2991



LLI Sample No. WW 3024588

Collected: 10/20/98 at 13:51 by SL

Submitted: 10/23/98 Reported: 11/ 6/98
Discard: 12/ 7/98

MW-2 Water Sample
LOC# 99-105 PRCA# 980044 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
8209	BTEX, MTBE (8020)			
0776	Benzene	0.8	0.3	ug/l
0777	Toluene	0.7	0.3	ug/l
0778	Ethylbenzene	N.D.	0.3	ug/l
0779	Total Xylenes	0.8	0.6	ug/l
0780	Methyl tert-Butyl Ether	N.D.	10.	ug/l
8268	8015 Mod. for Gasoline			
5554	TPH-GRO (CA LUFT)	50.	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
8209 BTEX, MTBE (8020)		Batch: 98299A02									
0776	Benzene										
0.3	ug/l	N.D.		104	98	6	106			81	124
0777	Toluene										
0.3	ug/l	N.D.		107	101	5	109			84	119
0778	Ethylbenzene										
0.3	ug/l	N.D.		105	99	5	110			82	118
0779	Total Xylenes										
0.6	ug/l	N.D.		105	100	5	111			81	120
0780	Methyl tert-Butyl Ether										
10.	ug/l	N.D.		99	97	2	103			79	125
8268 8015 Mod. for Gasoline		Batch: 98299A02									
5554	TPH-GRO (CA LUFT)										
50.	ug/l	N.D.		105	98	8	98			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: Katy Racke

Questions? Contact your Client Services Representative
Jedidiah E. Turzi at (717) 656-2300
10:55:46 D 0001 3 134751 637654
673 0.00 00004500 ASR000

Donald L. Shelby Jr.
for

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



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



LLI Sample No. WW 3024588

Collected: 10/20/98 at 13:51 by SL

Submitted: 10/23/98 Reported: 11/ 6/98
Discard: 12/ 7/98

MW-2 Water Sample
LOC# 99-105 PRCA# 980044 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	BLANK	DUP	MS	MSD	MS	LCS	LCS	LCS	LCS LIMITS
RPT LIM	UNITS		RPD			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	95	61	133

LABORATORY CHRONICLE

CAT	ANALYSIS NAME	METHOD	TRIAL	ID	DATE AND TIME	ANALYST
8209	BTEX, MTBE (8020)	SW-846 8020A	1		10/27/98 1047	Donald L. Shelly, Jr.
8268	8015 Mod. for Gasoline	CA LUFT Gasoline Method	1		10/27/98 1047	Donald L. Shelly, Jr.

State of California Lab Certification No. 2116

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

Questions? Contact your Client Services Representative
Jedidiah E. Turzi at (717) 656-2300

Donald L. Shelly Jr.
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 3024589

Collected: 10/20/98 at 14:06 by SL

Submitted: 10/23/98 Reported: 11/ 6/98

Discard: 12/ 7/98

MW-3 Water Sample

LOC# 99-105 PRCA# 980044 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	
2306	MTBE by GC/MS			
2010	Methyl t-butyl ether	N.D.	5.	ug/l
8209	BTEX, MTBE (8020)			
0776	Benzene	200.	1.	ug/l
0777	Toluene	18.	1.	ug/l
0778	Ethylbenzene	350.	1.	ug/l
0779	Total Xylenes	350.	3.	ug/l
0780	Methyl tert-Butyl Ether	N.D. #	50.	ug/l
Due to the presence of an interferent near its retention time, the normal reporting limit was not attained for MTBE.				
8268	8015 Mod. for Gasoline			
5554	TPH-GRO (CA LUFT)	6,700.	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: 98302A72									
2010	Methyl t-butyl ether	N.D.		107	86 (2)	4	89			70	130
5.	ug/l										
8209	BTEX, MTBE (8020)	Batch: 98299A02									
0776	Benzene	N.D.		104	98	6	106			81	124
1.	ug/l										
0777	Toluene	N.D.		107	101	5	109			84	119
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: Katy Racke

Questions? Contact your Client Services Representative
 Jedidiah E. Turzi at (717) 656-2300
 10:57:01 D 0001 3 134751 637654
 673 0.00 00014000 ASR000

Donald J. Shady Jr.

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) 656-2301



LLI Sample No. WW 3024589

Collected: 10/20/98 at 14:06 by SL

Submitted: 10/23/98 Reported: 11/ 6/98

Discard: 12/ 7/98

MW-3 Water Sample

LOC# 99-105 PRCA# 980044 PHC# 6L

MOBIL: 6301 San Pablo Ave.; Oakland, CA

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

P.O. 99-105

Rel.

SAMPLE RPT	SAMPLE LIM	SAMPLE UNITS	BLANK	DUP RPD	MS	MSD	MS RPD	LCS	LCS DUP	LCS RPD	LCS LOW	LCS LIMITS HIGH
0778		Ethylbenzene										
1.		ug/l	N.D.		105	99	5	110			82	118
0779		Total Xylenes										
3.		ug/l	N.D.		105	100	5	111			81	120
0780		Methyl tert-Butyl Ether										
50.		ug/l	N.D.		99	97	2	103			79	125

8268	8015	Mod. for Gasoline	Batch: 98299A02									

5554		TPH-GRO (CA LUFT)										
100.		ug/l	N.D.		105	98	8	98			72	124

(2) The background result was more than four times the spike added.

 SURROGATE SUMMARY

	TRIAL ID	SURROGATE	RECOVERY %	SURROGATE LIMITS	
				LOW	HIGH
2306 MTBE by GC/MS		DBFM	96	86	118
8209 BTEX, MTBE (8020)		TFT	104	77	125
8268 8015 Mod. for Gasoline		TFT	114	61	133

 LABORATORY CHRONICLE

CAT NO	ANALYSIS NAME	METHOD	ANALYSIS		
			TRIAL ID	DATE AND TIME	ANALYST
2306	MTBE by GC/MS	SW-846 8260B	1	11/02/98 1438	Karen L. Baney
8209	BTEX, MTBE (8020)	SW-846 8020A	1	10/27/98 1846	Martha L. Bennett
8268	8015 Mod. for Gasoline	CA LUFT Gasoline Method	1	10/27/98 1846	Martha L. Bennett

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
 Jedidiah E. Turzi at (717) 656-2300

Donald L. Shady Jr.
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

Mobil Western Region Analysis Request/Chain of Custody



For Lancaster Laboratories use only

Acct. #: 9728 Sample #: 3024587-89

Please print.

SCR#: _____

Mobil Consultant/Office: <u>ATMUNGEO SCIENCE</u>				Matrix		Analyses Requested										Preservative Codes				
Consultant Prj. Mgr: <u>KATY RACK</u> Prj. #: <u>41-0123-50</u>						Preservative Codes														
Consultant Phone #: <u>(925) 606-9100</u> Fax #: <u>(925) 606-9260</u>				<input type="checkbox"/> Potable <input type="checkbox"/> NPDES		List total number of containers in the box under each analysis.										H=HCl T=Thiosulfate N=HNO ₃ B=NaOH S=H ₂ SO ₄ O=Other				
Location Code #: <u>99-105</u>																				
PRCA/AFE/Release #: <u>980014</u> Phase Code: <u>101</u>				<input type="checkbox"/> Oil <input type="checkbox"/> Air		Total Number of Containers														
Site Address: <u>6301 Simsbury Ave., Oakland State: CA</u>																				
Sampler: <u>DAVID LANGE</u>				<input type="checkbox"/> Grab <input type="checkbox"/> Composite		BTEX 8020 <input checked="" type="checkbox"/> + MTBE <input checked="" type="checkbox"/> TPH 8015 MOD <input checked="" type="checkbox"/> GRO <input checked="" type="checkbox"/> DRO <input checked="" type="checkbox"/> NWTPH Gx <input type="checkbox"/> Dx <input type="checkbox"/> TPHAZ Title 22 Metals Lead 7420 <input type="checkbox"/> 7421 <input type="checkbox"/>														
Mobil Engineer: <u>Ernie Langer</u>																				
Sample Identification			Date Collected	Time Collected	Grab	Composite	Soil	Water	Oil	Air	Total Number of Containers	BTEX 8020	TPH 8015 MOD	NWTPH Gx	TPHAZ	Title 22 Metals	Lead 7420	7421	Remarks	
<u>MW-1</u>			<u>10/20/98</u>	<u>13:34</u>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>			<u>4</u>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>							<u>please confirm highest nitrate concentration by 8260</u>
<u>MW-2</u>			↓	<u>13:51</u>	<input type="checkbox"/>			↓		↓	↓	↓	↓							
<u>MW-3</u>			↓	<u>14:06</u>	<input type="checkbox"/>			↓		↓	↓	↓	↓							
Turnaround Time Requested (TAT) (please circle):				Relinquished by: <u>[Signature]</u>				Date	Time	Received by:				Date	Time					
<input checked="" type="radio"/> MOBIL STD. TAT 72 hour 48 hour 24 hour other _____ day								<u>10/20/98</u>	<u>8:00am</u>											
Data Package Options (please circle if requested)				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				SDG Complete? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Site-specific QC required? Yes <input type="checkbox"/> No <input checked="" 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:				Received by:				Date	Time							
				UPS <input type="checkbox"/> FedEx <input checked="" type="checkbox"/> Other _____				[Signature]				<u>10/20/98</u>	<u>[Signature]</u>							
				Temperature Upon Receipt <u>12</u> °C				Custody Seals Intact? <input checked="" type="checkbox"/> Yes No N/A												

EXHIBIT 8

WASTE DISPOSAL MANIFEST

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.

George Montross
 for Mobil Oil *George Montross for Mobil* 11-2-98
 (Date)

1375

Site Information

	Date Generated	Site Number	Amount Generated	Sampler's Initials		Date Generated	Site Number	Amount Generated	Sampler's Initials
1	10/20	99-105	50	SL	16				
2	10/21	10-HTD	40	SL	17				
3	10/24	99-319	130	SL	18				
4	10/27	99-NH	100	SL	19				
5	10-30	04-018	922	GM	20				
6	10/29	04-004	68	SL	21				
7	10/30	04394	500	GM	22				
8					23				
9					24				
10					25				
11					26				
12					27				
13					28				
14					29				
15					30				

200+500 Total: 1300

Transporter Information

Name: Clearwater Environmental Management
 Address: P.O. Box 7420
 City, State, Zip: Fremont, CA 94555 Phone: (800) 499-3676

Truck ID No.: _____
 _____ (Typed or printed full name & signature) _____ (Date)

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
 _____ (Typed or printed full name & signature) _____ (Date)

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. 2. Page 1 of 3. Document Number
 NH- No 43758

4. Generator's Name and Mailing Address
 Mobil Oil
 3700 W. 190th Street, TPT 2
 Torrance, CA 90584-2925
 Generator's Phone 310-212 1877

Profile #
 1297-1335-PS

5. Transporter Company Name 6. US EPA ID Number
 Clearwater Environmental CA200007013

7. Transporter Phone
 510-797 8511

8. Designated Facility Name and Site Address 9. US EPA ID Number
 McKittrick WASTE TREATMENT SITE
 56533 Hwy 58, WEST
 McKittrick, CA 93251 (CA) 980636831

10. Facility's Phone
 805 762-7366

11. Waste Shipping Name and Description	12. Containers		13. Total Quantity	14. Unit Wt/Vol
	No.	Type		
a. NON HAZARDOUS WASTE LIQUID	001	TI	1200	G
b.				

15. Special Handling Instructions and Additional Information
 Wear PPE
 Emergency contact
 510-797 8511
 ADAM KIRK Hayward

Handling Codes for Wastes Listed Above	
11a.	11b.

16. GENERATOR'S CERTIFICATION: I certify the materials described above are not regulated under RCRA or other federal regulations for reporting, storage or disposal of hazardous waste.

Printed/Typed Name: Chris Smiga Signature: *Chris Smiga* Month Day Year: 12 2 98

Printed/Typed Name: STEVEN R. STONE Signature: *Steven R. Stone* Month Day Year: 12 6 98

18. Discrepancy Indication Space

19. Facility Owner or Operator: Signature: *Kathy May* Month Day Year: 12 7 98

GENERATOR
TRANSPORTER
FACILITY

NON-HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No.	2. Page 1 of 1	3. Document Number NH- No 46365
4. Generator's Name and Mailing Address Mobil Oil Corporation 3700 West 14th St TPT2 Torrance CA 90509 Generator's Phone (310) 212-1877				
5. Transporter Company Name CLEARWATER ENVIRONMENTAL	6. US EPA ID Number CAR000007013	7. Transporter Phone (510) 797-8511		
8. Designated Facility Name and Site Address McKitttrick waste Treatment Site ALVISO INDEPENDENT OIL 56533 Hwy 58 West 93251 5002 ARCHER STREET McKitttrick CA CAD 980636831 ALVISO, CA 95002 (805) 762-7366		9. US EPA ID Number CAL000161743	10. Facility's Phone (510) 707-8511	
11. Waste Shipping Name and Description a. Non-Hazardous waste, liquid		12. Containers No. 001	Type TT	13. Total Quantity 1300
				14. Unit Wt/Vol G
15. Special Handling Instructions and Additional Information Wear PPE Emergency Contact (510) 797-8511 Attn: Kirk Hayward		Handling Codes for Wastes Listed Above 11a. 11b.		
16. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to state or federal regulations for reporting proper disposal of Hazardous Waste.				
Printed/Typed Name George Montross Sr Mobil		Signature <i>George Montross Sr</i>		Month Day Year 11 2 98
17. Transporter Acknowledgement of Receipt of Materials Printed/Typed Name Chris Ricken		Signature <i>Chris Ricken</i>		Month Day Year 11 2 98
18. Discrepancy Indication Space				
19. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 18.				
Printed/Typed Name Kathy May		Signature <i>Kathy May</i>		Month Day Year 11 16 98

WHITE - ORIGINAL (Return to Generator) YELLOW - TSD (Retain Copy) PINK - TRANSPORTER COPY GOLDENROD - GENERATOR'S COPY