ALTON GEOSCIENCE

ENVIRONMENTAL PROTECTION
97 OCT 16 AM 9:39

October 15, 1997

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

Alton Project No. 41-0123

RE: FORMER MOBIL STATION 99-105
6301 SAN PABLO AVENUE
OAKLAND, CALIFORNIA 94608

Dear Ms. Hugo:

Please find enclosed the Third Quarter 1997 Progress Report for the subject location prepared for Mobil Oil 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 Ms. Cherine Foutch, Mobil Engineer, at (510) 625-1173, or Mr. Ron Scheele, Alton Geoscience Geologist, at (510) 606-9150.

Sincerely,

ALTON GEOSCIENCE

Ron Scheele
Project Geologist

cc: Ms. Cherine Foutch, Mobil Oil Corporation
Mr. Kevin Graves, California Regional Water Quality Control Board, San Francisco Bay Region

M:\..\99-105R06.QMS

30A Lindbergh Avenue
Livermore, California 94550
(510) 606-9150 • FAX (510) 606-9260

ALTON GEOSCIENCE

Quarterly Progress Report Summary Report
Third Quarter 1997

Former Mobil Statio 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:**	**29-Jul-97**
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
SITE HYDROGEOLOGY:			
Approximate depth to ground water below ground surface:			10.5 feet
Approximate elevation of potentiometric surface above Mean Sea Level:			22.0 feet
Average Increase/Decrease in ground water elevations since last sampling episode:			1.3 foot decrease
Approximate flow direction and hydraulic gradient:			Southwest at 0.02 ft/ft
GROUND WATER CONTAMINATION (BENZENE MCL=1.0 ppb):			
Wells containing free product:	1	Range in Thickness of Free Product:	0.0 to 12 ft.
Number of wells with concentrations below MCL:	1	Volume of Free Product Recovered This Period:	N/A
Number of wells with concentrations at or above MCL:	3	Volume of Free Product Recovered To Date:	N/A
		Range in Concentrations:	Benzene: 0.84 ppb to F.P.
Nature of contamination:	Gasoline and diesel		TPH-G: ND to F.P.
			TPH-D: 60ppb to F.P.

ADDITIONAL INFORMATION:

Groundwater sampled by no purge method. Approximately 25 gallons of freeproduct/ groundwater was removed from monitoring well MW-4 and stored on site pending disposal.

Prepared by: _____ John Riggi, Staff Geologist

Approved by: _____ Matthew W. Katen, RG, California RG# 5167, Associate

Alton Project No: 41-0123

Submittal date: 10/15/97

EXHIBIT 1

SAMPLING SCHEDULE

MONITORING WELL SAMPLING SCHEDULE 1997
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

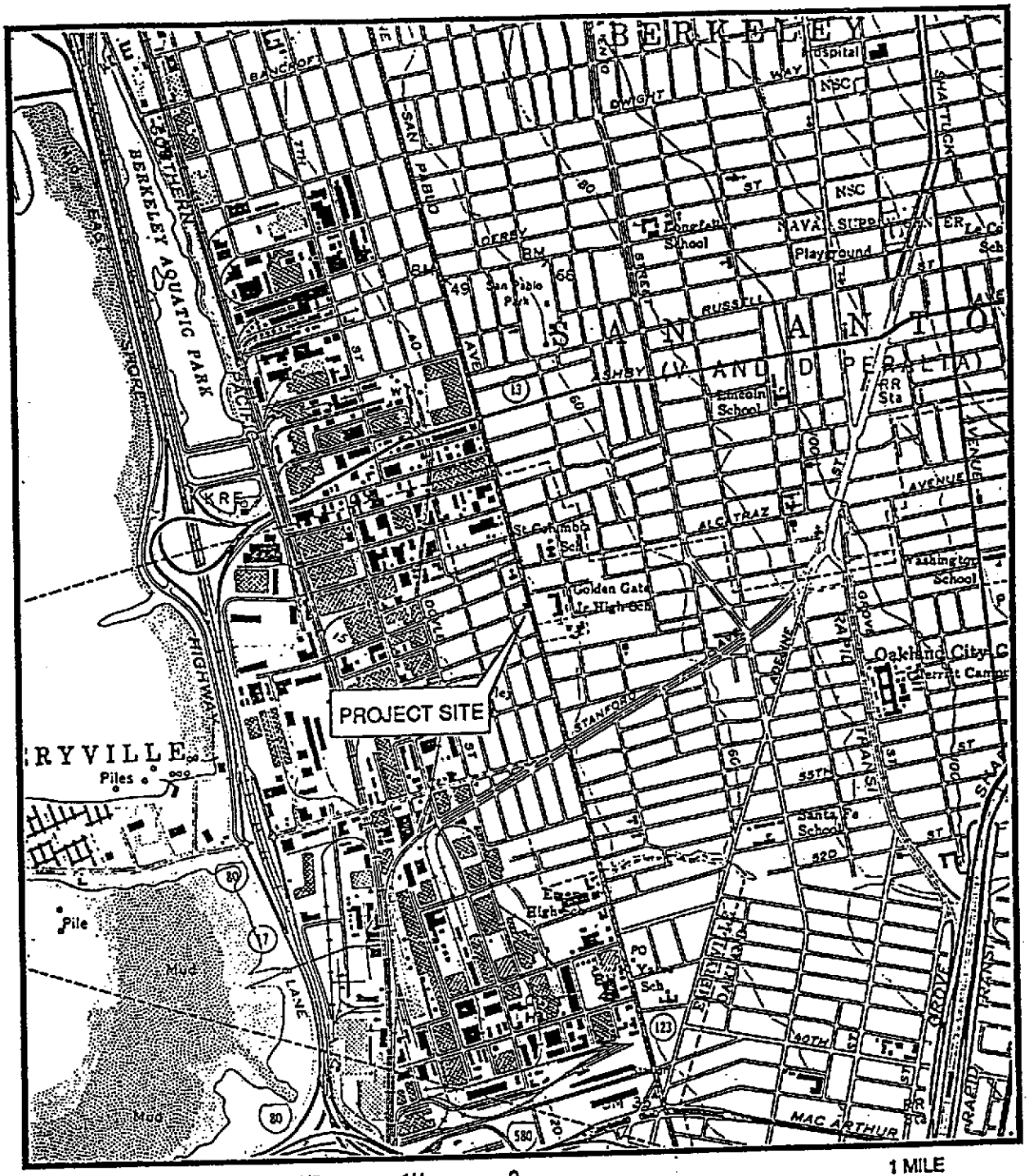
Former Mobil Station 99-105

Well ID	Date	Top of Casing Elevation (feet)	Depth to Water (feet)	Groundwater Elevation (feet)	Product Thickness (feet)	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)
TW-1	1/4/96	—	6.00	—	0.00	ND	700	ND	ND	ND	ND	—	—	—	—
WW-1	1/4/96	—	3.00	—	0.00	ND	—	ND	ND	ND	ND	—	—	ND	—
MW-1	3/14/96	32.79	4.50	28.29	0.00	610	450	0.75	0.54	1.5	59	—	—	—	ND
MW-1	5/21/96	32.79	5.64	27.15	0.00	ND	ND	ND	ND	ND	ND	—	—	—	—
MW-1	8/13/96	32.79	9.76	23.03	0.00	ND	ND	ND	ND	ND	ND	—	—	—	—
MW-1	11/8/96	32.79	10.24	22.55	0.00	ND	ND	ND	0.92	ND	2.1	ND	—	—	—
MW-1	1/31/97	32.79	3.83	28.96	0.00	ND	ND	ND	0.85	ND	ND	2.6	ND	—	—
MW-1	4/22/97	32.79	9.14	23.65	0.00	ND	ND	ND	ND	ND	ND	ND	—	—	—
MW-1†	7/29/97	32.79	10.18	22.61	0.00	ND	60*****	0.84	0.95	ND	1.6	36	—	—	—
MW-2	3/14/96	32.80	4.51	28.29	0.00	560	250	2.0	0.96	4.3	11	—	—	—	ND
MW-2	5/21/96	32.80	5.65	27.15	0.00	730	560	5.1	1.4	6.7	5.9	—	—	—	—
MW-2	8/13/96	32.80	10.14	22.66	0.00	490	380*	25	3.5	7.2	13	—	—	—	—
MW-2	11/8/96	32.80	10.70	22.10	0.00	520	160***	80	2.7	14	66	6.1	—	—	—
MW-2	1/31/97	32.80	3.84	28.96	0.00	74	130*	ND	ND	ND	ND	ND	—	—	—
MW-2	4/22/97	32.80	9.61	23.19	0.00	260	430	2.7	ND	2.5	ND	ND	—	—	—
MW-2†	7/29/97	32.80	10.53	22.27	0.00	320	150******	28	1.2	10	ND	ND	—	—	—
MW-3	3/14/96	32.80	9.55	23.25	0.00	4,200	1,200	220	30	140	520	—	—	ND	ND
MW-3	5/21/96	32.80	10.16	22.64	0.00	8,500	2,800	710	110	440	1,700	—	—	—	—
MW-3	8/13/96	32.80	11.18	21.62	0.00	5,000	2,300**	430	ND	200	360	—	—	—	—
MW-3	11/8/96	32.80	11.51	21.29	0.00	8,400	2,900*	890	82	790	1,700	73	ND	—	—
MW-3	1/31/97	32.80	7.90	24.90	0.00	16,000	7,500*	660	85	960	1,800	ND	—	—	—
MW-3	4/22/97	32.80	10.64	22.16	0.00	8,000	2,700	340	33	400	490	200	ND	—	—
MW-3†	7/29/97	32.80	11.36	21.44	0.00	9,800	2,300*	330	ND	530	530	ND	—	—	—
MW-4	3/14/96	31.50	4.92	26.58	0.00	12,000	3,500	2,200	140	880	2,000	—	—	—	ND
MW-4	5/21/96	31.50	8.60	22.90	0.00	11,000	4,200	1,700	ND	930	470	—	—	—	—
MW-4	8/13/96	31.50	10.02	21.50	0.02	—	—	—	—	—	—	—	—	—	—
MW-4	11/8/96	31.50	10.28	21.33	0.15	—	—	—	—	—	—	—	—	—	—
MW-4	1/31/97	31.50	7.88	23.62	0.00	23,000	8,200*	980	68	1,100	1,400	ND	—	—	—
MW-4	4/22/97	31.50	7.40	24.10	0.00	8,800	4,500	950	ND	610	130	ND	—	—	—
MW-4	7/29/97	31.50	9.85	21.74	0.12	—	—	—	—	—	—	—	—	—	—

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



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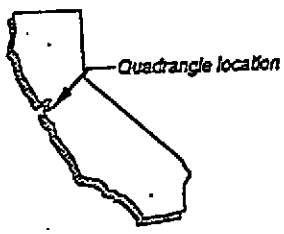


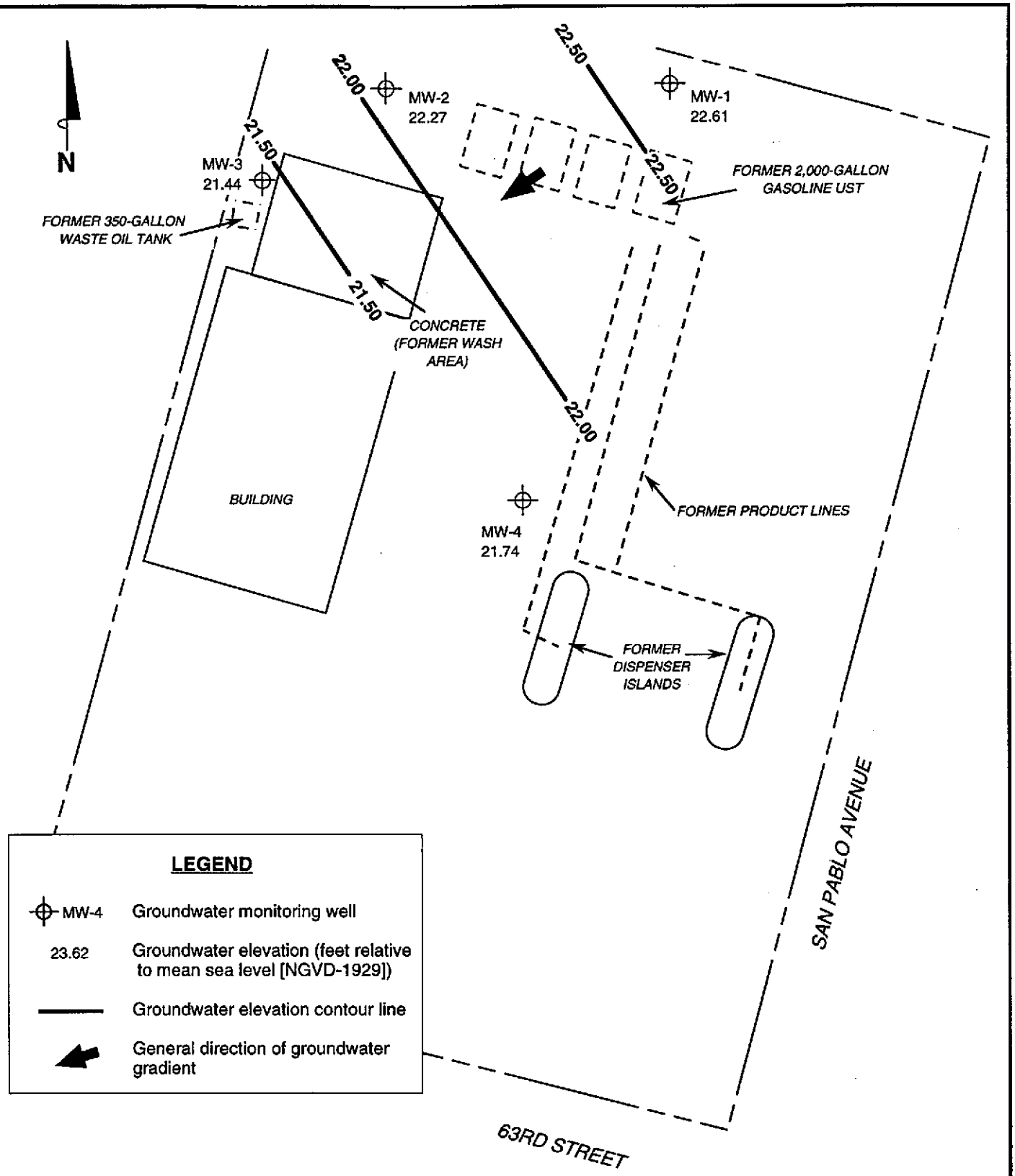
Source: U.S.G.S. Map
Oakland West Quadrangle
California
7.5 Minute Series

VICINITY MAP

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

ALTON GEOSCIENCE
Livermore, California

FIGURE 1



NOTES:
Contour lines are interpretive based on fluid level measurements collected July 29, 1997. Contour interval = 0.50 feet.

SCALE (feet)
0 5 10 20

Source: ALISTO Engineering

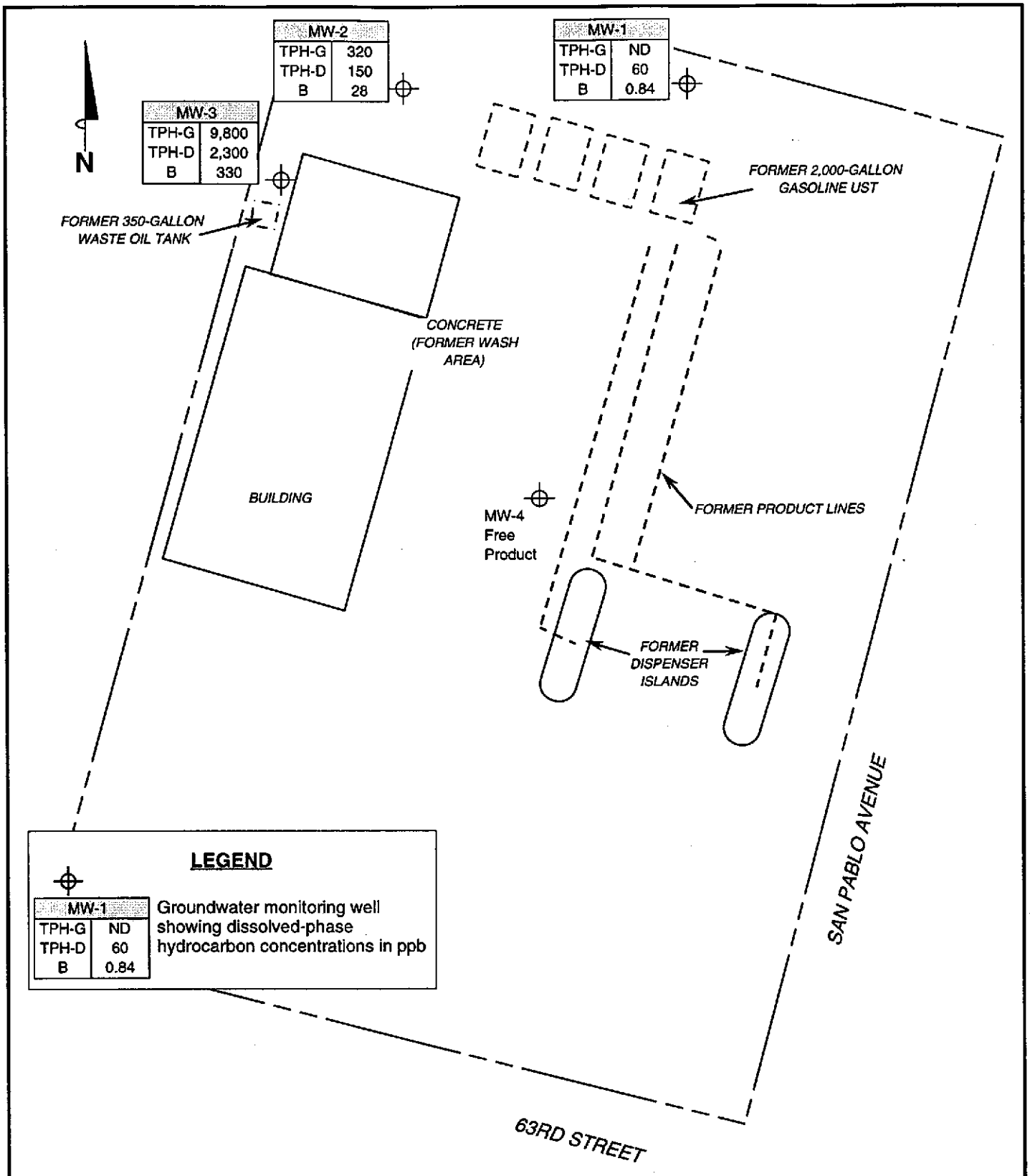
GROUNDWATER ELEVATION CONTOUR MAP
July 29, 1997

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

FIGURE 2

ALTON GEOSCIENCE
Livermore, California

99-105/Site plan 3/19/97



NOTES:
Results are based on analysis of groundwater samples collected July 29, 1997. 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.

SCALE (feet)
0 5 10 20

Source: ALISTO Engineering

ALTON GEOSCIENCE
Livermore, California

DISSOLVED-PHASE HYDROCARBON CONCENTRATIONS
July 29, 1997

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

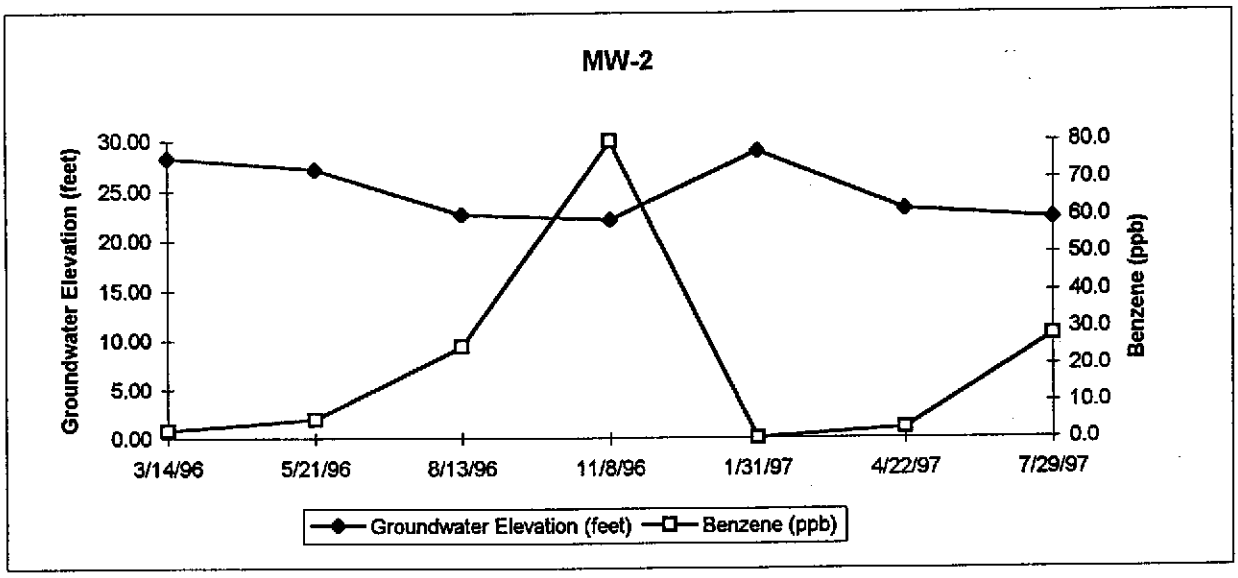
FIGURE 3

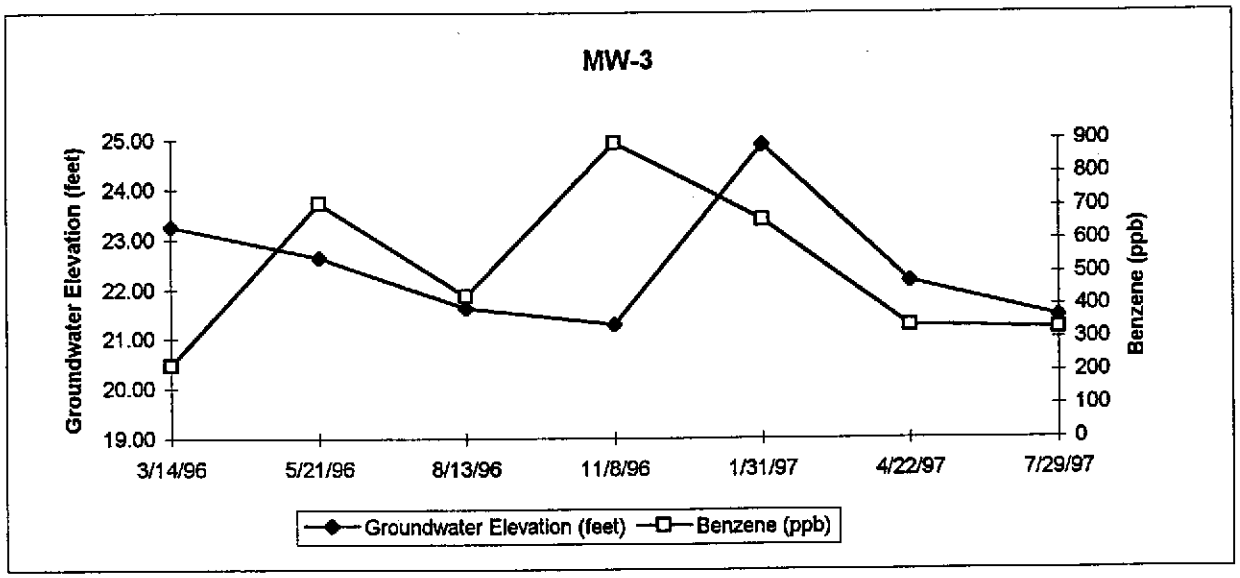
99-105/Site plan 3/19/97

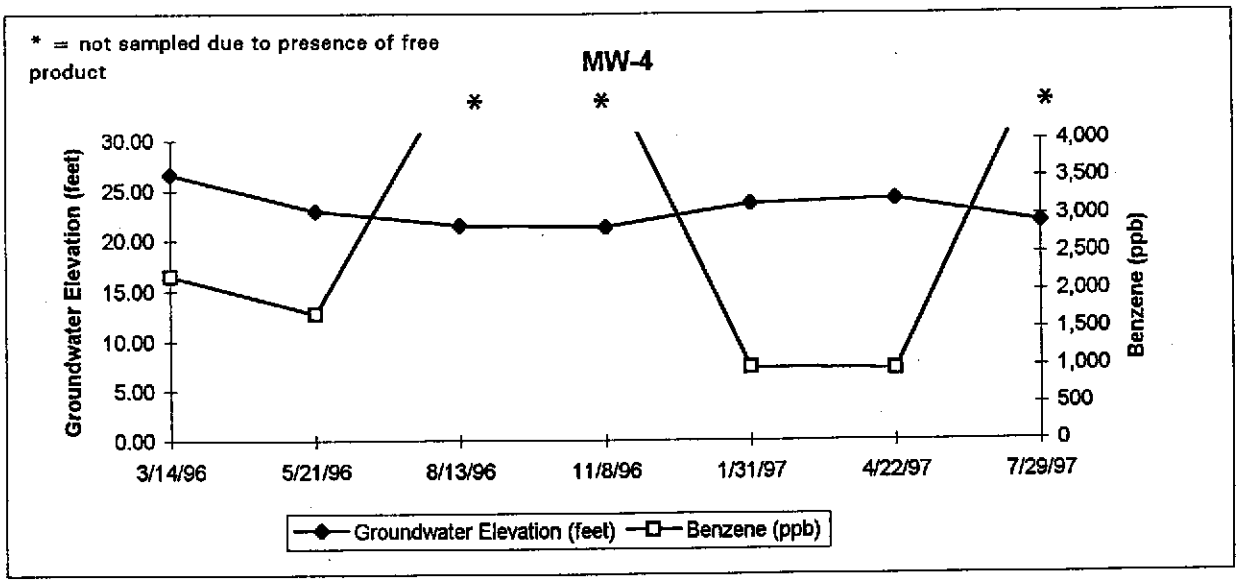
EXHIBIT 4

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
THE RESULTS TEAM

FLUID MEASUREMENT FIELD FORM

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

Alton Personnel: JM
Date: 7-29-97

Well Number	Well Elevation	Depth to Water	Depth to Product	Free Product Thickness (ft)	Free Product Recovery	Total Depth	Comments
MW-1		10.18					
MW-2		10.53					
MW-3		11.36					
MW-4		9.85	9.73	.12 FT			

Alton Geoscience, Northern California Operations

GROUND WATER SAMPLING FIELD NOTES

Site: 99-105 Project No.: 41-0123 Sampled By: JM Date: 7-29-97

Well No. MW-1
Total Depth (feet) 19.85
Depth to Water (feet): 10.18
Water Column (feet): 9.67
80% Recharge Depth (feet):
Purge Method: NO
Depth to Product (feet): —
Product Recovered (gallons): —
Casing Diameter (Inches): 4
1 Well Volume (gallons): 6.30

Time Start	Time Stop	Depth To Water (feet)	Volume Purged (gallons)	Conductivity (uS/cm)	Temperature (F , C)	pH
				.96	70.4	7.37
	Total Purged			Time Sampled		1240

Comments:
Turbidity =

Well No. MW-2
Total Depth (feet) 19.73
Depth to Water (feet): 10.53
Water Column (feet):
80% Recharge Depth (feet):
Purge Method: NO
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
				1.23	70.1	7.41
	Total Purged			Time Sampled		1410

Comments:
Turbidity =

Well No. MW-3
Total Depth (feet) 19.91
Depth to Water (feet): 11.36
Water Column (feet):
80% Recharge Depth (feet):
Purge Method: NO
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
				1.13	69.6	7.48
	Total Purged			Time Sampled		1325

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):

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

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

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

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Alton Geoscience	Client Project ID:	Mobil #99-105	Sampled: Jul 29, 1997
30-A Lindbergh Ave.	Sample Matrix:	Water	Received: Jul 30, 1997
Livermore, CA 94550	Analysis Method:	EPA 5030/8015 Mod./8020	Reported: Aug 13, 1997
Attention: Tom Seliger	First Sample #:	707-1534	

QC Batch Number: GC080197 802002A | GC080197 802002A | GC080197 802002A

TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX DISTINCTION

Analyte	Reporting Limit µg/L	Sample I.D. 707-1534 MW-1	Sample I.D. 707-1535 MW-2	Sample I.D. 707-1536 MW-3
Purgeable Hydrocarbons	50	N.D.	320	9,800
Benzene	0.50	0.84	28	330
Toluene	0.50	0.95	1.2	N.D.
Ethyl Benzene	0.50	N.D.	10	530
Total Xylenes	0.50	1.6	N.D.	530
MTBE	2.5	36	N.D.	N.D.
Chromatogram Pattern:		--	Gasoline	Gasoline

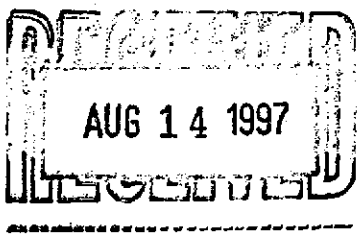
Quality Control Data

Report Limit Multiplication Factor:	1.0	2.0	100
Date Analyzed:	8/1/97	8/1/97	8/1/97
Instrument Identification:	HP-2	HP-2	HP-2
Surrogate Recovery, %: (QC Limits = 70-130%)	75	75	85

Purgeable Hydrocarbons are quantitated against a fresh gasoline standard.
Analytes reported as N.D. were not detected above the stated reporting limit.

SEQUOIA ANALYTICAL, #1271

Jim Bava
Project Manager



7071534.ALT <1>

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Alton Geoscience	Client Project ID:	Mobil #99-105	Sampled: Jul 29, 1997
30-A Lindbergh Ave.	Sample Matrix:	Water	Received: Jul 30, 1997
Livermore, CA 94550	Analysis Method:	EPA 3510/8015 Mod.	Reported: Aug 13, 1997
Attention: Tom Seliger	First Sample #:	707-1534	

QC Batch Number: SP080197 8015EXB | SP080197 8015EXB | SP080197 8015EXB

TOTAL EXTRACTABLE PETROLEUM HYDROCARBONS

Analyte	Reporting Limit µg/L	Sample I.D. 707-1534 MW-1	Sample I.D. 707-1535 MW-2	Sample I.D. 707-1536 MW-3
Extractable Hydrocarbons	50	60	150	2,300
Chromatogram Pattern:		Unidentified Hydrocarbons > C18	Diesel Unidentified Hydrocarbons > C20	Diesel Unidentified Hydrocarbons < C15

Quality Control Data

Report Limit Multiplication Factor:	1.0	1.1	1.0
Date Extracted:	8/1/97	8/1/97	8/1/97
Date Analyzed:	8/6/97	8/6/97	8/6/97
Instrument Identification:	HP-3B	HP-3B	HP-3B

Extractable Hydrocarbons are quantitated against a fresh diesel standard.
Analytes reported as N.D. were not detected above the stated reporting limit.

SEQUOIA ANALYTICAL, #1271

Jim Bava
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
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819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Alton Geoscience
30-A Lindbergh Ave.
Livermore, CA 94550
Attention: Tom Seliger

Client Project ID: Mobil #99-105
Matrix: Liquid

QC Sample Group: 7071534-536

Reported: Aug 13, 1997

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes	Diesel
QC Batch#:	GC080197	GC080197	GC080197	GC080197	SP080197
	802002A	802002A	802002A	802002A	8015EXB
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020	EPA 8015M
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030	EPA 3510
Analyst:	D. Newcomb	D. Newcomb	D. Newcomb	D. Newcomb	K. Grubb
MS/MSD #:	7071326	7071326	7071326	7071326	BLK080197
Sample Conc.:	N.D.	N.D.	N.D.	N.D.	N.D.
Prepared Date:	8/1/97	8/1/97	8/1/97	8/1/97	8/1/97
Analyzed Date:	8/1/97	8/1/97	8/1/97	8/1/97	8/6/97
Instrument I.D.#:	HP-2	HP-2	HP-2	HP-2	HP-3B
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L	60 µg/L	300 mg/L
Result:	14	17	15	48	220
MS % Recovery:	70	85	75	80	73
Dup. Result:	16	19	18	54	180
MSD % Recov.:	80	95	90	90	60
RPD:	13	11	19	12	20.0
RPD Limit:	0-20	0-20	0-20	0-20	0-50

LCS #:	2LCS080197	2LCS080197	2LCS080197	2LCS080197	LCS080197
Prepared Date:	8/1/97	8/1/97	8/1/97	8/1/97	8/1/97
Analyzed Date:	8/1/97	8/1/97	8/1/97	8/1/97	8/6/97
Instrument I.D.#:	HP-2	HP-2	HP-2	HP-2	HP-3B
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L	60 µg/L	300 mg/L
LCS Result:	17	20	19	59	130
LCS % Recov.:	85	100	95	98	43

MS/MSD LCS Control Limits	70-130	70-130	70-130	70-130	60-140

SEQUOIA ANALYTICAL, #1271

Jim Bava
Project Manager

Please Note:
The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

** MS = Matrix Spike, MSD = MS Duplicate, RPD = Relative % Difference

SEQUOIA ANALYTICAL
CHAIN OF CUSTODY

680 Chesapeake Drive • Redwood City, CA 94063 • (415) 364-9600 FAX (415) 364-9233
819 Striker Ave., Suite 8 • Sacramento, CA 95834 • (916) 921-9600 FAX (916) 921-0100
404 North Wiget Lane • Walnut Creek, CA 94598 • (510) 988-9600 FAX (510) 988-9673

Mobil Oil Consulting Firm: Alton Geoscience	Station No./Site Address: 99-105
Address: 30 A Lindbergh Ave	Project Contact: 970424 Tom Seeley
City: Livermore State: CA Zip: 94550	Mobil Oil Engineer: Cherine Fowler
Tel: (510) 606-9150 Fax: (510) 606-9260	Sampler(s) (signature):

Sample I.D.	Matrix	Date Sampled	Time	Preservation	Number of Containers	Type of Containers	BTEX - EPA 602/8020	BTEX -TPH EPA M602/8015/8020 (GAS)	TPH EPA Modified 8015 Gas ☐ Diesel ☒	Oil & Grease - EPA 413.2	TPH - EPA 418.1	EPA 601/8010	EPA 624/8240	EPA 625/8270	Title 22 Metals EPA 6010/7000 TTLC ☐ STLC ☐	Lead Org./DHS ☐ Lead Total ☐	EDB/DBCD - EPA 504	pH	Bioassay - Title 22 Haz. Waste	Bioassay - Effluent	MTBE*
MW-1	H_2O	7-29	1340	HCl	3 3VOAs +HCl	VOAs + amber		X	X				7071534			A-E					X
MW-2	↓	↓	1410	↓	3	↓		X	X				7071535								X
MW-3	↓	↓	1435	↓	3	↓		X	X				7071536			↓					X

CODING (check one)

- Code 1 ☐ Emergency Response
- Code 2 ☐ Site Assessment
- Code 3 ☐ Remediation (Plan Devlpmt.)
- Code 4 ☐ Active Remed. (Install./Start-up)
- Code 5 ☐ Active Remed. (O & M)
- Code 6 ☒ Passive Remed/ Monitoring
- Code 7 ☐ Closure
- Code 8 ☐ Construction
- Code 9 ☐ Litigation/Claims Fines

Relinquished by:	Date/Time:	Received by:	Date/Time: 7-30-97 135
Relinquished by:	Date/Time: 7-30-97 215	Received by:	Date/Time:
Relinquished by:	Date/Time:	Received in Lab by:	Date/Time: 7/30/97 1410

Turnaround Time: (check one)
Normal ___ Same day ___
1 day ___ 2 day ___
5 day X

Sample Integrity:
Intact ___ On Ice ___

Remarks: * Run Hi/Lo MTBE for 8260