



ENVIRONMENTAL  
PROTECTION  
JUL 21 AM 8:01

July 15, 1997

Mr. Scott Seery  
Alameda County Health Care Services Agency  
1131 Harbor Bay Parkway, Room 250  
Alameda, California 94502-6577

Alton Project 41-0114

RE: FORMER MOBIL STATION 04-FGN  
14994 EAST 14TH STREET  
SAN LEANDRO, CALIFORNIA

Dear Mr. Seery:

Please find enclosed the Second 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 versus 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 Manifests

If you have any questions regarding this report, please call Ms. Cherine Foutch, Mobil Engineer, at (510) 625-1173, or Tom Seeliger, Alton Geoscience Geologist, at (510) 606-9150.

Sincerely,

ALTON GEOSCIENCE

Tom Seeliger  
Geologist

cc: Ms. Cherine Foutch, Mobil Oil Corporation  
Mr. Steven Ritchie, California Regional Water Quality Control Board, San Francisco Bay Region  
Mr. Bertram Kubo  
Mr. Fuk K. Sit and Ms. Ying C. Sit

# ALTON GEOSCIENCE

## Quarterly Progress Report Summary Sheet Second Quarter 1997

Mobil Service Station 04-FGN  
14994 East 14th Street  
San Leandro, California

LOP Agency: Alameda County Health Care Services Agency

Number of water zones:	1	This Page	1
FIELD ACTIVITY:		Date Sampled:	7-May-97
Number of ground water wells on-site:	5	Ground Water Wells monitored:	7
Number of ground water wells off-site:	2	Ground Water Wells sampled:	5
		Ground Water Wells with Free Product:	0
Phase of Investigation: Vadose Zone	N/A	Ground Water Phase:	Monitor & Sample
SITE HYDROGEOLOGY:			
Approximate depth to ground water below ground surface:			9.50 feet
Approximate elevation of potentiometric surface above Mean Sea Level:			27.5 feet
Average Increase/Decrease in ground water elevations since last sampling episode:			1.5 foot decrease
Approximate flow direction and hydraulic gradient:			South at 0.003 foot/foot
GROUND WATER CONTAMINATION (BENZENE MCL=1.0 ppb):			
Wells containing free product:	0	Range in Thickness of Free Product:	N/A
Number of wells with concentrations below MCL:	2	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
Nature of contamination:	Gasoline	Range in Concentrations:	Benzene: ND to 230 ppb TPH-G: ND to 37,000 ppb
ADDITIONAL INFORMATION:			
MW-5A and MW-6A are sampled semi-annually. Purged water was transported to McKittrick Waste Treatment Facility for disposal.			

Prepared by: *John L. Hayden* for

Jacob Madden  
Staff Geologist

Alton Project No: 41-0114

Approved by: *Matthew W. Katen*  
California RG 5167

Matthew W. Katen, RG  
Senior Geologist

Submittal Date: 7/15/97



**EXHIBIT 1**  
**SAMPLING SCHEDULE**

**MONITORING WELL SAMPLING SCHEDULE 1997-98**  
**Former Mobil Station 04-FGN**

Well Number	Second Quarter 1997	Third Quarter 1997	Fourth Quarter 1997	First Quarter 1998	Second Quarter 1998
MW-1A	X	X		X	
MW-2A	X	X		X	
MW-3A	X	X		X	
MW-4A	X				
MW-5A				X	
MW-6A				X	
MW-7A	X	X		X	

NOTE: X = Well scheduled for sampling.

**EXHIBIT 2**

**GROUNDWATER LEVELS AND CHEMICAL ANALYSIS TABLE**

## Groundwater Levels and Chemical Analysis

Former Mobil Station 04-FGN

Well ID	Date	Top of Casing Elevation (feet)	Depth to Water (feet)	Groundwater Elevation (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)	TRPO (ppm)
<b>MOBIL wells</b>														
MW-1A	3/31/88	36.35	—	—	29,000	ND	ND	ND	550	640	—	—	ND	—
	1/31/89		—	—	11,200	—	260	ND	500	500	—	—	—	—
	2/24/94		9.42	26.93	11,000	2,500	70	ND	260	180	—	—	ND	—
	8/3/94		12.00	24.35	13,000	7,100	61	50	280	230	—	—	ND	—
	11/23/94		11.18	25.17	12,000	2,500	49	ND	300	190	—	—	10,000	—
	2/28/95		9.08	27.27	10,000	3,200	25	ND	110	67	—	—	8,400	—
	5/10/95		8.33	28.02	10,000	3,600	31	ND	140	81	—	—	7,200	—
	8/2/95	36.63	9.49	27.14	10,000	3,800	24	18	130	80	—	—	—	—
	11/2/95		11.05	25.58	12,000	3400*	ND	ND	190	150	—	—	—	ND
	2/8/96		7.55	29.08	8,000	3,600*	100	21	87	58	—	—	—	—
	5/8/96		7.52	29.11	9,200	—	11	ND	120	64	—	—	—	—
	8/9/96		9.63	27.00	—	—	—	—	—	—	—	—	—	—
	8/20/96		—	—	6,800	—	64	22	100	55	130	ND	—	—
	11/7/96		11.01	25.62	7,900	—	100	12	70	34	95	ND	—	—
	2/10/97		7.58	29.05	5,800	—	36	15	67	29	58	ND	—	—
	5/7/97		9.15	27.48	1,400	—	13	ND	11	ND	ND	—	—	—
MW-2A	2/24/94	36.61	9.52	27.09	6,400	4,500	31	ND	58	42	—	—	ND	—
	8/23/94		12.05	24.56	7,500	7,100	42	21	71	53	—	—	ND	—
	11/23/94		11.25	25.36	7,000	1,800	33	11	39	ND	—	—	7,300	—
	2/28/95		9.10	27.51	9,000	1,600	29	36	96	45	—	—	6,900	—
	5/10/95		8.42	28.19	5,100	1,600	20	27	32	35	—	—	3,400	—
	8/2/95	36.62	9.54	27.08	4,300	1,800	36	ND	11	16	—	—	—	—
	11/2/95		11.08	25.54	4,300	3000*	22	ND	10	11	—	—	—	ND
	2/8/96		7.68	28.94	2,900	940*	32	13	13	ND	—	—	—	—
	5/8/96		8.64	27.98	2,500	—	13	12	19	26	—	—	—	—
	8/9/96		9.71	26.91	—	—	—	—	—	—	—	—	—	—
	8/20/96		—	—	2,500	—	19	11	6.8	8.1	36	—	—	—

## Groundwater Levels and Chemical Analysis

Former Mobil Station 04-FGN

Well ID	Date	Top of Casing Elevation (feet)	Depth to Water (feet)	Groundwater Elevation (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)	TRPO (ppm)
MW-2A	11/7/96		11.04	25.58	4,700	—	58	7.3	5.3	ND	55	—	—	—
(cont'd)	2/10/97		7.75	28.87	2,600	—	12	10	35	15	ND	—	—	—
	5/7/97		9.23	27.39	3,300	—	25	18	16	11	ND	—	—	—
MW-3A	2/24/94	36.92	9.85	27.07	19,000	10,000	52	30	690	290	—	—	ND	—
	8/23/94		12.33	24.59	14,000	11,000	44	24	1,000	100	—	—	ND	—
	11/23/94		11.56	25.36	13,000	2,600	30	18	690	52	—	—	8,500	—
	2/28/95		9.35	27.57	8,500	—	11	ND	340	24	—	—	5,500	—
	5/10/95		8.55	28.37	7,600	3,800	ND	ND	400	45	—	—	3,900	—
	8/2/95	36.93	9.75	27.18	9,200	3,800	17	13	340	34	—	—	—	—
	11/2/95		11.29	25.64	9,200	4400*	31	ND	360	72	—	—	—	ND
	2/8/96		7.97	28.96	6,900	3,800*	38	ND	230	43	—	—	—	—
	5/8/96		8.82	28.11	7,700	—	ND	ND	270	38	—	—	—	—
	8/9/96		9.95	26.98	—	—	—	—	—	—	—	—	—	—
	8/20/96		—	—	5,600	—	8.0	29	180	23	12	—	—	—
	11/7/96		11.28	25.65	8,600	—	47	ND	150	29	ND	—	—	—
	2/10/97		7.95	28.98	8,300	—	28	ND	130	23	ND	—	—	—
	5/7/97		9.45	27.48	37,000	—	230	110	630	ND	ND	—	—	—
MW-4A	8/2/95	37.18	9.63	27.55	ND	ND	ND	ND	ND	ND	—	—	—	—
	11/2/95		11.48	25.70	ND	ND	ND	ND	ND	ND	—	—	—	ND
	2/8/96		8.18	29.00	ND	ND	ND	1.1	ND	0.92	—	—	—	—
	5/8/96		8.49	28.69	ND	—	ND	ND	ND	ND	—	—	—	—
	8/9/96		10.05	27.13	—	—	—	—	—	—	—	—	—	—
	8/20/96		—	—	ND	—	ND	ND	ND	ND	ND	—	—	—
	11/7/96		11.48	25.70	ND	—	ND	ND	ND	0.88	ND	—	—	—

## Groundwater Levels and Chemical Analysis

Former Mobil Station 04-FGN

Well ID	Date	Top of Casing Elevation (feet)	Depth to Water (feet)	Groundwater Elevation (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)	TRPO (ppm)
MW-4A	2/10/97		8.11	29.07	ND	—	ND	2.4	ND	ND	ND	—	—	—
(cont'd)	5/7/97		9.64	27.54	ND	—	ND	ND	ND	ND	ND	—	—	—
MW-5A	8/2/95	35.91	8.74	27.17	1,300	220	16	0.68	1.3	4.3	—	—	—	—
	11/2/95		10.34	25.57	180	ND	1.9	1.2	ND	ND	—	—	—	ND
	2/8/96		6.67	29.24	160	150	1.9	2.2	ND	0.89	—	—	—	—
	5/8/96		7.35	28.56	260	—	2.4	6.7	2.0	9.6	—	—	—	—
	8/9/96		8.81	27.10	—	—	—	—	—	—	—	—	—	—
	8/20/96		—	—	ND	—	ND	1.8	ND	ND	9.4	—	—	—
	11/7/96		10.25	25.66	—	—	—	—	—	—	—	—	—	—
	2/10/97		6.93	28.98	ND	—	ND	1.2	ND	ND	ND	—	—	—
	5/7/97		8.42	27.49	—	—	—	—	—	—	—	—	—	—
MW-6A	8/2/95	37.10	9.68	27.42	ND	ND	ND	ND	ND	ND	—	—	—	—
	11/2/95		11.26	25.84	ND	ND	ND	ND	ND	ND	—	—	—	ND
	2/8/96		7.79	29.31	ND	ND	ND	1.3	ND	1.3	—	—	—	—
	5/8/96		8.38	28.72	ND	—	ND	1.6	ND	1.2	—	—	—	—
	8/9/96		9.82	27.28	—	—	—	—	—	—	—	—	—	—
	8/20/96		—	—	ND	—	ND	ND	ND	ND	ND	—	—	—
	11/7/96		11.02	26.08	—	—	—	—	—	—	—	—	—	—
	2/10/97		7.70	29.40	ND	—	ND	3.4	ND	ND	ND	—	—	—
	5/7/97		9.31	27.79	—	—	—	—	—	—	—	—	—	—
MW-7A	11/2/95	37.39	11.77	25.62	ND	ND	ND	ND	ND	ND	—	—	—	ND
	2/8/96		8.68	28.71	ND	75	ND	1.4	ND	1.5	—	—	—	—
	5/8/96		9.00	28.39	ND	—	2.2	6.3	1.4	7.9	—	—	—	—
	8/9/96		10.31	27.08	—	—	—	—	—	—	—	—	—	—
	8/20/96		—	—	ND	—	ND	ND	ND	ND	ND	—	—	—
	11/7/96		11.81	25.58	ND	—	ND	0.96	ND	1.6	ND	—	—	—



## Groundwater Levels and Chemical Analysis

Former Mobil Station 04-FGN

Well ID	Date	Top of Casing Elevation (feet)	Depth to Water (feet)	Groundwater Elevation (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)	TRPO (ppm)
MW-7A	2/10/97		8.57	28.82	ND	—	ND	2.4	ND	ND	ND	—	—	—
(cont'd)	5/7/97		10.05	27.34	ND	—	ND	ND	ND	ND	ND	—	—	—
<b>UNOCAL wells</b>														
MW-1	8/23/93	—	—	—	24,000	—	160	110	840	810	—	—	—	—
	11/23/93		—	—	18,000	—	210	63	900	620	—	—	—	—
	2/24/94	36.37	9.45	26.92	18,000	—	74	30	940	480	—	—	—	—
	8/23/94		11.98	24.39	24,000	—	130	57	970	320	—	—	—	—
	11/23/94		11.17	25.20	—	—	—	—	—	—	—	—	—	—
	2/3/95		8.01	28.36	—	—	—	—	—	—	—	—	—	—
	5/10/95		8.51	27.86	—	—	—	—	—	—	—	—	—	—
	8/2/95		10.00	26.37	—	—	—	—	—	—	—	—	—	—
	11/2/95		11.11	25.26	—	—	—	—	—	—	—	—	—	—
	2/8/96		7.74	28.63	—	—	—	—	—	—	—	—	—	—
	5/8/96		8.50	27.87	—	—	—	—	—	—	—	—	—	—
	8/8/96		9.72	26.65	—	—	—	—	—	—	—	—	—	—
	11/7/96		10.74	25.63	—	—	—	—	—	—	—	—	—	—
	2/10/97		7.92	28.45	—	—	—	—	—	—	—	—	—	—
	5/7/97		9.24	27.13	—	—	—	—	—	—	—	—	—	—
MW-2	8/23/93	—	—	—	15,000	—	110	ND	590	64	—	—	—	—
	11/23/93		—	—	11,000	—	80	10	480	20	—	—	—	—
	2/24/94	36.34	9.27	27.07	11,000	—	44	ND	580	32	—	—	—	—
	8/23/94		11.82	24.52	12,000	—	45	10	360	20	—	—	—	—
	11/23/94		10.97	25.37	—	—	—	—	—	—	—	—	—	—
	2/3/95		7.87	28.47	—	—	—	—	—	—	—	—	—	—
	5/10/95		8.38	27.96	—	—	—	—	—	—	—	—	—	—
	8/2/95		9.36	26.98	—	—	—	—	—	—	—	—	—	—
	11/2/95		10.95	25.39	—	—	—	—	—	—	—	—	—	—

## Groundwater Levels and Chemical Analysis

Former Mobil Station 04-FGN

Well ID	Date	Top of Casing Elevation (feet)	Depth to Water (feet)	Groundwater Elevation (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)	TRPO (ppm)
MW-2 (cont'd)	2/8/96		7.52	28.82	—	—	—	—	—	—	—	—	—	—
	5/8/96		8.21	28.13	—	—	—	—	—	—	—	—	—	—
	8/8/96		9.54	26.80	—	—	—	—	—	—	—	—	—	—
	11/7/96		10.69	25.65	—	—	—	—	—	—	—	—	—	—
	2/10/97		7.75	28.59	—	—	—	—	—	—	—	—	—	—
	5/7/97		9.14	27.20	—	—	—	—	—	—	—	—	—	—
MW-3	8/23/93	—	—	—	—	—	—	—	—	—	—	—	—	—
	11/23/93		—	—	2,900	—	25	ND	50	18	—	—	—	—
	2/24/94	36.42	9.21	27.21	2,300	—	34	ND	24	5.6	—	—	—	—
	8/23/94		11.88	24.54	3,400	—	46	ND	53	11	—	—	—	—
	11/23/94		10.98	25.44	2,900	—	37	49	14	2.9	—	—	—	—
	2/3/95		7.89	28.53	—	—	—	—	—	—	—	—	—	—
	5/10/95		8.38	28.04	—	—	—	—	—	—	—	—	—	—
	8/2/95		9.49	26.93	—	—	—	—	—	—	—	—	—	—
	11/2/95		11.00	25.42	—	—	—	—	—	—	—	—	—	—
	2/8/96		7.41	29.01	—	—	—	—	—	—	—	—	—	—
	5/8/96		8.20	28.22	—	—	—	—	—	—	—	—	—	—
	8/8/96		9.53	26.89	—	—	—	—	—	—	—	—	—	—
	11/7/96		10.96	25.46	—	—	—	—	—	—	—	—	—	—
	2/10/97		7.71	28.71	—	—	—	—	—	—	—	—	—	—
	5/7/97		9.17	27.25	—	—	—	—	—	—	—	—	—	—
MW-4	8/23/93	—	—	—	1,200	—	5	ND	16	ND	—	—	—	—
	11/23/93		—	—	720	—	10	ND	8.7	ND	—	—	—	—
	2/24/94	37.04	9.89	27.15	1,300	—	8.9	ND	20	ND	—	—	—	—
	8/23/94		12.57	24.47	690	—	9.2	1.3	7.1	1.9	—	—	—	—
	11/23/94		11.65	25.39	—	—	—	—	—	—	—	—	—	—
	2/3/95		8.52	28.52	—	—	—	—	—	—	—	—	—	—

## Groundwater Levels and Chemical Analysis

Former Mobil Station 04-FGN

Well ID	Date	Top of Casing Elevation (feet)	Depth to Water (feet)	Groundwater Elevation (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)	TRPO (ppm)
MW-4	5/10/95		9.97	27.07	—	—	—	—	—	—	—	—	—	—
(cont'd)	8/2/95		10.18	26.86	—	—	—	—	—	—	—	—	—	—
	11/2/95		11.67	25.37	—	—	—	—	—	—	—	—	—	—
	2/8/96		8.15	28.89	—	—	—	—	—	—	—	—	—	—
	8/8/96		10.24	26.80	—	—	—	—	—	—	—	—	—	—
	11/7/96		11.58	25.46	—	—	—	—	—	—	—	—	—	—
	2/10/97		8.45	28.59	—	—	—	—	—	—	—	—	—	—
	5/7/97		9.85	27.19	—	—	—	—	—	—	—	—	—	—
MW-5	8/23/93	—	—	—	61,000	—	340	380	3,600	14,000	—	—	—	—
	11/23/93		—	—	46,000	—	290	310	4,100	15,000	—	—	—	—
	2/24/94	35.94	9.02	26.92	57,000	—	140	400	4,400	16,000	—	—	—	—
	8/23/94		11.57	24.37	61,000	—	360	380	4,800	17,000	—	—	—	—
	11/23/94		10.71	25.23	—	—	—	—	—	—	—	—	—	—
	2/3/95		7.69	28.25	—	—	—	—	—	—	—	—	—	—
	5/10/95		8.2	27.74	—	—	—	—	—	—	—	—	—	—
	8/2/95		9.23	26.71	—	—	—	—	—	—	—	—	—	—
	11/2/95		10.70	25.24	—	—	—	—	—	—	—	—	—	—
	2/8/96		7.36	28.58	—	—	—	—	—	—	—	—	—	—
	5/8/96		8.25	27.69	—	—	—	—	—	—	—	—	—	—
	8/8/96		9.37	26.57	—	—	—	—	—	—	—	—	—	—
	11/7/96		10.65	25.29	—	—	—	—	—	—	—	—	—	—
	2/10/97		7.63	28.31	—	—	—	—	—	—	—	—	—	—
	5/7/97		8.98	26.96	—	—	—	—	—	—	—	—	—	—
MW-6	8/23/93	—	—	—	1,000	—	9.4	2.3	5	2.3	—	—	—	—
	11/23/93		—	—	520	—	ND	1.7	1.9	0.82	—	—	—	—
	2/24/94	35.67	8.39	27.28	810	—	12	ND	2.6	0.77	—	—	—	—
	8/23/94		10.97	24.70	570	—	6.8	2.5	3.2	2.6	—	—	—	—

## Groundwater Levels and Chemical Analysis

Former Mobil Station 04-FGN

Well ID	Date	Top of Casing Elevation (feet)	Depth to Water (feet)	Groundwater Elevation (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)	TRPO (ppm)
MW-6	11/23/94		10.21	25.46	—	—	—	—	—	—	—	—	—	—
(cont'd)	2/3/95		6.99	28.68	—	—	—	—	—	—	—	—	—	—
	5/10/95		7.53	28.14	—	—	—	—	—	—	—	—	—	—
	8/2/95		8.68	26.99	—	—	—	—	—	—	—	—	—	—
	11/2/95		10.20	25.47	—	—	—	—	—	—	—	—	—	—
	2/8/96		6.66	29.01	—	—	—	—	—	—	—	—	—	—
	5/8/96		7.40	28.27	—	—	—	—	—	—	—	—	—	—
	8/8/96		8.72	26.95	—	—	—	—	—	—	—	—	—	—
	11/7/96		10.12	25.55	—	—	—	—	—	—	—	—	—	—
	2/10/97		6.88	28.79	—	—	—	—	—	—	—	—	—	—
	5/7/97		8.32	27.35	—	—	—	—	—	—	—	—	—	—
MW-7	8/23/93	—	—	—	33,000	—	360	ND	2,500	4,300	—	—	—	—
	11/23/93		—	—	19,000	—	310	30	2,500	2,300	—	—	—	—
	2/24/94	36.09	8.95	27.14	16,000	—	220	19	2,400	3,200	—	—	—	—
	8/23/94		11.43	24.66	19,000	—	210	50	2,000	2,800	—	—	—	—
	11/23/94		10.69	25.40	—	—	—	—	—	—	—	—	—	—
	2/3/95		7.49	28.60	—	—	—	—	—	—	—	—	—	—
	5/10/95		7.88	28.21	—	—	—	—	—	—	—	—	—	—
	8/2/95		9.02	27.07	—	—	—	—	—	—	—	—	—	—
	11/2/95		10.55	25.54	—	—	—	—	—	—	—	—	—	—
	2/8/96		7.13	28.96	—	—	—	—	—	—	—	—	—	—
	5/8/96		7.11	28.98	—	—	—	—	—	—	—	—	—	—
	8/8/96		9.07	27.02	—	—	—	—	—	—	—	—	—	—
	11/7/96		10.76	25.33	—	—	—	—	—	—	—	—	—	—
	2/10/97		7.22	28.87	—	—	—	—	—	—	—	—	—	—
	5/7/97		8.47	27.62	—	—	—	—	—	—	—	—	—	—

## Groundwater Levels and Chemical Analysis

Former Mobil Station 04-FGN

Well ID	Date	Top of Casing	Depth to	Groundwater	TPH-G	TPH-D	Benzene	Toluene	Ethyl-	Total	MTBE	MTBE	TOG	TRPO
		Elevation (feet)	Water (feet)	Elevation (feet)	(ppb)	(ppb)	(ppb)	(ppb)	benzene (ppb)	Xylenes (ppb)	8020 (ppb)	8240 or 8260 (ppb)	(ppb)	(ppm)
MW-8	8/23/93	—	—	—	280	—	49	4.5	ND	ND	—	—	—	—
	11/23/93	—	—	—	1,800	—	ND	3.4	ND	ND	—	—	—	—
	2/24/94	36.89	10.44	26.45	1,200	—	10	2.3	ND	3.2	—	—	—	—
	8/23/94	—	12.61	24.28	3,200	—	45	18	2	7.2	—	—	—	—
	11/23/94	—	11.98	24.91	—	—	—	—	—	—	—	—	—	—
	2/3/95	—	9.16	27.73	—	—	—	—	—	—	—	—	—	—
	5/10/95	—	9.35	27.54	—	—	—	—	—	—	—	—	—	—
	8/2/95	—	10.40	26.49	—	—	—	—	—	—	—	—	—	—
	11/2/95	—	11.80	25.09	—	—	—	—	—	—	—	—	—	—
	2/8/96	—	8.98	27.91	—	—	—	—	—	—	—	—	—	—
	5/8/96	—	9.46	27.43	—	—	—	—	—	—	—	—	—	—
	8/8/96	—	10.47	26.42	—	—	—	—	—	—	—	—	—	—
	11/7/96	—	11.71	25.18	—	—	—	—	—	—	—	—	—	—
	2/10/97	—	8.84	28.05	—	—	—	—	—	—	—	—	—	—
5/7/97	—	10.12	26.77	—	—	—	—	—	—	—	—	—	—	
MW-9	8/23/93	—	—	—	3,000	—	29	ND	ND	ND	—	—	—	—
	11/23/93	—	—	—	2,500	—	23	2.1	ND	ND	—	—	—	—
	2/24/94	36.29	9.74	26.55	2,900	—	35	ND	ND	ND	—	—	—	—
	8/23/94	—	11.99	24.30	2,800	—	28	32	ND	ND	—	—	—	—
	11/23/94	—	11.31	24.98	—	—	—	—	—	—	—	—	—	—
	2/3/95	—	8.45	27.84	—	—	—	—	—	—	—	—	—	—
	8/2/95	—	7.95	28.34	—	—	—	—	—	—	—	—	—	—
	11/2/95	—	11.16	25.13	—	—	—	—	—	—	—	—	—	—
	2/8/96	—	8.15	28.14	—	—	—	—	—	—	—	—	—	—
	5/8/96	—	8.75	27.54	—	—	—	—	—	—	—	—	—	—
	8/8/96	—	9.84	26.45	—	—	—	—	—	—	—	—	—	—
11/7/96	—	11.10	25.19	—	—	—	—	—	—	—	—	—	—	

## Groundwater Levels and Chemical Analysis

Former Mobil Station 04-FGN

Well ID	Date	Top of Casing Elevation (feet)	Depth to Water (feet)	Groundwater Elevation (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)	TRPO (ppm)
MW-9	2/10/97		8.15	28.14	—	—	—	—	—	—	—	—	—	—
(cont'd)	5/7/97		9.45	26.84	—	—	—	—	—	—	—	—	—	—
MW-10	8/23/93	—	—	—	20,000	—	230	13	3,200	140	—	—	—	—
	11/23/93		—	—	18,000	—	300	10	2,800	110	—	—	—	—
	2/24/94	36.04	9.57	26.47	15,000	—	330	19	2,000	83	—	—	—	—
	8/23/94		11.81	24.23	16,000	—	250	41	1,800	74	—	—	—	—
	11/23/94		11.10	24.94	—	—	—	—	—	—	—	—	—	—
	2/3/95		8.32	27.72	—	—	—	—	—	—	—	—	—	—
	8/2/95		9.55	26.49	—	—	—	—	—	—	—	—	—	—
	11/2/95		11.03	25.01	—	—	—	—	—	—	—	—	—	—
	2/8/96		8.05	27.99	—	—	—	—	—	—	—	—	—	—
	5/8/96		8.70	27.34	—	—	—	—	—	—	—	—	—	—
	8/8/96		9.76	26.28	—	—	—	—	—	—	—	—	—	—
	11/7/96		10.92	25.12	—	—	—	—	—	—	—	—	—	—
	2/10/97		8.10	27.94	—	—	—	—	—	—	—	—	—	—
	5/7/97		9.28	26.76	—	—	—	—	—	—	—	—	—	—
MW-11	8/23/93	—	—	—	5,400	—	68	ND	230	43	—	—	—	—
	11/23/93		—	—	3,400	—	105	ND	120	43	—	—	—	—
	2/24/94	35.50	9.20	26.30	4,600	—	170	ND	140	36	—	—	—	—
	8/23/94		11.39	24.11	7,300	—	250	13	150	42	—	—	—	—
	11/23/94		10.67	24.83	—	—	—	—	—	—	—	—	—	—
	2/3/95		8.02	27.48	—	—	—	—	—	—	—	—	—	—
	8/2/95		9.31	26.19	—	—	—	—	—	—	—	—	—	—
	11/2/95		10.85	24.65	—	—	—	—	—	—	—	—	—	—
	2/8/96		7.76	27.74	—	—	—	—	—	—	—	—	—	—
	5/8/96		8.50	27.00	—	—	—	—	—	—	—	—	—	—
	8/8/96		9.46	26.04	—	—	—	—	—	—	—	—	—	—

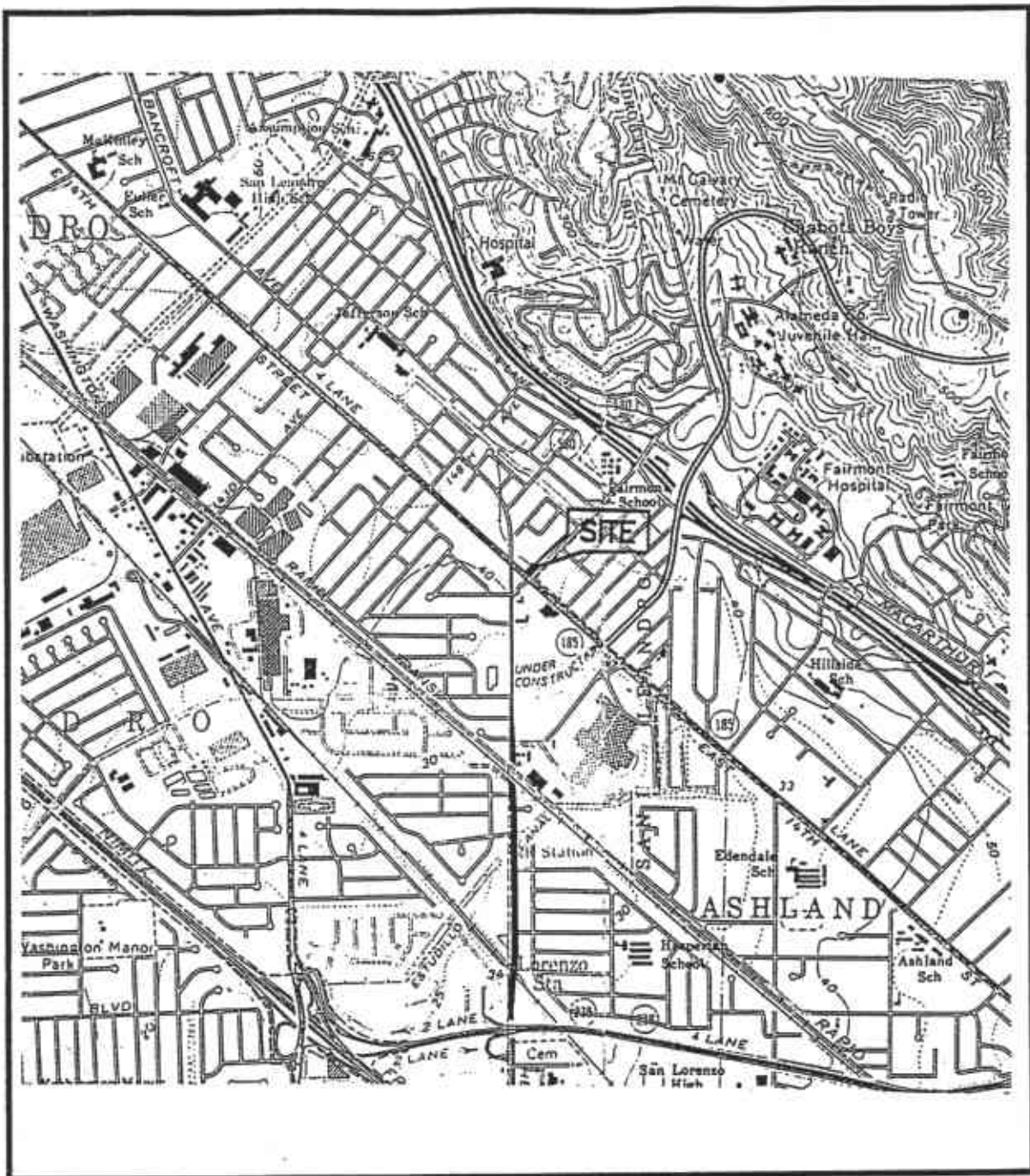
## Groundwater Levels and Chemical Analysis

Former Mobil Station 04-FGN

Well ID	Date	Top of Casing Elevation (feet)	Depth to Water (feet)	Groundwater Elevation (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)	TRPO (ppm)
MW-11	11/7/96		10.58	24.92	—	—	—	—	—	—	—	—	—	—
(cont'd)	2/10/97		7.88	27.62	—	—	—	—	—	—	—	—	—	—
	5/7/97		9.07	26.43	—	—	—	—	—	—	—	—	—	—

NOTES:

ppb = parts per billion	ND = not detected at or above method detection limit
ppm = parts per million	TRPO = total recoverable petroleum oil
TPH-G = total petroleum hydrocarbons as gasoline	— = not analyzed or not provided
TPH-D = total petroleum hydrocarbons as diesel	TOG = total oil and grease
* = Unidentified hydrocarbons <C10	# = well inaccessible
MTBE = methyl-tert butyl ether	



SCALE 1:24,000



Source: U.S.G.S. Map  
Hayward & San Leandro  
Quadrangles  
California  
7.5 Minute Series

**VICINITY MAP**

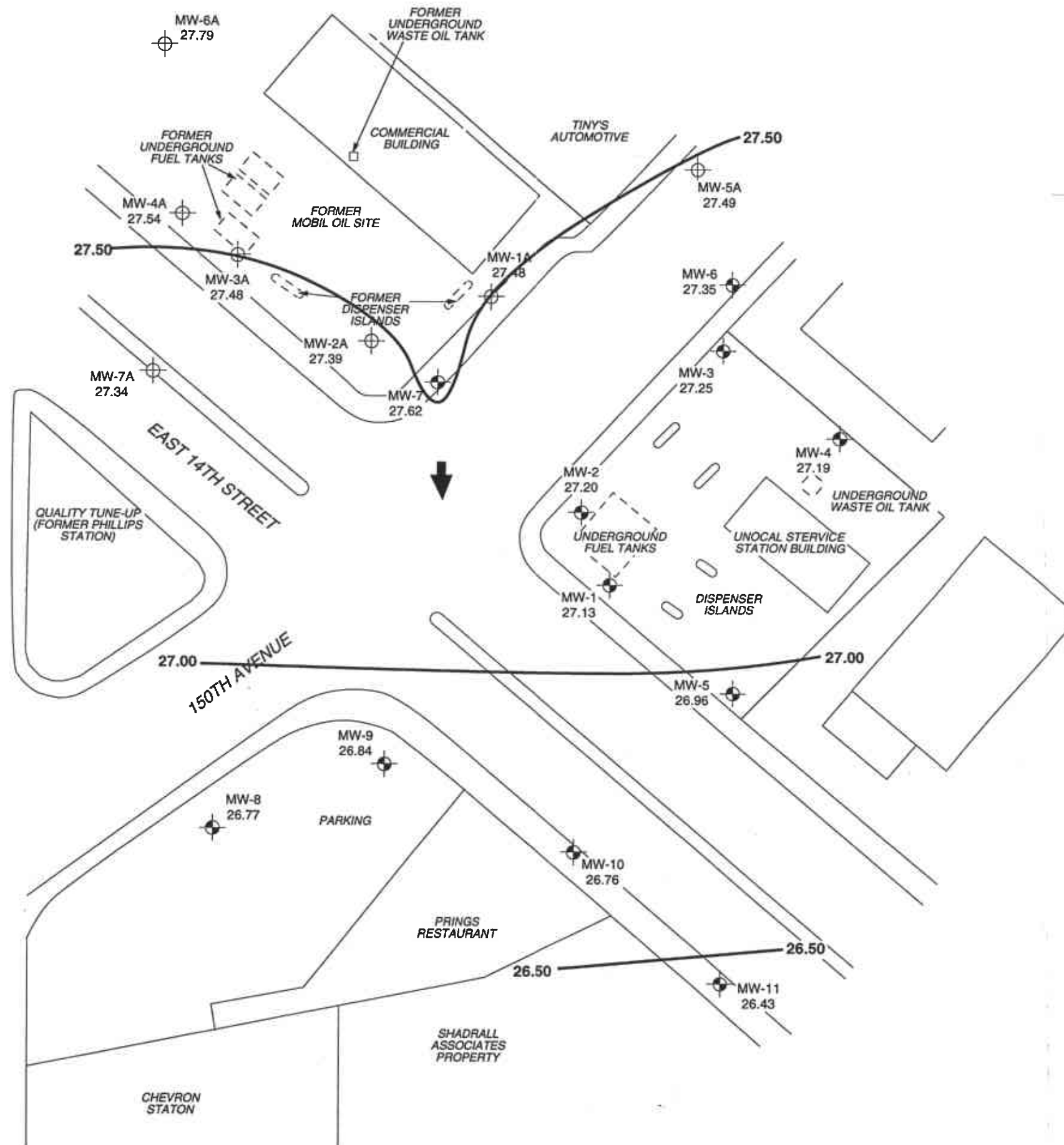
Former Mobil Station 04-FGN  
14994 East 14th Street  
San Leandro, California

**FIGURE 1**



**ALTON  
GEOSCIENCE**  
Livermore, California





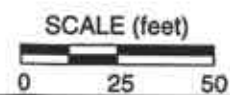
**LEGEND**

- MW-7A Groundwater monitoring well (Mobil)
- MW-11 Groundwater monitoring well (Unocal)
- 28.82 Groundwater elevation 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 May 7, 1997. Contour interval = 0.50 foot.



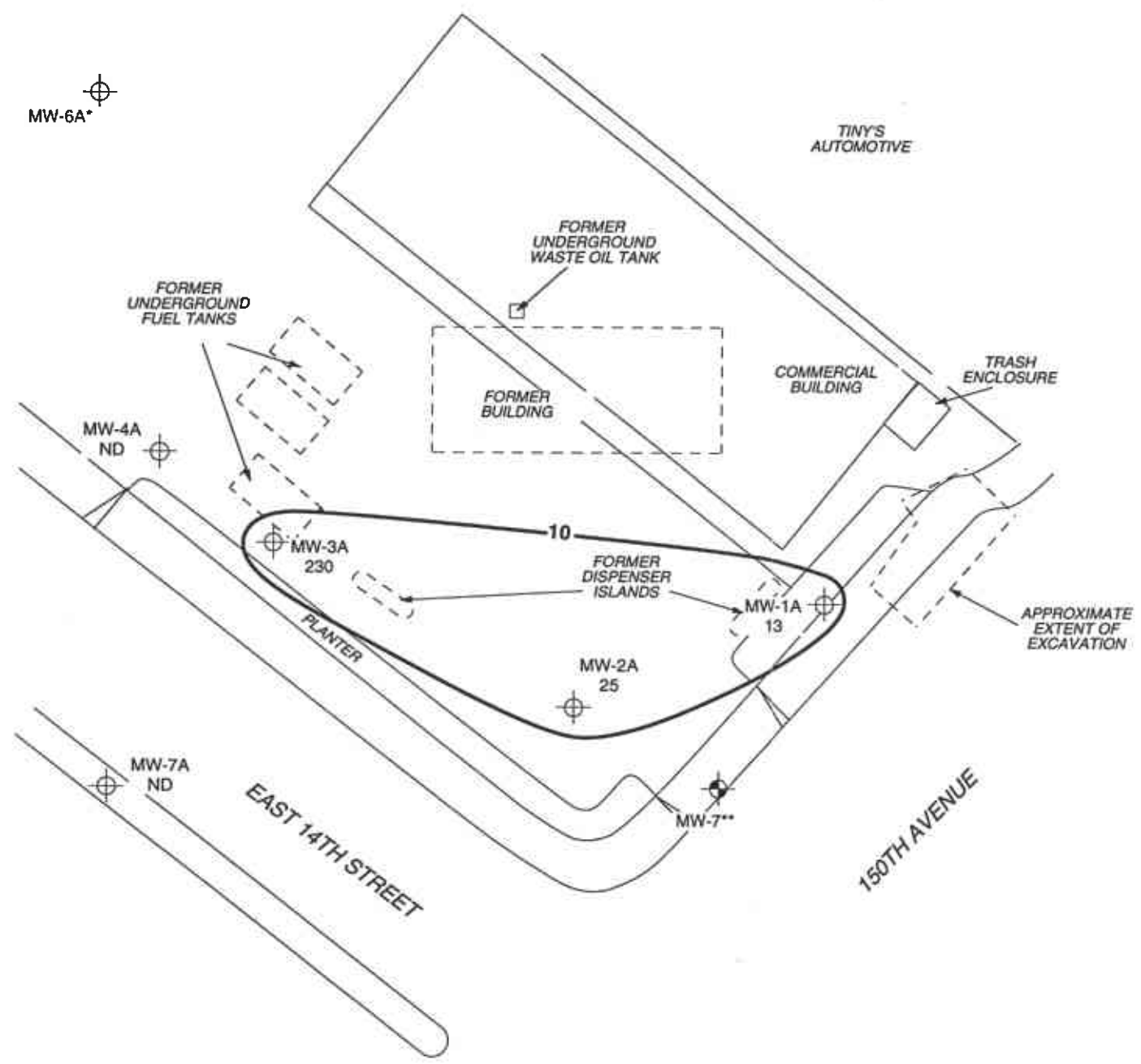
SOURCE: Allsto Engineering Group



**GROUNDWATER ELEVATION CONTOUR MAP**  
 May 7, 1997

Former Mobil Station 04-FGN  
 14994 East 14th Street  
 San Leandro, California

**FIGURE 2**



**LEGEND**

MW-7A ND Groundwater monitoring well (Mobil) showing dissolved-phase benzene concentration in ppb

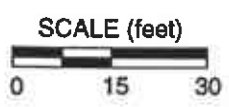
MW-7 Groundwater monitoring well (Unocal)

Dissolved-phase benzene isoconcentration line

**NOTES:**  
 Results are based on analysis of groundwater samples collected May 7, 1997. ND = not detected at or above method detection limit; ppb = parts per billion; \* = not sampled; \*\* = data not provided for Unocal wells.



SOURCE: Alisto Engineering Group



**DISSOLVED-PHASE BENZENE CONCENTRATIONS**  
 May 7, 1997

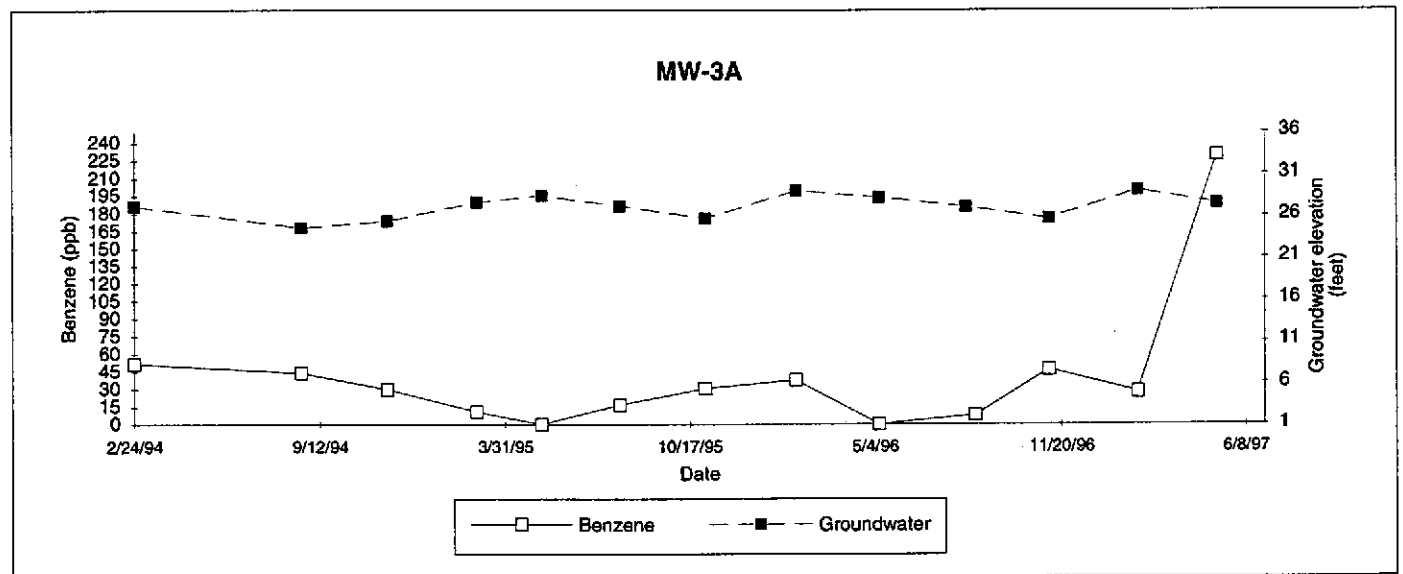
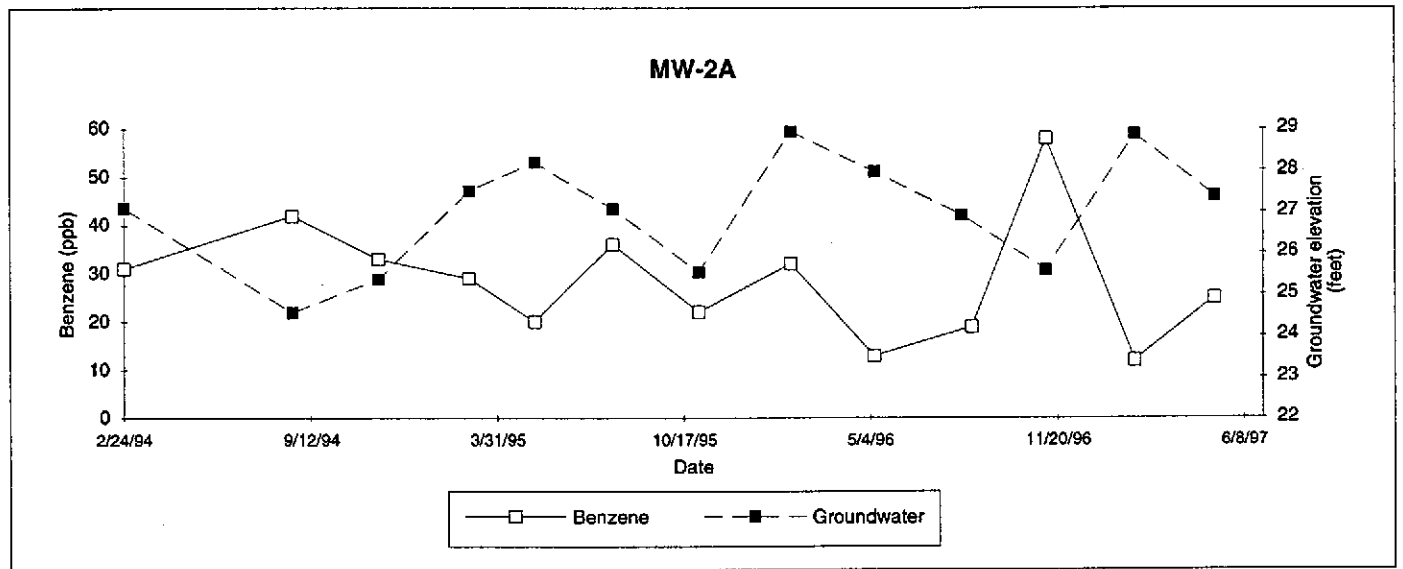
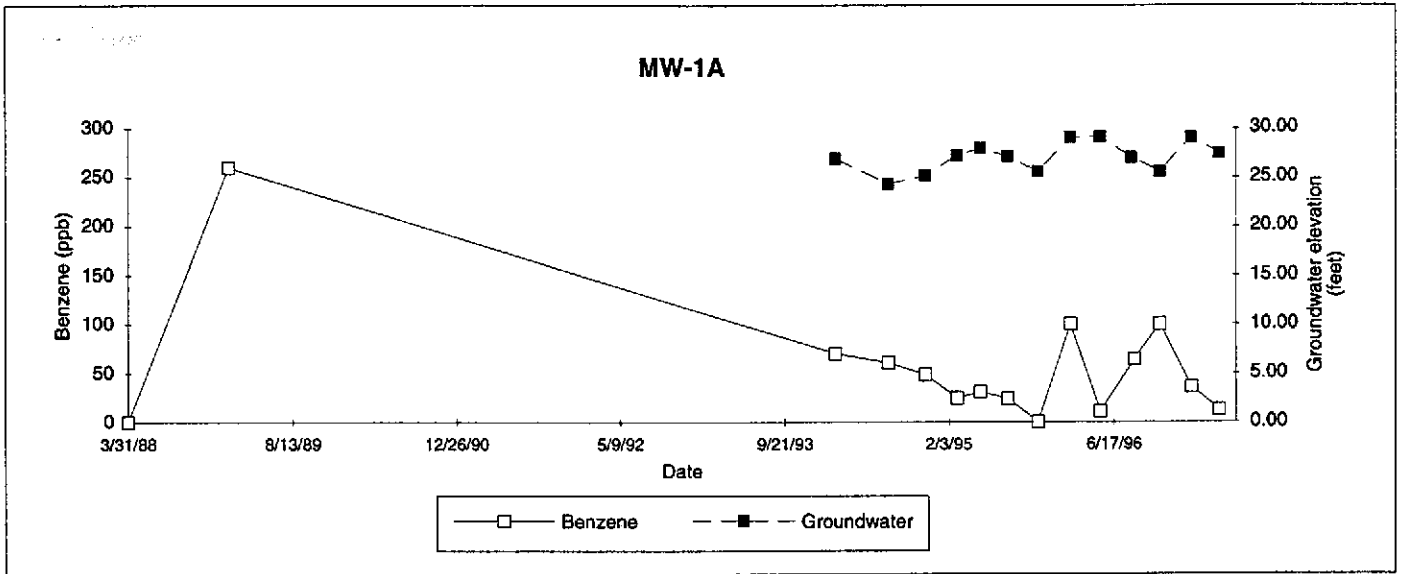
Former Mobil Station 04-FGN  
 14994 East 14th Street  
 San Leandro, California

**FIGURE 3**

**EXHIBIT 4**

**BENZENE VERSUS GROUNDWATER ELEVATION GRAPHS**

# Benzene vs. Groundwater Elevation Graphs



**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.: 41-0114-50  
Station No.: 04-F6N

Alton Personnel: CL  
Date: 5-7-97

Well Number	Screen Interval	Depth to Water	Depth to Product	Free Product Thickness (ft)	Free Product Recovery	Total Depth	Comments
MW-6A		9.31				24.03	
MW-5A		8.42				24.27	
MW-7A		10.05				24.61	
MW-4A		9.64				23.97	
MW-3A		9.45				22.45	
MW-2A		9.23				24.41	
MW-1A		9.15				18.60	

# Alton Geoscience, Northern California Operations

## GROUND WATER SAMPLING FIELD NOTES

Site: 04-F6N Project No.: 41-0114-50 Sampled By: CC Date: 5-7-97

Well No. MW-7A Purge Method: SUB  
 Total Depth (feet) 24.61 Depth to Product (feet): \_\_\_\_\_  
 Depth to Water (feet): 10.05 Product Recovered (gallons): \_\_\_\_\_  
 Water Column (feet): 14.56 Casing Diameter (Inches): 4"  
 80% Recharge Depth (feet): 12.96 1 Well Volume (gallons): 2.60

Well No. MW-4A Purge Method: SUB  
 Total Depth (feet) 23.47 Depth to Product (feet): \_\_\_\_\_  
 Depth to Water (feet): 9.64 Product Recovered (gallons): \_\_\_\_\_  
 Water Column (feet): 13.83 Casing Diameter (Inches): 4"  
 80% Recharge Depth (feet): 12.40 1 Well Volume (gallons): 2.12

Time Start	Time Stop	Depth To Water (feet)	Volume Purged (gallons)	Conductivity (uS/cm)	Temperature (F, C)	pH
12:13				1.34	74.7	6.91
				1.09	72.8	6.87
	12:19			1.05	72.8	6.82
Total Purged			5.9	Time Sampled 12:25		

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

Time Start	Time Stop	Depth To Water (feet)	Volume Purged (gallons)	Conductivity (uS/cm)	Temperature (F, C)	pH
12:30				1.02	73.5	7.56
				0.96	72.9	7.39
	12:36			0.96	72.5	7.27
Total Purged			2.75	Time Sampled 12:40		

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

Well No. MW-2A Purge Method: SUB  
 Total Depth (feet) 24.41 Depth to Product (feet): \_\_\_\_\_  
 Depth to Water (feet): 9.23 Product Recovered (gallons): \_\_\_\_\_  
 Water Column (feet): 15.18 Casing Diameter (Inches): 2"  
 80% Recharge Depth (feet): 12.26 1 Well Volume (gallons): 2.58

Well No. MW-3A Purge Method: SUB  
 Total Depth (feet) 22.45 Depth to Product (feet): \_\_\_\_\_  
 Depth to Water (feet): 9.45 Product Recovered (gallons): \_\_\_\_\_  
 Water Column (feet): 13.00 Casing Diameter (Inches): 2"  
 80% Recharge Depth (feet): 12.05 1 Well Volume (gallons): 2.21

Time Start	Time Stop	Depth To Water (feet)	Volume Purged (gallons)	Conductivity (uS/cm)	Temperature (F, C)	pH
12:47				0.94	73.1	7.53
				0.86	71.8	7.34
	12:50			0.87	71.7	7.17
Total Purged			8	Time Sampled 12:55		

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

Time Start	Time Stop	Depth To Water (feet)	Volume Purged (gallons)	Conductivity (uS/cm)	Temperature (F, C)	pH
12:59				0.93	73.1	7.29
				0.98	72.8	6.95
	13:02			1.00	72.2	6.71
Total Purged			7	Time Sampled 13:08		

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

Well No. MW-1A Purge Method: SUB  
 Total Depth (feet) 18.60 Depth to Product (feet): \_\_\_\_\_  
 Depth to Water (feet): 9.15 Product Recovered (gallons): \_\_\_\_\_  
 Water Column (feet): 9.45 Casing Diameter (Inches): 2"  
 80% Recharge Depth (feet): 11.04 1 Well Volume (gallons): 1.60

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
13:13				1.04	73.4	7.05
				0.90	71.4	6.82
	13:15			0.85	70.2	6.72
Total Purged			5	Time Sampled 13:20		

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**



# Sequoia Analytical

680 Chesapeake Drive  
404 N. Wiget Lane  
819 Striker Avenue, Suite 8

Redwood City, CA 94063  
Walnut Creek, CA 94598  
Sacramento, CA 95834

(415) 364-9600  
(510) 988-9600  
(916) 921-9600

FAX (415) 364-9233  
FAX (510) 988-9673  
FAX (916) 921-0100

Alton Geoscience 30-A Lindbergh Ave. Livermore, CA 94550 Attention: Tom Seeliger	Client Project ID: Mobil #04-FGN Sample Matrix: Water Analysis Method: EPA 5030/8015 Mod./8020 First Sample #: 705-0542	Sampled: May 7, 1997 Received: May 9, 1997 Reported: May 15, 1997
---	--	---

QC Batch Number: GC050997 GC050997 GC051297 GC050997 GC050997

802002A 802002A 802002A 802002A 802002A

## TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX DISTINCTION

Analyte	Reporting Limit µg/L	Sample I.D. 705-0542 MW-7A	Sample I.D. 705-0543 MW-4A	Sample I.D. 705-0544 MW-2A	Sample I.D. 705-0545 MW-3A	Sample I.D. 705-0546 MW-1A
Purgeable Hydrocarbons	50	N.D.	N.D.	3,300	37,000	1,400
Benzene	0.50	N.D.	N.D.	25	230	13
Toluene	0.50	N.D.	N.D.	18	110	N.D.
Ethyl Benzene	0.50	N.D.	N.D.	16	630	11
Total Xylenes	0.50	N.D.	N.D.	11	N.D.	N.D.
MTBE:	2.5	N.D.	N.D.	N.D.	N.D.	N.D.
Chromatogram Pattern:		--	--	Gasoline	Gasoline	Gasoline

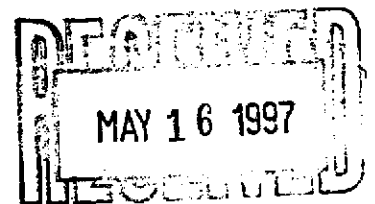
### Quality Control Data

Report Limit Multiplication Factor:	1.0	1.0	20	100	20
Date Analyzed:	5/9/97	5/9/97	5/12/97	5/9/97	5/9/97
Instrument Identification:	HP-2	HP-2	HP-2	HP-2	HP-2
Surrogate Recovery, %: (QC Limits = 70-130%)	78	83	101	133	98

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





# Sequoia Analytical

680 Chesapeake Drive  
404 N. Wiget Lane  
819 Striker Avenue, Suite 8

Redwood City, CA 94063  
Walnut Creek, CA 94598  
Sacramento, CA 95834

(415) 364-9600  
(510) 988-9600  
(916) 921-9600

FAX (415) 364-9233  
FAX (510) 988-9673  
FAX (916) 921-0100

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

Client Project ID: Mobil #04-FGN  
Matrix: Liquid

QC Sample Group: 7050542-546

Reported: May 15, 1997

## QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC050997 802002A	GC050997 802002A	GC050997 802002A	GC050997 802002A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030
Analyst:	K. Nill	K. Nill	K. Nill	K. Nill
MS/MSD #:	7050441	7050441	7050441	7050441
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	5/9/97	5/9/97	5/9/97	5/9/97
Analyzed Date:	5/9/97	5/9/97	5/9/97	5/9/97
Instrument I.D.#:	HP-2	HP-2	HP-2	HP-2
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L	60 µg/L
Result:	15	18	17	52
MS % Recovery:	75	90	85	87
Dup. Result:	16	19	18	53
MSD % Recov.:	80	95	90	88
RPD:	6.5	5.4	5.7	1.9
RPD Limit:	0-25	0-25	0-25	0-25

LCS #:	2LCS050997	2LCS050997	2LCS050997	2LCS050997
Prepared Date:	5/9/97	5/9/97	5/9/97	5/9/97
Analyzed Date:	5/9/97	5/9/97	5/9/97	5/9/97
Instrument I.D.#:	HP-2	HP-2	HP-2	HP-2
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L	60 µg/L
LCS Result:	16	20	19	56
LCS % Recov.:	80	100	95	93

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

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

680 Chesapeake Drive  
404 N. Wiget Lane  
819 Striker Avenue, Suite 8

Redwood City, CA 94063  
Walnut Creek, CA 94598  
Sacramento, CA 95834

(415) 364-9600  
(510) 988-9600  
(916) 921-9600

FAX (415) 364-9233  
FAX (510) 988-9673  
FAX (916) 921-0100

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

Client Project ID: Mobil #04-FGN  
Matrix: Liquid

QC Sample Group: 7050542-546

Reported: May 15, 1997

## QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC051297 802002A	GC051297 802002A	GC051297 802002A	GC051297 802002A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030
Analyst:	K. Nill	K. Nill	K. Nill	K. Nill
MS/MSD #:	7050448	7050448	7050448	7050448
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	5/12/97	5/12/97	5/12/97	5/12/97
Analyzed Date:	5/12/97	5/12/97	5/12/97	5/12/97
Instrument I.D.#:	HP-2	HP-2	HP-2	HP-2
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L	60 µg/L
Result:	17	19	18	52
MS % Recovery:	85	95	90	87
Dup. Result:	19	22	20	62
MSD % Recov.:	95	110	100	103
RPD:	11	15	11	18
RPD Limit:	0-25	0-25	0-25	0-25

LCS #:	2LCS051297	2LCS051297	2LCS051297	2LCS051297
Prepared Date:	5/12/97	5/12/97	5/12/97	5/12/97
Analyzed Date:	5/12/97	5/12/97	5/12/97	5/12/97
Instrument I.D.#:	HP-2	HP-2	HP-2	HP-2
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L	60 µg/L
LCS Result:	17	20	19	56
LCS % Recov.:	85	100	95	93

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

**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, #1271

Jim Bava  
Project Manager



# 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: <u>AHon Geoscience</u>	Station No./Site Address: <u>04-FGN</u>
Address: <u>30 A Lindbergh Ave</u>	Project Contact: <u>Tom Seeliger</u>
City: <u>Livermore</u> State: <u>CA</u> Zip: <u>94550</u>	Mobil Oil Engineer:
Tel: <u>(510) 606-9150</u> Fax: <u>(510) 606-9260</u>	Sampler(s) (signature): <u>[Signature]</u>

Sample I.D.	Matrix	Date Sampled		Preservation	Number of Containers	Type of Containers	BTEX - EPA 602/8020	BTEX - TPH	EPA M602/8015/8020 (GAS)	TPH EPA Modified 8015	Gas <input type="checkbox"/> Diesel <input type="checkbox"/>	Oil & Grease - EPA 413.2	TPH - EPA 418.1	EPA 601/8010	EPA 624/8240	EPA 625/8270	Title 22 Metals EPA 6010/7000	TTLG <input type="checkbox"/> STLC <input type="checkbox"/>	Lead Org./DHS <input type="checkbox"/>	Lead Total <input type="checkbox"/>	EDB/DBCD - EPA 504	pH	Bioassay - Title 22 Haz. Waste	Bioassay - Effluent	CODING (check one)	
		Time	Time																							Code 1 <input type="checkbox"/>
MW-7A	H <sub>2</sub> O	5-7	12:25	Hcl	2	Vox	X																		X	Emergency Response
MW-4A			12:40				X																		X	Site Assessment
MW-2A			12:55				X																		X	Remediation (Plan Devlpmt.)
MW-3A			13:08				X																		X	Active Remed. (Install./Start-up)
MW-1A			13:20				X																		X	Active Remed. (O & M)

Relinquished by: <u>[Signature]</u>	Date/Time: _____	Received by: <u>[Signature]</u>	Date/Time: <u>5/9/97 12:30</u>	Turnaround Time: (check one): Normal _____ Same day _____ 1 day _____ 2 day _____ 5 day <input checked="" type="checkbox"/>
Relinquished by: <u>[Signature]</u>	Date/Time: <u>5/17/1400</u>	Received by: <u>[Signature]</u>	Date/Time: _____	
Relinquished by: <u>[Signature]</u>	Date/Time: _____	Received in Lab by: <u>[Signature]</u>	Date/Time: <u>5/9/97 1400</u>	
Remarks: <u>* Run Highest Concentration for 8260 Confirmation</u>				Sample Integrity: Intact _____ On Ice _____

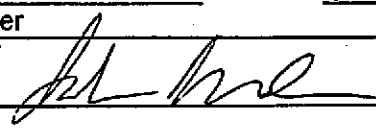
**EXHIBIT 8**

**WASTE DISPOSAL MANIFESTS**



# Monitoring Well Purge Water Transport Form

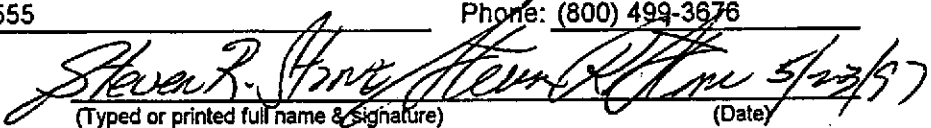
## Generator Information

Name: Mobil Oil Corporation Attn: Steve Pao  
 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. Jack Madden Mark Fritz for Mobil:  5-23-97  
(Date)

## Site Information

	Date Generated	Mobil Site No.	Amount Generated	Sampler's Initials		Date Generated	Mobil Site No.	Amount Generated	Sampler's Initials	
1	5-5-97	04-GPE	290	CC	16					
2	4-30-97	99-A01	100	CC	17					
3	5/6/97	04-FPA	230	CC	18					
4	5-7-97	04-FGD	100	CC	19					
5	5-8-97	04-NNH	70	CC	20					
6	5-20-97	04-394	510	CC + JM	21					
7	5-22-97	04-FG4	100	CC	22					
8					23					
9					24					
10					25					
11					26					
12					27					
13					28					
14					29					
15					30					
Total:								<u>1400</u>		

## 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  5/23/97  
(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.: 1296-1367-PS  
(Date)

# NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

2. Page 1 of

3. Document Number

NH- NE 43398

4. Generator's Name and Mailing Address

Mobil Oil  
3700 W. 190th Street TPT2  
Torrance, CA 90509-2929  
Generator's Phone 310 212 1877

Profile #

1296-1367-PS

5. Transporter Company Name

Clearwater Environmental Management Inc

US EPA ID Number

CA000007013

7. Transporter Phone

510-797 8511

8. Designated Facility Name and Site Address

McKittick Waste Treatment Site  
56533 Hwy 58, WEST  
McKittick, CA 93251

9. US EPA ID Number

CA098036831

10. Facility's Phone

805-762 7366

11. Waste Shipping Name and Description

a. NON HAZARDOUS WASTE LIQUID

12. Containers  
No. Type

001 TI 1400 G

13. Total Quantity

14. Unit WVol

15. Special Handling Instructions and Additional Information

Wear Protective Gear  
Emergency Contact  
510-797 8511  
NTM Kirk Hayward

Handling Codes for Wastes Listed Above

11a.

11b.

Site

Altam GeoScience  
304 Lindberg Ave  
Livermore, CA

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

John Mulder for Mobil

Signature

*[Signature]*

Month Day Year

7 7 7

17. Transporter Acknowledgement of Receipt of Materials

Printed/Typed Name

Steven R. Stone

Signature

*[Signature]*

Month Day Year

05/23/77

18. Discrepancy Indication Space

19. Facility Owner or Operator Certification of receipt of waste materials covered by this manifest.

Printed/Typed Name

Signature

Month Day Year