ALTON GEOSCIENCE
THE RESULTS TEAM

10/22/96
503

ENVIRONMENTAL PROTECTION
96 OCT 11 PM 2:56

October 10, 1996

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

Alton Project 41-0063-35

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

Dear Mr. Seery:

Please find enclosed the Third Quarter 1996 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 Tables
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

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
Mr. Brady Nagle, Alisto Engineering Group

M:\...\04FGNR04.QMS

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

ALTON GEOSCIENCE

Quarterly Progress Report Summary Sheet
Third Quarter 1996

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

Number of water zones:	1	This Page	1
FIELD ACTIVITY:		Date Sampled:	8/8-9/96
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:	7
		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:			9.81 feet
Approximate elevation of potentiometric surface above Mean Sea Level:			26.65 feet
Average Increase/Decrease in ground water elevations since last sampling episode:			1.84 foot decrease
Approximate flow direction and hydraulic gradient:			South at 0.003 feet/feet
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:	4	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 64 ppb TPH-G: ND to 6,800 ppb

ADDITIONAL INFORMATION:

A request to discontinue analyzing groundwater samples for TPH-D and TOG and sample MW-5A and MW-6A on a semi-annual basis was approved by Mr. Seery of the Alameda County Health Care Services Agency in a letter dated February 23, 1996.

Prepared by: _____ Chris Callegari, Staff Geologist

Approved by: _____ Matthew W. Katen, RG, Senior Geologist
California RG 5167

Alton Project No: 41-0063-35

Submittal Date: 10/10/96

REGISTERED GEOLOGIST
MATTHEW W KATEN
NO. 5167
STATE OF CALIFORNIA

EXHIBIT 1

SAMPLING SCHEDULE

MONITORING WELL SAMPLING SCHEDULE 1996
Former Mobil Station 04-FGN

Well Number	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
MW-1A	X	X	X	X
MW-2A	X	X	X	X
MW-3A	X	X	X	X
MW-4A	X	X	X	X
MW-5A	X		X	
MW-6A	X		X	
MW-7A	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 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 (ppb)	TOG (ppb)	TRPO (ppm)
MOBIL wells													
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		—	—	[illegible]	—	[illegible]	22	100	55	[illegible]**	—	—
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		—	—	[illegible]	—	[illegible]	11	6.8	8.1	[illegible]	—	—

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 (ppb)	TOG (ppb)	TRPO (ppm)
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	—	—
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	—	—
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	—	—

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 (ppb)	TOG (ppb)	TRPO (ppm)
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	—	—
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	—	—
UNOCAL wells													
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	—	—	—	—	—	—	—	—	—

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 (ppb)	TOG (ppb)	TRPO (ppm)
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	—	—	—	—	—	—	—	—	—
	2/8/96		7.52	28.82	—	—	—	—	—	—	—	—	—
	5/8/96		8.21	28.13	—	—	—	—	—	—	—	—	—
	8/8/96		9.54	26.80	—	—	—	—	—	—	—	—	—
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	—	—	—	—	—	—	—	—	—

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 (ppb)	TOG (ppb)	TRPO (ppm)
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	—	—	—	—	—	—	—	—	—
	5/10/95		9.97	27.07	—	—	—	—	—	—	—	—	—
	8/2/95		10.18	26.86	—	—	—	—	—	—	—	—	—
	11/2/95		11.67	25.37	—	—	—	—	—	—	—	—	—
	2/8/96		8.15	28.89	—	—	—	—	—	—	—	—	—
#	5/8/96		—	—	—	—	—	—	—	—	—	—	—
	8/8/96		10.24	26.80	—	—	—	—	—	—	—	—	—
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	—	—	—	—	—	—	—	—	—

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 (ppb)	TOG (ppb)	TRPO (ppm)
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	—	—	—
	11/23/94		10.21	25.46	—	—	—	—	—	—	—	—	—
	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	—	—	—	—	—	—	—	—	—
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	—	—	—	—	—	—	—	—	—

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 (ppb)	TOG (ppb)	TRPO (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	—	—	—	—	—	—	—	—	—
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	—	—	—	—	—	—	—	—	—
	5/10/95		—	—	—	—	—	—	—	—	—	—	—
	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	—	—	—	—	—	—	—	—	—

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 (ppb)	TOG (ppb)	TRPO (ppm)
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	—	—	—	—	—	—	—	—	—
	5/10/95		—	—	—	—	—	—	—	—	—	—	—
	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	—	—	—	—	—	—	—	—	—
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	—	—	—	—	—	—	—	—	—
	5/10/95		—	—	—	—	—	—	—	—	—	—	—
	8/2/95		9.31	26.19	—	—	—	—	—	—	—	—	—
	11/2/95		10.85	24.65	—	—	—	—	—	—	—	—	—

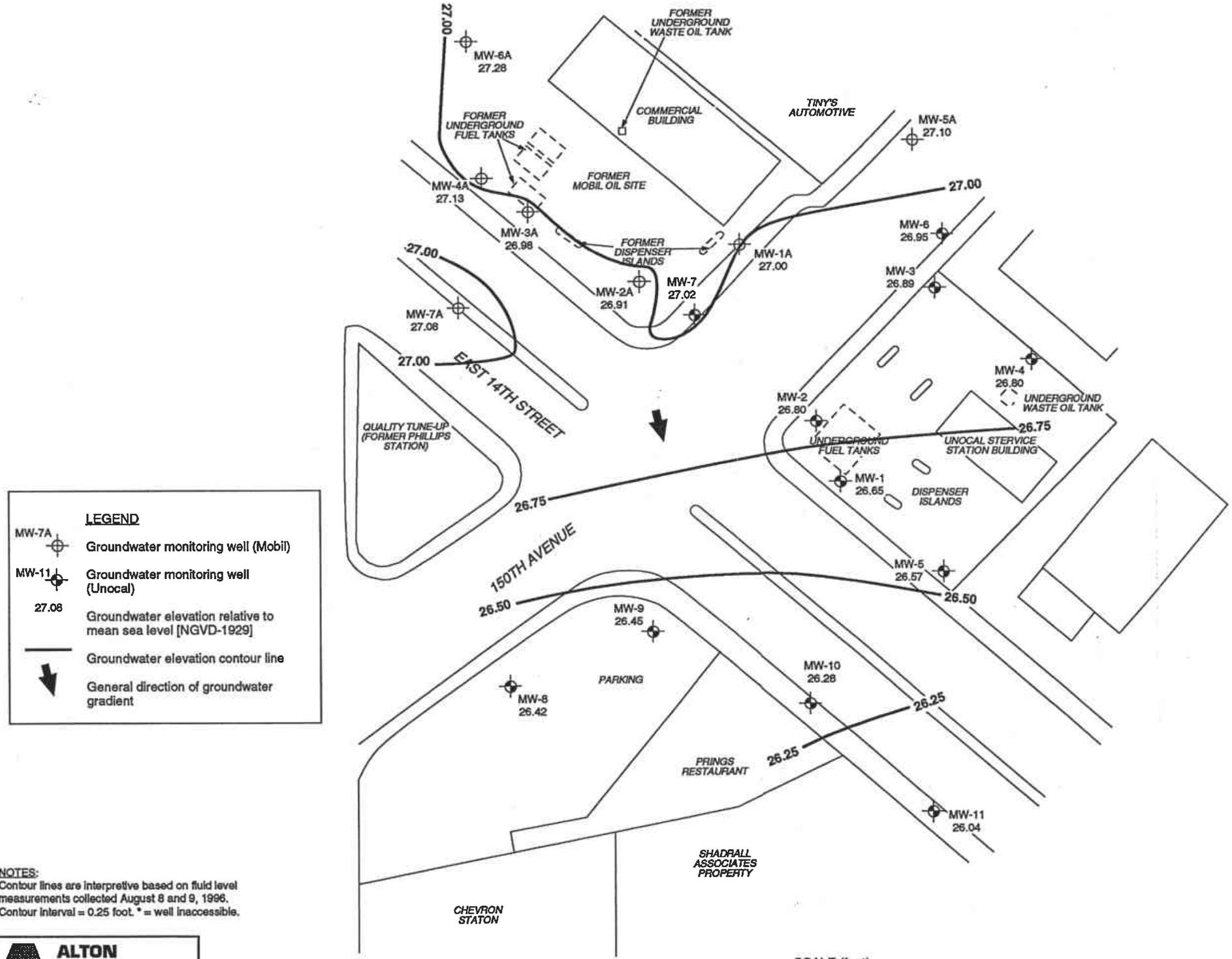
Groundwater Levels and Chemical Analysis

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 (ppb)	TOG (ppb)	TRPO (ppm)
MW-11	2/8/96		7.76	27.74	—	—	—	—	—	—	—	—	—
(con't)	5/8/96		8.50	27.00	—	—	—	—	—	—	—	—	—
	8/8/96		9.46	26.04	—	—	—	—	—	—	—	—	—

NOTES:

ppb = parts per billion
ppm = parts per million
TPH-G = total petroleum hydrocarbons as gasoline
TPH-D = total petroleum hydrocarbons as diesel
* = Unidentified hydrocarbons <C10
MTBE = methyl-tert butyl ether
ND = not detected at or above method detection limit
TRPO = total recoverable petroleum oil
— = not analyzed or not provided
TOG = total oil and grease
# = well inaccessible
** = MTBE concentration not confirmed by EPA Method 8240. EPA Method 8240 results indicate "ND" with detection limit 10 ppb.



NOTES:
Contour lines are interpretive based on fluid level measurements collected August 8 and 9, 1996.
Contour interval = 0.25 foot. * = well inaccessible.

ALTON GEOSCIENCE
Livermore, California

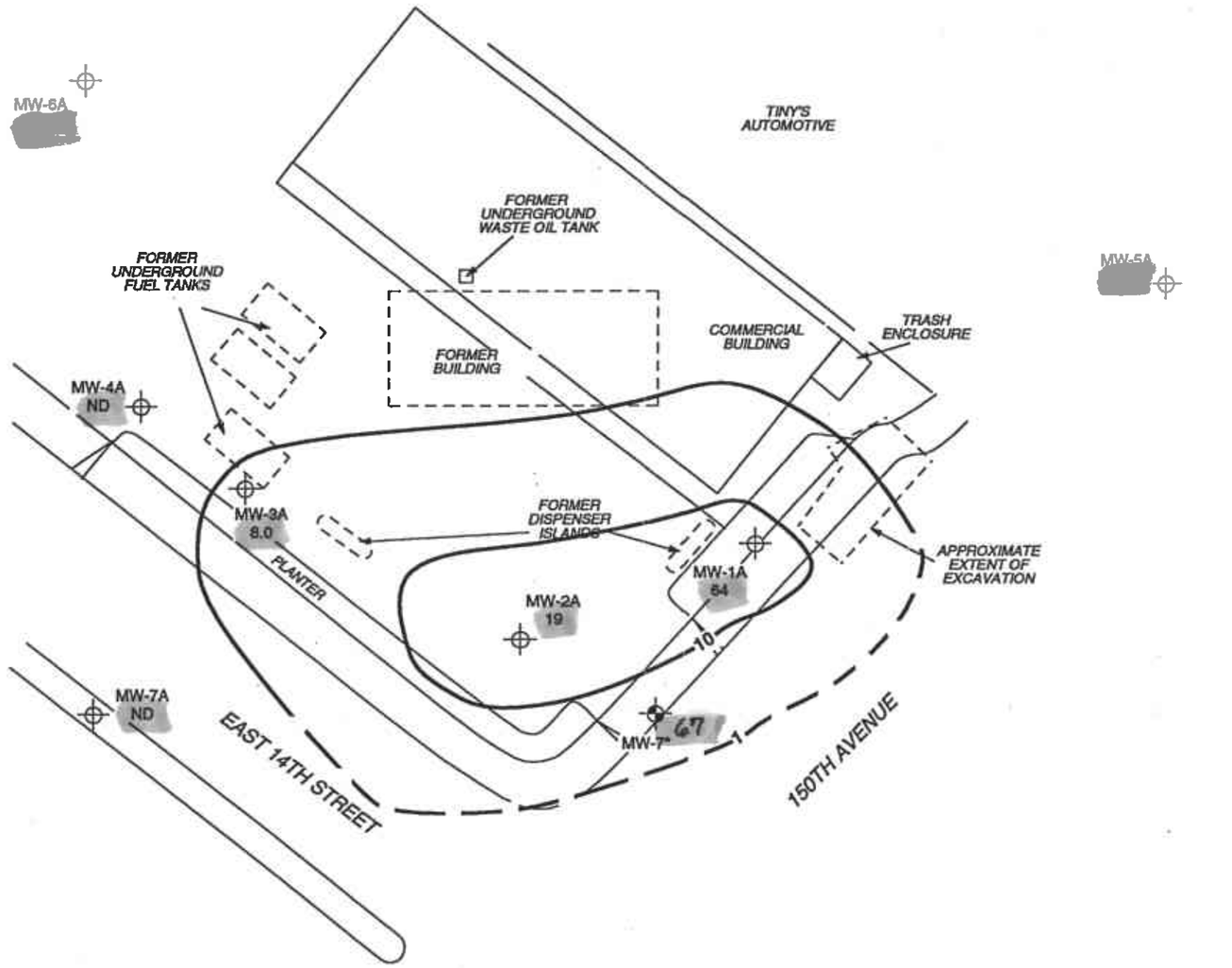
SOURCE: Allsto Engineering Group

GROUNDWATER ELEVATION CONTOUR MAP
August 8 and 9, 1996

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

FIGURE 2

04-FGN/Area Site



NOTES:
Results are based on analysis of groundwater samples collected August 20, 1996. ND = not detected at or above method detection limit; ppb = parts per billion. * = data not provided.

ALTON GEOSCIENCE
Livermore, California

SOURCE: Allsto Engineering Group

SCALE (feet)
0 15 30

DISSOLVED-PHASE BENZENE CONCENTRATIONS
August 20, 1996

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

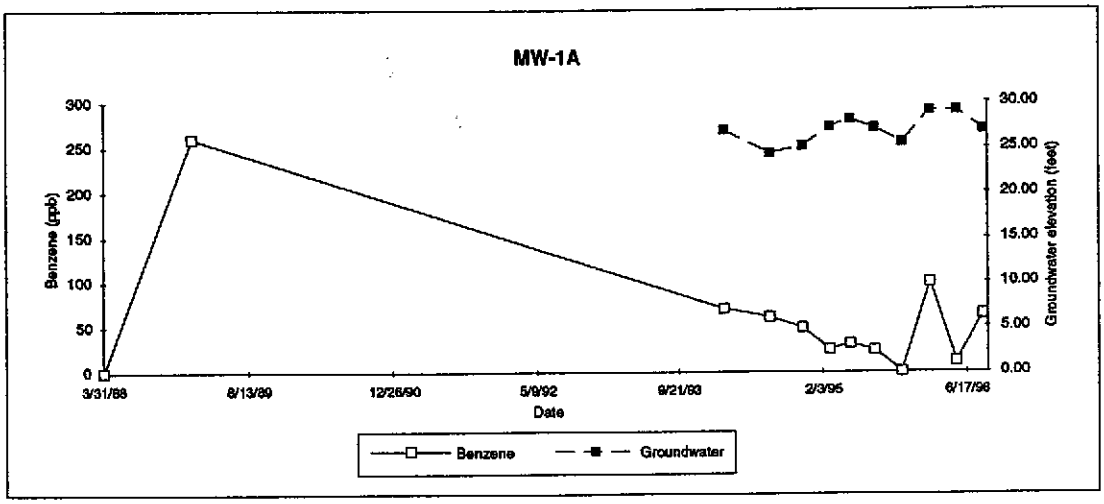
FIGURE 3

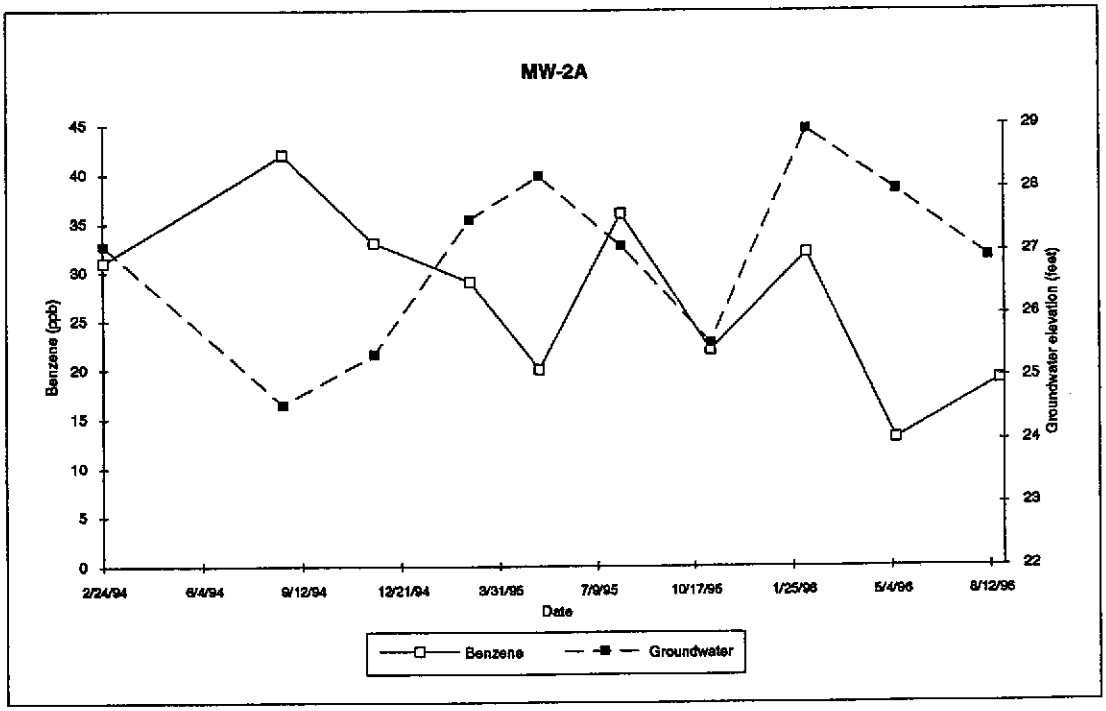
04-FGN/Site plan 11x17 09/25/96

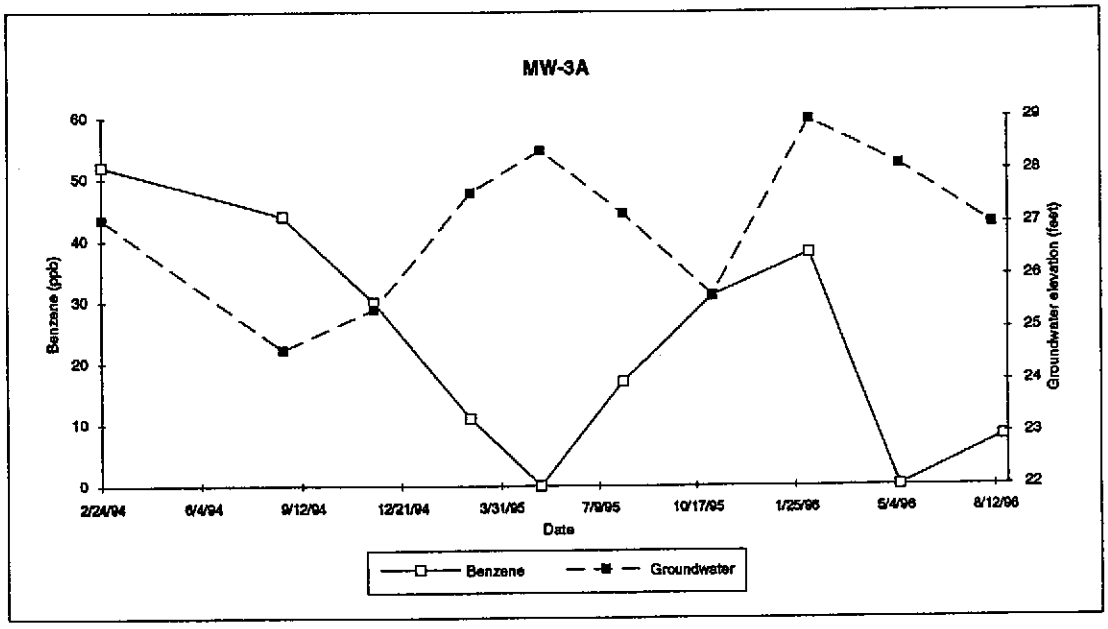
EXHIBIT 4

BENZENE VERSUS 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 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

Groundwater monitoring wells 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

DAILY FIELD REPORT

JOB NAME: 04 FGN	PROJECT NO.:	DATE: 8/9/96
LOCATION: SAN Leandro	WEATHER: Sunny warm	DAY: Friday
CONTRACTOR: ALTON	FOREMAN:	
FIELD TECHNICIAN: MARK FEITZ	INSPECTION/ TESTING OF measure DTW all wells, co-ordinated event.	

SUMMARY OF OPERATIONS:

- never saw other company at STATION ACROSS STREET.

- No well cap locks on any well

- numerous broken/missing bolts - MW-5A in street no bolts

DTW's

Well	Time	DTW
MW-6A	0910	9.82
MW-4A	0917	10.05
MW-3A	0925	9.95
MW-7A	0935	10.31
MW-5A	0945	8.81
MW-1A	0955	9.63
MW-2A	1000	9.71

On site 0900

Off site 1000

ALTON GEOSCIENCE
16510 ASTON ST.
IRVINE, CA 92714

GROUND WATER SAMPLING FIELD NOTES

Site: 04-FGN Project No.: 41-00630-05 Sampled By: JM Date: _____

Well No. MW-6A
Total Depth (feet) 24.0
Depth to Water (feet): 9.82
Water Column (feet): 14.18
80% Recharge Depth (feet): 12.65
Purge Method: Sub
Depth to Product (feet): 0
Product Recovered (gallons): 0
Casing Diameter (Inches): 4
1 Well Volume (gallons): 9.35

Time Start	Time Stop	Depth To Water (feet)	Volume Purged (gallons)	Conductivity (uS/cm)	Temperature (F, C)	pH
1003			9	.97	68.1	6.85
			18	.98	69.4	6.86
	1013	11.17	27	.97	70.8	6.85
	Total Purged		28.5	Time Sampled		1024

28.1

Comments:
Turbidity =

Well No. MW-7A
Total Depth (feet) 24.50
Depth to Water (feet): 13.31
Water Column (feet): 14.19
80% Recharge Depth (feet): 13.15
Purge Method: Sub
Depth to Product (feet): 0
Product Recovered (gallons): 0
Casing Diameter (Inches): 4
1 Well Volume (gallons): 9.35

Time Start	Time Stop	Depth To Water (feet)	Volume Purged (gallons)	Conductivity (uS/cm)	Temperature (F, C)	pH
			9	.57	70.4	7.17
			18	.58	71.2	7.25
		11.42	27	.59	71.5	7.35
	Total Purged		29	Time Sampled		1110

28.

Comments:
Turbidity =

Well No. MW-5A
Total Depth (feet) 23.00
Depth to Water (feet): 8.81
Water Column (feet): 14.19
80% Recharge Depth (feet): 11.65
Purge Method: Sub
Depth to Product (feet): 0
Product Recovered (gallons): 0
Casing Diameter (Inches): 4
1 Well Volume (gallons): 9.36

Time Start	Time Stop	Depth To Water (feet)	Volume Purged (gallons)	Conductivity (uS/cm)	Temperature (F, C)	pH
			9	.62	71.3	7.14
			18	.81	71.6	7.18
		9.82	27	.79	72.5	7.23
	Total Purged		26	Time Sampled		1137

28

Comments:
Turbidity =

Well No. MW-4A
Total Depth (feet) 23.50
Depth to Water (feet): 10.05
Water Column (feet): 13.45
80% Recharge Depth (feet): 12.74
Purge Method: Sub
Depth to Product (feet): 0
Product Recovered (gallons): 0
Casing Diameter (Inches): 4
1 Well Volume (gallons): 8.8

Time Start	Time Stop	Depth To Water (feet)	Volume Purged (gallons)	Conductivity (uS/cm)	Temperature (F, C)	pH
			9	.87	73.4	8.96
			18	.86	72.7	6.97
		11.68	27	.84	71.4	6.95
	Total Purged		27	Time Sampled		1153

26.

Comments:
Turbidity =

Well No. MW-3A
Total Depth (feet) 22.48
Depth to Water (feet): 9.95
Water Column (feet): 12.53
80% Recharge Depth (feet): 12.46
Purge Method: Sub
Depth to Product (feet): 0
Product Recovered (gallons): 0
Casing Diameter (Inches): 2
1 Well Volume (gallons): 2.13

Time Start	Time Stop	Depth To Water (feet)	Volume Purged (gallons)	Conductivity (uS/cm)	Temperature (F, C)	pH
			2	.58	69.7	7.37
			4	.59	70.4	7.48
		10.55	7	.58	71.8	7.53
	Total Purged		7	Time Sampled		1225

6.40

Comments:
Turbidity =

Well No. MW-2A
Total Depth (feet) 24.5
Depth to Water (feet): 9.71
Water Column (feet): 14.79
80% Recharge Depth (feet): 12.67
Purge Method: Sub
Depth to Product (feet): 0
Product Recovered (gallons): 0
Casing Diameter (Inches): 2
1 Well Volume (gallons): 2.5

Time Start	Time Stop	Depth To Water (feet)	Volume Purged (gallons)	Conductivity (uS/cm)	Temperature (F, C)	pH
			2	.77	70.2	6.87
			4	.87	69.9	6.75
		11.08	7	.81	68.3	6.85
	Total Purged		8	Time Sampled		1241

7.5

Comments:
Turbidity =

Alton Geoscience, Northern California Operations

GROUND WATER SAMPLING FIELD NOTES

Site: 04-FGN Project No.: 41-0063-35 Sampled By: JM Date: 8/19/96

Well No. MW-1A
Total Depth (feet) 18.60
Depth to Water (feet): 9.63
Water Column (feet): 8.97
80% Recharge Depth (feet): 11.42
Purge Method: Sub
Depth to Product (feet): 0
Product Recovered (gallons): 0
Casing Diameter (Inches): 2
1 Well Volume (gallons): 1.52 4.6

Time Start	Time Stop	Depth To Water (feet)	Volume Purged (gallons)	Conductivity (uS/cm)	Temperature (F, C)	pH
1250			1	.97	70.4	6.85
			3	.93	71.2	6.80
	1255	10.51	5	.92	71.5	6.75
	Total Purged		5	Time Sampled		1309

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 =

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 =

MONITORING
PURGING
DISPOSAL
SAMPLING
mpds SERVICES, INCORPORATED

Date: 9/9/96 ~~8-29-96~~

Transmittal Page

TO: ALTON GEOSCIENCE

~~ALYSA KELLER~~ - SEELIGER

TOM FAX (510) 606-9260

FROM: Gary Tejirian

Number of Pages (Including Cover): 2

SUBJECT: JOINT MONITORING/SAMPLING ON AUGUST 9, 1996

AT UNOCAL # 3292 SAN LEANDRO, CA

FORMER MOBILE 04-FGN
14994 EAST 14TH ST. SAN LEANDRO, CA

ATTACHED PLEASE FIND OUR WATER LEVEL DATA; COULD YOU PLEASE FAX US YOUR DATA AS SOON AS POSSIBLE.

IF YOU HAVE ANY QUESTIONS, PLEASE CALL ME AT (510) 602-5120. THANK YOU.

Should any problems occur in receiving, please call the number listed below.

2401 Stanwell Drive, Suite 300, Concord, CA 94520
TEL: (510) 602-5120 FAX: (510) 689-1918

Table 1
Summary of Monitoring Data

(Monitored and Sampled on August 8, 1996)

Well	Groundwater Elevation (Feet MSL)	Depth to Water (Feet)	Total Well Depth (Feet)	Product Thickness (Feet)	Sheen	Purge Volume (Gallons)
MW1	26.65	9.72	19.00	0	No	6.5
MW2	26.80	9.54	19.12	0	No	6.5
MW3	26.89	9.53	22.16	0	No	9
MW4	26.80	10.24	19.64	0	No	6.5
MW5	26.57	9.37	22.16	0	No	9
MW6	26.95	8.72	20.15	0	No	8
MW7	27.02	9.07	21.25	0	No	8.5
MW8	26.42	10.47	19.10	0	No	6
MW9	26.45	9.84	19.11	0	No	6.5
MW10	26.28	9.76	19.91	0	No	7
MW11	26.04	9.46	19.00	0	No	6.5
MW2‡	25.46	9.98	19.99	0	No	7
MW3‡	26.08	9.73	20.20	0	No	7.5

♦ The depth to water level and total well depth measurements were taken from the top of the well casings.

★ Monitoring well MW1 was resampled on November 20, 1995. The vial containing the ground water sample collected from this well on November 2, 1995, was inadvertently broken by the laboratory.

★★ Monitoring wells MW8 and MW11 were resampled on February 14, 1996. The vials containing the ground water samples collected from these wells on February 8, 1996, were inadvertently broken by the laboratory.

• The elevations of the top of the well casings are relative to Mean Sea Level (MSL), per a Benchmark located at the northwest corner of East 14th Street and 150th Avenue (elevation = 36.88 feet MSL).

•• The elevations of the top of the well casings are relative to Mean Sea Level (MSL), per Chevron monitoring well MW-6 used as a benchmark (elevation = 36.92 feet MSL).

‡ Wells located on Shadrall Property.

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 #04-FGN	Sampled: Aug 20, 1996
30-A Lindbergh Ave.	Sample Matrix:	Water	Received: Aug 21, 1996
Livermore, CA 94550	Analysis Method:	EPA 5030/8015 Mod./8020	Reported: Aug 29, 1996
Attention: Tom Seeliger	First Sample #:	608-1559	

TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX DISTINCTION

Analyte	Reporting Limit µg/L	Sample I.D. 608-1559 MW-6A	Sample I.D. 608-1560 MW-7A	Sample I.D. 608-1561 MW-5A	Sample I.D. 608-1562 MW-4A	Sample I.D. 608-1563 MW-3A	Sample I.D. 608-1564 MW-2A
QC Batch Number:		GC082696 802011A	GC082696 802011A	GC082696 802011A	GC082696 802011A	GC082696 802011A	GC082796 802002A
Purgeable Hydrocarbons	50	N.D.	N.D.	N.D.	N.D.	5,600	2,500
Benzene	0.50	N.D.	N.D.	N.D.	N.D.	8.0	19
Toluene	0.50	N.D.	N.D.	1.8	N.D.	29	11
Ethyl Benzene	0.50	N.D.	N.D.	N.D.	N.D.	180	6.8
Total Xylenes	0.50	N.D.	N.D.	N.D.	N.D.	23	8.1
Chromatogram Pattern:		--	--	--	--	Gasoline & Unidentified Hydrocarbons >C8	Gasoline & Unidentified Hydrocarbons >C8

Quality Control Data

Report Limit Multiplication Factor:	1.0	1.0	1.0	1.0	5.0	10
Date Analyzed:	8/26/96	8/26/96	8/26/96	8/26/96	8/26/96	8/27/96
Instrument Identification:	HP-11	HP-11	HP-11	HP-11	HP-11	HP-2
Surrogate Recovery, %: (QC Limits = 70-130%)	88	90	94	91	97	124

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

RECEIVED
SEP 30 1996

6081559.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 #04-FGN	Sampled: Aug 20, 1996
30-A Lindbergh Ave.	Sample Matrix:	Water	Received: Aug 21, 1996
Livermore, CA 94550	Analysis Method:	EPA 5030/8015 Mod./8020	Reported: Aug 29, 1996
Attention: Tom Seeliger	First Sample #:	608-1565	

QC Batch Number: GC082696
802011A

TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX DISTINCTION

Analyte	Reporting Limit µg/L	Sample I.D. 608-1565 MW-1A
Purgeable Hydrocarbons	50	6,800
Benzene	0.50	64
Toluene	0.50	22
Ethyl Benzene	0.50	100
Total Xylenes	0.50	55
Chromatogram Pattern:		Gasoline

Quality Control Data

Report Limit Multiplication Factor:	20
Date Analyzed:	8/26/96
Instrument Identification:	HP-2
Surrogate Recovery, %: (QC Limits = 70-130%)	144

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, 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 #04-FGN	Sampled: Aug 20, 1996
30-A Lindbergh Ave.	Sample Descript:	Water	Received: Aug 21, 1996
Livermore, CA 94550	Analysis for:	MTBE (Modified EPA 8020)	
Attention: Tom Seeliger	First Sample #:	608-1559	Analyzed: Aug 26-27, 1996
			Reported: Aug 30, 1996

LABORATORY ANALYSIS FOR: MTBE (Modified EPA 8020)

Sample Number	Sample Description	Detection Limit µg/L	Sample Result µg/L	QC Batch Number	Instrument ID
608-1559	MW-6A	0.60	N.D.	GC082696802011A	HP-11
608-1560	MW-7A	0.60	N.D.	GC082696802011A	HP-11
608-1561	MW-5A	0.60	9.4	GC082696802011A	HP-11
608-1562	MW-4A	0.60	N.D.	GC082696802011A	HP-11
608-1563	MW-3A	3.0	12	GC082696802011A	HP-11
608-1564	MW-2A	6.0	36	GC082796802011A	HP-2
608-1565	MW-1A	12	130	GC082696802011A	HP-2

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL, #1271

Jim Bava
Project Manager

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 #04-FGN	Sampled:	Aug 20, 1996
30-A Lindbergh Ave.	Sample Descript:	Water, MW-1A	Received:	Aug 21, 1996
Livermore, CA 94550	Analysis Method:	EPA 8240 & "T.I.C."	Analyzed:	Aug 28, 1996
Attention: Tom Seeliger	Lab Number:	608-1565	Reported:	Aug 30, 1996

QC Batch Number: MS0828968240S2A

Instrument ID: GC/MS-2

VOLATILE ORGANICS by GC/MS, TENTATIVELY IDENTIFIED COMPOUNDS

Analyte	Detection Limit µg/L	Sample Results µg/L
MTBE	10	N.D.

SEQUOIA ANALYTICAL, #1271

Jim Bava
Project Manager

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

Client Project ID: Mobil #04-FGN
Matrix: Liquid
QC Sample Group: 6081559-565
Reported: Aug 29, 1996

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC082696	GC082696	GC082696	GC082696
	802011A	802011A	802011A	802011A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030
Analyst:	S. Chullakorn	S. Chullakorn	S. Chullakorn	S. Chullakorn
MS/MSD #:	6081010	6081010	6081010	6081010
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	8/26/96	8/26/96	8/26/96	8/26/96
Analyzed Date:	8/26/96	8/26/96	8/26/96	8/26/96
Instrument I.D.#:	HP-11	HP-11	HP-11	HP-11
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L	60 µg/L
Result:	21	18	20	58
MS % Recovery:	105	90	100	97
Dup. Result:	21	19	20	60
MSD % Recov.:	105	95	100	100
RPD:	0.0	5.4	0.0	3.4
RPD Limit:	0-25	0-25	0-25	0-25

LCS #:	11LCS082696	11LCS082696	11LCS082696	11LCS082696
Prepared Date:	8/26/96	8/26/96	8/26/96	8/26/96
Analyzed Date:	8/26/96	8/26/96	8/26/96	8/26/96
Instrument I.D.#:	HP-11	HP-11	HP-11	HP-11
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L	60 µg/L
LCS Result:	20	19	20	62
LCS % Recov.:	100	95	100	103

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

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

Client Project ID: Mobil #04-FGN
Matrix: Liquid
QC Sample Group: 6081559-565

Reported: Aug 29, 1996

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC082696	GC082696	GC082696	GC082696
	802011A	802011A	802011A	802011A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030
Analyst:	S. Chullakorn	S. Chullakorn	S. Chullakorn	S. Chullakorn
MS/MSD #:	6080992	6080992	6080992	6080992
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	8/26/96	8/26/96	8/26/96	8/26/96
Analyzed Date:	8/26/96	8/26/96	8/26/96	8/26/96
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:	20	20	21	62
MS % Recovery:	100	100	105	103
Dup. Result:	22	22	24	69
MSD % Recov.:	110	110	120	115
RPD:	9.5	9.5	13	11
RPD Limit:	0-25	0-25	0-25	0-25

LCS #:	2LCS082696	2LCS082696	2LCS082696	2LCS082696
Prepared Date:	8/26/96	8/26/96	8/26/96	8/26/96
Analyzed Date:	8/26/96	8/26/96	8/26/96	8/26/96
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:	20	20	21	63
LCS % Recov.:	100	100	105	105

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

SEQUOIA ANALYTICAL, #1271

Jim Bava
Project Manager

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Sequoia Analytical

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

Client Project ID: Mobil #04-FGN
Matrix: Liquid
QC Sample Group: 6081559-565

Reported: Aug 29, 1996

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC082796 802002A	GC082796 802002A	GC082796 802002A	GC082796 802002A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030
Analyst:	S. Chullakorn	S. Chullakorn	S. Chullakorn	S. Chullakorn
MS/MSD #:	6081840	6081840	6081840	6081840
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	8/27/96	8/27/96	8/27/96	8/27/96
Analyzed Date:	8/27/96	8/27/96	8/27/96	8/27/96
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:	20	20	21	62
MS % Recovery:	100	100	105	103
Dup. Result:	20	20	22	63
MSD % Recov.:	100	100	110	105
RPD:	0.0	0.0	4.7	1.6
RPD Limit:	0-25	0-25	0-25	0-25
LCS #:	2LCS082796	2LCS082796	2LCS082796	2LCS082796
Prepared Date:	8/27/96	8/27/96	8/27/96	8/27/96
Analyzed Date:	8/27/96	8/27/96	8/27/96	8/27/96
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:	18	18	19	57
LCS % Recov.:	90	90	95	95
MS/MSD LCS Control Limits	70-130	70-130	70-130	70-130

SEQUOIA ANALYTICAL, #1271

Jim Bava
Project Manager

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

Client Project ID: Mobil #04-FGN
Matrix: Liquid
QC Sample Group: 6081559-565

Reported: Aug 30, 1996

QUALITY CONTROL DATA REPORT

Analyte:	1,1-Dichloroethene	Trichloroethene	Benzene	Toluene	Chloro-benzene
QC Batch#:	MS082896	MS082896	MS082896	MS082896	MS082896
	8240S2A	8240S2A	8240S2A	8240S2A	8240S2A
Analy. Method:	EPA 8240	EPA 8240	EPA 8240	EPA 8240	EPA 8240
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030	EPA 5030
Analyst:	K. Nill	K. Nill	K. Nill	K. Nill	K. Nill
MS/MSD #:	6081639	6081639	6081639	6081639	6081639
Sample Conc.:	N.D.	N.D.	N.D.	N.D.	N.D.
Prepared Date:	8/28/96	8/28/96	8/28/96	8/28/96	8/28/96
Analyzed Date:	8/28/96	8/28/96	8/28/96	8/28/96	8/28/96
Instrument I.D.#:	GC/MS-2	GC/MS-2	GC/MS-2	GC/MS-2	GC/MS-2
Conc. Spiked:	50 µg/L	50 µg/L	50 µg/L	50 µg/L	50 µg/L
Result:	47	45	50	46	43
MS % Recovery:	95	90	100	92	87
Dup. Result:	49	50	54	49	48
MSD % Recov.:	97	99	108	99	96
RPD:	2.5	9.3	7.7	6.7	10
RPD Limit:	0-25	0-25	0-25	0-25	0-25

LCS #:	LCS082896	LCS082896	LCS082896	LCS082896	LCS082896
Prepared Date:	8/28/96	8/28/96	8/28/96	8/28/96	8/28/96
Analyzed Date:	8/28/96	8/28/96	8/28/96	8/28/96	8/28/96
Instrument I.D.#:	GC/MS-2	GC/MS-2	GC/MS-2	GC/MS-2	GC/MS-2
Conc. Spiked:	50 µg/L	50 µg/L	50 µg/L	50 µg/L	50 µg/L
LCS Result:	44	49	52	48	46
LCS % Recov.:	87	97	103	96	93

MS/MSD LCS Control Limits	65-135	70-130	70-130	70-130	70-130

SEQUOIA ANALYTICAL, #1271

Jim Bava
Project Manager

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SEQUOIA ANALYTICAL
CHAIN OF CUSTODY

680 Chesapeake Drive • Redwood City, CA 94063 • (415) 364-9600 FAX (415) 364-9233
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1900 Bates Ave., Suite LM • Concord, CA 94520 • (510) 686-9600 FAX (510) 686-9689

Mobil Oil Consulting Firm: Alton Geoscience	Station No./Site Address: 04-FON
Address: 30 A Lindbergh Ave	Project Contact: Tom Seeliger
City: Livermore State: CA Zip: 94550	Mobil Oil Engineer: Cherine Fowler
Tel: (510) 606-9150 Fax.: (510) 606-9626	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-6A	H2O	8-20-96	1034	HCl				X				6081559			AC						X
MW-7A			1110					X				6081560									X
MW-5A			1133					X				6081561									X
MW-4A			1153					X				6081562									X
MW-3A			1225					X				6081563									X
MW-2A			1245					X				6081564									X
MW-1A			1309					X				6081565									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: 8/21/96 1020	Relinquished by:	Date/Time: 8/21/96 1020
Relinquished by:	Date/Time: 8/21/96 1206	Relinquished by:	Date/Time: 8-21 1307
Relinquished by:	Date/Time: 8-21	Relinquished in Lab by:	Date/Time: 8/21/96 1430

Turnaround Time: (check one):
Normal ___ Same day ___
1 day ___ 2 day ___
5 day X → very Important That This is within 5 days

Sample Integrity:
Intact ___ On Ice ___

Remarks:
* Run Highest MTBE for 8240