

ENVIRONMENTAL  
PROTECTION  
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July 22, 1996

Mr. Scott Seery  
Alameda County Environmental Health Department  
Environmental Protection Division  
1131 Harbor Bay Parkway, Room 250  
Alameda, California 94502

RE: FORMER MOBIL STATION 04-H6J  
1024 MAIN STREET  
PLEASANTON, CALIFORNIA

Alton Project No. 30-0065

Mr. Seery:

Please find enclosed the Second 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
- Exhibit 3: Figures 1 through 3 (Vicinity Map, Groundwater Elevation Contour Map, and Dissolved-Phase Benzene Concentrations)
- Exhibit 4: Benzene Versus Groundwater Elevation Graphs
- Exhibit 5: Vapor Extraction System Performance Tables and Graphs
- Exhibit 6: Groundwater Remediation Performance Tables
- Exhibit 7: Well Purging and Groundwater Sampling Protocol
- Exhibit 8: Monitoring Well Sampling Forms
- Exhibit 9: Analytical Laboratory Data Sheets

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 Project Geologist, at (510) 606-9150.

Sincerely,

ALTON GEOSCIENCE

*Ron A. Scheele*  
*kg*

Ron A. Scheele  
Project Geologist

cc: Ms. Cherine Foutch, Mobil Oil Corporation  
Mr. Kevin Graves, California Regional Water Quality Control Board, SFBR  
Mr. Gary Lee, Pleasanton Department of Works  
Mr. Craig Mayfield, Alameda County Flood Control & Water Conservation District

Alton Geoscience

Quarterly Progress Report Summary Sheet  
Second Quarter 1996

**Mobil Service Station 04-H6J**  
**1024 Main Street**  
**Pleasanton, California**

Case # N/A  
BAAQMD # 14053  
DSRSD sewer discharge permit # 95010

Number of water zones:	1	This Page	1
<b>FIELD ACTIVITY:</b>		Date Sampled:	17-May-96
Number of ground water wells on-site:	12	Ground Water Wells monitored:	15
Number of ground water wells off-site:	3	Ground Water Wells sampled:	10
Phase of Investigation: Vadose Zone:	Remediation	<del>Ground Water Wells with Free Product:</del>	1
		Ground Water Phase:	Remediation
<b>SITE HYDROGEOLOGY:</b>			
Approximate depth to ground water below ground surface:			39.8 feet
Approximate elevation of potentiometric surface above Mean Sea Level:			307.57 feet
Average Increase/Decrease in ground water elevations since last sampling episode:			Decrease 2.0 feet
Approximate flow direction and hydraulic gradient:			Cone of depression, pumping conditions
<b>GROUND WATER CONTAMINATION (BENZENE MCL=1.0 ppb):</b>			
Wells containing free product:	0	Range in Thickness of Free Product:	0
Number of wells with concentrations below MCL:	3	Volume of Free Product Recovered This Period:	0
Number of wells with concentrations at or above MCL:	7	Volume of Free Product Recovered To Date:	0
Nature of contamination:	Gasoline	Range in Concentrations:	Benzene: <0.50 to 2,700 ppb TPH-G: <50 to 81,000 ppb
<b>GROUND WATER REMEDIATION PERFORMANCE</b>		Date Started:	5-May-95
Technology used:	Pump & treat w/ air stripper	Number of Wells Extracting Ground Water:	4 (RW-1 through RW-4)
Amount of Groundwater Extracted This Quarter(gallons):	241,650	Carbon Change:	N/A
Total Amount of Groundwater Extracted (gallons):	2,232,070		
Operating days this quarter:	39 days		
Total operating Days:	356 days		
<b>VAPOR EXTRACTION PERFORMANCE</b>		Date Started:	4-Apr-95
Technology used:	Catalytic Oxidizer	Maximum influent Concentration (ppmv):	220 ppmv
Number of vapor wells onsite:	9	Maximum Diluted Influent Concentration (ppmv):	30 ppmv
Number of vapor extraction wells open:	3	Amount of hydrocarbons removed this quarter:	64 gallons
Operating Days this quarter:	39 days	Cumulative amount of hydrocarbons removed:	3,521 gallons
Total operating Days:	275 days	Operating Mode:	Catalytic
		Conversion Date (Downsized VES blower):	1/8/96
<b>ADDITIONAL INFORMATION:</b>			
Site monitored and sampled quarterly, but jointly with former Unocal Station # 543 on a semi-annual schedule, i.e., first and third quarters. Monitoring Wells MW-3, MW-5, MW-7, MW-8 and Vapor Wells VMW-1 through VMW-4 are shallow wells which are historically dry Vapor extraction wells MW-1, MW-2, VMW-4 and combined groundwater/vapor extraction wells RW-2, RW-3, RW-4 were closed to soil vapor recovery			

Prepared by: Ron Scheele

Ron Scheele  
Project Manager

Alton Project No: 30-0065

Approved by: Matthew W Kater  
California RG 5167

Matthew W. Kater, RG  
Senior Geologist

Submittal Date: 7/29/96



1  
2  
3

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

MONITORING WELL SAMPLING SCHEDULE 1996  
Former Mobil Station 04-H6J

Well Number	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
MW-1	X	X	X	X
MW-2	X	X	X	X
MW-3	na	na	na	na
MW-4	X	X	X	X
MW-5	na	na	na	na
MW-6	X	X	X	X
MW-7	na	na	na	na
MW-8	na	na	na	na
MW-10	X	X	X	X
MW-11	X	X	X	X
MW-12	X	X	X	X
RW-1	X	X	X	X
RW-2	X	X	X	X
RW-3	X	X	X	X
RW-4	X	X	X	X

NOTES: X = well scheduled for sampling  
na = well historically dry, screened above water table

**EXHIBIT 2**  
**GROUNDWATER LEVELS AND CHEMICAL ANALYSES**

## Groundwater Levels and Chemical Analysis

Former Mobil Station 04-H6J

Sample ID	Date	Casing Elevation (feet)	Product Thickness (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)
MW-1	04/12/90	348.03	0.00	43.57	304.46	3,600	—	73	13	3	180	—
	10/18/90		0.00	43.18	304.85	5,000	ND	700	360	170	480	—
	08/06/91		0.00	38.65	309.38	2,600	—	310	340	110	340	—
	01/08/92		0.00	38.68	309.35	2,400	—	270	370	18	340	—
	04/30/92		0.00	39.93	308.10	1,300	—	150	120	12	160	—
	07/31/92		0.00	43.05	304.98	ND	—	ND	ND	ND	ND	—
	10/27/92		0.00	42.86	305.17	2,700	—	320	310	84	310	—
	01/22/93		0.00	34.88	313.15	2,800	—	190	340	87	320	—
	04/05/93		0.00	33.71	314.32	6,000	—	410	460	51	500	—
	07/06/93		0.00	35.46	312.57	2,200	—	140	240	32	180	—
	11/30/93		0.00	37.81	310.22	450	—	68	34	ND	48	—
	01/27/94		0.00	42.10	305.93	1,000	—	270	330	44	190	—
	04/25/94		0.00	40.33	307.70	—	—	—	—	—	—	—
	04/26/94		—	—	—	3,500	—	310	370	22	320	—
	07/08/94		0.00	41.39	306.64	640	—	120	87	15	43	—
	10/05/94		0.00	42.19	305.84	970	—	110	140	21	90	—
	02/21/95		0.00	34.73	313.30	3,500	—	200	270	24	100	—
	05/03/95		0.00	34.67	313.36	160	—	7.8	12	4.5	20	—
	08/04/95		0.00	37.00	311.03	1,900	—	99	330	40	570	10
	11/10/95		0.00	39.66	308.37	610	—	150	56	22	89	—
02/12/96		0.00	36.19	311.84	470	—	3.0	37	7.8	140	1.3	
05/17/96		0.00	35.82	312.21	ND	—	ND	ND	ND	ND	ND	
MW-2	04/12/90	348.45	0.00	44.14	304.31	64,000	—	5,500	7,600	1,900	7,800	—
	10/18/90		0.00	43.18	305.27	83,000	10,000	6,800	9,100	2,400	11,000	—
	08/06/91		0.00	39.19	309.26	160,000	—	16,000	25,000	4,300	19,000	—
	01/08/92		0.02	39.40	309.07	—	—	—	—	—	—	—

## Groundwater Levels and Chemical Analysis

Former Mobil Station 04-H6J

Sample ID	Date	Casing Elevation (feet)	Product Thickness (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)
MW-2	04/30/92		0.00	40.50	307.95	71,000	—	9,200	19,000	3,700	15,000	—
(cont')	07/31/92		0.15	43.64	304.92	—	—	—	—	—	—	—
	10/27/92		Trace	43.53	304.92	—	—	—	—	—	—	—
	01/22/93		Trace	35.55	312.90	—	—	—	—	—	—	—
	04/05/93		Trace	34.41	314.04	—	—	—	—	—	—	—
	07/06/93		Trace	35.98	312.47	—	—	—	—	—	—	—
	11/30/93		0.48	38.78	310.03	—	—	—	—	—	—	—
	01/27/94		0.01	42.50	305.96	—	—	—	—	—	—	—
	04/25/94		Trace	40.32	308.13	—	—	—	—	—	—	—
	07/08/94		Trace	42.46	305.99	—	—	—	—	—	—	—
	10/05/94		Trace	42.78	305.67	—	—	—	—	—	—	—
	02/21/95		0.12	34.88	313.66	—	—	—	—	—	—	—
	05/03/95		0.62	35.30	313.62	—	—	—	—	—	—	—
	08/04/95		0.20	37.21	311.39	—	—	—	—	—	—	—
	11/10/95		0.24	39.87	308.76	—	—	—	—	—	—	—
	02/12/96		Trace	36.16	312.29	—	—	—	—	—	—	—
	05/17/96		0.00	35.95	312.50	57,000	—	980	3,000	940	6,500	ND
MW-3	04/12/90	347.97	0.00	23.18	324.79	2,100	—	32	56	31	170	—
	10/18/90		0.00	14.28	333.69	110	ND	3	3	1	5	—
	08/06/91		—	Dry	—	—	—	—	—	—	—	—
	01/08/92		0.00	32.36	315.61	680	—	8.9	26	8.5	72	—
	04/30/92		—	Dry	—	—	—	—	—	—	—	—
	07/31/92		—	Dry	—	—	—	—	—	—	—	—
	10/27/92		—	Dry	—	—	—	—	—	—	—	—
	01/22/93		0.00	27.30	320.67	2,600	—	240	300	170	440	—
	04/05/93		—	Dry	—	—	—	—	—	—	—	—

## Groundwater Levels and Chemical Analysis

Former Mobil Station 04-H6J

Sample ID	Date	Casing Elevation (feet)	Product Thickness (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)
MW-3	07/06/93		—	Dry	—	—	—	—	—	—	—	—
(cont)	11/30/93		—	Dry	—	—	—	—	—	—	—	—
	01/27/94		—	Dry	—	—	—	—	—	—	—	—
	04/25/94		—	Dry	—	—	—	—	—	—	—	—
	07/08/94		—	Dry	—	—	—	—	—	—	—	—
	02/21/95		—	Dry	—	—	—	—	—	—	—	—
	05/03/95		—	Dry	—	—	—	—	—	—	—	—
	08/04/95		—	Dry	—	—	—	—	—	—	—	—
	11/10/95		—	Dry	—	—	—	—	—	—	—	—
	02/12/96		—	Dry	—	—	—	—	—	—	—	—
	05/17/96		—	Dry	—	—	—	—	—	—	—	—
MW-4	10/18/90	348.07	0.00	43.16	304.91	9,600	2,000	180	500	200	1,200	—
	08/06/91		0.00	38.65	309.42	8,600	—	320	420	220	650	—
	01/08/92		0.00	38.65	309.42	3,400	—	600	880	220	1,100	—
	04/30/92		0.00	39.88	308.19	7,200	—	650	1,200	210	1,200	—
	07/31/92		0.00	43.07	305.00	3,800	—	320	340	120	360	—
	10/27/92		0.00	42.78	305.29	9,000	—	440	750	190	900	—
	01/22/93		0.00	34.76	313.31	12,000	—	540	1,200	320	1,900	—
	04/05/93		0.00	33.61	314.46	1,100	—	34	18	12	31	—
	07/06/93		0.00	35.37	312.70	4,000	—	220	300	43	440	—
	11/30/93		0.00	37.78	310.29	1,400	—	140	83	54	110	—
	01/27/94		0.00	42.10	305.97	910	—	140	75	24	94	—
	04/25/94		0.00	40.28	307.79	—	—	—	—	—	—	—
	04/26/94		—	—	—	27,000	—	1,200	1,800	580	2,500	—
	07/08/94		0.00	41.38	306.69	540	—	57	47	17	43	—
	10/05/94		0.00	42.17	305.90	3,200	—	230	280	73	210	—



## Groundwater Levels and Chemical Analysis

Former Mobil Station 04-H6J

Sample ID	Date	Casing Elevation (feet)	Product Thickness (feet)	Depth to Water (feet)	Groundwater Elevation (feet)	TPH-G (ppb)	TPH-D (ppb)	Benzene (ppb)	Toluene (ppb)	Ethylbenzene (ppb)	Total Xylenes (ppb)	MTBE (ppb)
MW-4	02/21/95		0.02	34.87	313.22	—	—	—	—	—	—	—
(con't)	05/03/95		0.00	34.81	313.26	—	—	—	—	—	—	—
	05/04/95		—	—	—	1,700	—	100	200	50	240	—
	08/04/95		0.00	37.18	310.89	2,500	—	92	67	49	150	12
	11/10/95		0.00	39.86	308.21	11,000	—	1,100	590	420	1,200	—
	02/12/96		0.00	36.38	311.69	77	—	4.5	2.4	ND	2.8	17
	05/17/96		0.00	36.00	312.07	470	—	50	ND	ND	8.9	ND
MW-5	10/18/90	347.97	—	**	—	—	—	—	—	—	—	—
	08/06/91		0.00	34.25	313.72	—	—	—	—	—	—	—
	01/08/92		0.00	34.22	313.75	—	—	—	—	—	—	—
	04/30/92		—	Dry	—	—	—	—	—	—	—	—
	07/31/92		—	Dry	—	—	—	—	—	—	—	—
	10/27/92		—	Dry	—	—	—	—	—	—	—	—
	01/22/93		—	Dry	—	—	—	—	—	—	—	—
	04/05/93		—	Dry	—	—	—	—	—	—	—	—
	07/06/93		—	Dry	—	—	—	—	—	—	—	—
	11/30/93		—	Dry	—	—	—	—	—	—	—	—
	01/27/94		—	Dry	—	—	—	—	—	—	—	—
	04/25/94		0.00	34.23	313.74	—	—	—	—	—	—	—
	07/08/94		—	Dry	—	—	—	—	—	—	—	—
	02/21/95		—	Dry	—	—	—	—	—	—	—	—
	05/03/95		—	Dry	—	—	—	—	—	—	—	—
	08/04/95		—	Dry	—	—	—	—	—	—	—	—
	11/10/95		—	Dry	—	—	—	—	—	—	—	—
	02/12/96		—	Dry	—	—	—	—	—	—	—	—
	05/17/96		—	Dry	—	—	—	—	—	—	—	—

## Groundwater Levels and Chemical Analysis

Former Mobil Station 04-H6J

Sample ID	Date	Casing Elevation (feet)	Product Thickness (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)
MW-6	10/18/90	348.23	0.00	43.60	304.63	3,000	ND	1,300	150	120	85	—
	08/06/91		0.00	39.07	309.16	1,600	—	220	10	5.2	14	—
	01/08/92		0.00	39.18	309.05	370	—	81	3.9	4.5	2.9	—
	04/30/92		0.00	40.46	307.77	610	—	180	8.4	6.8	3.3	—
	07/31/92		0.00	43.61	304.62	96	—	1,500	1,500	370	1,100	—
	10/27/92		0.00	43.68	304.55	9,400	—	27	ND	6	10	—
	01/22/93		0.00	35.66	312.57	250	—	12	2.4	1.4	1.9	—
	04/05/93		0.00	34.41	313.82	190	—	2.3	0.99	ND	0.5	—
	07/06/93		0.00	36.01	312.22	99	—	1.4	0.54	ND	ND	—
	11/30/93		0.00	38.36	309.87	86	—	9.1	ND	ND	ND	—
	01/27/94		0.00	42.57	305.66	140	—	1.7	ND	ND	ND	—
	04/25/94		0.00	40.77	307.46	—	—	—	—	—	—	—
	04/26/94		—	—	—	330	—	40	ND	ND	ND	—
	07/08/94		0.00	41.82	306.41	170	—	8.8	9.2	3.5	12	—
	10/05/94		0.00	42.64	305.59	600	—	100	5.6	11	12	—
	02/21/95		0.01	35.55	312.69	—	—	—	—	—	—	—
	05/03/95		0.00	35.47	312.76	—	—	—	—	—	—	—
	05/04/95		—	—	—	350	—	6.8	1.8	7.4	7.1	—
	08/04/95		0.00	37.72	310.51	150	—	3.8	1.7	ND	1.1	6.5
	11/10/95		0.00	40.31	307.92	130	—	6.6	0.96	1.6	1.7	—
02/12/96		0.00	36.92	311.31	65	—	2.8	1.6	0.57	1.3	5.2	
05/17/96		0.00	36.56	311.67	91	—	2.8	ND	ND	ND	ND	
MW-7	10/18/90	347.90	0.00	9.26	338.64	ND	ND	0	0.5	ND	0.8	—
	08/06/91		—	Dry	—	—	—	—	—	—	—	—
	01/08/92		0.00	23.79	324.11	220	—	7.8	1.7	ND	0.55	—

## Groundwater Levels and Chemical Analysis

Former Mobil Station 04-H6J

Sample ID	Date	Casing Elevation (feet)	Product Thickness (feet)	Depth to Water (feet)	Groundwater Elevation (feet)	TPH-G (ppb)	TPH-D (ppb)	Benzene (ppb)	Toluene (ppb)	Ethylbenzene (ppb)	Total Xylenes (ppb)	MTBE (ppb)
MW-7	04/30/92		—	Dry	—	—	—	—	—	—	—	—
(cont)	07/31/92		—	Dry	—	—	—	—	—	—	—	—
	10/27/92		—	Dry	—	—	—	—	—	—	—	—
	01/22/93		—	Dry	—	—	—	—	—	—	—	—
	04/05/93		—	Dry	—	—	—	—	—	—	—	—
	07/06/93		—	Dry	—	—	—	—	—	—	—	—
	11/30/93		—	Dry	—	—	—	—	—	—	—	—
	01/27/94		—	Dry	—	—	—	—	—	—	—	—
	04/25/94		—	Dry	—	—	—	—	—	—	—	—
	07/08/94		—	Dry	—	—	—	—	—	—	—	—
	02/21/95		—	Dry	—	—	—	—	—	—	—	—
	05/03/95		—	Dry	—	—	—	—	—	—	—	—
	08/04/95		—	Dry	—	—	—	—	—	—	—	—
	11/10/95		—	Dry	—	—	—	—	—	—	—	—
	02/12/96		—	Dry	—	—	—	—	—	—	—	—
	05/17/96		—	Dry	—	—	—	—	—	—	—	—
MW-8	10/18/90	348.90	0.00	11.30	337.60	900	ND	3	5	7	62	—
	08/06/91		—	Dry	—	—	—	—	—	—	—	—
	01/08/92		—	Dry	—	—	—	—	—	—	—	—
	04/30/92		—	Dry	—	—	—	—	—	—	—	—
	07/31/92		0.00	12.04	336.86	270*	—	ND	ND	ND	1.3	—
	10/27/92		—	Dry	—	—	—	—	—	—	—	—
	01/22/93		—	Dry	—	—	—	—	—	—	—	—
	04/05/93		—	Dry	—	—	—	—	—	—	—	—
	07/06/93		0.00	7.48	341.42	ND	—	ND	ND	ND	ND	—
	11/30/93		—	Dry	—	—	—	—	—	—	—	—

## Groundwater Levels and Chemical Analysis

Former Mobil Station 04-H6J

Sample ID	Date	Casing Elevation (feet)	Product Thickness (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)
MW-8	01/27/94		—	Dry	—	—	—	—	—	—	—	—
(cont)	04/25/94		—	Dry	—	—	—	—	—	—	—	—
	07/08/94		—	Dry	—	—	—	—	—	—	—	—
	10/05/94		—	—	—	—	—	—	—	—	—	—
	02/21/95		—	Dry	—	—	—	—	—	—	—	—
	05/03/95		—	Dry	—	—	—	—	—	—	—	—
	08/04/95		—	Dry	—	—	—	—	—	—	—	—
	11/10/95		—	Dry	—	—	—	—	—	—	—	—
	02/12/96		—	Dry	—	—	—	—	—	—	—	—
	05/17/96		—	Dry	—	—	—	—	—	—	—	—
MW-9	02/04/92	348.53	0.00	43.54	304.99	16,000	—	3,000	740	1,200	2,500	—
	04/30/92		0.00	42.83	305.70	5,600	—	1,000	120	410	350	—
	07/31/92		0.00	47.36	301.17	93	—	1,800	1,900	620	940	—
	10/27/92		0.00	48.32	300.21	13,000	—	2,400	1,600	680	1,100	—
	01/22/93		0.00	39.11	309.42	5,600	—	1,200	200	510	350	—
	04/05/93		0.00	37.10	311.43	7,900	—	1,300	510	620	670	—
	07/06/93		0.00	39.21	309.32	3,200	—	510	46	170	150	—
	11/30/93		0.00	40.58	307.95	2,800	—	610	28	220	65	—
	01/27/94		0.00	44.32	304.21	11,000	—	1,400	130	230	700	—
	04/25/94		0.00	43.05	305.48	—	—	—	—	—	—	—
	04/26/94		—	—	—	3,900	—	460	56	160	220	—
	07/08/94		0.00	45.72	302.81	2,600	—	340	82	96	220	—
	(Abandoned 08/01/94)											

## Groundwater Levels and Chemical Analysis

Former Mobil Station 04-H6J

Sample ID	Date	Casing Elevation (feet)	Product Thickness (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)
MW-10	11/30/93	347.95	0.00	37.97	309.98	ND	—	ND	ND	ND	ND	—
	01/27/94		0.00	42.16	305.79	ND	—	ND	ND	ND	1.2	—
	04/25/94		0.00	40.39	307.56	—	—	—	—	—	—	—
	04/26/94		—	—	—	810	—	17	0.84	ND	ND	—
	07/08/94		0.00	41.45	306.50	110	—	18	12	3.7	14	—
	10/05/94		0.00	42.28	305.67	87	—	8.0	5.0	0.85	4.5	—
	02/21/95		0.00	35.14	312.81	70	—	3.6	12	1.8	9.5	—
	05/03/95		0.00	35.07	312.88	ND	—	ND	ND	ND	ND	—
	08/04/95		0.00	37.42	310.53	ND	—	ND	ND	ND	ND	ND
	11/10/95		0.00	39.95	308.00	ND	—	ND	ND	ND	ND	—
	02/12/96		0.00	36.57	311.38	ND	—	ND	1.9	ND	1.2	1.2
05/17/96	0.00	36.18	311.77	ND	—	ND	ND	ND	ND	ND		
MW-11	11/30/93	347.56	0.00	38.41	309.15	ND	—	ND	ND	ND	1.6	—
	01/27/94		0.00	38.02	309.54	ND	—	ND	ND	ND	ND	—
	04/25/94		0.00	38.77	308.79	—	—	—	—	—	—	—
	04/26/94		—	—	—	ND	—	ND	ND	ND	1.7	—
	07/08/94		0.00	41.70	305.86	120	—	23	18	4.0	15	—
	10/05/94		0.00	44.49	303.07	130	—	12	19	4.6	24	—
	02/21/95		0.00	41.74	305.82	300	—	27	64	7.3	36	—
	05/03/95		0.00	34.64	312.92	ND	—	ND	ND	ND	ND	—
	08/04/95		0.00	35.28	312.28	ND	—	ND	ND	ND	ND	ND
	11/10/95		0.00	36.85	310.71	ND	—	ND	0.88	ND	0.88	—
	02/12/96		0.00	36.18	311.38	ND	—	ND	1.7	ND	1.2	1.3
05/17/96	0.00	34.39	313.17	ND	—	ND	ND	ND	ND	ND		

## Groundwater Levels and Chemical Analysis

Former Mobil Station 04-H6J

Sample ID	Date	Casing Elevation (feet)	Product Thickness (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)
MW-12	11/30/93	347.15	0.00	37.97	309.18	55	—	1.8	4.3	2.5	11	—
	01/27/94		0.00	44.02	303.13	ND	—	ND	ND	ND	ND	—
	04/25/94		0.00	42.27	304.88	—	—	—	—	—	—	—
	04/26/94		—	—	—	ND	—	ND	ND	ND	1.4	—
	07/08/94		0.00	43.26	303.89	53	—	8.4	7.4	1.9	7.1	—
	10/05/94		0.00	44.32	302.83	350	—	27	56	13	67	—
	02/21/95		0.00	37.83	309.32	ND	—	4.0	4.0	0.77	3.6	—
	05/03/95		0.00	37.24	309.91	ND	—	ND	ND	ND	ND	—
	08/04/95		0.00	39.07	308.08	ND	—	ND	ND	ND	ND	ND
	11/10/95		0.00	41.24	305.91	ND	—	ND	ND	ND	ND	—
	02/12/96		0.00	38.19	308.96	ND	—	ND	2.1	ND	1.3	2.5
**	05/17/96	—	—	—	—	—	—	—	—	—	—	
VMW-1	11/30/93	348.05	—	Dry	—	—	—	—	—	—	—	—
	01/27/94		—	Dry	—	—	—	—	—	—	—	—
	04/25/94		—	Dry	—	—	—	—	—	—	—	—
	07/08/94		—	Dry	—	—	—	—	—	—	—	—
	10/05/94		—	—	—	—	—	—	—	—	—	—
	02/21/95		—	Dry	—	—	—	—	—	—	—	—
	05/03/95		—	Dry	—	—	—	—	—	—	—	—
	08/04/95		—	Dry	—	—	—	—	—	—	—	—
	11/10/95		—	Dry	—	—	—	—	—	—	—	—
	02/12/96		—	Dry	—	—	—	—	—	—	—	—
05/17/96	—	Dry	—	—	—	—	—	—	—	—		

## Groundwater Levels and Chemical Analysis

Former Mobil Station 04-H6J

Sample ID	Date	Casing Elevation (feet)	Product Thickness (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)
VMW-2	11/30/93	347.90	—	Dry	—	—	—	—	—	—	—	—
	01/27/94		—	Dry	—	—	—	—	—	—	—	—
	04/25/94		0.00	33.82	314.08	—	—	—	—	—	—	—
	07/08/94		—	Dry	—	—	—	—	—	—	—	—
	02/21/95		—	Dry	—	—	—	—	—	—	—	—
	05/03/95		—	Dry	—	—	—	—	—	—	—	—
	08/04/95		—	Dry	—	—	—	—	—	—	—	—
	11/10/95		—	Dry	—	—	—	—	—	—	—	—
	02/12/96		—	Dry	—	—	—	—	—	—	—	—
	05/17/96		—	Dry	—	—	—	—	—	—	—	—
VMW-3	11/30/93	348.10	—	Dry	—	—	—	—	—	—	—	—
	01/27/94		—	Dry	—	—	—	—	—	—	—	—
	04/25/94		Trace	31.23	316.87	—	—	—	—	—	—	—
	07/08/94		—	Dry	—	—	—	—	—	—	—	—
	02/21/95		—	Dry	—	—	—	—	—	—	—	—
	05/03/95		—	Dry	—	—	—	—	—	—	—	—
	08/04/95		—	Dry	—	—	—	—	—	—	—	—
	11/10/95		—	Dry	—	—	—	—	—	—	—	—
	02/12/96		—	Dry	—	—	—	—	—	—	—	—
	05/17/96		—	Dry	—	—	—	—	—	—	—	—
VMW-4	11/30/93	347.95	—	Dry	—	—	—	—	—	—	—	—
	01/27/94		—	Dry	—	—	—	—	—	—	—	—
	04/25/94		—	31.41	316.54	—	—	—	—	—	—	—
	07/08/94		—	Dry	—	—	—	—	—	—	—	—
	02/21/95		—	Dry	—	—	—	—	—	—	—	—

## Groundwater Levels and Chemical Analysis

Former Mobil Station 04-H6J

Sample ID	Date	Casing Elevation (feet)	Product Thickness (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)
VMW-4 (cont')	05/03/95		—	Dry	—	—	—	—	—	—	—	—
	08/04/95		—	Dry	—	—	—	—	—	—	—	—
	11/10/95		—	Dry	—	—	—	—	—	—	—	—
	02/12/96		—	Dry	—	—	—	—	—	—	—	—
	05/17/96		—	Dry	—	—	—	—	—	—	—	—
RW-1	11/30/93	347.89	Trace	37.75	310.14	—	—	—	—	—	—	—
	01/27/94		Trace	42.00	305.89	—	—	—	—	—	—	—
	04/25/94		0.02	40.24	307.67	—	—	—	—	—	—	—
	07/08/94		0.15	41.41	306.59	—	—	—	—	—	—	—
	10/05/94		Trace	42.18	305.71	—	—	—	—	—	—	—
	02/21/95		Trace	34.94	312.95	110,000	—	16,000	29,000	2,200	14,000	—
	05/03/95		0.01	34.83	313.07	—	—	—	—	—	—	—
	08/04/95		Trace	37.11	310.78	—	—	—	—	—	—	—
	11/10/95		0.02	39.74	308.17	—	—	—	—	—	—	—
	02/12/96		0.00	47.29	300.60	41,000	—	4,400	12,000	960	6,900	120
	05/17/96		0.00	47.53	300.36	81,000	—	2,700	8,600	1,100	6,300	ND
RW-2	10/05/94	—	0.00	43.33	—	41,000	—	6,500	6,300	1,000	5,400	—
	02/21/95	347.82	0.00	35.05	312.77	45,000	—	6,200	2,600	1,400	5,600	—
	05/03/95		0.00	35.11	312.71	30,000	—	3,600	2,000	1,000	5,700	—
	08/04/95		0.00	37.35	310.47	21,000	—	4,100	1,400	810	3,200	ND
	11/10/95		0.00	41.02	306.80	26,000	—	2,600	990	810	2,700	—
	02/12/96		0.00	38.63	309.19	10,000	—	600	600	230	1,900	ND
	05/17/96		0.00	48.56	299.26	4,000	—	300	64	86	470	10



## Groundwater Levels and Chemical Analysis

Former Mobil Station 04-H6J

Sample ID	Date	Casing Elevation (feet)	Product Thickness (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)
RW-3	10/05/94	—	0.00	44.66	—	1,600	—	120	180	26	170	—
	02/21/95	347.92	0.00	39.85	308.07	620	—	67	30	12	48	—
	05/03/95		0.00	40.12	307.80	780	—	31	28	6.0	40	—
	08/04/95		0.00	41.84	306.08	190	—	37	14	ND	19	8.1
	11/10/95		0.00	44.45	303.47	160	—	19	5.0	ND	4.4	—
	02/12/96		0.00	42.62	305.30	ND	—	0.78	2.0	ND	2.0	1.4
	05/17/96		0.00	48.90	299.02	52	—	2.8	0.5	ND	ND	3.6
RW-4	10/05/94	—	0.00	42.62	—	130	—	11	4.9	1.5	9.2	—
	02/21/95	348.29	0.02	35.40	312.91	—	—	—	—	—	—	—
	05/03/95		0.00	35.03	313.26	—	—	—	—	—	—	—
	05/04/95		—	—	—	2,900	—	330	130	120	410	—
	08/04/95		0.00	37.62	310.67	520	—	63	ND	14	2.1	6.1
	11/10/95		0.00	40.26	308.03	450	—	94	28	31	43	—
	02/12/96		0.00	36.84	311.45	52	—	1.5	2.0	2.9	2.4	4.0
	05/17/96		0.00	36.58	311.71	160	—	7.7	2.3	26	1.4	ND

## Groundwater Levels and Chemical Analysis

Former Mobil Station 04-H6J

Sample ID	Date	Casing Elevation (feet)	Product Thickness (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)
<b>FORMER UNOCAL STATION #0543 WELLS</b>												
MW-1#	12/16/92	351.18	—	—	—	ND	ND	ND	ND	ND	ND	—
	02/02/93		0.00	37.76	313.42	—	—	—	—	—	—	—
	03/01/93		0.00	36.26	314.92	—	—	—	—	—	—	—
	04/14/93		0.00	36.56	314.62	ND	ND	ND	ND	ND	ND	—
	05/14/93		0.00	37.27	313.91	—	—	—	—	—	—	—
	06/15/93		0.00	38.02	313.16	—	—	—	—	—	—	—
	07/06/93		0.00	38.06	313.12	ND	ND	ND	ND	ND	ND	—
	11/30/93	350.78	—	—	—	—	—	—	—	—	—	—
	01/27/94		0.00	43.41	307.37	ND	—	ND	ND	ND	ND	—
	04/25/94		0.00	45.32	305.46	ND	—	ND	3.5	ND	3.4	—
	07/08/94		0.00	46.26	304.52	ND	—	ND	ND	ND	ND	—
	10/05/94		0.00	47.26	303.52	ND	—	ND	ND	ND	ND	—
	01/04/95		0.00	44.98	305.80	ND	—	ND	ND	ND	ND	—
	05/03/95		0.00	36.75	314.03	—	—	—	—	—	—	—
	08/04/95		0.00	38.54	312.24	—	—	—	—	—	—	—
	11/10/95		0.00	40.97	309.81	—	—	—	—	—	—	—
	02/12/96		0.00	37.58	313.20	—	—	—	—	—	—	—
MW-2#	12/16/92	349.83	—	—	—	1,600	—	28	ND	5.1	5.6	—
	02/02/93		0.00	39.18	310.65	—	—	—	—	—	—	—
	03/01/93		0.00	34.33	315.50	—	—	—	—	—	—	—
	04/14/93		0.00	37.56	312.27	4,300	—	7.2	5.8	13	10	—
	05/14/93		0.00	37.49	312.34	—	—	—	—	—	—	—
	06/15/93		0.00	39.34	310.49	—	—	—	—	—	—	—
	07/06/93		0.00	37.82	312.01	4,700	—	17	15	30	28	—

## Groundwater Levels and Chemical Analysis

Former Mobil Station 04-H6J

Sample ID	Date	Casing Elevation (feet)	Product Thickness (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)
MW-2#	11/30/93	349.51	—	—	—	—	—	—	—	—	—	—
(cont)	01/27/94		0.00	43.15	306.36	1,500	—	28	9.0	ND	20	—
	04/25/94		0.00	41.90	307.61	1,100	—	19	1.7	2.5	8.8	—
	07/08/94		0.00	42.75	306.76	1,100	—	17	ND	ND	6	—
	10/05/94		0.00	43.50	306.01	240	—	4.7	2.5	0.52	2.6	—
	01/04/95		0.00	44.75	304.76	2,000	—	23	ND	ND	ND	—
	05/03/95		0.00	36.98	312.53	—	—	—	—	—	—	—
	08/04/95		0.00	39.15	310.36	2,000	—	40	ND	17	43	—
	11/10/95		0.00	41.45	308.06	1,400	—	13	2.8	2.7	4.0	—
	02/12/96		0.00	38.11	311.40	3,200	—	66	9.2	27	35	ND
MW-3#	12/16/92	351.35	—	—	—	ND	—	ND	ND	ND	ND	—
	02/02/93		0.00	40.62	310.73	—	—	—	—	—	—	—
	03/01/93		0.00	35.7	315.65	—	—	—	—	—	—	—
	04/14/93		0.00	38.97	312.38	ND	—	ND	ND	ND	ND	—
	05/14/93		0.00	39.07	312.28	—	—	—	—	—	—	—
	06/15/93		0.00	40.68	310.67	—	—	—	—	—	—	—
	07/06/93		0.00	37.82	313.53	ND	—	ND	ND	ND	ND	—
	11/30/93	351.04	—	—	—	—	—	—	—	—	—	—
	01/27/94		0.00	44.25	306.79	ND	—	ND	ND	ND	ND	—
	04/25/94		0.00	43.23	307.81	ND	—	ND	1.4	ND	1.8	—
	07/08/94		0.00	44.01	307.03	ND	—	ND	ND	ND	ND	—
	10/05/94		0.00	44.66	306.38	ND	—	ND	ND	ND	ND	—
	01/04/95		0.00	44.90	306.14	ND	—	ND	ND	ND	ND	—
	05/03/95		0.00	38.61	312.43	—	—	—	—	—	—	—

## Groundwater Levels and Chemical Analysis

Former Mobil Station 04-H6J

Sample ID	Date	Casing Elevation (feet)	Product Thickness (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)
MW-3# (con't)	08/04/95		0.00	40.75	310.29	—	—	—	—	—	—	—
	11/10/95		0.00	42.68	308.36	—	—	—	—	—	—	—
	02/12/96		0.00	39.54	311.50	—	—	—	—	—	—	—
MW-4#	01/27/94	350.14	0.00	43.37	306.77	ND	—	ND	ND	ND	ND	—
	04/25/94		0.00	42.28	307.86	ND	—	ND	1.2	ND	1.5	—
	07/08/94		0.00	43.2	306.94	ND	—	ND	ND	ND	ND	—
	10/05/94		0.00	43.97	306.17	ND	—	ND	ND	ND	ND	—
	01/04/95		0.00	44.96	305.18	ND	—	ND	ND	ND	ND	—
	05/03/95		0.00	36.06	314.08	—	—	—	—	—	—	—
	08/04/95		0.00	38.10	312.04	63	—	0.77	1.1	1.9	15	—
	11/10/95		0.00	40.61	309.53	—	—	—	—	—	—	—
	02/12/96		0.00	37.24	312.90	ND	—	ND	0.98	ND	0.67	—
MW-5#	01/27/94	349.33	0.00	44.76	304.57	320	—	1.8	1.3	2.6	4.5	—
	04/25/94		0.00	44.30	305.03	160	—	ND	1.9	1.4	1.9	—
	07/08/94		0.00	45.17	304.16	120	—	ND	ND	1.1	1.8	—
	10/05/94		0.00	46.07	303.26	83	—	0.73	0.90	ND	3.0	—
	01/04/95		0.00	46.38	302.95	210	—	ND	0.74	ND	0.90	—

## Groundwater Levels and Chemical Analysis

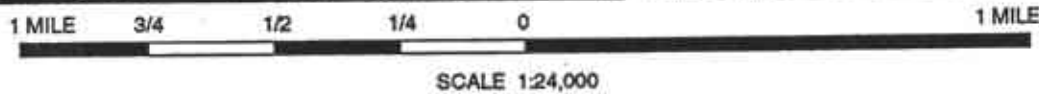
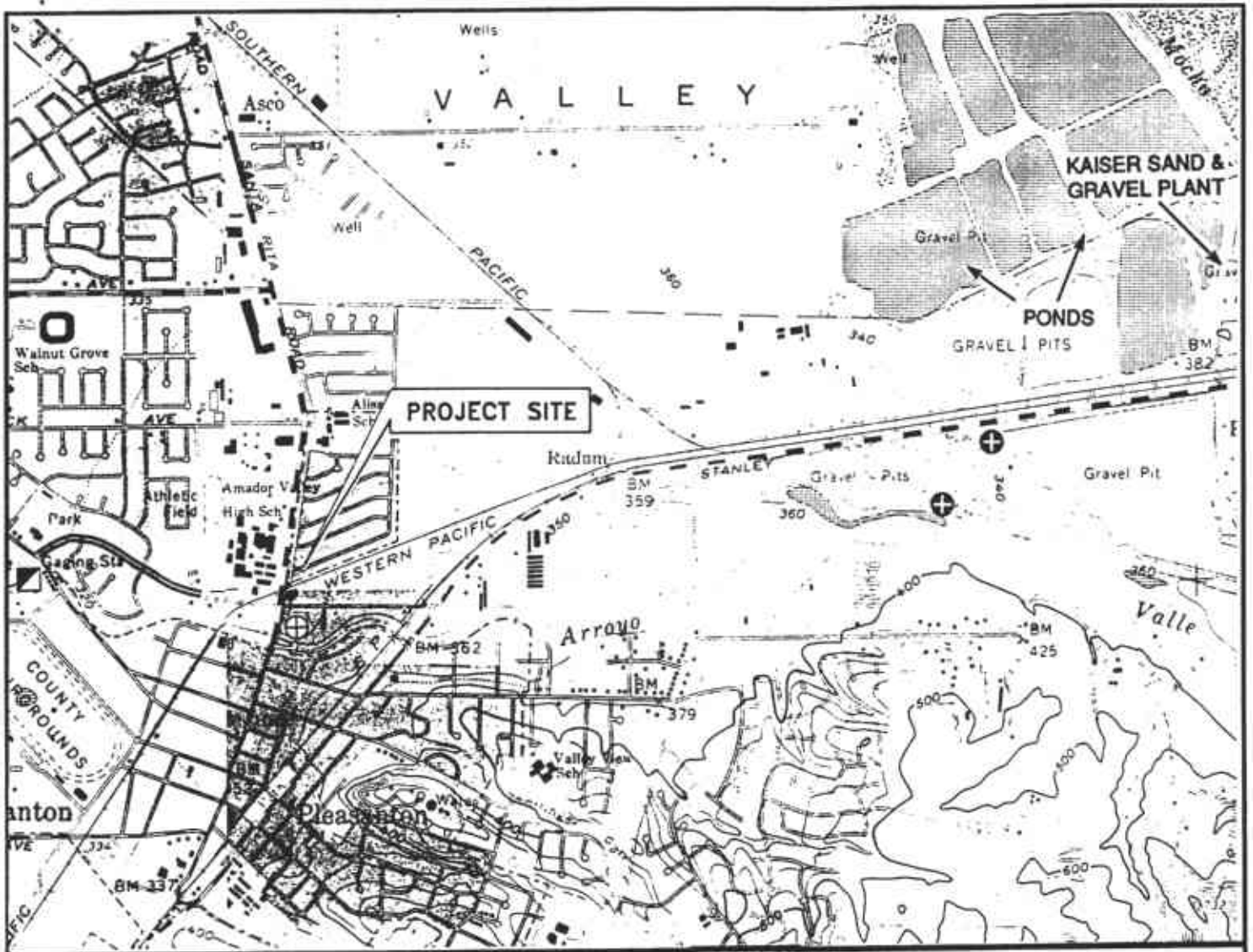
Former Mobil Station 04-H6J

Sample ID	Date	Casing Elevation (feet)	Product Thickness (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)
MW-5#	05/03/95		0.00	36.64	312.69	580	—	6.9	1.5	1.6	1.7	—
(con't)	08/04/95		0.00	39.00	310.33	550	—	5.4	0.76	1.2	11	—
	11/10/95		0.00	42.59	306.74	300	—	0.99	1.2	0.98	0.58	—
	02/12/96		0.00	37.25	312.08	420	—	8.2	2.1	1.7	1.2	—

**NOTES:**

ppb = parts per billion  
 TPH-G = total petroleum hydrocarbons as gasoline  
 TPH-D = total petroleum hydrocarbons as diesel  
 ND = not detected at or above method detection limits  
 — = not measured/not analyzed  
 1,2-DCE = 1,2-Dichloroethane

\* = reported by laboratory as non-gasoline mixture  
 \*\* = well inaccessible  
 # = wells installed by Kapreallan Engineering at former Unocal Station #0543; resurveyed by Kier & Wright Civil Engineers & Surveyors, Inc. 09/20/93.  
 Trace = product present but too thin to be measured



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

**LEGEND**

- U.S.G.S. Gauging Station
- ⊕ City of Pleasanton Monitoring Well
- ⊕ Kaiser Discharge to Arroyo Valle



**VICINITY MAP**

Former Mobil Station 04-H6J  
1024 Main Street  
Pleasanton, California

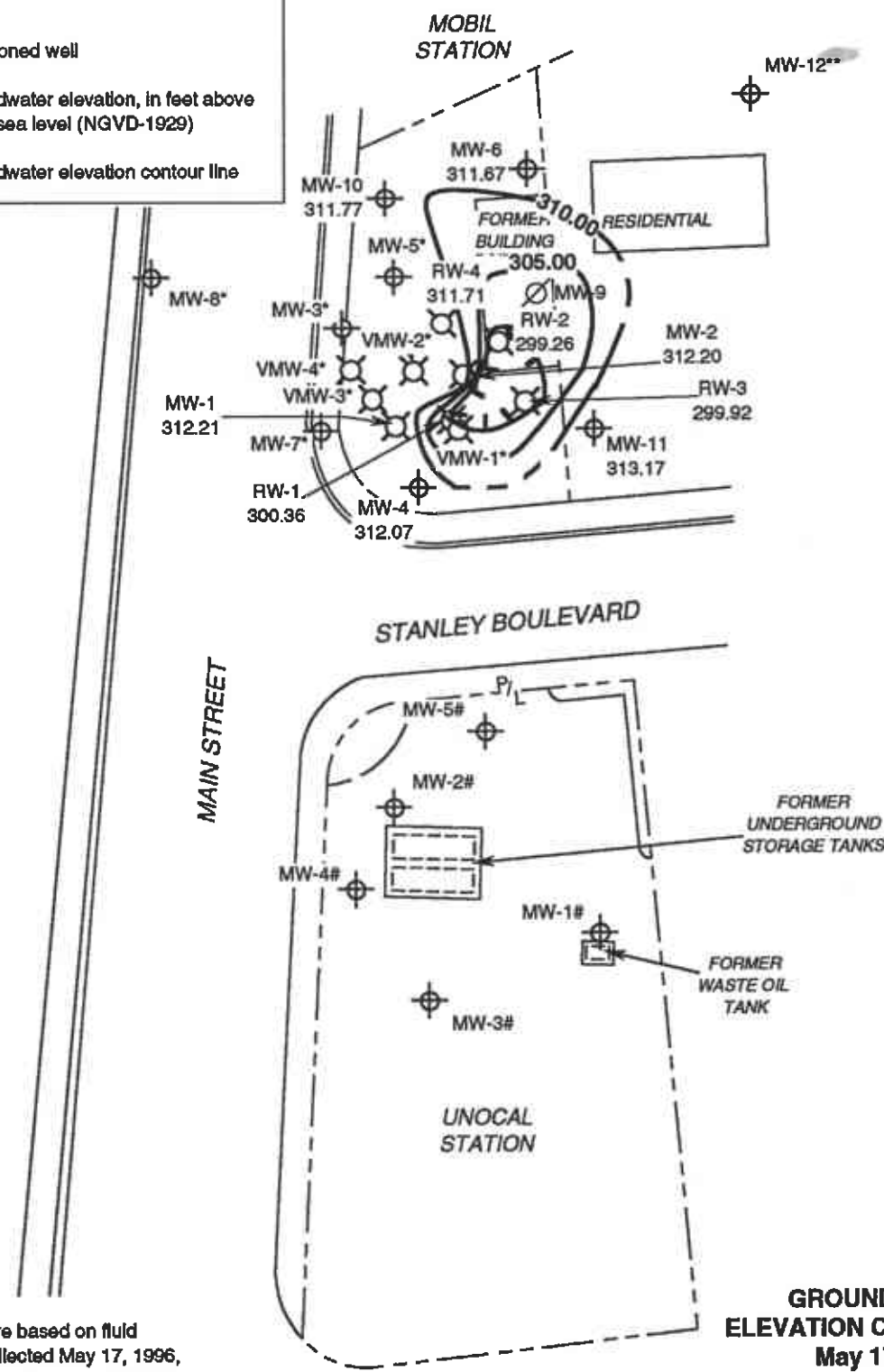
**FIGURE 1**



Project No. 30-0065

**LEGEND**

- ⊕ MW-12 Groundwater monitoring well
- ⊗ RW-4 Groundwater recovery/vapor extraction well
- ⊘ MW-9 Abandoned well
- 313.17 Groundwater elevation, in feet above mean sea level (NGVD-1929)
- Groundwater elevation contour line



**NOTES:**

Contours are interpretive based on fluid level measurements collected May 17, 1996, under pumping conditions from groundwater recovery wells RW-1, RW-2, RW-3 and RW-4. Contour interval = 5.0 feet. # = Unocal groundwater monitoring well. \* = well screened above aquifer, no water present. ⊗ = well not available. Joint sampling to occur semi-annually first and third quarters.

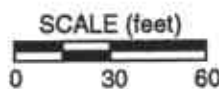
**GROUNDWATER ELEVATION CONTOUR MAP  
May 17, 1996**

Former Mobil Station 04-H6J  
1024 Main Street  
Pleasanton, California  
and  
Former Unocal Station #0543  
922 Main Street  
Pleasanton, California

**FIGURE 2**

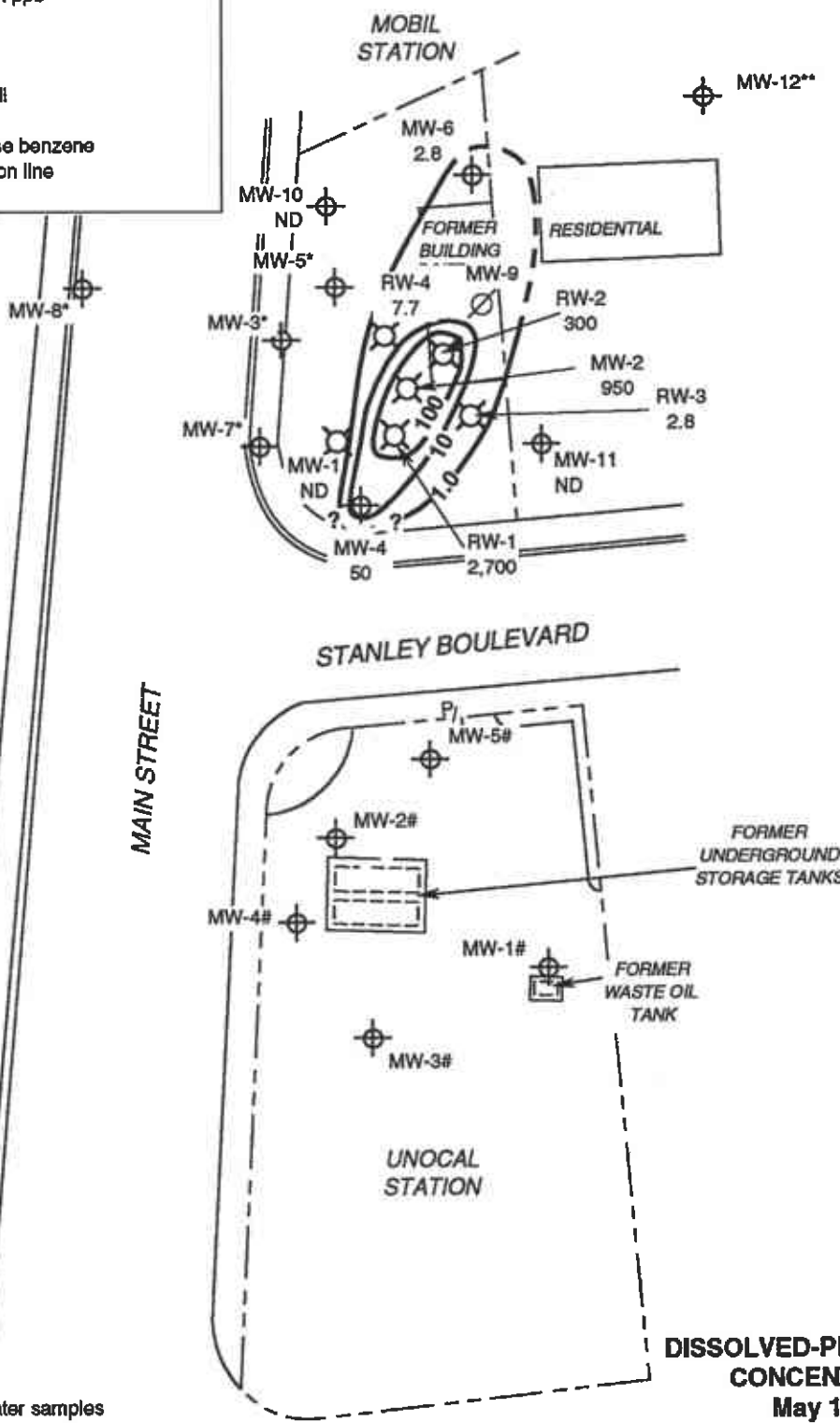


**ALTON  
GEOSCIENCE**  
Livermore, California



**LEGEND**

- ⊕ MW-11 ND Groundwater monitoring well showing dissolved-phase benzene concentration in ppb
- ⊕ RW-4 Recovery well
- ⊕ MW-9 Abandoned well
- Dissolved-phase benzene iso-concentration line

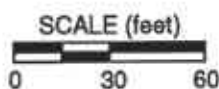


**NOTES:**

Results are based on groundwater samples collected on May 17 1996. ND = not detected at or above method detection limit; ppb = parts per billion. # = Unocal groundwater monitoring well. Groundwater samples collected by MPDS. \* = well screened above aquifer, no water present; \*\* = well not sampled.

**DISSOLVED-PHASE BENZENE CONCENTRATIONS  
May 17, 1996**

Former Mobil Station 04-H6J  
1024 Main Street  
Pleasanton, California  
and  
Former Unocal Station #0543  
922 Main Street  
Pleasanton, California



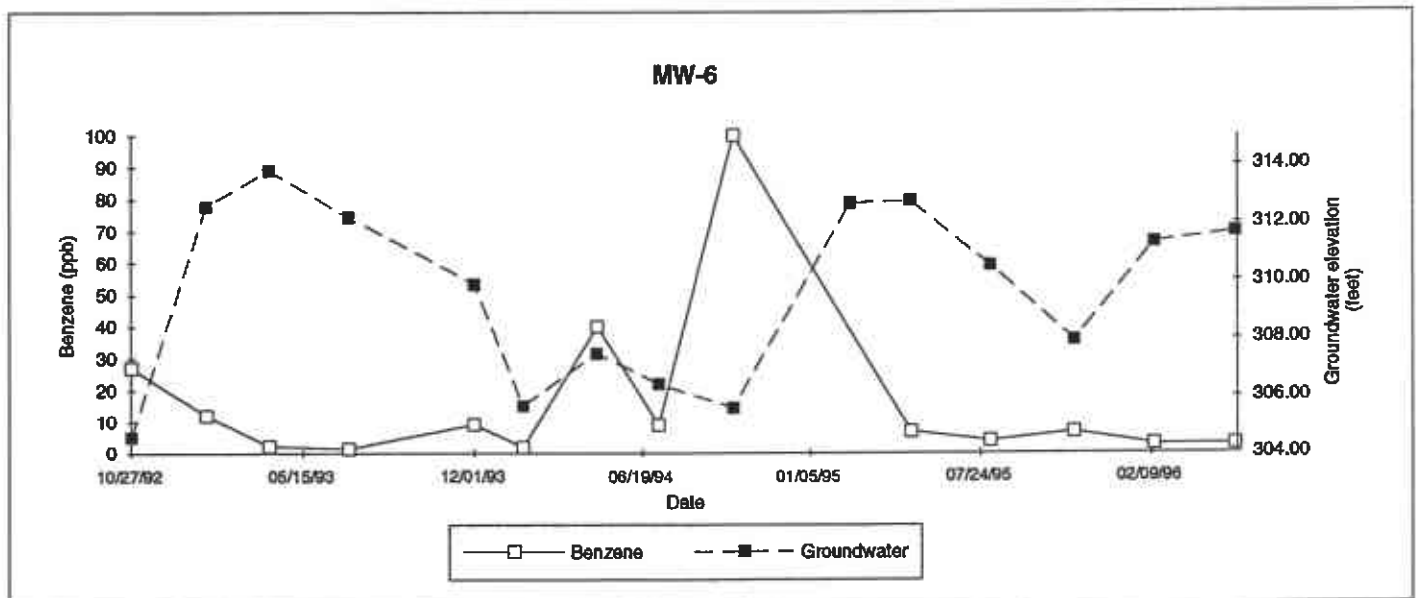
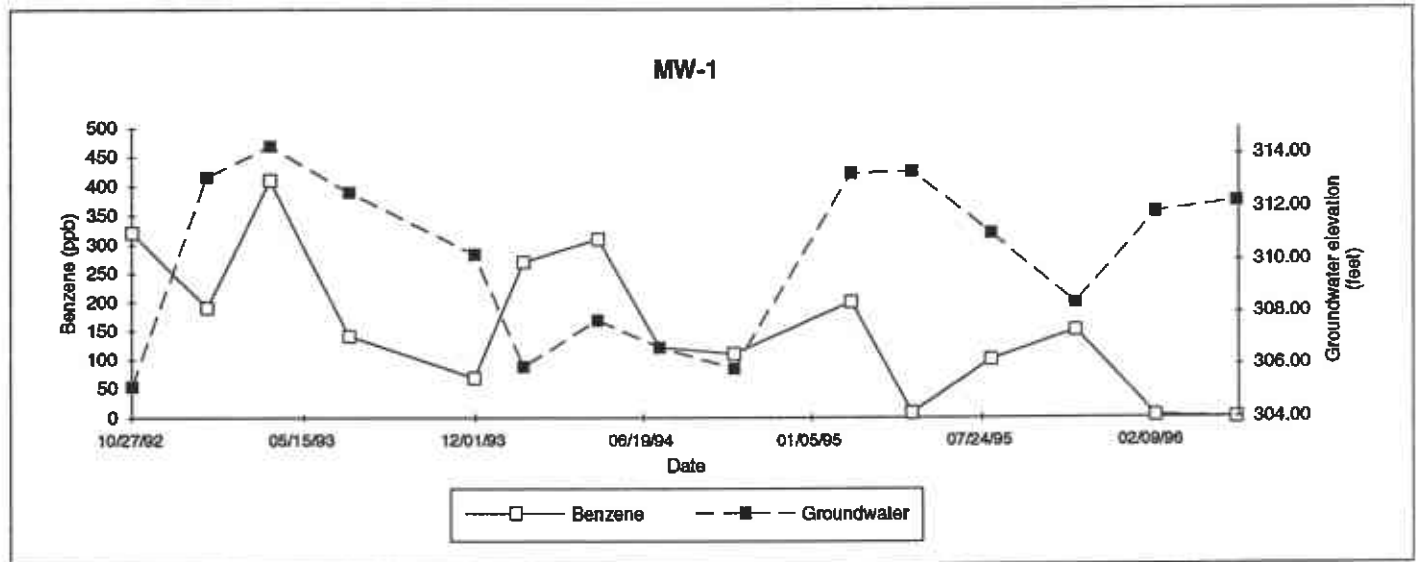
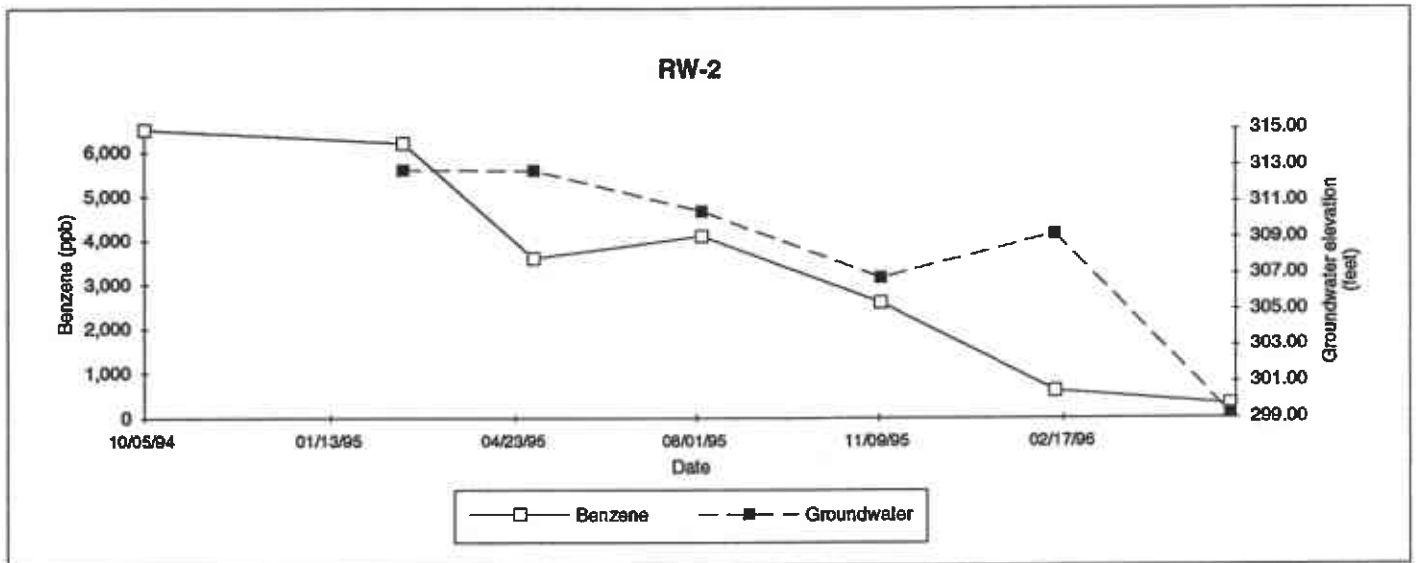
**FIGURE 3**



**EXHIBIT 4**

**BENZENE VERSUS GROUNDWATER ELEVATION GRAPHS**

## Benzene vs. Groundwater Elevation Graphs



**EXHIBIT 5**

**VAPOR EXTRACTION SYSTEM PERFORMANCE TABLES AND GRAPHS**

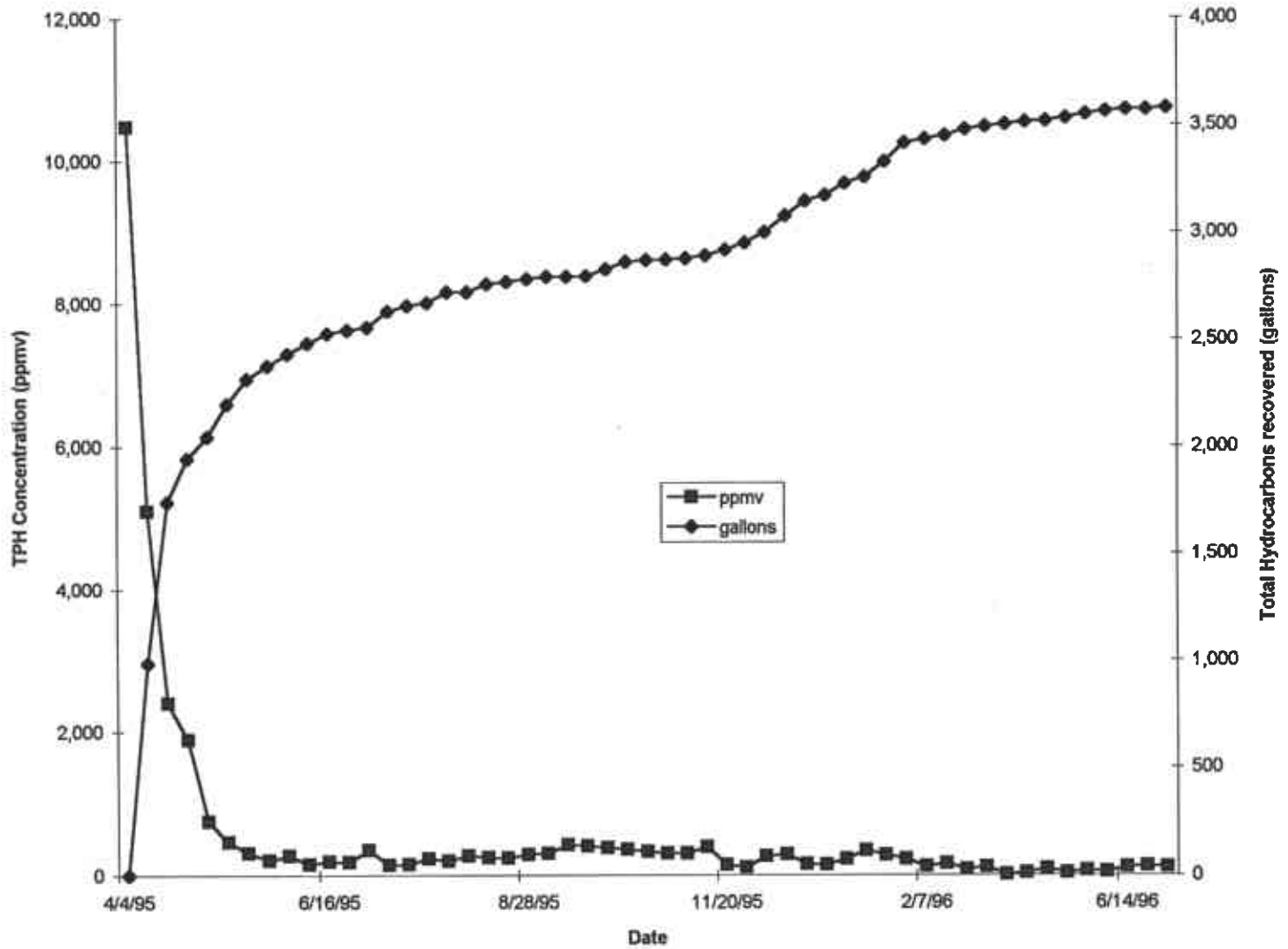
## Vapor Extraction System Monitoring

### Former Mobil Station # 04-H6J

Date (m/d/yy)	Operation Time			INFLUENT					EFFLUENT					RECOVERY DATA			
	Hour Meter Reading (hours)	Operating Time (hours)	Up-Time Per Period (%)	Total Flow Rate (cfm)	Vacuum Reading at Well Header (in. H2O)	Inlet Temp. (deg F)	Total Well TPH-G Conc. (ppmv)	Influent TPH-G Conc. (ppmv)		Effluent TPH-G Conc. (ppmv)		Mass Emission Benzene (lbs/day)	Mass Emission TPH-G (lbs/day)	Outlet Temp. (deg F)	HC Recovery Per Period (gallons)	Cumulative HC Recovery (gallons)	Destruction Efficiency TPH-G (%)
								Field	Lab	Field	Lab						
4/4/95	11	0	0%	175	57	600	10,480	10,480	11,000	0	< 1.2	0.030	0.0809	0.0008	809	0	100.0
4/12/95	202	191	99%	324	96	601	5,100	5,100		0					850	988	
4/22/95	440	238	99%	314	96	599	2,400	2,400		0					764	758	1,742
4/26/95	535	95	99%	432	98	597	1,890	1,890	390	0	2.8	< 0.016	0.4668	0.0020	710	202	1,944
5/5/95	601	66	31%	452	95	601	1,800	750		0					885	102	2,046
5/12/95	758	167	99%	678	100	601	960	460	350	0	< 2.3	< 0.031	0.8006	0.0060	742	152	2,197
5/19/95	936	188	100%	678	100	601	1,010	310		0					701	116	2,314
5/25/95	1080	144	100%	530	100	600	840	210		0					675	60	2,374
6/1/95	1248	188	100%	535	97	598	870	270		0					683	57	2,431
6/8/95	1415	167	99%	530	100	599	700	150	280	0	< 1.2	< 0.016	0.2450	0.0024	658	50	2,481
6/16/95	1607	192	100%	545	100	600	400	190		0					648	47	2,527
6/23/95	1664	57	34%	540	98	601	520	160		0					647	15	2,542
6/28/95	1695	31	26%	545	94	600	820	350		0					641	12	2,554
7/7/95	1907	212	98%	545	90	601	320	140		0					635	75	2,629
7/13/95	2055	148	103%	432	88	606	300	150		0					611	26	2,657
7/18/95	2106	51	43%	471	74	599	650	230	320	0	2.1	0.044	0.3810	0.0059	648	12	2,669
7/28/95	2300	184	81%	432	84	NA	430	200		0					NA	50	2,718
8/4/95	2303	3	2%	452	83	NA	690	270		0					NA	1	2,720
8/11/95	2406	103	31%	589	68	NA	430	250		0					NA	37	2,757
8/18/95	2440	34	20%	353	68	NA	480	240		0					NA	10	2,767
8/28/95	2494	54	23%	432	62	600	730	290	370	0	< 2.8	< 0.016	0.4326	0.0020	679	15	2,782
9/1/95	2520	26	27%	441	69	629	190	300		0					678	9	2,791
9/6/95	2524	4	3%	545	78	600	690	420	280	0	< 2.3	0.029	0.4828	0.0045	693	2	2,793
9/14/95	2528	4	2%	354	54	600	670	410		0					657	2	2,795
9/22/95	2625	97	51%	265	130	600	3,450	380		0					755	31	2,826
9/29/95	2742	117	70%	334	115	600	3,200	360		0					679	34	2,881
10/6/95	2771	29	20%	334	115	600	3,100	330		0					682	9	2,870
10/12/95	2780	3	5%	324	100	600	2,310	300	320	0	< 2.3	< 0.016	0.2870	0.0015	712	2	2,872
11/10/95	2798	18	3%	324	100	600	2,310	300		0					712	5	2,877
11/17/95	2839	41	24%	393	82	600	3,360	390	300	0	< 2.3	< 0.016	0.3482	0.0018	664	13	2,890
11/20/95	2910	71	99%	700	88	600	2,100	140		0					601	27	2,917
11/27/95	3046	135	80%	700	88	687	830	100		0					603	30	2,948
12/4/95	3213	168	100%	545	66	602	2,200	260	230	0	< 2.3	< 0.016	0.4828	0.0025	643	50	2,998
12/14/95	3383	170	71%	700	92	601	1,660	290		0					612	77	3,075
12/21/95	3651	168	100%	700	94	600	1,150	150		0					608	89	3,144
12/29/95	3658	105	65%	700	90	598	890	140		0					605	28	3,172
1/5/96	3828	170	101%	692	91	597	630	220		0					600	67	3,228
1/8/96	3887	71	89%	361	105	600	1,120	340	210	0	< 2.3	< 0.016	0.3198	0.0017	638	28	3,256
1/18/96	4132	235	98%	393	107	600	950	280		0					643	73	3,329
2/2/96	4484	352	98%	353	105	600	720	220		0					630	87	3,416
2/7/96	4602	118	98%	353	105	599	560	120	130	0	< 2.3	0.024	0.3127	0.0016	613	19	3,435
2/12/96	4724	122	102%	353	105	600	630	160		0					602	16	3,461
2/22/96	4965	241	100%	353	107	601	330	80		0					602	27	3,478
2/29/96	5136	171	102%	353	105	596	450	110		0					601	15	3,493
3/6/96	5281	146	101%	645	106	595	90	10	58	0	< 2.3	< 0.016	0.4828	0.0025	600	10	3,504
3/22/96	5662	381	99%	645	106	590	70	30		0					602	11	3,515
4/8/96	5679	17	4%	545	90	577	190	90		0					600	3	3,518
5/2/96	5942	263	46%	160	96	600	140	30		0					607	13	3,531
5/14/96	6159	217	75%	272	95	581	130	60	180	0	1.8	0.038	0.2410	0.0012	602	20	3,551
5/27/96	6430	271	87%	254	90	598	140	60		0					601	14	3,565
6/14/96	6608	78	18%	286	90	592	220	110	130	0	5.4	0.019	0.2534	0.0013	604	7	3,573
6/25/96	6521	13	5%	282	90	601	170	130		0					605	1	3,574
7/8/96	6598	90	16%	147	90	599	140	110	166	0	< 2.4	< 0.016	0.1302	0.0007	601	5	3,579
Total to Date =			6800	= Average % Operation			60%										

NOTES:  
 ppmv = parts per million volume  
 cfm = cubic feet per minute  
 HC Recovery Per Period = Hydrocarbons recovered based on weekly field data and an average hydrocarbon density of 6.26 lbs. per gallon  
 HC Destruction Efficiency = Hydrocarbon destruction efficiency based on monthly lab data  
 Total Well TPH-G Conc. = Concentration of total petroleum hydrocarbons as gasoline of soil vapor extracted from all open wells

Inlet TPH-G and Total Hydrocarbons Removed vs. Operating Time



**EXHIBIT 6**  
**GROUNDWATER REMEDIATION PERFORMANCE TABLES**

Table 1

## Summary of Results of Groundwater Treatment System Monitoring

Former Mobil Station 04-H6J

Sample ID	Date of Sampling	Flow Meter Reading (gallons)	Effluent Discharge (gallons)	Average Flow Rate (gpd)	Total Discharged (gallons)	TPH-G (ppb)	TPH-D (ppb)	Benzene (ppb)	Toluene (ppb)	Ethyl-benzene (ppb)	Total Xylenes (ppb)
I-1	04/27/95	640	0	0	0	240	840	44	54	8.0	39
	05/05/95	55,200	54,560	6,820	54,560	—	—	—	—	—	—
	05/12/95	197,540	142,340	20,334	196,900	6,500	790	400	860	92	860
	05/25/95	328,980	131,440	10,111	328,340	—	—	—	—	—	—
	06/01/95	331,090	2,110	301	330,450	—	—	—	—	—	—
	06/08/95	460,730	129,640	18,520	460,090	780	130	82	130	15	140
	06/16/95	590,300	129,570	16,196	589,660	—	—	—	—	—	—
	06/23/95	626,890	36,590	5,227	626,250	—	—	—	—	—	—
	06/28/95	646,240	19,350	3,870	645,600	—	—	—	—	—	—
	07/07/95	646,930	690	77	646,290	—	—	—	—	—	—
	07/13/95	677,120	30,190	5,032	676,480	3,400	1,100	190	370	45	300
	07/18/95	711,770	34,650	6,930	711,130	—	—	—	—	—	—
	07/28/95	831,040	119,270	11,927	830,400	—	—	—	—	—	—
	08/04/95	831,940	900	129	831,300	—	—	—	—	—	—
	08/11/95	897,280	65,340	9,334	896,640	—	—	—	—	—	—
	08/17/95	918,610	21,330	3,555	917,970	—	—	—	—	—	—
	08/28/95	964,370	45,760	4,160	963,730	7,900	2,100	940	1,100	120	1,200
	09/01/95	969,900	5,530	1,383	969,260	—	—	—	—	—	—
	09/07/95	972,180	2,280	380	971,540	5,800	1,300	540	750	51	760
	09/14/95	975,490	3,310	473	974,850	—	—	—	—	—	—
	09/22/95	1,038,540	63,050	7,881	1,037,900	—	—	—	—	—	—
	09/29/95	1,114,830	76,290	10,899	1,114,190	—	—	—	—	—	—
	10/05/95	1,133,030	18,200	3,033	1,132,390	—	—	—	—	—	—
	10/12/95	1,139,200	6,170	881	1,138,560	2,700	690	280	470	45	270
	10/23/95	1,169,390	30,190	2,745	1,168,750	—	—	—	—	—	—
	11/10/95	1,169,390	0	0	1,168,750	—	—	—	—	—	—
	11/17/95	1,171,890	2,500	357	1,171,250	4,900	1,200	450	680	55	500
	11/20/95	1,221,950	50,060	16,687	1,221,310	—	—	—	—	—	—
	11/27/95	1,295,450	73,500	10,500	1,294,810	—	—	—	—	—	—

Table 1

## Summary of Results of Groundwater Treatment System Monitoring

Former Mobil Station 04-H6J

Sample ID	Date of Sampling	Flow Meter Reading (gallons)	Effluent Discharge (gallons)	Average Flow Rate (gpd)	Total Discharged (gallons)	TPH-G (ppb)	TPH-D (ppb)	Benzene (ppb)	Toluene (ppb)	Ethyl-benzene (ppb)	Total Xylenes (ppb)
I-1	12/04/95	1,400,780	105,330	15,047	1,400,140	2,300	380	290	510	27	230
(cont)	12/14/95	1,501,930	101,150	10,115	1,501,290	—	—	—	—	—	—
	12/21/95	1,608,890	106,960	15,280	1,608,250	—	—	—	—	—	—
	12/29/95	1,632,530	23,640	2,955	1,631,890	—	—	—	—	—	—
	01/05/96	1,690,780	58,250	8,321	1,690,140	—	—	—	—	—	—
	01/08/96	1,735,880	45,100	15,033	1,735,240	3,000	520	250	600	46	440
	01/18/96	1,865,520	129,640	12,964	1,864,880	—	—	—	—	—	—
	01/25/96	1,886,830	21,310	3,044	1,886,190	—	—	—	—	—	—
	02/02/96	2,014,240	127,410	15,926	2,013,600	—	—	—	—	—	—
	02/07/96	2,027,770	13,530	2,706	2,027,130	1,800	860	38	75	9.6	110
	02/12/96	2,027,950	180	36	2,027,310	—	—	—	—	—	—
	02/22/96	10	0	0	2,027,310	—	—	—	—	—	—
	02/29/96	14,090	14,080	2,011	2,041,390	—	—	—	—	—	—
	03/06/96	23,260	9,170	1,528	2,050,560	25,000	3,400	5,400	5,400	360	3,500
	03/14/96	34,660	11,400	1,425	2,061,960	—	—	—	—	—	—
	03/22/96	46,300	11,640	1,455	2,073,600	—	—	—	—	—	—
	04/08/96	54,120	7,820	460	2,081,420	10,000	2,000	690	1,500	120	930
	05/02/96	54,840	720	30	2,082,140	—	—	—	—	—	—
	05/14/96	139,900	85,060	7,088	2,167,200	4,400	840	330	820	53	580
	05/28/96	251,390	111,490	7,964	2,278,690	—	—	—	—	—	—
	06/14/96	264,690	13,300	782	2,291,990	1,200	330	170	16	51	120
	07/08/96	295,770	31,080	1,295	2,323,070	—	—	—	—	—	—
E-1	04/27/95	—	—	—	—	ND	87	ND	ND	ND	ND
	05/12/95	—	—	—	—	670	180	3.4	5.8	ND	9.8
	06/08/95	—	—	—	—	ND	ND	0.87	0.92	ND	1.4
	07/13/95	—	—	—	—	ND	110	ND	ND	ND	ND
	08/28/95	—	—	—	—	140	220	2.6	4.4	0.98	6.2
	09/07/95	—	—	—	—	200	290	5.8	6.9	0.77	93



Table 1

Summary of Results of Groundwater Treatment System Monitoring

Former Mobil Station 04-H6J

Sample ID	Date of Sampling	Flow Meter Reading (gallons)	Effluent Discharge (gallons)	Average Flow Rate (gpd)	Total Discharged (gallons)	TPH-G (ppb)	TPH-D (ppb)	Benzene (ppb)	Toluene (ppb)	Ethyl-benzene (ppb)	Total Xylenes (ppb)
E-1 (cont)	10/12/95	—	—	—	—	ND	120	ND	ND	ND	ND
	11/17/95	—	—	—	—	93	230	0.73	1.3	ND	1.4
	12/04/95	—	—	—	—	ND	120	ND	ND	ND	ND
	01/08/96	—	—	—	—	110	76	52	11	0.74	9.4
	02/07/96	—	—	—	—	840	470	4.2	7.7	2.1	16
	03/06/96	—	—	—	—	140	420	1.1	0.94	ND	0.59
	04/08/96	—	—	—	—	340	190	11	7.1	3.5	21
	05/14/96	—	—	—	—	630	330	13	31	3.8	29
	06/14/96	—	—	—	—	ND	79	ND	ND	ND	ND

Total Effluent Discharged to Date: 2,323,070 gallons

NOTES: ppb = parts per billion  
 TPH-G = total petroleum hydrocarbons as gasoline  
 ND = not detected at or above method detection limit  
 — = not measured/not analyzed  
 gpd = gallons per day  
 I-1 = Influent  
 E-1 = effluent from primary carbon drum  
 TPH-D = total petroleum hydrocarbons as diesel  
 \* = new flow meter installed 02/22/96

**EXHIBIT 7**

**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 8**  
**MONITORING WELL SAMPLING FORMS**

# GROUND WATER SAMPLING FIELD NOTES

Site: 04-H6J Project No.: 41-0263 Sampled By: TP Date: 5/17/96

Well No. MW-11 Purge Method: 2" SUB  
 Total Depth (feet) 45.05 Depth to Product (feet):       
 Depth to Water (feet): 24.39 Product Recovered (gallons):       
 Water Column (feet): 10.66 Casing Diameter (Inches): 4  
 80% Recharge Depth (feet): 36.52 1 Well Volume (gallons): 7.03

Time Start	Time Stop	Depth To Water (feet)	Volume Purged (gallons)	Conductivity (uS/cm)	Temperature (F, C)	pH
0830			7	2.05	65.1	7.50
			14	1.89	65.4	7.21
	0844	35.91	22	1.82	65.6	7.06
Total Purged			22	Time Sampled		0846

Comments:  
Turbidity =

Well No. MW-10 Purge Method: 2" SUB  
 Total Depth (feet) 54.57 Depth to Product (feet):       
 Depth to Water (feet): 36.18 Product Recovered (gallons):       
 Water Column (feet): 18.39 Casing Diameter (Inches): 4  
 80% Recharge Depth (feet): 39.85 1 Well Volume (gallons): 12.13

Time Start	Time Stop	Depth To Water (feet)	Volume Purged (gallons)	Conductivity (uS/cm)	Temperature (F, C)	pH
0855			13	.54	63.8	7.27
			26	.74	63.9	7.41
	0906	38.11	39	.71	63.8	7.24
Total Purged			39	Time Sampled		0908

Comments:  
Turbidity =

Well No. MW-1 Purge Method: 2" SUB  
 Total Depth (feet) 50.59 Depth to Product (feet):       
 Depth to Water (feet): 35.82 Product Recovered (gallons):       
 Water Column (feet): 14.77 Casing Diameter (Inches): 4  
 80% Recharge Depth (feet): 38.77 1 Well Volume (gallons): 9.74

Time Start	Time Stop	Depth To Water (feet)	Volume Purged (gallons)	Conductivity (uS/cm)	Temperature (F, C)	pH
0925			10	.79	62.5	7.51
			20	.80	62.3	7.38
	0933		30	.77	62.3	7.24
Total Purged			30	Time Sampled		0935

Comments:  
Turbidity =

Well No. MW-4 Purge Method: 2" SUB  
 Total Depth (feet) 48.96 Depth to Product (feet):       
 Depth to Water (feet): 26.00 Product Recovered (gallons):       
 Water Column (feet): 12.96 Casing Diameter (Inches): 4  
 80% Recharge Depth (feet): 38.59 1 Well Volume (gallons): 8.55

Time Start	Time Stop	Depth To Water (feet)	Volume Purged (gallons)	Conductivity (uS/cm)	Temperature (F, C)	pH
1003			9	.75	62.8	7.57
			18	.79	62.4	7.32
	1010	38.02	27	.78	62.4	7.29
Total Purged			27	Time Sampled		1012

Comments:  
Turbidity =

Well No. MW-6 Purge Method: 2" SUB  
 Total Depth (feet) 54.09 Depth to Product (feet):       
 Depth to Water (feet): 36.56 Product Recovered (gallons):       
 Water Column (feet): 17.53 Casing Diameter (Inches): 4  
 80% Recharge Depth (feet): 40.06 1 Well Volume (gallons): 11.56

Time Start	Time Stop	Depth To Water (feet)	Volume Purged (gallons)	Conductivity (uS/cm)	Temperature (F, C)	pH
1026			12	.73	62.8	7.67
			24	.72	62.6	7.40
	1036	38.09	36	.72	62.7	7.38
Total Purged			36	Time Sampled		1038

Comments:  
Turbidity =

Well No. MW-2 Purge Method: 2" SUB  
 Total Depth (feet) 48.86 Depth to Product (feet):       
 Depth to Water (feet): 35.95 Product Recovered (gallons):       
 Water Column (feet): 12.91 Casing Diameter (Inches): 2  
 80% Recharge Depth (feet): 38.53 1 Well Volume (gallons): 2.19

Time Start	Time Stop	Depth To Water (feet)	Volume Purged (gallons)	Conductivity (uS/cm)	Temperature (F, C)	pH
1054			3	.76	62.9	7.51
			6	.71	62.9	7.49
	1058	36.09	9	.71	62.6	7.44
Total Purged			9	Time Sampled		1100

Comments:  
Turbidity =

# GROUND WATER SAMPLING FIELD NOTES

Site: 04-N6J Project No.: 41-0063 Sampled By: TP Date: 5/17/96

Well No. RW-1 Purge Method: \_\_\_\_\_  
 Total Depth (feet): \_\_\_\_\_ Depth to Product (feet): \_\_\_\_\_  
 Depth to Water (feet): 47.53 Product Recovered (gallons): \_\_\_\_\_  
 Water Column (feet): \_\_\_\_\_ Casing Diameter (Inches): \_\_\_\_\_  
 80% Recharge Depth (feet): \_\_\_\_\_ 1 Well Volume (gallons): \_\_\_\_\_

Time Start	Time Stop	Depth To Water (feet)	Volume Purged (gallons)	Conductivity (uS/cm)	Temperature (F, C)	pH
Total Purged				Time Sampled		<u>1210</u>
Comments:						
Turbidity =						

Well No. RW-3 Purge Method: \_\_\_\_\_  
 Total Depth (feet): \_\_\_\_\_ Depth to Product (feet): \_\_\_\_\_  
 Depth to Water (feet): \_\_\_\_\_ 48.90 Product Recovered (gallons): \_\_\_\_\_  
 Water Column (feet): \_\_\_\_\_ Casing Diameter (Inches): \_\_\_\_\_  
 80% Recharge Depth (feet): \_\_\_\_\_ 1 Well Volume (gallons): \_\_\_\_\_

Time Start	Time Stop	Depth To Water (feet)	Volume Purged (gallons)	Conductivity (uS/cm)	Temperature (F, C)	pH
Total Purged				Time Sampled		<u>1140</u>
Comments:						
Turbidity =						

Well No. RW-2 Purge Method: \_\_\_\_\_  
 Total Depth (feet): \_\_\_\_\_ Depth to Product (feet): \_\_\_\_\_  
 Depth to Water (feet): 48.56 Product Recovered (gallons): \_\_\_\_\_  
 Water Column (feet): \_\_\_\_\_ Casing Diameter (Inches): \_\_\_\_\_  
 80% Recharge Depth (feet): \_\_\_\_\_ 1 Well Volume (gallons): \_\_\_\_\_

Time Start	Time Stop	Depth To Water (feet)	Volume Purged (gallons)	Conductivity (uS/cm)	Temperature (F, C)	pH
Total Purged				Time Sampled		<u>1230</u>
Comments:						
Turbidity =						

Well No. RW-4 Purge Method: \_\_\_\_\_  
 Total Depth (feet): \_\_\_\_\_ Depth to Product (feet): \_\_\_\_\_  
 Depth to Water (feet): 36.58 Product Recovered (gallons): \_\_\_\_\_  
 Water Column (feet): \_\_\_\_\_ Casing Diameter (Inches): \_\_\_\_\_  
 80% Recharge Depth (feet): \_\_\_\_\_ 1 Well Volume (gallons): \_\_\_\_\_

Time Start	Time Stop	Depth To Water (feet)	Volume Purged (gallons)	Conductivity (uS/cm)	Temperature (F, C)	pH
Total Purged				Time Sampled		<u>1240</u>
Comments:						
Turbidity =						

Well No. \_\_\_\_\_ Purge Method: \_\_\_\_\_  
 Total Depth (feet): \_\_\_\_\_ Depth to Product (feet): \_\_\_\_\_  
 Depth to Water (feet): \_\_\_\_\_ Product Recovered (gallons): \_\_\_\_\_  
 Water Column (feet): \_\_\_\_\_ Casing Diameter (Inches): \_\_\_\_\_  
 80% Recharge Depth (feet): \_\_\_\_\_ 1 Well Volume (gallons): \_\_\_\_\_

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. \_\_\_\_\_ Purge Method: \_\_\_\_\_  
 Total Depth (feet): \_\_\_\_\_ Depth to Product (feet): \_\_\_\_\_  
 Depth to Water (feet): \_\_\_\_\_ Product Recovered (gallons): \_\_\_\_\_  
 Water Column (feet): \_\_\_\_\_ Casing Diameter (Inches): \_\_\_\_\_  
 80% Recharge Depth (feet): \_\_\_\_\_ 1 Well Volume (gallons): \_\_\_\_\_

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

**EXHIBIT 9**  
**ANALYTICAL LABORATORY DATA SHEETS**



Alton Geoscience  
 30-A Lindbergh Ave.  
 Livermore, CA 94550  
 Attention: Ron Scheele

Client Project ID: Mobil #04-H 6J  
 Sample Matrix: Water  
 Analysis Method: EPA 5030/8015 Mod./8020  
 First Sample #: 605-1472

Sampled: May 17, 1996  
 Received: May 20, 1996  
 Reported: May 29, 1996

QC Batch Number: GC052296 GC052296 GC052296 GC052296 GC052296 GC052296 GC052296  
 802002A 802002A 802002A 802002A 802002A 802002A 802002A

**TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX DISTINCTION**

Analyte	Reporting Limit µg/L	Sample I.D. 605-1472 RW-1	Sample I.D. 605-1473 RW-2	Sample I.D. 605-1474 RW-3	Sample I.D. 605-1475 RW-4	Sample I.D. 605-1476 MW-10	Sample I.D. 605-1477 MW-11
Purgeable Hydrocarbons	50	81,000	4,000	52	160	N.D.	N.D.
Benzene	0.50	2,700	300	2.8	7.7	N.D.	N.D.
Toluene	0.50	8,600	64	0.53	2.3	N.D.	N.D.
Ethyl Benzene	0.50	1,100	86	N.D.	26	N.D.	N.D.
Total Xylenes	0.50	6,300	470	N.D.	1.4	N.D.	N.D.
Chromatogram Pattern:		Gasoline	Gasoline	Gasoline	Gasoline	--	--

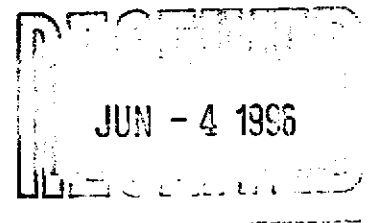
**Quality Control Data**

Report Limit Multiplication Factor:	50	10	1.0	1.0	1.0	1.0
Date Analyzed:	5/22/96	5/22/96	5/22/96	5/22/96	5/22/96	5/22/96
Instrument Identification:	HP-2	HP-2	HP-2	HP-2	HP-2	HP-2
Surrogate Recovery, %: (QC Limits = 70-130%)	111	107	105	106	90	104

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

*Kevin Van Slambrook*  
 Kevin Van Slambrook  
 Project Manager







Alton Geoscience  
30-A Lindbergh Ave.  
Livermore, CA 94550  
Attention: Ron Scheele

Client Project ID: Mobil #04-H 6J  
Sample Matrix: Water  
Analysis Method: EPA 5030/8015 Mod./8020  
First Sample #: 605-1478

Sampled: May 17, 1996  
Received: May 20, 1996  
Reported: May 29, 1996

QC Batch Number: GC052296 GC052296 GC052296 GC052296  
802002A 802002A 802002A 802002A

**TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX DISTINCTION**

Analyte	Reporting Limit µg/L	Sample I.D. 605-1478 MW-6	Sample I.D. 605-1479 MW-1	Sample I.D. 605-1480 MW-4	Sample I.D. 605-1481 MW-2
Purgeable Hydrocarbons	50	91	N.D.	470	57,000
Benzene	0.50	2.8	N.D.	50	950
Toluene	0.50	N.D.	N.D.	N.D.	3,000
Ethyl Benzene	0.50	N.D.	N.D.	N.D.	940
Total Xylenes	0.50	N.D.	N.D.	8.9	6,500
Chromatogram Pattern:		Gasoline & Unidentified Hydrocarbons <C7	--	Gasoline	Gasoline

**Quality Control Data**

Report Limit Multiplication Factor:	1.0	1.0	5.0	500
Date Analyzed:	5/22/96	5/22/96	5/22/96	5/22/96
Instrument Identification:	HP-2	HP-2	HP-2	HP-2
Surrogate Recovery, %: (QC Limits = 70-130%)	102	105	102	103

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

*Kevin Van Slambrook*  
Kevin Van Slambrook  
Project Manager





Alton Geoscience  
30-A Lindbergh Ave.  
Livermore, CA 94550  
Attention: Ron Scheele

Client Project ID: Mobil #04-H 6J  
Sample Descript: Water  
Analysis for: MTBE (Modified EPA 8020)  
First Sample #: 605-1472

Sampled: May 17, 1996  
Received: May 20, 1996  
Analyzed: May 22, 1996  
Reported: May 29, 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
605-1472	RW-1	300	N.D.	GC052296802002A	HP-2
605-1473	RW-2	6.0	10	GC052296802002A	HP-2
605-1474	RW-3	0.60	3.6	GC052296802002A	HP-2
605-1475	RW-4	0.60	N.D.	GC052296802002A	HP-2
605-1476	MW-10	0.60	N.D.	GC052296802002A	HP-2
605-1477	MW-11	0.60	N.D.	GC052296802002A	HP-2
605-1478	MW-6	0.60	N.D.	GC052296802002A	HP-2
605-1479	MW-1	0.60	N.D.	GC052296802002A	HP-2
605-1480	MW-4	3.0	N.D.	GC052296802002A	HP-2
605-1481	MW-2	300	N.D.	GC052296802002A	HP-2

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

SEQUOIA ANALYTICAL, #1271

Kevin Van Slambrook  
Project Manager





Alton Geoscience  
 30-A Lindbergh Ave.  
 Livermore, CA 94550  
 Attention: Ron Scheele

Client Project ID: Mobil #04-H 6J  
 Matrix: Liquid

QC Sample Group: 6051472-481

Reported: May 29, 1996

**QUALITY CONTROL DATA REPORT**

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC052296	GC052296	GC052296	GC052296
	802002A	802002A	802002A	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 #:	6051476	6051476	6051476	6051476
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	5/22/96	5/22/96	5/22/96	5/22/96
Analyzed Date:	5/22/96	5/22/96	5/22/96	5/22/96
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:	18	19	20	60
MS % Recovery:	90	95	100	100
Dup. Result:	17	18	19	57
MSD % Recov.:	85	90	95	95
RPD:	5.7	5.4	5.1	5.1
RPD Limit:	0-25	0-25	0-25	0-25

LCS #:	2LCS052296	2LCS052296	2LCS052296	2LCS052296
Prepared Date:	5/22/96	5/22/96	5/22/96	5/22/96
Analyzed Date:	5/22/96	5/22/96	5/22/96	5/22/96
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	21	23	66
LCS % Recov.:	100	105	115	110

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

*Kevin Van Slambrook*  
 Kevin Van Slambrook  
 Project Manager







# SEQUOIA ANALYTICAL CHAIN OF CUSTODY

- 680 Chesapeake Drive • Hedwood 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
- 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-HGT, PLEASANTON, CA**  
 Address: **30A LINDBERGH AVE** Project Contact: **RON SCHEELE 9605338**  
 City: **LIVERMORE** State: **CA** Zip: **94550** Mobil Oil Engineer: **CHELINE FOUNTAIN**  
 Tel: **510 606-9150** Fax: **606-9260** Sampler(s) (signature): *[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 <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 TTLC <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	MTBE	
MMW-2	H <sub>2</sub> O	5/17/96	1400	HCL	3	40L		X		6051481												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: *[Signature]* Date/Time: **5/20/96 1500**

Relinquished by: *[Signature]* Date/Time: **5/20/96 1650**

Relinquished in Lab by: *[Signature]* Date/Time: **5/20/96 1650**

Turnaround Time: (check one):

Normal  Same day \_\_\_\_\_

1 day \_\_\_\_\_ 2 day \_\_\_\_\_

5 day \_\_\_\_\_

Sample Integrity: Intact \_\_\_\_\_ On Ice \_\_\_\_\_

Remarks:



# 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

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(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: Ron Scheele

Client Project ID: Mobil #04-H6J  
Sample Matrix: Water  
Analysis Method: EPA 5030/8015 Mod./8020  
First Sample #: 607-0610

Sampled: Jul 8, 1996  
Received: Jul 10, 1996  
Reported: Jul 17, 1996

QC Batch Number: GC071296 GC071296

## TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX DISTINCTION

Analyte	Reporting Limit µg/L	Sample I.D. 607-0610 I-1	Sample I.D. 607-0611 E-1
Purgeable Hydrocarbons	50	150	N.D.
Benzene	0.50	3.7	0.71
Toluene	0.50	4.4	N.D.
Ethyl Benzene	0.50	0.60	N.D.
Total Xylenes	0.50	6.7	N.D.

Chromatogram Pattern: Gasoline ..

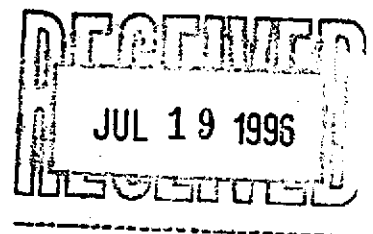
### Quality Control Data

Report Limit Multiplication Factor:	1.0	1.0
Date Analyzed:	7/12/96	7/12/96
Instrument Identification:	HP-5	HP-5
Surrogate Recovery, %: (QC Limits = 70-130%)	93	89

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  
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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: Ron Scheele	Client Project ID: Mobil #04-H6J Sample Matrix: Water Analysis Method: EPA 3510/8015 Mod. First Sample #: 607-0610	Sampled: Received: Jul 10, 1996 Reported:
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QC Batch Number: SP071196 SP071196  
 8015EXA 8015EXA

## TOTAL EXTRACTABLE PETROLEUM HYDROCARBONS

Analyte	Reporting Limit µg/L	Sample I.D. 607-0610 I-1	Sample I.D. 607-0611 E-1
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Extractable Hydrocarbons	50	65	N.D.
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Chromatogram Pattern: Unidentified Hydrocarbons <C15 --

### Quality Control Data

Report Limit Multiplication Factor:	1.0	1.0
Date Extracted:	7/11/96	7/11/96
Date Analyzed:	7/12/96	7/12/96
Instrument Identification:	HP-3A	HP-3A

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  
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(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: Ron Scheele

Client Project ID: Mobil #04-H6J  
Matrix: Liquid

QC Sample Group: 6070610-611

Reported: Jul 17, 1996

## QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes	Diesel
QC Batch#:	GC071296	GC071296	GC071296	GC071296	SP071196
	802005A	802005A	802005A	802005A	8015EXA
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020	EPA 8015
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030	EPA 3510
Analyst:	S. Chullakorn	S. Chullakorn	S. Chullakorn	S. Chullakorn	J. Dinsay
MS/MSD #:	6070609	6070609	6070609	6070609	BLK071196
Sample Conc.:	N.D.	N.D.	N.D.	N.D.	N.D.
Prepared Date:	7/12/96	7/12/96	7/12/96	7/12/96	7/11/96
Analyzed Date:	7/12/96	7/12/96	7/12/96	7/12/96	7/11/96
Instrument I.D.#:	HP-5	HP-5	HP-5	HP-5	GCHP-3B
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L	60 µg/L	300 µg/L
Result:	18	17	18	54	310
MS % Recovery:	90	85	90	90	103
Dup. Result:	16	15	16	48	270
MSD % Recov.:	80	75	80	80	90
RPD:	12	13	12	12	14
RPD Limit:	0-20	0-20	0-20	0-20	0-50

LCS #:	5LCS071296	5LCS071296	5LCS071296	5LCS071296	LCS071196
Prepared Date:	7/12/96	7/12/96	7/12/96	7/12/96	7/11/96
Analyzed Date:	7/12/96	7/12/96	7/12/96	7/12/96	7/11/96
Instrument I.D.#:	HP-5	HP-5	HP-5	HP-5	GCHP-3B
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L	60 µg/L	300 µg/L
LCS Result:	18	17	17	52	300
LCS % Recov.:	90	85	85	87	100

MS/MSD LCS Control Limits	70-130	70-130	70-130	70-130	50-150
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**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*  
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  
 1900 Bates Ave., Suite LM • Concord, CA 94520 • (510) 686-9600 FAX (510) 686-9689

Mobil Oil Consulting Firm: <u>Altos Geoscience</u>			Station No./Site Address: <u>09 H 6 J</u>		
Address: <u>30A Lindbergh Ave</u>			Project Contact: <u>Ron Scheep</u>		
City: <u>Lucanore</u>		State: <u>CA</u>	Zip: <u>94550</u>		Mobil Oil Engineer: <u>Steve Poo Charlene Foutch</u>
Tel: <u>606 9150</u>		Fax: <u>606 9260</u>		Sampler(s) (signature): <u>[Signature]</u>	

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 <input type="checkbox"/> Diesel <input checked="" 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	TTL <input type="checkbox"/> STL <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	
<u>H-1</u>	<u>H2O</u>	<u>7/18/96</u>	<u>12</u>		<u>4</u>			<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>				<u>6070610</u>	<u>AD</u>										
<u>E-1</u>	<u>H2O</u>	<u>7/18/96</u>	<u>12</u>		<u>4</u>			<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>				<u>6070611</u>	<u>↓</u>										

**CODING (check one)**

Code 1  Emergency Response

Code 2  Site Assessment

Code 3  Remediation (Plan Devlpmnt.)

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: <u>[Signature]</u>	Date/Time: <u>7/18/96 1620</u>	Relinquished by: <u>[Signature]</u>	Date/Time: <u>7/18/96 1620</u>
Relinquished by: <u>[Signature]</u>	Date/Time: <u>7/18/96 1815</u>	Relinquished by: <u>[Signature]</u>	Date/Time: <u>7/18/96 1815</u>
Relinquished by: <u>[Signature]</u>	Date/Time: <u>7/18/96 1815</u>	Relinquished by: <u>[Signature]</u>	Date/Time: <u>7/18/96 1815</u>
Remarks:			

Turnaround Time: (check one):

Normal  Same day \_\_\_\_\_

1 day \_\_\_\_\_ 2 day \_\_\_\_\_

5 day \_\_\_\_\_

Sample Integrity: Intact \_\_\_\_\_ On Ice \_\_\_\_\_

**# 9 37**



Alton Geoscience  
30-A Lindbergh Ave.  
Livermore, CA 94550  
Attention: Ron Scheele

Client Project ID: Mobil #04-H6J  
Sample Matrix: Air  
Analysis Method: EPA 5030/8015 Mod./8020  
First Sample #: 605-1082

Sampled: May 14, 1996  
Received: May 15, 1996  
Reported: May 22, 1996

QC Batch Number: GC051696 GC051796 GC051696 GC051696

802004A 802004A 802004A 802004A

**TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX DISTINCTION**

Analyte	Reporting Limit µg/L	Sample I.D. 605-1082 I-1	Sample I.D. 605-1083 I-2	Sample I.D. 605-1084 I-3	Sample I.D. 605-1085 E-1
Purgeable Hydrocarbons	10	1,100	120	720	74
Benzene	0.050	3.0	0.18	2.6	0.12
Toluene	0.050	30	1.6	17	0.97
Ethyl Benzene	0.050	8.0	0.65	5.7	0.40
Total Xylenes	0.050	91	11	67	6.7
Chromatogram Pattern:		Gasoline	Gasoline	Gasoline	Gasoline

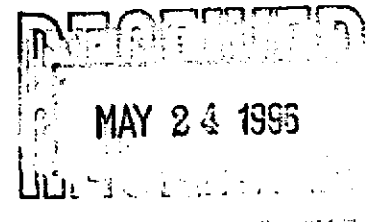
**Quality Control Data**

Report Limit Multiplication Factor:	50	2.0	50	1.0
Date Analyzed:	5/16/96	5/17/96	5/16/96	5/16/96
Instrument Identification:	HP-4	HP-4	HP-4	HP-4
Surrogate Recovery, %: (QC Limits = 70-130%)	102	97	100	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

  
Kevin Van Slambrook  
Project Manager





Alton Geoscience 30-A Lindbergh Ave. Livermore, CA 94550 Attention: Ron Scheele	Client Project ID: Mobil #04-H6J Sample Matrix: Air Analysis Method: EPA 5030/8015 Mod./8020 First Sample #: 605-1082	Sampled: May 14, 1996 Received: May 15, 1996 Reported: May 22, 1996
--	--	---

QC Batch Number: GC051696 GC051796 GC051696 GC051696

802004A 802004A 802004A 802004A

**TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX DISTINCTION**

Analyte	Reporting Limit ppmv	Sample I.D. 605-1082 I-1	Sample I.D. 605-1083 I-2	Sample I.D. 605-1084 I-3	Sample I.D. 605-1085 E-1
Purgeable Hydrocarbons	2.4	270	29	180	18
Benzene	0.016	0.94	0.056	0.81	0.038
Toluene	0.013	8.0	0.42	4.5	0.26
Ethyl Benzene	0.012	1.8	0.15	1.3	0.092
Total Xylenes	0.012	21	2.5	15	1.5
Chromatogram Pattern:		Gasoline	Gasoline	Gasoline	Gasoline

**Quality Control Data**

Report Limit Multiplication Factor:	50	2.0	50	1.0
Date Analyzed:	5/16/96	5/17/96	5/16/96	5/16/96
Instrument Identification:	HP-4	HP-4	HP-4	HP-4
Surrogate Recovery, %: (QC Limits = 70-130%)	102	97	100	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

*Kevin Van Slambrook*  
Kevin Van Slambrook  
Project Manager





Alton Geoscience  
30-A Lindbergh Ave.  
Livermore, CA 94550  
Attention: Ron Scheele

Client Project ID: Mobil #04-H6J  
Matrix: Liquid

QC Sample Group: 6051082-085

Reported: May 22, 1996

**QUALITY CONTROL DATA REPORT**

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC051796 802004A	GC051796 802004A	GC051796 802004A	GC051796 802004A
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 #:	6050968	6050968	6050968	6050968
Sample Conc.:	1.2 mg/L	N.D.	N.D.	N.D.
Prepared Date:	5/17/96	5/17/96	5/17/96	5/17/96
Analyzed Date:	5/17/96	5/17/96	5/17/96	5/17/96
Instrument I.D.#:	HP-4	HP-4	HP-4	HP-4
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L	60 µg/L
Result:	16	16	16	48
MS % Recovery:	74	80	80	80
Dup. Result:	18	17	17	51
MSD % Recov.:	84	85	85	85
RPD:	13	6.1	6.1	6.1
RPD Limit:	0-25	0-25	0-25	0-25

LCS #:	4LCS051796	4LCS051796	4LCS051796	4LCS051796
Prepared Date:	5/17/96	5/17/96	5/17/96	5/17/96
Analyzed Date:	5/17/96	5/17/96	5/17/96	5/17/96
Instrument I.D.#:	HP-4	HP-4	HP-4	HP-4
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L	60 µg/L
LCS Result:	17	18	18	53
LCS % Recov.:	85	90	90	88

MS/MSD LCS Control Limits	70-130	70-130	70-130	70-130
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SEQUOIA ANALYTICAL, #1271

*Kevin Van Slambrook*  
Kevin Van Slambrook  
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





Alton Geoscience  
30-A Lindbergh Ave.  
Livermore, CA 94550  
Attention: Ron Scheele

Client Project ID: Mobil #04-H6J  
Matrix: Liquid

QC Sample Group: 6051082-085

Reported: May 22, 1996

**QUALITY CONTROL DATA REPORT**

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC051696	GC051696	GC051696	GC051696
	802004A	802004A	802004A	802004A
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 #:	6051004	6051004	6051004	6051004
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	5/16/96	5/16/96	5/16/96	5/16/96
Analyzed Date:	5/16/96	5/16/96	5/16/96	5/16/96
Instrument I.D.#:	HP-4	HP-4	HP-4	HP-4
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L	60 µg/L
Result:	15	16	16	47
MS % Recovery:	75	80	80	78
Dup. Result:	17	17	17	51
MSD % Recov.:	85	85	85	85
RPD:	13	6.1	6.1	8.2
RPD Limit:	0-25	0-25	0-25	0-25

LCS #:	4LCS051696	4LCS051696	4LCS051696	4LCS051696
Prepared Date:	5/16/96	5/16/96	5/16/96	5/16/96
Analyzed Date:	5/16/96	5/16/96	5/16/96	5/16/96
Instrument I.D.#:	HP-4	HP-4	HP-4	HP-4
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L	60 µg/L
LCS Result:	18	19	19	57
LCS % Recov.:	90	95	95	95

MS/MSD LCS Control Limits	70-130	70-130	70-130	70-130
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SEQUOIA ANALYTICAL, #1271

*Kevin Van Slambrook*  
Kevin Van Slambrook  
Project Manager

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





Alton Geoscience  
30-A Lindbergh Ave.  
Livermore, CA 94550  
Attention: Ron Scheele

Client Project ID: Mobil #04-H6J  
Matrix: Vapor

QC Sample Group: 6051082-085

Reported: May 22, 1996

**QUALITY CONTROL DATA REPORT**

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC051696 802004B	GC051696 802004B	GC051696 802004B	GC051696 802004B
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030
Analyst:	M. Brewer	M. Brewer	M. Brewer	M. Brewer
MS/MSD #:	BLK051696	BLK051696	BLK051696	BLK051696
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	5/16/96	5/16/96	5/16/96	5/16/96
Analyzed Date:	5/16/96	5/16/96	5/16/96	5/16/96
Instrument I.D.#:	HP-4	HP-4	HP-4	HP-4
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Result:	8.7	8.9	8.8	27
MS % Recovery:	87	89	88	90
Dup. Result:	8.4	8.5	8.4	26
MSD % Recov.:	84	85	84	87
RPD:	3.5	4.6	4.7	3.8
RPD Limit:	0-25	0-25	0-25	0-25

LCS #:	-	-	-	-
Prepared Date:	-	-	-	-
Analyzed Date:	-	-	-	-
Instrument I.D.#:	-	-	-	-
Conc. Spiked:	-	-	-	-
LCS Result:	-	-	-	-
LCS % Recov.:	-	-	-	-

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

SEQUOIA ANALYTICAL, #1271

*Kevin Van Slambrook*  
Kevin Van Slambrook  
Project Manager

**Please Note:**

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





Alton Geoscience  
30-A Lindbergh Ave.  
Livermore, CA 94550  
Attention: Ron Scheele

Client Project ID: Mobil #04-H6J  
Matrix: Vapor

QC Sample Group: 6051082-085

Reported: May 22, 1996

**QUALITY CONTROL DATA REPORT**

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC051796 802004B	GC051796 802004B	GC051796 802004B	GC051796 802004B
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030
Analyst:	M. Brewer	M. Brewer	M. Brewer	M. Brewer
MS/MSD #:	BLK051796	BLK051796	BLK051796	BLK051796
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	5/17/96	5/17/96	5/17/96	5/17/96
Analyzed Date:	5/17/96	5/17/96	5/17/96	5/17/96
Instrument I.D.#:	HP-4	HP-4	HP-4	HP-4
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Result:	8.5	8.7	8.7	27
MS % Recovery:	85	87	87	90
Dup. Result:	9.6	9.8	9.7	30
MSD % Recov.:	96	98	97	100
RPD:	12	12	11	11
RPD Limit:	0-25	0-25	0-25	0-25

LCS #:	-	-	-	-
Prepared Date:	-	-	-	-
Analyzed Date:	-	-	-	-
Instrument I.D.#:	-	-	-	-
Conc. Spiked:	-	-	-	-
LCS Result:	-	-	-	-
LCS % Recov.:	-	-	-	-

MS/MSD LCS Control Limits	70-130	70-130	70-130	70-130
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SEQUOIA ANALYTICAL, #1271

*Kevin Van Slambrook*  
Kevin Van Slambrook  
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  
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Redwood City, CA 94063  
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Sacramento, CA 95834

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(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: Ron Scheele

Client Project ID: Mobil #04-H6J  
Sample Matrix: Air  
Analysis Method: EPA 5030/8015 Mod./8020  
First Sample #: 606-1164

Sampled: Jun 14, 1996  
Received: Jun 14, 1996  
Reported: Jun 20, 1996

QC Batch Number: GC061796 GC061496 GC061796 GC061496  
802011B 802002A 802011A 802002A

## TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX DISTINCTION

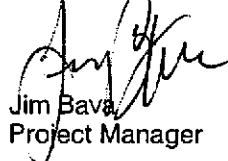
Analyte	Reporting Limit µg/L	Sample I.D. 606-1164 I-1	Sample I.D. 606-1165 I-2	Sample I.D. 606-1166 I-3	Sample I.D. 606-1167 E-1
Purgeable Hydrocarbons	10	840	51	530	22
Benzene	0.050	3.7	0.079	5.6	0.060
Toluene	0.050	14	0.99	15	0.56
Ethyl Benzene	0.050	4.3	0.24	2.4	0.15
Total Xylenes	0.050	51	5.7	23	2.8
Chromatogram Pattern:		Gasoline	Gasoline	Gasoline	Gasoline

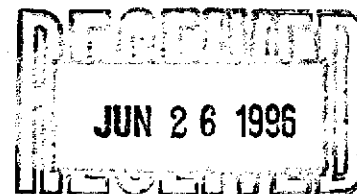
### Quality Control Data

Report Limit Multiplication Factor:	5.0	1.0	5.0	1.0
Date Analyzed:	6/17/96	6/14/96	6/17/96	6/14/96
Instrument Identification:	HP-11	HP-2	HP-11	HP-2
Surrogate Recovery, %: (QC Limits = 70-130%)	150	102	147	104

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



6061164.ALT <1>





Alton Geoscience	Client Project ID: Mobil #04-H6J	Sampled: Jun 14, 1996
30-A Lindbergh Ave.	Sample Matrix: Air	Received: Jun 14, 1996
Livermore, CA 94550	Analysis Method: EPA 5030/8015 Mod./8020	Reported: Jun 20, 1996
Attention: Ron Scheele	First Sample #: 606-1164	

QC Batch Number: GC061796 GC061496 GC061796 GC061496

802011B 802002A 802011A 802002A

**TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX DISTINCTION**

Analyte	Reporting Limit ppmv	Sample I.D. 606-1164 I-1	Sample I.D. 606-1165 I-2	Sample I.D. 606-1166 I-3	Sample I.D. 606-1167 E-1
Purgeable Hydrocarbons	2.4	210	13	130	5.4
Benzene	0.016	1.2	0.025	1.8	0.019
Toluene	0.013	3.7	0.26	4.0	0.15
Ethyl Benzene	0.012	0.99	0.55	0.55	0.035
Total Xylenes	0.012	12	1.3	5.3	0.65
Chromatogram Pattern:		Gasoline	Gasoline	Gasoline	Gasoline

**Quality Control Data**

Report Limit Multiplication Factor:	5.0	1.0	5.0	1.0
Date Analyzed:	6/17/96	6/14/96	6/17/96	6/14/96
Instrument Identification:	HP-11	HP-2	HP-11	HP-2
Surrogate Recovery, %: (QC Limits = 70-130%)	150	102	147	104

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*  
 Jim Bava  
 Project Manager





# Sequoia Analytical

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FAX (510) 988-9673  
FAX (916) 921-0100

Alton Geoscience  
30-A Lindbergh Ave.  
Livermore, CA 94550  
Attention: Ron Scheele

Client Project ID: Mobil #04-H6J  
Matrix: Liquid

QC Sample Group: 6061164-167

Reported: Jun 20, 1996

## QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC061796 802011A	GC061796 802011A	GC061796 802011A	GC061796 802011A
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 #:	6060875	6060875	6060875	6060875
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	6/17/96	6/17/96	6/17/96	6/17/96
Analyzed Date:	6/17/96	6/17/96	6/17/96	6/17/96
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:	23	20	22	64
MS % Recovery:	115	100	110	107
Dup. Result:	23	20	21	63
MSD % Recov.:	115	100	105	105
RPD:	0.0	0.0	4.7	1.6
RPD Limit:	0-25	0-25	0-25	0-25

LCS #:	11LCS061796	11LCS061796	11LCS061796	11LCS061796
Prepared Date:	6/17/96	6/17/96	6/17/96	6/17/96
Analyzed Date:	6/17/96	6/17/96	6/17/96	6/17/96
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:	21	19	21	62
LCS % Recov.:	105	95	105	103

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





Alton Geoscience 30-A Lindbergh Ave. Livermore, CA 94550 Attention: Ron Scheele	Client Project ID: Mobil #04-H6J Matrix: Liquid QC Sample Group: 6061164-167	Reported: Jun 20, 1996
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**QUALITY CONTROL DATA REPORT**

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC0614796	GC0614796	GC0614796	GC0614796
	802002A	802002A	802002A	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 #:	6060546	6060546	6060546	6060546
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	6/14/96	6/14/96	6/14/96	6/14/96
Analyzed Date:	6/14/96	6/14/96	6/14/96	6/14/96
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:	19	19	20	58
MS % Recovery:	95	95	100	97
Dup. Result:	21	21	22	64
MSD % Recov.:	105	105	110	107
RPD:	10	10	9.5	9.8
RPD Limit:	0-25	0-25	0-25	0-25

LCS #:	2LCS061496	2LCS061496	2LCS061496	2LCS061496
Prepared Date:	6/14/96	6/14/96	6/14/96	6/14/96
Analyzed Date:	6/14/96	6/14/96	6/14/96	6/14/96
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:	21	21	22	66
LCS % Recov.:	105	105	110	110

MS/MSD LCS Control Limits	70-130	70-130	70-130	70-130
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SEQUOIA ANALYTICAL, #1271

Jim Bava  
Project Manager





# Sequoia Analytical

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FAX (510) 988-9673  
FAX (916) 921-0100

Alton Geoscience  
30-A Lindbergh Ave.  
Livermore, CA 94550  
Attention: Ron Scheele

Client Project ID: Mobil #04-H6J  
Matrix: Vapor

QC Sample Group: 6061164-167

Reported: Jun 20, 1996

## QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC061796 802011B	GC061796 802011B	GC061796 802011B	GC061796 802011B
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030
Analyst:	M. Brewer	M. Brewer	M. Brewer	M. Brewer
MS/MSD #:	BLK061796	BLK061796	BLK061796	BLK061796
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	6/17/96	6/17/96	6/17/96	6/17/96
Analyzed Date:	6/17/96	6/17/96	6/17/96	6/17/96
Instrument I.D.#:	HP-11	HP-11	HP-11	HP-11
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Result:	11	9.1	9.9	29
MS % Recovery:	110	91	99	97
Dup. Result:	10	8.6	9.6	28
MSD % Recov.:	100	86	96	93
RPD:	9.5	5.7	3.1	3.5
RPD Limit:	0-25	0-25	0-25	0-25

LCS #:	-	-	-	-
Prepared Date:	-	-	-	-
Analyzed Date:	-	-	-	-
Instrument I.D.#:	-	-	-	-
Conc. Spiked:	-	-	-	-
LCS Result:	-	-	-	-
LCS % Recov.:	-	-	-	-

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

**Please Note:**

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SEQUOIA ANALYTICAL, #1271

Jim Bava  
Project Manager





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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: Ron Scheele

Client Project ID: Mobil #04-H6J  
 Matrix: Vapor

QC Sample Group: 6061164-167

Reported: Jun 20, 1996

## QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC061496 802002B	GC061496 802002B	GC061496 802002B	GC061496 802002B
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030
Analyst:	M. Brewer	M. Brewer	M. Brewer	M. Brewer
MS/MSD #:	BLK061496	BLK061496	BLK061496	BLK061496
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	6/14/96	6/14/96	6/14/96	6/14/96
Analyzed Date:	6/14/96	6/14/96	6/14/96	6/14/96
Instrument I.D.#:	HP-2	HP-2	HP-2	HP-2
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Result:	10	10	11	32
MS % Recovery:	100	100	110	107
Dup. Result:	9.2	8.9	9.4	28
MSD % Recov.:	92	89	94	93
RPD:	8.3	12	16	13
RPD Limit:	0-25	0-25	0-25	0-25

LCS #:	-	-	-	-
Prepared Date:	-	-	-	-
Analyzed Date:	-	-	-	-
Instrument I.D.#:	-	-	-	-
Conc. Spiked:	-	-	-	-
LCS Result:	-	-	-	-
LCS % Recov.:	-	-	-	-

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

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SEQUOIA ANALYTICAL, #1271

Jim Bava  
 Project Manager





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FAX (916) 921-0100

Alton Geoscience  
30-A Lindbergh Ave.  
Livermore, CA 94550  
Attention: Ron Scheele

Client Project ID: Mobil #04-H6J  
Sample Matrix: Air  
Analysis Method: EPA 5030/8015 Mod./8020  
First Sample #: 607-0600

Sampled: Jul 8, 1996  
Received: Jul 10, 1996  
Reported: Jul 17, 1996

QC Batch Number: GC071196 GC071196 GC071196 GC071196

802002B 802002B 802002B 802002B

## TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX DISTINCTION

Analyte	Reporting Limit µg/L	Sample I.D. 607-0600 I-1	Sample I.D. 607-0601 I-2	Sample I.D. 607-0602 I-3	Sample I.D. 607-0603 E-1
Purgeable Hydrocarbons	10	1,000	N.D.	680	N.D.
Benzene	0.050	9.2	N.D.	4.7	N.D.
Toluene	0.050	10	0.12	19	0.052
Ethyl Benzene	0.050	4.8	N.D.	2.4	N.D.
Total Xylenes	0.050	71	0.41	35	0.054

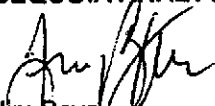
Chromatogram Pattern: Gasoline -- Gasoline --

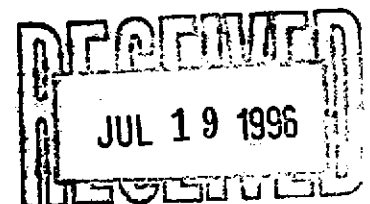
### Quality Control Data

Report Limit Multiplication Factor:	10	1.0	10	1.0
Date Analyzed:	7/11/96	7/11/96	7/11/96	7/11/96
Instrument Identification:	HP-2	HP-2	HP-2	HP-2
Surrogate Recovery, %: (QC Limits = 70-130%)	144	107	137	99

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





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Alton Geoscience  
30-A Lindbergh Ave.  
Livermore, CA 94550  
Attention: Ron Scheele

Client Project ID: Mobil #04-H6J  
Sample Matrix: Air  
Analysis Method: EPA 5030/8015 Mod./8020  
First Sample #: 607-0600

Sampled: Jul 8, 1996  
Received: Jul 10, 1996  
Reported: Jul 17, 1996

QC Batch Number: GC071196 GC071196 GC071196 GC071196

802002B 802002B 802002B 802002B

## TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX DISTINCTION

Analyte	Reporting Limit ppmv	Sample I.D. 607-0600 I-1	Sample I.D. 607-0601 I-2	Sample I.D. 607-0602 I-3	Sample I.D. 607-0603 E-1
Purgeable Hydrocarbons	2.4	245	N.D.	166	N.D.
Benzene	0.016	2.9	N.D.	1.5	N.D.
Toluene	0.013	2.7	0.32	5.0	0.014
Ethyl Benzene	0.012	1.1	N.D.	0.55	N.D.
Total Xylenes	0.012	16	0.10	8.1	0.012
Chromatogram Pattern:		Gasoline	--	Gasoline	--

### Quality Control Data

Report Limit Multiplication Factor:	10	1.0	10	1.0
Date Analyzed:	7/11/96	7/11/96	7/11/96	7/11/96
Instrument Identification:	HP-2	HP-2	HP-2	HP-2
Surrogate Recovery, %: (QC Limits = 70-130%)	144	107	137	99

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

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Alton Geoscience  
30-A Lindbergh Ave.  
Livermore, CA 94550  
Attention: Ron Scheele

Client Project ID: Mobil #04-H6J  
Matrix: Liquid

QC Sample Group: 6070600-603

Reported: Jul 17, 1996

## QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC071196	GC071196	GC071196	GC071196
	802002B	802002B	802002B	802002B
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030
Analyst:	M. Brewer	M. Brewer	M. Brewer	M. Brewer
MS/MSD #:	BLK071196	BLK071196	BLK071196	BLK071196
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	7/11/96	7/11/96	7/11/96	7/11/96
Analyzed Date:	7/11/96	7/11/96	7/11/96	7/11/96
Instrument I.D.#:	HP-2	HP-2	HP-2	HP-2
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Result:	8.2	8.1	8.4	25
MS % Recovery:	82	81	84	83
Dup. Result:	9.8	9.5	10	30
MSD % Recov.:	98	95	100	100
RPD:	18	16	17	18
RPD Limit:	0-25	0-25	0-25	0-25

LCS #:	2LCS071196	2LCS071196	2LCS071196	2LCS071196
Prepared Date:	7/11/96	7/11/96	7/11/96	7/11/96
Analyzed Date:	7/11/96	7/11/96	7/11/96	7/11/96
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:	22	22	22	67
LCS % Recov.:	110	110	110	112

MS/MSD LCS Control Limits	70-130	70-130	70-130	70-130
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SEQUOIA ANALYTICAL, #1271

Jim Bava  
Project Manager



# SEQUOIA ANALYTICAL CHAIN OF CUSTODY

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 1900 Bates Ave., Suite LM • Concord, CA 94520 • (510) 686-9600 FAX (510) 686-9689

Mobil Oil Consulting Firm: <u>Alton Geoservap</u>	Station No./Site Address: <u>0446 J</u>
Address: <u>30A Lindbergh Ave</u>	Project Contact: <u>Ron Scheelp</u>
City: <u>Livermore</u> State: <u>CA</u> Zip: <u>94550</u>	Mobil Oil Engineer: <u>Cherie Foutch</u>
Tel: <u>606 9150</u> Fax: <u>606 9260</u>	Sampler(s) (signature): <u>Paul Fournier</u>

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 <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	TTL <input type="checkbox"/> STL <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) <b>3 6 49</b>				
							<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Code 1 <input type="checkbox"/> Emergency Response
I-1	Air	7/8/96	12		1	bag	X																						
I-2	Air	7/8/96	12		1	bag	X																						
I-3	Air	7/8/96	12		1	bag	X																						
E-1	Air	7/8/96	12		1	bag	X																						

Relinquished by: <u>Paul Fournier</u>	Date/Time: <u>7/10/96 1620</u>	Relinquished by: <u>[Signature]</u>	Date/Time: <u>7/10/96 1620</u>	Turnaround Time: (check one): Normal <input checked="" type="checkbox"/> Same day _____ 1 day _____ 2 day _____ 5 day _____
Relinquished by: <u>[Signature]</u>	Date/Time: <u>7/10/96 1815</u>	Relinquished by: <u>[Signature]</u>	Date/Time: _____	
Relinquished by: <u>[Signature]</u>	Date/Time: _____	Relinquished in Lab by: <u>[Signature]</u>	Date/Time: <u>7/10/96 1815</u>	
Remarks:				Sample Integrity: Intact _____ On Ice _____