

Mobil Oil Corporation

ENVIRONMENTAL
POST OFFICE

2063 MAIN ST., SUITE 501
OAKLEY, CALIFORNIA 94561

95 AUG 29 PM 2:55

August 25, 1995

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

Re: Former Mobil location 04-H6J, 1024 Main St., Pleasanton, CA

Dear Mr. Seery:

Enclosed is a copy of the Second Quarter 1995 monitoring and sampling report for the above referenced location. This report summarizes the results of sampling taken in May, 1995.

Should you have any questions, please call me at (510) 625-1173.

Sincerely,



Cherine Foutch
Project Engineer

Enclosure

cc: Gary lee, Pleasanton Dept. of Public Works
Kevin Graves, RWQCB
Craig Mayfield, ACFC&WCD
Ron Scheele (w/o enclosure)

July 18, 1995

Mobil Oil Corporation
2063 Main Street, #501
Oakley, California 94537

Alton Project No.30-0065

ATTN: MS. CHERINE FOUTCH

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

RE: QUARTERLY PROGRESS REPORT,
SECOND QUARTER 1995

95 AUG 29 PM 2:55
ENVIRONMENTAL

Dear Ms.Foutch:

This quarterly report presents the results of fluid level monitoring and groundwater sampling at the above-referenced site. On May 3 and 4, 1995, fluid levels were measured and groundwater samples were collected in six monitoring and three recovery wells. No groundwater samples were collected from wells with free product (MW-2 and RW-1), in accordance with standard protocol. Groundwater samples were submitted to a state-certified laboratory for analysis. The results of the investigation are attached. Unocal Station No. 0543, located directly south of the site, was monitored and sampled by KEI on May 3, 1995. The results of the KEI investigation are included in the attachments.

Fluids recovered during sampling activities were treated onsite by a groundwater treatment system prior to discharging into the sanitary sewer system. Discharges into the sanitary sewer are permitted by the Dublin San Ramon Sewer District.

ATTACHMENTS

- Figure 1: Groundwater Elevation Contour Map
- Figure 2: Dissolved-Phase Hydrocarbon Concentrations
- Table 1: Summary of Groundwater Monitoring and Analysis
- Appendix: General Field Procedures, Official Laboratory Reports, and Chain of Custody Records

This report was prepared in compliance with the requirements of the Alameda County Environmental Health Department.

Quarterly Progress Report, Second Quarter 1995
Former Mobil Station 04-H6J
July 18, 1995

If you have any questions regarding this report, please call us at (510) 606-9150.

Sincerely,

ALTON GEOSCIENCE

Ron Scheele

Ron A. Scheele
Project Geologist

Matthew W. Katen

Matthew W. Katen, RG
Senior Geologist






Attachments

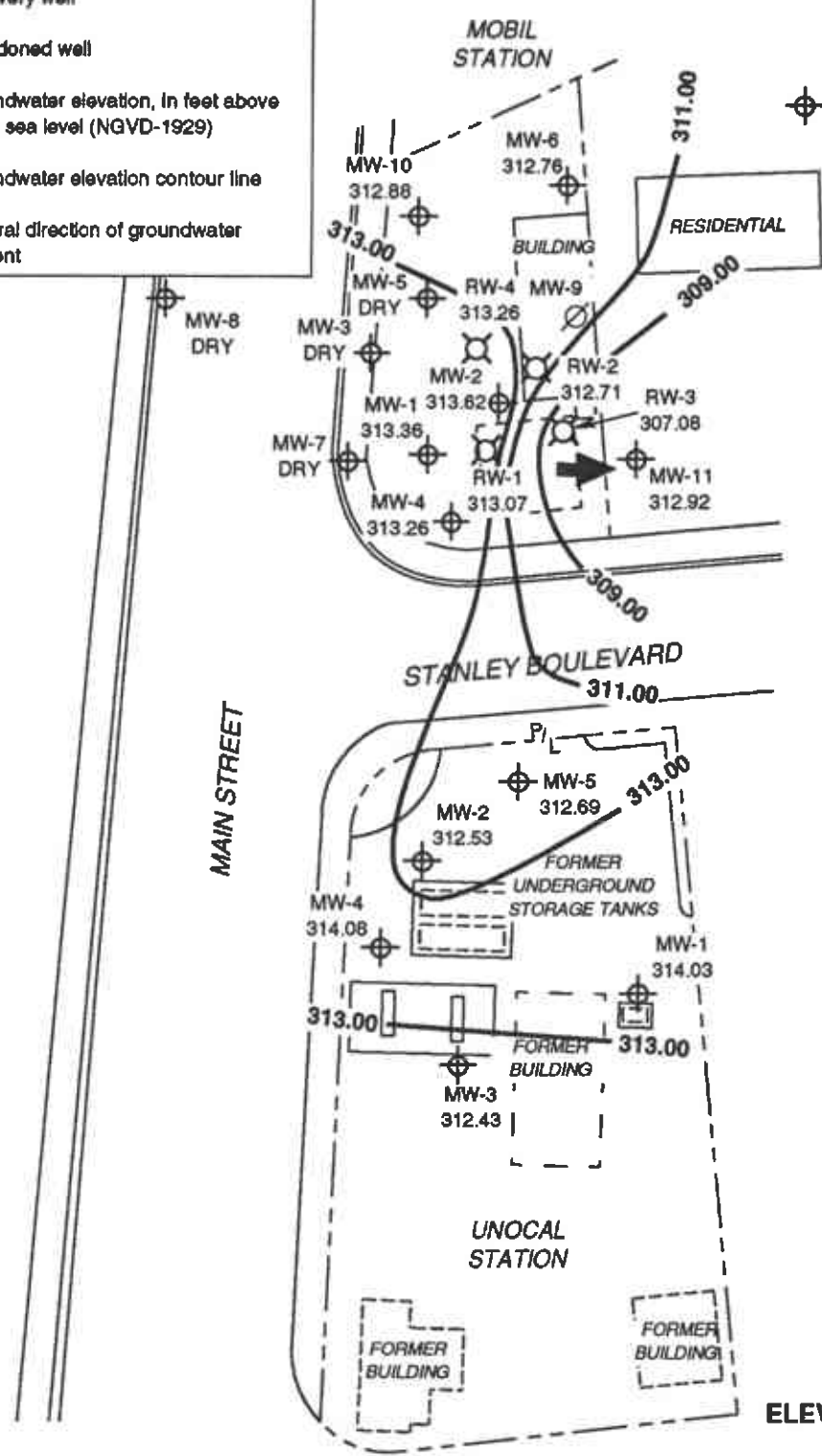
30-0065/M:\...104H6JR12.QFM



The ongoing project services summarized in this report have been conducted in accordance with current practice and the standard of care exercised by geologists and engineers performing similar tasks in this area. No warranty, express or implied, is made regarding the findings and professional opinions presented in this report. The findings are based solely upon an analysis of the observed conditions. If actual conditions differ from those described in this report, our office should be notified.

LEGEND

-  MW-12 Groundwater monitoring well
-  RW-4 Recovery well
-  MW-9 Abandoned well
- 309.91 Groundwater elevation, in feet above mean sea level (NGVD-1929)
-  Groundwater elevation contour line
-  General direction of groundwater gradient



NOTES:
 Contours are interpretive based on fluid level measurements collected May 3, 1995 with the automatic recovery system not operating.
 Contour interval = 2.0 foot.

GROUNDWATER ELEVATION CONTOUR MAP
 May 3, 1995

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

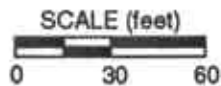



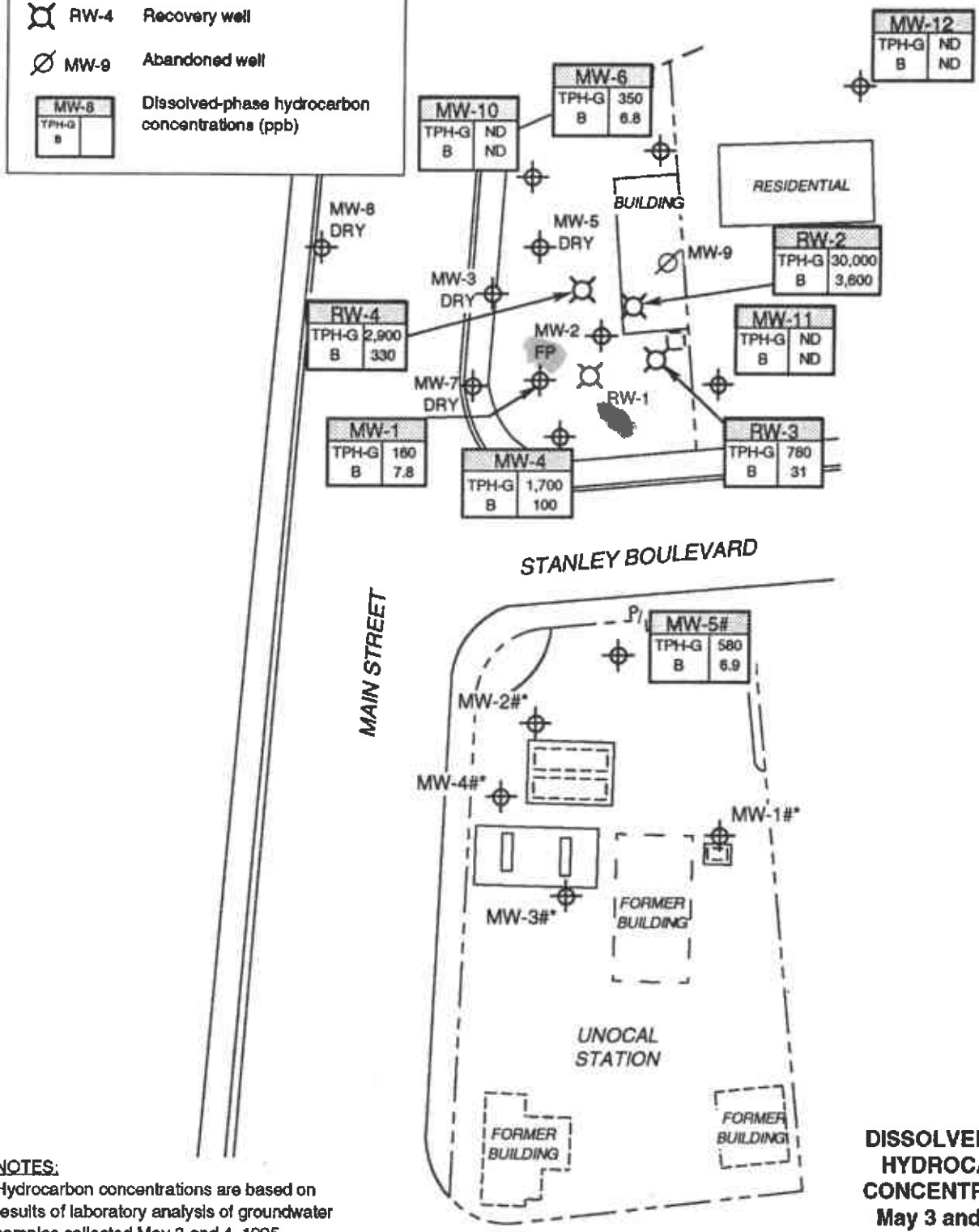


FIGURE 1

LEGEND

-  MW-12 Groundwater monitoring well
-  RW-4 Recovery well
-  MW-9 Abandoned well
- | |
|-------|
| MW-8 |
| TPH-G |
| B |

 Dissolved-phase hydrocarbon concentrations (ppb)



NOTES:

Hydrocarbon concentrations are based on results of laboratory analysis of groundwater samples collected May 3 and 4, 1995.
 ND = not detected at detection limits stated in official laboratory reports. TPH-G= total petroleum hydrocarbons as gasoline; B = benzene; ppb = parts per billion.
 FP = not sampled due to presence of free product. * = well not sampled.

**DISSOLVED-PHASE HYDROCARBON CONCENTRATIONS
 May 3 and 4, 1995**

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

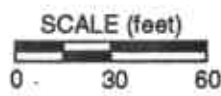


FIGURE 2

Table 1

Summary of Groundwater Monitoring and Analysis

Former Mobil Station 04-H6J

Sample ID	Date	Casing Elevation (feet)	Product Thickness (feet)	Depth To Water	Ground-water Elevation	TPH-G (ppb)	TPH-D (ppb)	Benzene (ppb)	Toluene (ppb)	Ethyl-benzene (ppb)	Total Xylenes (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			
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	—	—	—	—	—	—	
	04/30/92		0.00	40.50	307.95	71,000	—	9,200	19,000	3,700	15,000	
	07/31/92		0.15	43.64	304.92	—	—	—	—	—	—	

Table 1

Summary of Groundwater Monitoring and Analysis

Former Mobil Station 04-H6J

Sample ID	Date	Casing Elevation (feet)	Product Thickness (feet)	Depth To Water	Ground-water Elevation	TPH-G (ppb)	TPH-D (ppb)	Benzene (ppb)	Toluene (ppb)	Ethyl-benzene (ppb)	Total Xylenes (ppb)
MW-2	10/27/92		Trace	43.53	304.92	—	—	—	—	—	—
(con't)	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	—	—	—	—	—	—
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	—	—	—	—	—	—	—
	07/06/93		—	Dry	—	—	—	—	—	—	—
	11/30/93		—	Dry	—	—	—	—	—	—	—
	01/27/94		—	Dry	—	—	—	—	—	—	—
	04/25/94		—	Dry	—	—	—	—	—	—	—

Table 1

Summary of Groundwater Monitoring and Analysis

Former Mobil Station 04-H6J

Sample ID	Date	Casing Elevation (feet)	Product Thickness (feet)	Depth To Water	Ground-water Elevation	TPH-G (ppb)	TPH-D (ppb)	Benzene (ppb)	Toluene (ppb)	Ethyl-benzene (ppb)	Total Xylenes (ppb)	
MW-3 (con't)	07/08/94		—	Dry	—	—	—	—	—	—	—	
	02/21/95		—	Dry	—	—	—	—	—	—	—	
	05/03/95		—	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	
	02/21/95		0.02	34.87	313.22	—	—	—	—	—	—	
05/03/95		0.00	34.81	313.26	—	—	—	—	—	—		
05/04/95		—	—	—	—	1,700	—	100	200	50	240	
MW-5	10/18/90	347.97	—	**	—	—	—	—	—	—	—	
	08/06/91		0.00	34.25	313.72	—	—	—	—	—	—	

Table 1

Summary of Groundwater Monitoring and Analysis

Former Mobil Station 04-H6J

Sample ID	Date	Casing Elevation (feet)	Product Thickness (feet)	Depth To Water	Ground-water Elevation	TPH-G (ppb)	TPH-D (ppb)	Benzene (ppb)	Toluene (ppb)	Ethyl-benzene (ppb)	Total Xylenes (ppb)
MW-5	01/08/92		0.00	34.22	313.75	—	—	—	—	—	—
(con't)	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	—	—	—	—	—	—	—
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

Table 1

Summary of Groundwater Monitoring and Analysis

Former Mobil Station 04-H6J

Sample ID	Date	Casing Elevation (feet)	Product Thickness (feet)	Depth To Water	Ground-water Elevation	TPH-G (ppb)	TPH-D (ppb)	Benzene (ppb)	Toluene (ppb)	Ethyl-benzene (ppb)	Total Xylenes (ppb)
MW-6	04/25/94		0.00	40.77	307.46	—	—	—	—	—	—
(cont)	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
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
	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		—	Dry	—	—	—	—	—	—	—
	07/08/94		—	Dry	—	—	—	—	—	—	—
	02/21/95		—	Dry	—	—	—	—	—	—	—
	05/03/95		—	Dry	—	—	—	—	—	—	—

Table 1

Summary of Groundwater Monitoring and Analysis

Former Mobil Station 04-H6J

Sample ID	Date	Casing Elevation (feet)	Product Thickness (feet)	Depth To Water	Ground-water Elevation	TPH-G (ppb)	TPH-D (ppb)	Benzene (ppb)	Toluene (ppb)	Ethyl-benzene (ppb)	Total Xylenes (ppb)
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	—	—	—	—	—	—	—
	01/27/94		—	Dry	—	—	—	—	—	—	—
	04/25/94		—	Dry	—	—	—	—	—	—	—
	07/08/94		—	Dry	—	—	—	—	—	—	—
	10/05/94		—	—	—	—	—	—	—	—	—
	02/21/95		—	Dry	—	—	—	—	—	—	—
05/03/95		—	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	

Table 1

Summary of Groundwater Monitoring and Analysis

Former Mobil Station 04-H6J

Sample ID	Date	Casing Elevation (feet)	Product Thickness (feet)	Depth To Water	Ground-water Elevation	TPH-G (ppb)	TPH-D (ppb)	Benzene (ppb)	Toluene (ppb)	Ethyl-benzene (ppb)	Total Xylenes (ppb)
MW-9	01/27/94		0.00	44.32	304.21	11,000	—	1,400	130	230	700
(con't)	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)											
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
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

Table 1

Summary of Groundwater Monitoring and Analysis

Former Mobil Station 04-H6J

Sample ID	Date	Casing Elevation (feet)	Product Thickness (feet)	Depth To Water	Ground-water Elevation	TPH-G (ppb)	TPH-D (ppb)	Benzene (ppb)	Toluene (ppb)	Ethyl-benzene (ppb)	Total Xylenes (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
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	—	—	—	—	—	—	—
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	—	—	—	—	—	—	—

Table 1

Summary of Groundwater Monitoring and Analysis

Former Mobil Station 04-H6J

Sample ID	Date	Casing Elevation (feet)	Product Thickness (feet)	Depth To Water	Ground-water Elevation	TPH-G (ppb)	TPH-D (ppb)	Benzene (ppb)	Toluene (ppb)	Ethyl-benzene (ppb)	Total Xylenes (ppb)
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	—	—	—	—	—	—	—
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	—	—	—	—	—	—	—
	05/03/95		—	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	—	—	—	—	—	—
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

Table 1

Summary of Groundwater Monitoring and Analysis

Former Mobil Station 04-H6J

Sample ID	Date	Casing Elevation (feet)	Product Thickness (feet)	Depth To Water	Ground-water Elevation	TPH-G (ppb)	TPH-D (ppb)	Benzene (ppb)	Toluene (ppb)	Ethyl-benzene (ppb)	Total Xylenes (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
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
FORMER UNOCAL STATION #0543 WELLS											
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	—	—	—	—	—	—

Table 1

Summary of Groundwater Monitoring and Analysis

Former Mobil Station 04-H6J

Sample ID	Date	Casing Elevation (feet)	Product Thickness (feet)	Depth To Water	Ground-water Elevation	TPH-G (ppb)	TPH-D (ppb)	Benzene (ppb)	Toluene (ppb)	Ethyl-benzene (ppb)	Total Xylenes (ppb)
MW-1#	10/05/94		0.00	47.26	303.52	ND	—	ND	ND	ND	ND
(con't)	01/04/95		0.00	44.98	305.80	ND	—	ND	ND	ND	ND
	05/03/95		0.00	36.75	314.03	—	—	—	—	—	—
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
	11/30/93	349.51	—	—	—	—	—	—	—	—	—
	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	—	—	—	—	—	—
	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	—	—	—	—	—	—
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	—	—	—	—	—	—

Table 1

Summary of Groundwater Monitoring and Analysis

Former Mobil Station 04-H6J

Sample ID	Date	Casing Elevation (feet)	Product Thickness (feet)	Depth To Water	Ground-water Elevation	TPH-G (ppb)	TPH-D (ppb)	Benzene (ppb)	Toluene (ppb)	Ethyl-benzene (ppb)	Total Xylenes (ppb)
MW-3#	07/06/93		0.00	37.82	313.53	ND	—	ND	ND	ND	ND
(con't)	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	—	—	—	—	—	—
	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	—	—	—	—	—	—
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	—	—	—	—	—	—
	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	—	—	—	—	—	—

Table 1

Summary of Groundwater Monitoring and Analysis

Former Mobil Station 04-H6J

Sample ID	Date	Casing Elevation (feet)	Product Thickness (feet)	Depth To Water	Ground-water Elevation	TPH-G (ppb)	TPH-D (ppb)	Benzene (ppb)	Toluene (ppb)	Ethyl-benzene (ppb)	Total Xylenes (ppb)
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	—	—	—	—	—	—
	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
	05/03/95		0.00	36.64	312.69	580	—	6.9	1.5	1.6	1.7

NOTES:

ppb = parts per billion	* = reported by laboratory as non-gasoline mixture
TPH-G = total petroleum hydrocarbons as gasoline	** = well inaccessible
TPH-D = total petroleum hydrocarbons as diesel	# = wells installed by Kaprealian Engineering at former Unocal Station #0543; resurveyed by Kier & Wright Civil Engineers & Surveyors, Inc. 09/20/93.
ND = not detected at or above method detection limits	Trace = product present but too thin to be measured
— = not measured/not analyzed	
1,2-DCE = 1,2-Dichloroethane	

APPENDIX

**GENERAL FIELD PROCEDURES, OFFICIAL LABORATORY REPORTS,
AND CHAIN OF CUSTODY RECORDS**

GENERAL FIELD PROCEDURES

General field procedures used during fluid level monitoring and groundwater sampling activities are described below.

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 ground water 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.



Alton Geoscience 30-A Lindbergh Ave. Livermore, CA 94550 Attention: Ron Scheele	Client Project ID: Mobil #04-H6J Sample Matrix: Water Analysis Method: EPA 5030/8015/8020 First Sample #: 505-0388	Sampled: May 3 & 4, 1995 Received: May 5, 1995 Reported: May 17, 1995
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TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX DISTINCTION

Analyte	Reporting Limit µg/L	Sample I.D. 505-0388 MW-1	Sample I.D. 505-0389 MW-4	Sample I.D. 505-0390 MW-6	Sample I.D. 505-0391 MW-10	Sample I.D. 505-0392 MW-11	Sample I.D. 505-0393 MW-12
Purgeable Hydrocarbons	50	160	1,700	350	N.D.	N.D.	N.D.
Benzene	0.50	7.8	100	6.8	N.D.	N.D.	N.D.
Toluene	0.50	12	200	1.8	N.D.	N.D.	N.D.
Ethyl Benzene	0.50	4.5	50	7.4	N.D.	N.D.	N.D.
Total Xylenes	0.50	20	240	7.1	N.D.	N.D.	N.D.
Chromatogram Pattern:		Gasoline	Gasoline	Gasoline	--	--	--

Quality Control Data

Report Limit Multiplication Factor:	1.0	4.0	1.0	1.0	1.0	1.0
Date Analyzed:	5/9/95	5/9/95	5/10/95	5/9/95	5/9/95	5/9/95
Instrument Identification:	HP-5	HP-5	HP-9	HP-5	HP-5	HP-2
Surrogate Recovery, %: (QC Limits = 70-130%)	82	70	82	90	88	105

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

RECEIVED
MAY 24 1995
RECEIVED



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

Client Project ID: Mobil #04-H6J
Sample Matrix: Water
Analysis Method: EPA 5030/8015/8020
First Sample #: 505-0394

Sampled: May 3 & 4, 1995
Received: May 5, 1995
Reported: May 17, 1995

TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX DISTINCTION

Analyte	Reporting Limit µg/L	Sample	Sample	Sample
		I.D. 505-0394 RW-2	I.D. 505-0395 RW-3	I.D. 505-0396 RW-4
Purgeable Hydrocarbons	50	30,000	780	2,900
Benzene	0.50	3,600	31	330
Toluene	0.50	2,000	28	130
Ethyl Benzene	0.50	1,000	6.0	120
Total Xylenes	0.50	5,700	40	410
Chromatogram Pattern:		Gasoline	Gasoline	Gasoline

Quality Control Data

Report Limit Multiplication Factor:	200	4.0	10
Date Analyzed:	5/10/95	5/9/95	5/9/95
Instrument Identification:	HP-9	HP-2	HP-2
Surrogate Recovery, %: (QC Limits = 70-130%)	81	113	88

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
Matrix: Liquid

QC Sample Group: 5050388-96

Reported: May 17, 1995

QUALITY CONTROL DATA REPORT

ANALYTE	Benzene	Toluene	Ethyl Benzene	Xylenes
Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Analyst:	M. Creusere	M. Creusere	M. Creusere	M. Creusere

MS/MSD	Benzene	Toluene	Ethyl Benzene	Xylenes
Batch#:	5050399	5050399	5050399	5050399
Date Prepared:	5/9/95	5/9/95	5/9/95	5/9/95
Date Analyzed:	5/9/95	5/9/95	5/9/95	5/9/95
Instrument I.D.#:	HP-5	HP-5	HP-5	HP-5
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L	60 µg/L
Matrix Spike % Recovery:	90	95	95	97
Matrix Spike Duplicate % Recovery:	85	90	90	92
Relative % Difference:	5.7	5.4	5.4	5.3

LCS Batch#:	3LCS050995	3LCS050995	3LCS050995	3LCS050995
Date Prepared:	5/9/95	5/9/95	5/9/95	5/9/95
Date Analyzed:	5/9/95	5/9/95	5/9/95	5/9/95
Instrument I.D.#:	HP-5	HP-5	HP-5	HP-5
LCS % Recovery:	95	94	95	99

% Recovery Control Limits:	Benzene	Toluene	Ethyl Benzene	Xylenes
	71-133	72-128	72-130	71-120

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.



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

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

QC Sample Group: 5050388-96

Reported: May 17, 1995

QUALITY CONTROL DATA REPORT

ANALYTE	Benzene	Toluene	Ethyl Benzene	Xylenes
Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Analyst:	J. Fontecha	J. Fontecha	J. Fontecha	J. Fontecha

MS/MSD Batch#:	5050293	5050293	5050293	5050293
Date Prepared:	5/10/95	5/10/95	5/10/95	5/10/95
Date Analyzed:	5/10/95	5/10/95	5/10/95	5/10/95
Instrument I.D.#:	HP-9	HP-9	HP-9	HP-9
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L	60 µg/L
Matrix Spike % Recovery:	100	105	115	117
Matrix Spike Duplicate % Recovery:	100	110	110	108
Relative % Difference:	0.0	4.7	4.4	8.0

LCS Batch#:	4LCS051095	4LCS051095	4LCS051095	4LCS051095
Date Prepared:	5/10/95	5/10/95	5/10/95	5/10/95
Date Analyzed:	5/10/95	5/10/95	5/10/95	5/10/95
Instrument I.D.#:	HP-9	HP-9	HP-9	HP-9
LCS % Recovery:	100	103	105	110

% Recovery Control Limits:	71-133	72-128	72-130	71-120
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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.



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

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

QC Sample Group: 5050388-96

Reported: May 17, 1995

QUALITY CONTROL DATA REPORT

ANALYTE	Benzene	Toluene	Ethyl Benzene	Xylenes
Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Analyst:	J. Fontecha	J. Fontecha	J. Fontecha	J. Fontecha

MS/MSD	Benzene	Toluene	Ethyl Benzene	Xylenes
Batch#:	5050370	5050370	5050370	5050370
Date Prepared:	5/9/95	5/9/95	5/9/95	5/9/95
Date Analyzed:	5/9/95	5/9/95	5/9/95	5/9/95
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
Matrix Spike % Recovery:	105	105	110	110
Matrix Spike Duplicate % Recovery:	95	95	100	100
Relative % Difference:	10	10	9.5	9.5

LCS Batch#:	1LCS050995	1LCS050995	1LCS050995	1LCS050995
Date Prepared:	5/9/95	5/9/95	5/9/95	5/9/95
Date Analyzed:	5/9/95	5/9/95	5/9/95	5/9/95
Instrument I.D.#:	HP-2	HP-2	HP-2	HP-2
LCS % Recovery:	104	105	111	110

% Recovery Control Limits:	Benzene	Toluene	Ethyl Benzene	Xylenes
	71-133	72-128	72-130	71-120

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.

