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DEVELOPMENT SERVICES DEPT

FIRE DEPARTMENT

SEP 18 1997

September 5, 1997

City of San Leandro  
Development Services  
835 E. 14th Street  
San Leandro, CA 94577

RE: Former Unocal Service Station #2512  
1300 Davis Street  
San Leandro, California

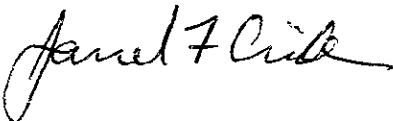
To whom it may concern:

Per the request of the Unocal Corporation Project Manager, Mr. Robert A. Boust, enclosed please find our report (MPDS-UN2512-10) dated August 20, 1997, for the above referenced site.

Should you have any questions regarding the reporting of data, please feel free to call our office at (510) 602-5120. Any other questions may be directed to the Project Manager at (510) 277-2334.

Sincerely,

MPDS Services, Inc.



Jarrel F. Crider

/jfc

Enclosure

cc: Mr. Robert A. Boust

MPDS-UN2512-10  
August 20, 1997

Unocal - DBG/AMG  
2000 Crow Canyon Place, Suite 470  
P.O. Box 5073  
San Ramon, California 94583-0973

Attention: Mr. Robert A. Boust

RE: Quarterly Report  
Former Unocal Service Station #2512  
1300 Davis Street  
San Leandro, California

Dear Mr. Boust:

This data report presents the results of the most recent monitoring and sampling of the monitoring wells at the referenced site by MPDS Services, Inc.

### RECENT FIELD ACTIVITIES

The monitoring wells that were monitored and sampled during this quarter are indicated in Table 1. Prior to sampling, the wells were checked for depth to water and the presence of free product or sheen. The monitoring data and the ground water elevations are summarized in Table 1. The ground water flow direction during the most recent quarter is shown on the attached Figure 1.

Ground water samples were collected on July 21, 1997. Prior to sampling, the wells were each purged of between 7.5 and 9 gallons of water. During purging operations, the field parameters pH, temperature, and electrical conductivity were recorded on the purging/sampling data sheets which are attached to this report. Once the field parameters were observed to stabilize, and where possible, a minimum of approximately three casing volumes had been removed from each well, samples were then collected using a clean Teflon bailer. The samples were decanted into clean VOA vials and/or one-liter amber bottles, as appropriate, which were then sealed with Teflon-lined screw caps, labeled, and stored in a cooler, on ice, until delivery to a state-certified laboratory. MPDS Services, Inc. transported the purged ground water to the Tosco Refinery located in Rodeo, California, for treatment and discharge to San Pablo Bay under NPDES permit.

### ANALYTICAL RESULTS

The ground water samples were analyzed at Sequoia Analytical Laboratory and were accompanied by properly executed Chain of Custody documentation. The analytical results of the ground water samples collected to date are summarized in Tables 2 and 3. The concentrations of Total Petroleum Hydrocarbons (TPH) as gasoline, TPH as diesel, and benzene detected in the ground water samples collected this quarter are shown on the attached Figure 2. Copies of the laboratory analytical results and the Chain of Custody documentation are attached to this report.

MPDS-UN2512-10

August 20, 1997

Page 2

### LIMITATIONS

Environmental changes, either naturally-occurring or artificially-induced, may cause changes in ground water levels and flow paths, thereby changing the extent and concentration of any contaminants.

### DISTRIBUTION

A copy of this report should be sent to the Alameda County Health Care Services Agency, and to the City of San Leandro.

If you have any questions regarding this report, please do not hesitate to call Mr. Nubar Srabian at (510) 602-5120.

Sincerely,

MPDS Services, Inc.



Armond A. Balaian  
Staff Engineer



Hagop Kevork, P.E.  
Senior Staff Engineer



License No. C 55734  
Exp. Date December 31, 2000

/aab

Attachments: Tables 1, 2 & 3  
Location Map  
Figures 1 & 2  
Laboratory Analyses  
Chain of Custody documentation

cc: Mr. Sarkis A. Soghomonian, Kaprealian Engineering, Inc.

**Table 1**  
 Summary of Monitoring Data

Well #	Ground Water Elevation (feet)	Depth to Water (feet)*	Total Well Depth (feet)*	Product Thickness (feet)	Sheen	Water Purged (gallons)
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**(Monitored and Sampled on July 21, 1997)**

MW3	16.85	15.17	33.29	0	No	9 (50)
MW7	16.70	15.01	29.70	0	No	7.5
MW8	17.02	15.71	29.93	0	No	7.5
MW9	16.89	15.44	30.00	0	No	7.5

**(Monitored and Sampled on April 16, 1997)**

MW3	19.97	12.05	32.18	0	No	10 (100)
MW7	19.59	12.12	29.78	0	No	10
MW8	19.99	12.74	30.04	0	No	10
MW9	19.67	12.66	29.98	0	No	10

**(Monitored and Sampled on January 28, 1997)**

MW3	20.47	11.55	33.35	0	No	11.5 (100)
MW7	21.30	10.41	29.61	0	No	10
MW8	18.87	13.86	29.86	0	No	8.5
MW9	18.57	13.76	29.99	0	No	8.5

**(Monitored and Sampled on October 25, 1996)**

MW3	16.69	15.33	33.30	0	No	9.5 (100)
MW7	16.58	15.13	29.89	0	No	8
MW8	16.77	15.96	29.95	0	No	7.5
MW9	16.67	15.66	30.00	0	No	7.5

Well #	Well Casing Elevation (feet)*
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MW3	32.02
MW7	31.71
MW8	32.73
MW9	32.33

**Table 1**  
Summary of Monitoring Data

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- ◆ The depth to water level and total well depth measurements were taken from the top of the well casings.
- \* The elevations of the top of the well casing are relative to MSL, per East Bay MUD Benchmark DAVIS FREE #2 - San Leandro 1952 (Elevation = 32.02 feet MSL).
- (x) Amount of water purged after sampling.
- Sheen determination was not performed.

**Table 2**  
 Summary of Laboratory Analyses  
 Water

Well #	Date	TPH as Diesel	TPH as Gasoline	Benzene	Toluene	Ethyl-Benzene	Xylenes	TOG (mg/L)	MTBE	
MW1	4/25/89	100	ND	0.31	ND	ND	ND	--	--	
	8/10/89	ND	ND	ND	ND	ND	ND	ND	--	
	11/21/89	ND	ND	ND	ND	ND	ND	8.9	--	
	2/23/90	ND	ND	ND	ND	ND	ND	ND	--	
	5/10/90	ND	ND	ND	ND	ND	ND	ND	--	
	8/9/90	ND	ND	ND	ND	ND	ND	ND	--	
	11/6/90	ND	ND	ND	ND	ND	ND	ND	--	
	2/4/91	ND	ND	ND	0.31	ND	0.62	ND	--	
	5/24/91	--	ND	ND	ND	ND	ND	ND	--	
	8/15/91	NOT SAMPLED								
	11/19/91	NOT SAMPLED								
	2/27/92	NOT SAMPLED								
	5/26/92	NOT SAMPLED								
	10/30/92	NOT SAMPLED								
	6/9/94	--	580†	ND	ND	ND	ND	ND	--	--
	9/8/94	--	160††	ND	1.6	ND	3.1	--	--	
	1/25/95	WELL WAS DESTROYED								
MW2	4/25/89	ND	32	0.35	ND	ND	ND	--	--	
	8/10/89	ND	ND	ND	0.39	ND	ND	ND	--	
	11/21/89	ND	48	ND	0.51	ND	ND	1.6	--	
	2/23/90	ND	44	ND	ND	ND	ND	ND	--	
	5/10/90	ND	43	ND	1	ND	ND	ND	--	
	8/9/90	ND	ND	ND	ND	ND	ND	ND	--	
	11/6/90	ND	ND	ND	0.42	ND	1.4	ND	--	
	2/4/91	ND	ND	ND	0.38	ND	0.87	ND	--	
	5/24/91	--	ND	1.5	ND	ND	ND	ND	--	
	8/15/91	--	ND	ND	ND	ND	ND	ND	--	
	11/19/91	--	220	2.5	8.4	2.4	14	--	--	
	2/27/92	--	330	12	12	10	93	--	--	
	5/26/92	--	2,900	8.8	9.3	54	36	--	--	
	10/30/92	--	1,200†	ND	ND	ND	ND	--	--	
6/9/94	--	1,900††	6.7	ND	66	ND	--	--		
9/8/94	--	3,000†	ND	ND	ND	17	--	--		
1/25/95	WELL WAS DESTROYED									
MW3	4/25/89	5,700	56	ND	ND	0.31	0.49	--	--	
	8/10/89	860	3,200	73	140	35	240	ND	--	
	11/21/89	110	1,900	ND	ND	ND	ND	3.8	--	
	2/23/90	350	ND	0.32	ND	ND	ND	1.3	--	
	5/10/90	850	6,200	94	460	160	540	2.8	--	
	8/9/90	500	1,900	56	140	140	31	ND	--	
	11/6/90	940	16,000	820	1,500	2,200	770	ND	--	
	2/4/91	NOT SAMPLED DUE TO A TRACE OF FREE PRODUCT								
	5/24/91	2,000	23,000	940	3,400	590	2,600	ND	--	

**Table 2**  
 Summary of Laboratory Analyses  
 Water

Well #	Date	TPH as Diesel	TPH as Gasoline	Benzene	Toluene	Ethyl-Benzene	Xylenes	TOG (mg/L)	MTBE
MW3	8/15/91	NOT SAMPLED DUE TO A TRACE OF FREE PRODUCT							
(Cont.)	11/19/91	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT							
	2/27/92	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT							
	5/26/92•	2,400,000	1,300,000	5,100	66,000	20,000	160,000	880	--
	10/30/92	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT							
	6/9/94	17,000*	69,000	1,300	7,100	1,900	11,000	--	--
	9/8/94	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT							
	10/21/95	5,900*	50,000	250	4,200	1,700	18,000	--	§
	1/24/96	5,300*	100,000	950	3,300	2,500	16,000	--	‡
	4/23/96	4,900*	50,000	430	1,700	1,600	7,600	--	ND
	7/25/96	2,400**	17,000	170	ND	650	3,300	--	240
	10/25/96	3,700**	26,000	420	1,100	1,800	6,400	--	340
	1/28/97	3,900*	32,000	230	1,000	1,000	4,500	--	ND
	4/16/97	3,100*	12,000	76	ND	330	1,600	--	ND
	7/21/97	2,400*	10,000	82	28	430	1,400	--	76
MW4	8/29/89	120	ND	ND	ND	ND	ND	ND	--
	11/21/89	ND	ND	ND	ND	ND	ND	ND	--
	2/23/90	ND	ND	ND	ND	ND	ND	ND	--
	5/10/90	88	54	ND	2	ND	0.37	ND	--
	8/9/90	ND	ND	ND	ND	ND	ND	ND	--
	11/6/90	ND	ND	ND	0.36	ND	0.98	ND	--
	2/4/91	ND	ND	ND	0.72	ND	1.1	ND	--
	5/24/91	ND	ND	0.64	ND	ND	ND	ND	--
	8/15/91	ND	ND	ND	ND	ND	ND	ND	--
	11/19/91	ND	ND	ND	ND	ND	ND	--	--
	2/27/92	ND	43	ND	1	0.37	2.5	--	--
	5/26/92	ND	120	0.59	0.82	ND	1.9	--	--
	10/30/92	WELL WAS INACCESSIBLE							
	6/9/94	ND	780†	ND	ND	ND	ND	--	--
	9/8/94	ND	300†	ND	ND	ND	ND	--	--
	1/25/95	WELL WAS DESTROYED							
MW5	8/29/89	100	ND	ND	0.94	0.3	ND	ND	--
	11/21/89	70	ND	ND	ND	ND	ND	ND	--
	2/23/90	ND	ND	ND	ND	ND	ND	ND	--
	5/10/90	83	ND	ND	ND	ND	0.31	ND	--
	8/9/90	ND	ND	ND	ND	ND	ND	ND	--
	11/6/90	ND	ND	ND	ND	ND	ND	ND	--
	2/4/91	ND	ND	ND	0.35	ND	ND	ND	--
	5/24/91	ND	ND	ND	ND	ND	ND	ND	--
	11/19/91	NOT SAMPLED							
	2/27/92	NOT SAMPLED							

**Table 2**  
 Summary of Laboratory Analyses  
 Water

Well #	Date	TPH as Diesel	TPH as Gasoline	Benzene	Toluene	Ethyl Benzene	Xylenes	TOG (mg/L)	MTBE
MW5	5/26/92	NOT SAMPLED							
(Cont.)	10/30/92	NOT SAMPLED							
	6/9/94	WELL WAS INACCESSIBLE							
	9/8/94	WELL WAS INACCESSIBLE							
	1/25/95	WELL WAS DESTROYED							
MW6	8/29/89	ND	ND	ND	ND	ND	ND	ND	--
	11/21/89	ND	ND	ND	ND	ND	ND	ND	--
	2/23/90	ND	ND	ND	ND	ND	ND	ND	--
	5/10/90	ND	ND	ND	1.2	ND	ND	ND	--
	8/9/90	ND	ND	ND	ND	ND	ND	ND	--
	11/6/90	ND	ND	1.6	0.35	ND	ND	ND	--
	2/4/91	ND	ND	ND	ND	ND	ND	ND	--
	5/24/91	--	ND	ND	ND	ND	ND	ND	--
	8/15/91	--	ND	ND	ND	ND	ND	ND	--
	11/19/91	--	ND	ND	ND	ND	ND	--	--
	2/27/92	--	ND	3.2	ND	ND	3.8	--	--
	5/26/92	--	ND	ND	ND	ND	0.65	--	--
	10/30/92	--	ND	ND	ND	ND	ND	--	--
	6/9/94	WELL WAS INACCESSIBLE							
	9/8/94	WELL WAS INACCESSIBLE							
	1/25/95	WELL WAS DESTROYED							
MW7	2/27/92	--	38	ND	0.97	0.69	4	--	--
	5/26/92	--	ND	ND	ND	ND	0.6	--	--
	10/30/92	--	ND	ND	ND	ND	ND	--	--
	6/9/94	--	610†	ND	ND	ND	ND	--	--
	9/8/94	--	ND	ND	1.3	ND	1.6	--	--
	10/21/95	--	ND	ND	ND	ND	ND	--	--
	1/24/96	--	ND	ND	ND	ND	ND	--	--
	4/23/96	--	220	ND	0.62	0.88	5.4	--	ND
	7/25/96	--	ND	ND	ND	ND	ND	--	ND
	10/25/96	--	ND	ND	ND	ND	ND	--	ND
	1/28/97	--	ND	ND	ND	ND	ND	--	ND
	4/16/97	--	ND	ND	ND	ND	ND	--	ND
	7/21/97	--	ND	ND	ND	ND	ND	--	ND
MW8	10/21/95	--	ND	ND	ND	ND	ND	--	--
	1/24/96	--	ND	ND	ND	ND	ND	--	--
	4/23/96	--	ND	ND	ND	ND	ND	--	ND
	7/25/96	--	ND	ND	ND	ND	ND	--	ND
	10/25/96	--	ND	ND	ND	ND	ND	--	ND
	1/28/97	--	ND	ND	ND	ND	ND	--	ND
	4/16/97	--	ND	ND	ND	ND	ND	--	ND
	7/21/97	--	ND	ND	ND	ND	ND	--	ND



**Table 2**  
 Summary of Laboratory Analyses  
 Water

Well #	Date	TPH as Diesel	TPH as Gasoline	Benzene	Toluene	Ethyl Benzene	Xylenes	TOG (mg/L)	MTBE
MW9	10/21/95	--	ND	ND	ND	ND	ND	--	§
	1/24/96	--	ND	ND	ND	ND	ND	--	‡
	4/23/96	--	ND	ND	ND	ND	ND	--	ND
	7/25/96	--	ND	ND	ND	ND	ND	--	ND
	10/25/96	--	ND	ND	ND	ND	ND	--	180
	1/28/97	--	ND	ND	ND	ND	ND	--	75
	4/16/97	--	ND	ND	ND	ND	ND	--	ND
	7/21/97	--	ND	ND	ND	ND	ND	--	ND

TOG = Total Oil & Grease

MTBE = Methyl tert butyl ether

ND = Non-detectable.

mg/L = milligrams per liter.

- \* Sequoia Analytical Laboratory reported that the hydrocarbons detected appeared to be a diesel and non-diesel mixture.
- \*\* Sequoia Analytical Laboratory reported that the hydrocarbons detected did not appear to be diesel.
- † Sequoia Analytical Laboratory reported that the hydrocarbons detected did not appear to be gasoline.
- †† Sequoia Analytical Laboratory reported that the hydrocarbons detected appeared to be a gasoline and non-gasoline mixture.
- Free product was detected in well MW3; however, a water sample was collected and analyzed to determine if the product was predominantly hydrocarbon based.
- § Sequoia Analytical Laboratory has potentially identified the presence of MTBE at reportable levels in the sample collected from this well.
- ‡ Sequoia Analytical Laboratory has identified the presence of MTBE at a level above or equal to the taste and odor threshold of 40 µg/L in the sample collected from this well

**Table 2**  
**Summary of Laboratory Analyses**  
**Water**

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-- Indicates analysis was not performed.

Results are in micrograms per liter ( $\mu\text{g/L}$ ), unless otherwise indicated.

Note: The detection limit for results reported as ND by Sequoia Analytical Laboratory is equal to the stated detection limit times the dilution factor indicated on the laboratory analytical sheets.

Prior to August 1, 1995, the total purgeable petroleum hydrocarbon (TPH as gasoline) quantification range used by Sequoia Analytical Laboratory was C4 - C12. Since August 1, 1995, the quantification range used by Sequoia Analytical Laboratory is C6 - C12.

Monitoring data prior to June 9, 1994, were provided by Kaprealian Engineering, Inc.

**Table 3**  
 Summary of Laboratory Analyses  
 Water

Well #	Date	Tetrachloro-ethene	1,1-Dichloro-ethane	1,1,1-Trichloro-ethane	Chloro-methane	1,1-Dichloro-ethene	1,2-Dichloro-benzene	Trichloro-ethene
MW1	4/25/89	3.3	ND	ND	ND	ND	ND	0.55
	11/06/90	4.8	ND	ND	ND	ND	ND	ND
	5/24/91	4.6	ND	ND	ND	ND	ND	ND
	6/9/94	1.0	ND	ND	ND	ND	ND	ND
	9/8/94	1.2	ND	ND	ND	ND	ND	ND
	1/25/95	WELL WAS DESTROYED						
MW2	4/25/89	0.68	ND	ND	ND	ND	ND	ND
	11/06/90	ND	ND	ND	ND	ND	ND	ND
	5/24/91	ND	ND	ND	ND	ND	ND	ND
	8/15/91	ND	ND	ND	ND	ND	ND	ND
	11/19/91	ND	ND	ND	ND	ND	ND	ND
	2/27/92	ND	ND	ND	ND	ND	ND	ND
	5/26/92	ND	ND	ND	ND	ND	ND	ND
	10/30/92	ND	ND	ND	ND	ND	ND	ND
	6/9/94	ND	ND	ND	ND	ND	ND	ND
	9/8/94	ND	ND	ND	ND	ND	ND	ND
1/25/95	WELL WAS DESTROYED							
MW3	4/25/89	1.0	ND	ND	ND	ND	ND	ND
	11/6/90	ND	ND	ND	ND	ND	ND	ND
	5/24/91	ND	ND	ND	ND	ND	ND	ND
	8/15/91	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT						
	11/19/91	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT						
	2/27/92	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT						
	5/26/92	ND	ND	ND	ND	ND	ND	ND
	10/30/92	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT						
	6/9/94	ND	ND	ND	ND	ND	ND	ND
	9/8/94	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT						
	10/21/95	ND	ND	ND	ND	ND	ND	ND
	1/24/96	ND	ND	ND	ND	ND	ND	ND
	4/23/96	ND	ND	ND	ND	ND	ND	ND
	7/25/96	ND	ND	ND	ND	ND	ND	ND
10/25/96	ND	ND	ND	ND	ND	ND	ND	
1/28/97	ND	ND	ND	ND	ND	ND	ND	
4/16/97	ND	ND	ND	ND	ND	ND	ND	
7/21/97	ND	ND	ND	ND	ND	ND	ND	
MW4	11/6/90	2.9	ND	ND	ND	ND	ND	ND
	5/24/91	4.1	2.5	3.9	ND	ND	ND	ND
	8/15/91	3.6	ND	ND	ND	ND	ND	ND
	11/19/91	3.4	ND	ND	ND	ND	ND	ND
	2/27/92	3.5	6	ND	ND	ND	ND	ND

**Table 3**  
 Summary of Laboratory Analyses  
 Water

Well #	Date	1,1-Tetrachloro-ethene	1,1-Dichloro-ethane	1,1,1-Trichloro-ethane	Chloro-methane	1,1-Dichloro-ethene	1,2-Dichloro-benzene	Trichloro-ethene
MW4	5/26/92	2.4	13	3.5	ND	0.83	ND	ND
(Cont.)	10/30/92	WELL WAS INACCESSIBLE						
	6/9/94	2.8	8.8	0.83	ND	0.51	ND	0.70
	9/8/94*	1.8	ND	ND	ND	ND	ND	0.60
	1/25/95	WELL WAS DESTROYED						
MW5	11/6/90	0.7	ND	ND	ND	ND	ND	ND
	5/24/91	0.89	ND	ND	ND	ND	ND	ND
	6/9/94	WELL WAS INACCESSIBLE						
	9/8/94	WELL WAS INACCESSIBLE						
	1/25/95	WELL WAS DESTROYED						
MW6	11/6/90	1.2	ND	ND	ND	ND	ND	ND
	5/24/91	0.88	ND	ND	5.6	ND	ND	ND
	8/15/91	1.2	ND	ND	ND	ND	ND	ND
	11/19/91	1.3	ND	ND	ND	ND	ND	ND
	2/27/92	1.5	ND	ND	ND	ND	1.6	ND
	5/26/92	1.1	ND	ND	ND	ND	1.7	ND
	10/30/92	1.2	ND	ND	ND	ND	ND	ND
	6/9/94	WELL WAS INACCESSIBLE						
	9/8/94	WELL WAS INACCESSIBLE						
	1/25/95	WELL WAS DESTROYED						
MW7	2/27/92	2.4	ND	ND	ND	ND	ND	ND
	5/26/92	2.2	ND	ND	ND	ND	ND	ND
	10/30/92	2.2	ND	ND	ND	ND	ND	ND
	6/9/94	0.67	ND	ND	ND	ND	ND	ND
	9/8/94	0.76	ND	ND	ND	ND	ND	ND
	10/21/95	ND	ND	ND	ND	ND	ND	ND
	1/24/96	1.2	ND	ND	ND	ND	ND	ND
	4/23/96	0.84	ND	ND	ND	ND	ND	ND
	7/25/96	1.7	ND	ND	ND	ND	ND	ND
	10/25/96**	1.2	ND	ND	ND	ND	ND	ND
	1/28/97	1.4	ND	ND	ND	ND	ND	ND
	4/19/97	0.75	ND	ND	ND	ND	ND	ND
	7/21/97	1.5	ND	ND	ND	ND	ND	ND
MW8	10/21/95	ND	ND	ND	ND	ND	ND	ND
	1/24/96	0.74	ND	ND	ND	ND	ND	ND
	4/23/96	1.1	ND	ND	ND	ND	ND	ND
	7/25/96	1.1	ND	ND	ND	ND	ND	ND
	10/25/96	0.90	ND	ND	ND	ND	ND	ND
	1/28/97	0.96	ND	ND	ND	ND	ND	ND
	4/16/97	0.51	ND	ND	ND	ND	ND	ND
	7/21/97	ND	ND	ND	ND	ND	ND	ND

**Table 3**  
 Summary of Laboratory Analyses  
 Water

Well #	Date	Tetrachloro-ethene	1,1-Dichloro-ethane	1,1,1-Trichloro-ethane	Chloro-methane	1,1-Dichloro-ethene	1,2-Dichloro-benzene	Trichloro-ethene
MW9	10/21/95	17	1.0	ND	ND	ND	ND	ND
	1/24/96	17	2.2	ND	ND	ND	ND	0.64
	4/23/96	71	ND	ND	ND	ND	ND	ND
	7/25/96	1.0	ND	ND	ND	ND	ND	ND
	10/25/96	80	ND	ND	ND	ND	ND	ND
	1/28/97	39	ND	ND	ND	ND	ND	ND
	4/16/97	0.51	ND	ND	ND	ND	ND	ND
	7/21/97	7.5	ND	ND	ND	ND	ND	ND

\* 1,2 Dichloroethane was detected at a concentration of 4.8 µg/L.

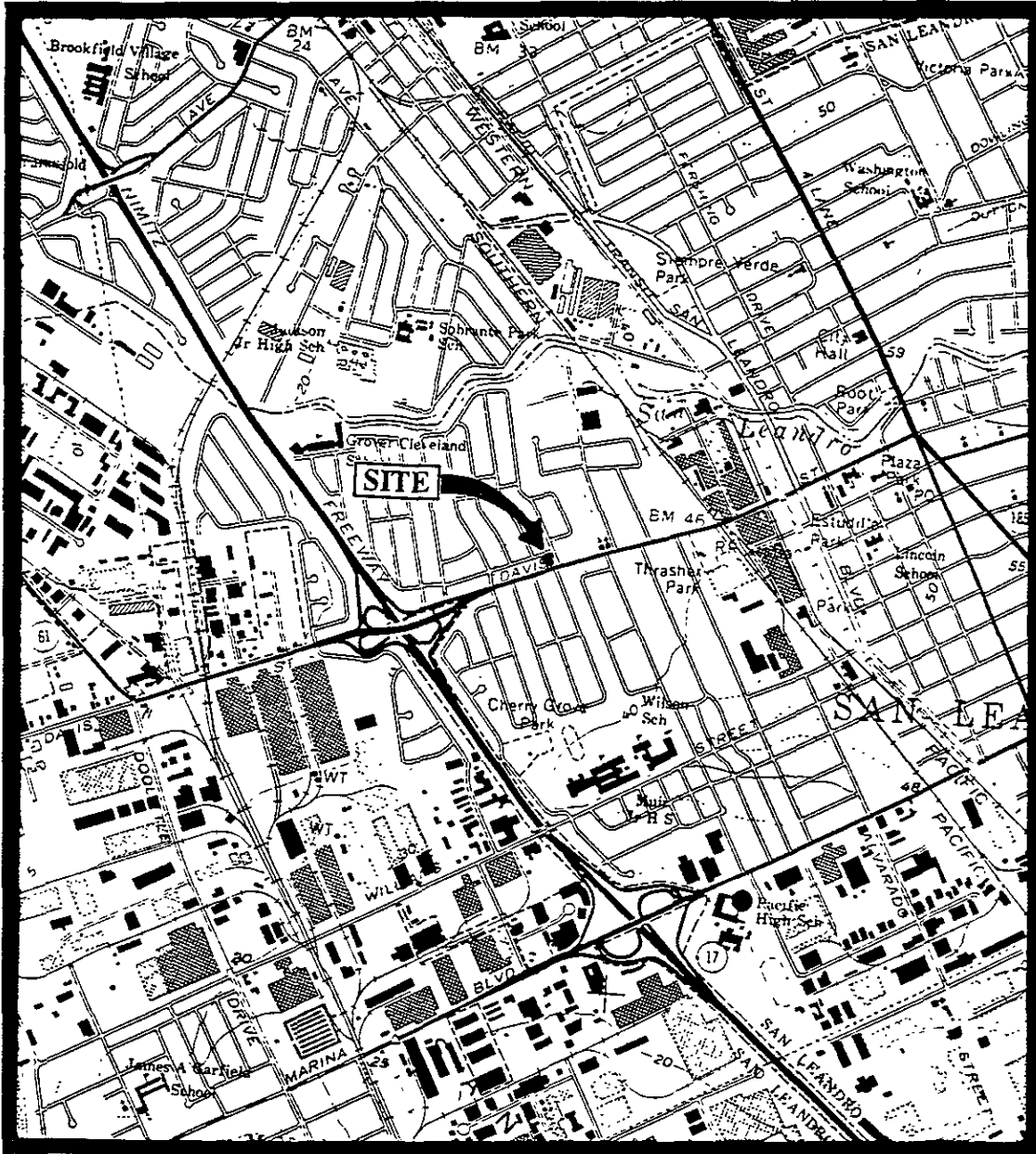
\*\* Chloroform was detected at a concentration of 1.7 µg/L.

ND = Non-detectable.

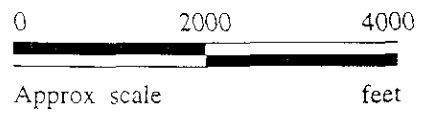
Results are in micrograms per liter (µg/L), unless otherwise indicated.

Note: All EPA method 8010 constituents were non detectable, except for those shown in this Table.

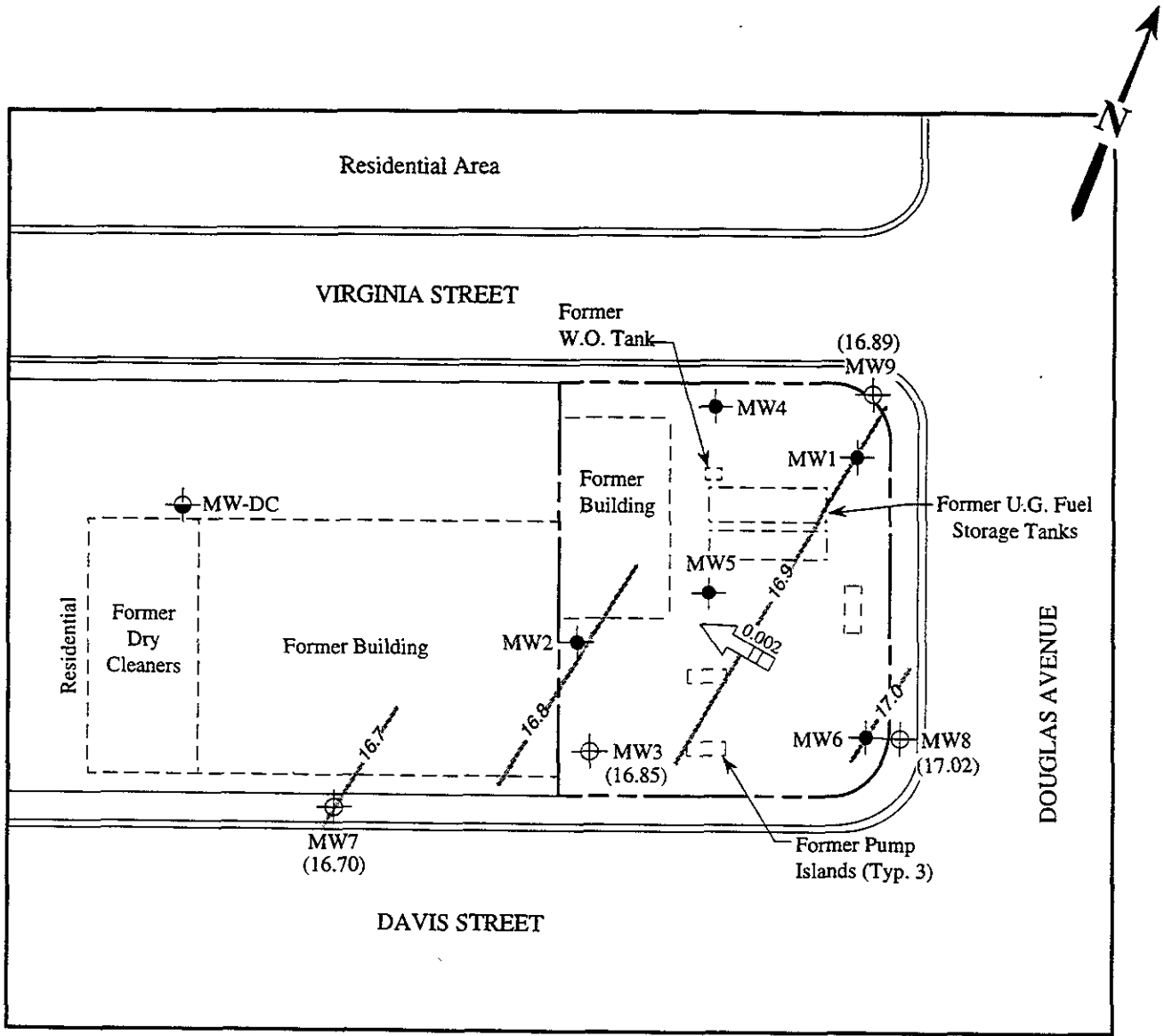
Laboratory analyses data prior to June 9, 1994, were provided by Kaprealian Engineering, Inc.



Base modified from 7.5 minute U.S.G.S. San Leandro Quadrangle  
 (photorevised 1980)

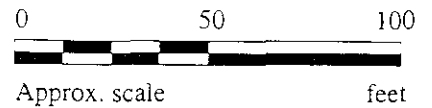


	<p>FORMER UNOCAL S/S #2512          1300 DAVIS STREET          SAN LEANDRO, CALIFORNIA</p>	<p>LOCATION          MAP</p>
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**LEGEND**

- Monitoring well (by KEI-existing)
- Monitoring well (by KEI-destroyed)
- Monitoring well (by others)
- Ground water elevation in feet above Mean Sea Level
- Direction of ground water flow with approximate hydraulic gradient
- Contours of ground water elevation

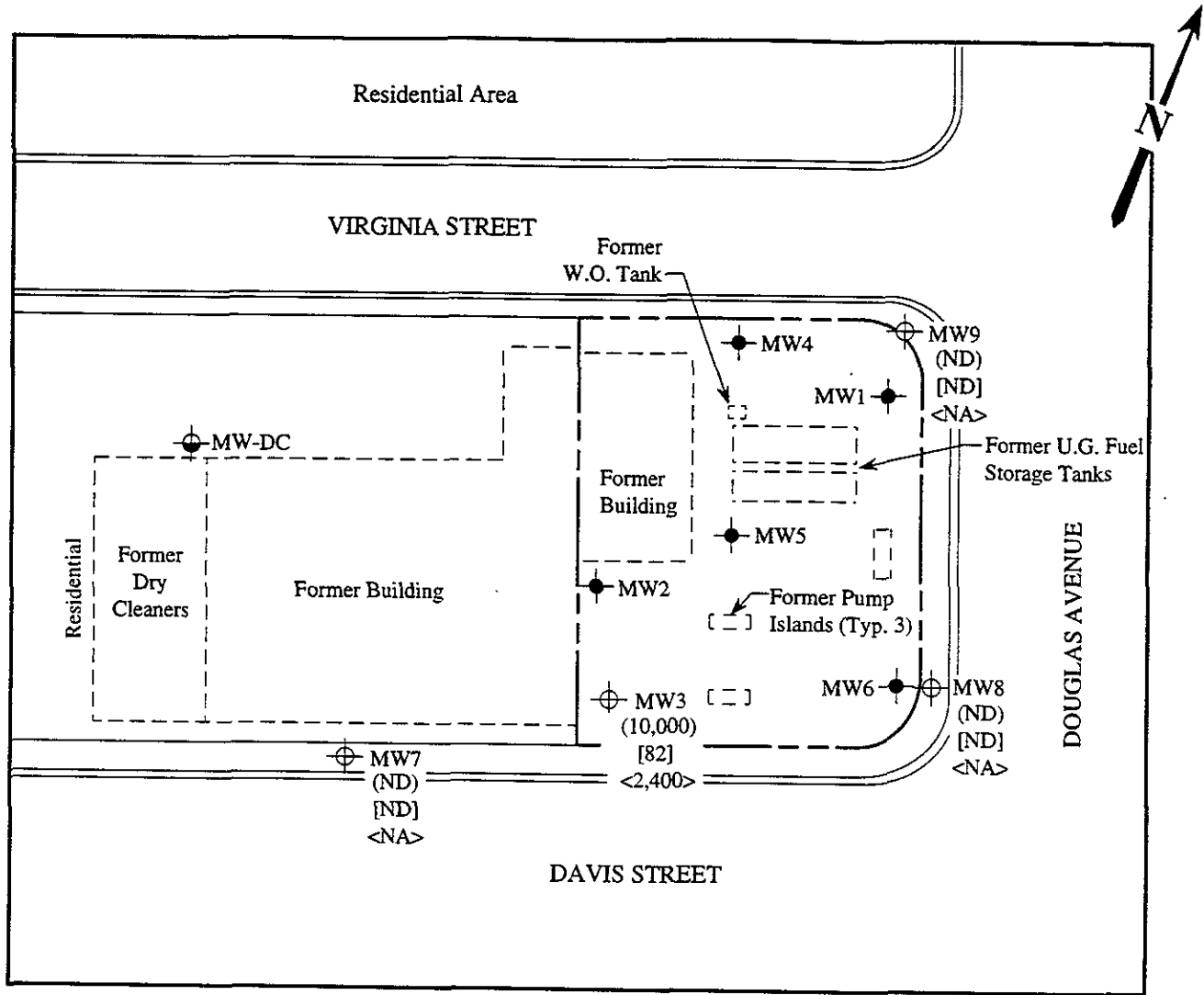


POTENTIOMETRIC SURFACE MAP FOR THE JULY 21, 1997 MONITORING EVENT

**MPDS** SERVICES, INCORPORATED

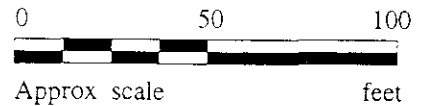
FORMER UNOCAL S/S #2512  
1300 DAVIS STREET  
SAN LEANDRO, CALIFORNIA

FIGURE  
**1**



**LEGEND**

- ⊕ Monitoring well (by KEI-existing)
- Monitoring well (by KEI-destroyed)
- ⊙ Monitoring well (by others - existing)
- ( ) Concentration of TPH as gasoline in  $\mu\text{g/L}$
- [ ] Concentration of benzene in  $\mu\text{g/L}$
- < > Concentration of TPH as diesel in  $\mu\text{g/L}$
- ND Non-detectable. NA Not analyzed



PETROLEUM HYDROCARBON CONCENTRATIONS IN GROUND WATER ON JULY 21, 1997





<b>MPDS Services</b>	<b>Client Project ID:</b> Unocal #2512, 1300 Davis St., San Leandro	<b>Sampled:</b> Jul 21, 1997
2401 Stanwell Dr., Ste. 300	<b>Matrix Descript:</b> Water	<b>Received:</b> Jul 21, 1997
Concord, CA 94520	<b>Analysis Method:</b> EPA 5030/8015 Mod./8020	<b>Reported:</b> Aug 4, 1997
<b>Attention:</b> Jarrel Crider	<b>First Sample #:</b> 707-1061	

**TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX DISTINCTION**

Sample Number	Sample Description	Purgeable Hydrocarbons µg/L	Benzene µg/L	Toluene µg/L	Ethyl Benzene µg/L	Total Xylenes µg/L
707-1061	MW-3	10,000	82	28	430	1,400
707-1062	MW-7	ND	ND	ND	ND	ND
707-1063	MW-8	ND	ND	ND	ND	ND
707-1064	MW-9	ND	ND	ND	ND	ND

<b>Detection Limits:</b>	<b>50</b>	<b>0.50</b>	<b>0.50</b>	<b>0.50</b>	<b>0.50</b>
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Total Purgeable Petroleum Hydrocarbons are quantitated against a fresh gasoline standard  
Analytes reported as ND were not present above the stated limit of detection

**SEQUOIA ANALYTICAL, #1271**

Signature on File

Alan B Kemp  
Project Manager





MPDS Services  
 2401 Stanwell Dr., Ste. 300  
 Concord, CA 94520  
 Attention: Jarrel Crider

Client Project ID: Unocal #2512, 1300 Davis St., San Leandro  
 Matrix Descript: Water  
 Analysis Method: EPA 5030/8015 Mod./8020  
 First Sample #: 707-1061

Sampled: Jul 21, 1997  
 Received: Jul 21, 1997  
 Reported: Aug 4, 1997

**TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX DISTINCTION**

Sample Number	Sample Description	Chromatogram Pattern	DL Mult. Factor	Date Analyzed	Instrument ID	Surrogate Recovery, % QC Limits: 70-130
707-1061	MW-3	Gasoline	20	07/25/97	HP-2	86
707-1062	MW-7	--	1.0	07/24/97	HP-9	91
707-1063	MW-8	--	1.0	07/30/97	HP-5	107
707-1064	MW-9	--	1.0	07/30/97	HP-5	99

SEQUOIA ANALYTICAL, #1271

Signature on File

Alan B. Kemp  
 Project Manager





# Sequoia Analytical

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

MPDS Services  
2401 Stanwell Dr., Ste. 300  
Concord, CA 94520  
Attention: Jarrel Crider

Client Project ID: Unocal #2512, 1300 Davis St., San Leandro  
Sample Descript: Water  
Analysis for: MTBE (Modified EPA 8020)  
First Sample #: 707-1061

Sampled: Jul 21, 1997  
Received: Jul 21, 1997  
Analyzed: Jul 24-30, 97  
Reported: Aug 4, 1997

## LABORATORY ANALYSIS FOR: MTBE (Modified EPA 8020)

Sample Number	Sample Description	Detection Limit µg/L	Sample Result µg/L
707-1061	MW-3	50	76
707-1062	MW-7	5.0	N.D.
707-1063	MW-8	5.0	N.D.
707-1064	MW-9	5.0	N.D.

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

SEQUOIA ANALYTICAL, #1271

Signature on File

Alan B Kemp  
Project Manager





# Sequoia Analytical

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 819 Striker Avenue, Suite 8 Sacramento, CA 95834 (916) 921-9600 FAX (916) 921-0100

MPDS Services  
 2401 Stanwell Dr., Ste. 300  
 Concord, CA 94520  
 Attention: Jarrel Crider

Client Project ID: Unocal #2512, 1300 Davis St., San Leandro  
 Sample Matrix: Water  
 Analysis Method: EPA 3510/8015 Mod.  
 First Sample #: 707-1061

Sampled: Jul 21, 1997  
 Received: Jul 21, 1997  
 Reported: Aug 4, 1997

## TOTAL EXTRACTABLE PETROLEUM HYDROCARBONS

Analyte	Reporting Limit µg/L	Sample I.D. 707-1061 MW-3 ^
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Extractable Hydrocarbons	50	2400
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Chromatogram Pattern: Diesel & Unidentified Hydrocarbons <C15

### Quality Control Data

Report Limit Multiplication Factor:	1.0
Date Extracted:	7/28/97
Date Analyzed:	7/30/97
Instrument Identification:	HP-3B

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

SEQUOIA ANALYTICAL, #1271

Signature on File

Alan B Kemp  
 Project Manager

Please Note

^ This sample appears to contain diesel and non-diesel mixtures. Unidentified Hydrocarbons <C15 are probably gasoline





MPDS Services  
 2401 Stanwell Dr., Ste. 300  
 Concord, CA 94520  
 Attention: Jarrel Crider

Client Project ID: Unocal #2512, 1300 Davis St., San Leandro  
 Sample Descript: Water, MW-3  
 Analysis Method: EPA 5030/8010  
 Lab Number: 707-1061

Sampled: Jul 21, 1997  
 Received: Jul 21, 1997  
 Analyzed: Jul 24, 1997  
 Reported: Aug 4, 1997

**HALOGENATED VOLATILE ORGANICS (EPA 8010)**

Analyte	Detection Limit µg/L	Sample Results µg/L
Bromodichloromethane.....	5.0	N.D.
Bromoform.....	5.0	N.D.
Bromomethane.....	10	N.D.
Carbon tetrachloride.....	5.0	N.D.
Chlorobenzene.....	5.0	N.D.
Chloroethane.....	10	N.D.
2-Chloroethylvinyl ether.....	10	N.D.
Chloroform.....	5.0	N.D.
Chloromethane.....	10	N.D.
Dibromochloromethane.....	5.0	N.D.
1,3-Dichlorobenzene.....	5.0	N.D.
1,4-Dichlorobenzene.....	5.0	N.D.
1,2-Dichlorobenzene.....	5.0	N.D.
1,1-Dichloroethane.....	5.0	N.D.
1,2-Dichloroethane.....	5.0	N.D.
1,1-Dichloroethene.....	5.0	N.D.
cis-1,2-Dichloroethene.....	5.0	N.D.
trans-1,2-Dichloroethene.....	5.0	N.D.
1,2-Dichloropropane.....	5.0	N.D.
cis-1,3-Dichloropropene.....	5.0	N.D.
trans-1,3-Dichloropropene.....	5.0	N.D.
Methylene chloride.....	50	N.D.
1,1,2,2-Tetrachloroethane.....	5.0	N.D.
Tetrachloroethene.....	5.0	N.D.
1,1,1-Trichloroethane.....	5.0	N.D.
1,1,2-Trichloroethane.....	5.0	N.D.
Trichloroethene.....	5.0	N.D.
Trichlorofluoromethane.....	5.0	N.D.
Vinyl chloride.....	10	N.D.

Analytes reported as N.D. were not present above the stated limit of detection. Because matrix effects and/or other factors required additional sample dilution, detection limits for this sample have been raised.

**SEQUOIA ANALYTICAL, #1271**

Signature on File

Alan B. Kemp  
 Project Manager



MPDS Services Client Project ID: Unocal #2512, 1300 Davis St., San Leandro Sampled: Jul 21, 1997  
 2401 Stanwell Dr., Ste. 300 Sample Descript: Water, MW-7 Received: Jul 21, 1997  
 Concord, CA 94520 Analysis Method: EPA 5030/8010 Analyzed: Jul 24, 1997  
 Attention: Jarrel Crider Lab Number: 707-1062 Reported: Aug 4, 1997

**HALOGENATED VOLATILE ORGANICS (EPA 8010)**

Analyte	Detection Limit µg/L	Sample Results µg/L
Bromodichloromethane.....	0.50	N.D.
Bromoform.....	0.50	N.D.
Bromomethane.....	1.0	N.D.
Carbon tetrachloride.....	0.50	N.D.
Chlorobenzene.....	0.50	N.D.
Chloroethane.....	1.0	N.D.
2-Chloroethylvinyl ether.....	1.0	N.D.
Chloroform.....	0.50	N.D.
Chloromethane.....	1.0	N.D.
Dibromochloromethane.....	0.50	N.D.
1,3-Dichlorobenzene.....	0.50	N.D.
1,4-Dichlorobenzene.....	0.50	N.D.
1,2-Dichlorobenzene.....	0.50	N.D.
1,1-Dichloroethane.....	0.50	N.D.
1,2-Dichloroethane.....	0.50	N.D.
1,1-Dichloroethene.....	0.50	N.D.
cis-1,2-Dichloroethene.....	0.50	N.D.
trans-1,2-Dichloroethene.....	0.50	N.D.
1,2-Dichloropropane.....	0.50	N.D.
cis-1,3-Dichloropropene.....	0.50	N.D.
trans-1,3-Dichloropropene.....	0.50	N.D.
Methylene chloride.....	5.0	N.D.
1,1,2,2-Tetrachloroethane.....	0.50	N.D.
<b>Tetrachloroethene.....</b>	<b>0.50</b>	<b>1.5</b>
1,1,1-Trichloroethane.....	0.50	N.D.
1,1,2-Trichloroethane.....	0.50	N.D.
Trichloroethene.....	0.50	N.D.
Trichlorofluoromethane.....	0.50	N.D.
Vinyl chloride.....	1.0	N.D.

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

SEQUOIA ANALYTICAL, #1271

Signature on File

Alan B Kemp  
Project Manager





MPDS Services Client Project ID: Unocal #2512, 1300 Davis St., San Leandro Sampled: Jul 21, 1997
2401 Stanwell Dr., Ste. 300 Sample Descript: Water, MW-8 Received: Jul 21, 1997
Concord, CA 94520 Analysis Method: EPA 5030/8010 Analyzed: Jul 24, 1997
Attention: Jarrel Crider Lab Number: 707-1063 Reported: Aug 4, 1997

HALOGENATED VOLATILE ORGANICS (EPA 8010)

Table with 3 columns: Analyte, Detection Limit (µg/L), and Sample Results (µg/L). Lists various organic compounds and their detection limits, with all sample results being N.D.

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

SEQUOIA ANALYTICAL, #1271

Signature on File

Alan B. Kemp
Project Manager





# Sequoia Analytical

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

MPDS Services  
 2401 Stanwell Dr., Ste. 300  
 Concord, CA 94520  
 Attention: Jarrel Crider

Client Project ID: Unocal #2512, 1300 Davis St., San Leandro  
 Sample Descript: Water, MW-9  
 Analysis Method: EPA 5030/8010  
 Lab Number: 707-1064

Sampled: Jul 21, 1997  
 Received: Jul 21, 1997  
 Analyzed: Jul 24, 1997  
 Reported: Aug 4, 1997

## HALOGENATED VOLATILE ORGANICS (EPA 8010)

Analyte	Detection Limit µg/L	Sample Results µg/L
Bromodichloromethane.....	0.50	N.D.
Bromoform.....	0.50	N.D.
Bromomethane.....	1.0	N.D.
Carbon tetrachloride.....	0.50	N.D.
Chlorobenzene.....	0.50	N.D.
Chloroethane.....	1.0	N.D.
2-Chloroethylvinyl ether.....	1.0	N.D.
Chloroform.....	0.50	N.D.
Chloromethane.....	1.0	N.D.
Dibromochloromethane.....	0.50	N.D.
1,3-Dichlorobenzene.....	0.50	N.D.
1,4-Dichlorobenzene.....	0.50	N.D.
1,2-Dichlorobenzene.....	0.50	N.D.
1,1-Dichloroethane.....	0.50	N.D.
1,2-Dichloroethane.....	0.50	N.D.
1,1-Dichloroethene.....	0.50	N.D.
cis-1,2-Dichloroethene.....	0.50	N.D.
trans-1,2-Dichloroethene.....	0.50	N.D.
1,2-Dichloropropane.....	0.50	N.D.
cis-1,3-Dichloropropene.....	0.50	N.D.
trans-1,3-Dichloropropene.....	0.50	N.D.
Methylene chloride.....	5.0	N.D.
1,1,2,2-Tetrachloroethane.....	0.50	N.D.
<b>Tetrachloroethene.....</b>	<b>0.50</b>	<b>7.5</b>
1,1,1-Trichloroethane.....	0.50	N.D.
1,1,2-Trichloroethane.....	0.50	N.D.
Trichloroethene.....	0.50	N.D.
Trichlorofluoromethane.....	0.50	N.D.
Vinyl chloride.....	1.0	N.D.

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

SEQUOIA ANALYTICAL, #1271

Signature on File

Alan B. Kemp  
 Project Manager





MPDS Services  
 2401 Starwell Dr., Ste. 300  
 Concord, CA 94520  
 Attention: Jarrel Crider

Client Project ID: Unocal #2512, 1300 Davis St., San Leandro  
 Matrix: Liquid

QC Sample Group: 7071061-064

Reported: Aug 11, 1997

**QUALITY CONTROL DATA REPORT**

ANALYTE	Benzene	Toluene	Ethyl Benzene	Xylenes	Diesel
<b>Method:</b>	EPA 8020	EPA 8020	EPA 8020	EPA 8020	EPA 8015
<b>Analyst:</b>	K. Nill	K. Nill	K. Nill	K. Nill	D. Sharma

<b>MS/MSD Batch#:</b>	7070888	7070888	7070888	7070888	BLK072597
<b>Date Prepared:</b>	7/24/97	7/24/97	7/24/97	7/24/97	7/25/97
<b>Date Analyzed:</b>	7/24/97	7/24/97	7/24/97	7/24/97	7/30/97
<b>Instrument I.D.#:</b>	HP-9	HP-9	HP-9	HP-9	HP-3B
<b>Conc. Spiked:</b>	20 µg/L	20 µg/L	20 µg/L	60 µg/L	300 µg/L
<b>Matrix Spike % Recovery:</b>	115	120	120	118	73
<b>Matrix Spike Duplicate % Recovery:</b>	115	120	120	118	73
<b>Relative % Difference:</b>	0.0	0.0	0.0	0.0	0.0

<b>LCS Batch#:</b>	9LCS072497	9LCS072497	9LCS072497	9LCS072497	LCS072897
<b>Date Prepared:</b>	7/24/97	7/24/97	7/24/97	7/24/97	7/28/97
<b>Date Analyzed:</b>	7/24/97	7/24/97	7/24/97	7/24/97	7/30/97
<b>Instrument I.D.#:</b>	HP-9	HP-9	HP-9	HP-9	HP-3B
<b>LCS % Recovery:</b>	110	115	115	118	68

<b>% Recovery Control Limits:</b>	60-140	60-140	60-140	60-140	60-140
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SEQUOIA ANALYTICAL, #1271

Signature on File  
 Alan B Kemp  
 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.



MPDS Services  
 2401 Stanwell Dr., Ste. 300  
 Concord, CA 94520  
 Attention: Jarrel Crider

Client Project ID: Unocal #2512, 1300 Davis St., San Leandro  
 Matrix: Liquid

QC Sample Group: 7071061-064

Reported: Aug 11, 1997

**QUALITY CONTROL DATA REPORT**

ANALYTE	Benzene	Toluene	Ethyl Benzene	Xylenes
Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Analyst:	K.Niili	K.Niili	K.Niili	K.Niili

<b>MS/MSD Batch#:</b>	7070938	7070938	7070938	7070938
<b>Date Prepared:</b>	7/25/97	7/25/97	7/25/97	7/25/97
<b>Date Analyzed:</b>	7/25/97	7/25/97	7/25/97	7/25/97
<b>Instrument I.D.#:</b>	HP-2	HP-2	HP-2	HP-2
<b>Conc. Spiked:</b>	20 µg/L	20 µg/L	20 µg/L	60 µg/L
<b>Matrix Spike % Recovery:</b>	85	105	95	102
<b>Matrix Spike Duplicate % Recovery:</b>	80	958	95	92
<b>Relative % Difference:</b>	6.1	10	0.0	10

<b>LCS Batch#:</b>	2LCS072597	2LCS072597	2LCS072597	2LCS072597
<b>Date Prepared:</b>	7/25/97	7/25/97	7/25/97	7/25/97
<b>Date Analyzed:</b>	7/25/97	7/25/97	7/25/97	7/25/97
<b>Instrument I.D.#:</b>	HP-2	HP-2	HP-2	HP-2
<b>LCS % Recovery:</b>	85	100	95	97

<b>% Recovery Control Limits:</b>	60-140	60-140	60-140	60-140
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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.

SEQUOIA ANALYTICAL, #1271

Signature on File

Alan B. Kemp  
 Project Manager





# Sequoia Analytical

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 819 Striker Avenue, Suite 8 Sacramento, CA 95834 (916) 921-9600 FAX (916) 921-0100

MPDS Services  
 2401 Stanwell Dr., Ste. 300  
 Concord, CA 94520  
 Attention: Jarrel Crider

Client Project ID: Unocal #2512, 1300 Davis St., San Leandro  
 Matrix: Liquid

QC Sample Group: 7071061-064

Reported: Aug 11, 1997

## QUALITY CONTROL DATA REPORT

ANALYTE	Benzene	Toluene	Ethyl Benzene	Xylenes
<b>Method:</b>	EPA 8020	EPA 8020	EPA 8020	EPA 8020
<b>Analyst:</b>	D. Newcomb	D. Newcomb	D. Newcomb	D. Newcomb

<b>MS/MSD Batch#:</b>	7071119	7071119	7071119	7071119
<b>Date Prepared:</b>	7/30/97	7/30/97	7/30/97	7/30/97
<b>Date Analyzed:</b>	7/30/97	7/30/97	7/30/97	7/30/97
<b>Instrument I.D.#:</b>	HP-5	HP-5	HP-5	HP-5
<b>Conc. Spiked:</b>	20 µg/L	20 µg/L	20 µg/L	60 µg/L
<b>Matrix Spike % Recovery:</b>	95	95	95	97
<b>Matrix Spike Duplicate % Recovery:</b>	90	90	90	97
<b>Relative % Difference:</b>	5.4	5.4	5.4	0.0

<b>LCS Batch#:</b>	5LCS073097	5LCS073097	5LCS073097	5LCS073097
<b>Date Prepared:</b>	7/30/97	7/30/97	7/30/97	7/30/97
<b>Date Analyzed:</b>	7/30/97	7/30/97	7/30/97	7/30/97
<b>Instrument I.D.#:</b>	HP-5	HP-5	HP-5	HP-5
<b>LCS % Recovery:</b>	100	100	100	105

<b>% Recovery Control Limits:</b>	60-140	60-140	60-140	60-140
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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.

SEQUOIA ANALYTICAL, #1271

Signature on File

Alan B Kemp  
 Project Manager





MPDS Services
2401 Stanwell Dr., Ste. 300
Concord, CA 94520
Attention: Jarrel Crider

Client Project ID: Unocal #2512, 1300 Davis St., San Leandro
Matrix: Liquid

QC Sample Group: 7071061-064

Reported: Aug 11, 1997

QUALITY CONTROL DATA REPORT

Table with 4 columns: ANALYTE, 1,1-Dichloro-ethene, Trichloro-ethene, Chloro-benzene. Rows include Method, Analyst, and K. Nill.

MS/MSD section with rows for Batch#, Date Prepared, Date Analyzed, Instrument I.D.#, Conc. Spiked, Matrix Spike % Recovery, Matrix Spike Duplicate % Recovery, and Relative % Difference.

LCS section with rows for LCS Batch#, Date Prepared, Date Analyzed, Instrument I.D.#, and LCS % Recovery.

% Recovery Control Limits table with values 65-135 for all three analytes.

SEQUOIA ANALYTICAL, # 1271

Signature on File

Alan B Kemp
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.



MPDS

CHAIN OF CUSTODY

*Correct*

SAMPLER			TOSCO S/S # 2512 CITY: SAN LEANDRO					ANALYSES REQUESTED						TURN AROUND TIME:		
WITNESSING AGENCY			ADDRESS: 1300 DAVIS STR.					TPH-G	BTEX	MTBE	SPP	8010	TPH-D			REGULAR
SAMPLE ID NO	DATE	TIME	WATER	GRAB	COMP	NO. OF CONT.	SAMPLING LOCATION								REMARKS	
MW 3	7/21/97		✓	✓		4 VOA'S	WELL	✓	✓	✓	✓	✓		7071061		
MW 7	↓		✓	✓		4 VOA'S		✓	✓	✓	✓			7071062		
MW 8	↓		✓	✓		4 VOA'S		✓	✓	✓	✓			7071063		
MW 9	↓		✓	✓		4 VOA'S	↓	✓	✓	✓	✓			7071064		

RELINQUISHED BY:	DATE/TIME	RECEIVED BY:	DATE/TIME	THE FOLLOWING <u>MUST BE</u> COMPLETED BY THE LABORATORY ACCEPTING SAMPLES FOR ANALYSES:
<i>[Signature]</i>	7/21/97	<i>[Signature]</i>	7/21/97 5:30 PM	1. HAVE ALL SAMPLES RECEIVED FOR ANALYSIS BEEN STORED ON ICE? <input checked="" type="checkbox"/>
(SIGNATURE)		(SIGNATURE)		2. WILL SAMPLES REMAIN REFRIGERATED UNTIL ANALYZED? <input checked="" type="checkbox"/>
(SIGNATURE)		(SIGNATURE)		3. DID ANY SAMPLES RECEIVED FOR ANALYSIS HAVE HEAD SPACE? <input checked="" type="checkbox"/>
(SIGNATURE)		(SIGNATURE)		4. WERE SAMPLES IN APPROPRIATE CONTAINERS AND PROPERLY PACKAGED? <input checked="" type="checkbox"/>
(SIGNATURE)		(SIGNATURE)		SIGNATURE: <i>[Signature]</i> TITLE: <i>LD</i> DATE: 7-21-97

Note: All water containers to be sampled for TPHG/BTEX, 8010 & 8240 are preserved with HCL. All water containers to be sampled for Lead or Metals are preserved with HN03. All other containers are unpreserved.

## PURGING/SAMPLING DATA SHEET

SAMPLING LOCATION: 2512 - S. Leandro DATE & TIME SAMPLED 7/21/97 4:05 A.M.  
P.M.

FIELD TECHNICIAN HAIG KIEVORK

PURGE METHOD PUMP DATE(S) PURGED 7/21/97

WELL NUMBER MW3

WATER LEVEL-INITIAL 15.17 SAMPLING METHOD BAIL

WATER LEVEL-FINAL 15.72 CONTAINERS 4 VOA'S + 1 amber

WELL DEPTH 33.29 PRESERVATIVES HCl (VOA)

WELL CASING VOLUME 3.08 † CASING DIAMETER 211

TIME	GALLONS PURGED	TEMPERATURE (°F)	ELECTRICAL CONDUCTIVITY (µmhos/cm x 100) or µS/cm	pH
3:35	0	77.6	583	6.91
↓	3	77.3	562	6.88
↓	6	76.9	541	6.87
3:45	9	77.1	547 µs	6.85

† Conversion Factors: Well Diameter      Factor

2"	0.17
3"	0.37
4"	0.65
4.5"	0.82
6"	1.46
8"	2.60
12"	5.87

S = Siemens = mhos

Stabilization Criteria:  
 Temperature = ± 1 °F  
 Conductivity = ± 10% of total  
 pH = ± 0.2

## PURGING/SAMPLING DATA SHEET

SAMPLING LOCATION: 2512 - San Leandro DATE & TIME SAMPLED: 7/21/97 2:35 A.M.  
P.M.

FIELD TECHNICIAN: HAIG KEVORK

PURGE METHOD: PUMP DATE(S) PURGED: 7/21/97

WELL NUMBER: MW 8

WATER LEVEL-INITIAL: 15.71 SAMPLING METHOD: BAIL

WATER LEVEL-FINAL: 15.72 CONTAINERS: 4 VOA'S

WELL DEPTH: 29.93 PRESERVATIVES: HCl

WELL CASING VOLUME: 2.42 †CASING DIAMETER: 2"

TIME	GALLONS PURGED	TEMPERATURE (°F)	ELECTRICAL CONDUCTIVITY (µmhos/cm x 100) or µS/cm	pH
2:10	0	78.2	598	6.93
↓	2.5	77.9	547	6.84
↓	5	77.6	526	6.86
2:20	7.5	77.4	513 Ms	6.88

† Conversion Factors:

Well Diameter	Factor
2"	0.17
3"	0.37
4"	0.65
4.5"	0.82
6"	1.46
8"	2.60
12"	5.87

S = Siemens = mhos

Stabilization Criteria:  
 Temperature = ± 1 °F  
 Conductivity = ± 10% of total  
 pH = ± 0.2

## PURGING/SAMPLING DATA SHEET

SAMPLING LOCATION: 2512 - San Leandro DATE & TIME SAMPLED: 7/21/97 3:20 A.M.  
P.M.

FIELD TECHNICIAN: HAIG KEVORAK

PURGE METHOD: PUMP DATE(S) PURGED: 7/21/97

WELL NUMBER: MW 9

WATER LEVEL-INITIAL: 15.44 SAMPLING METHOD: BAIL

WATER LEVEL-FINAL: 16.80 CONTAINERS: 4 VOALS

WELL DEPTH: 30.00 PRESERVATIVES: HCL

WELL CASING VOLUME: 2.48 † CASING DIAMETER: 2"

TIME	GALLONS PURGED	TEMPERATURE (°F)	ELECTRICAL CONDUCTIVITY (µmhos/cm x 100) or µS/cm	pH
2:55	0	78.4	531	6.81
↓	2.5	78.1	558	6.88
↓	5	77.8	573	6.90
3:05	7.5	77.9	581 µS	6.92

† Conversion Factors: Well Diameter      Factor

2"	0.17
3"	0.37
4"	0.65
4.5"	0.82
6"	1.46
8"	2.60
12"	5.87

S = Siemens = mhos

Stabilization Criteria

Temperature = ± 1 °F  
 Conductivity = ± 10% of total  
 pH = ± 0.2