

MONITORING
PURGING
DISPOSING
SAMPLING

MPDS SERVICES, INCORPORATED

RECEIVED

OCT 15 1996

DEVELOPMENT SERVICES DEPT

October 14, 1996

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

Per the request of the Unocal Corporation Project Manager, Mr. Edward C. Ralston, enclosed please find our report (MPDS-UN2512-06) dated August 23, 1996, 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) 277-2311.

Sincerely,

MPDS Services, Inc.



Jarrel F. Crider

/dr

Enclosure

cc: Mr. Edward C. Ralston

MPDS-UN2512-06
August 23, 1996

Unocal Corporation
2000 Crow Canyon Place, Suite 400
P.O. Box 5155
San Ramon, California 94583

Attention: Mr. Edward C. Ralston

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

Dear Mr. Ralston:

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 25, 1996. Prior to sampling, the wells were each purged of between 11 and 12.5 gallons of water. 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. Equipment blank, Field blank and Trip blank samples (denoted as ES1, ES2 and ES3 respectively) were also collected for quality assurance and control. MPDS Services, Inc. transported the purged ground water to the Unocal 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.

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. Joel G. Greger at (510) 602-5120.

Sincerely,

MPDS Services, Inc.

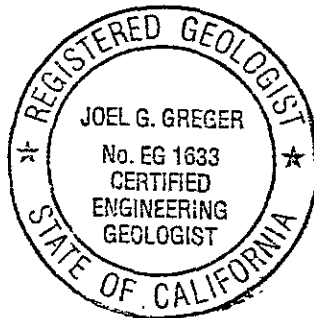


Haig (Gary) Tejirian
Senior Staff Geologist



Joel G. Greger, C.E.G.
Senior Engineering Geologist

License No. EG 1633
Exp. Date 8/31/98



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

cc: Mr. Robert H. Kezerian, 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 25, 1996)

MW3	17.62	14.40	32.28	0	No	12.5(100)
MW7	17.41	14.30	29.80	0	No	11
MW8	17.63	15.10	30.02	0	No	11
MW9	17.28	15.05	30.05	0	No	11

(Monitored and Sampled on April 23, 1996)

MW3	18.91	13.11	33.42	0	No	14(100)
MW7	19.23	12.48	29.98	0	No	12
MW8	17.03	15.70	30.00	0	No	10
MW9	17.73	14.60	30.08	0	No	11

(Monitored and Sampled on January 24, 1996)

MW3	18.87	13.15	33.65	0	Yes	14(100)
MW7	19.21	12.50	29.90	0	No	12
MW8	18.22	14.51	29.95	0	No	10.5
MW9	18.05	14.28	30.00	0	No	11

(Monitored and Sampled on October 21, 1995)

MW3	17.04	14.98	33.70	0	No	13(100)
MW7	16.97	14.74	29.81	0	No	10.5
MW8	17.08	15.65	30.00	0	No	10
MW9	16.74	15.59	30.02	0	No	10

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

- ◆ 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	FOG (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	FOG (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
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							
	5/26/92	NOT SAMPLED							
	10/30/92	NOT SAMPLED							
	6/9/94	WELL WAS INACCESSIBLE							
	9/8/94	WELL WAS INACCESSIBLE							
	1/25/95	WELL WAS DESTROYED							

Table 2
 Summary of Laboratory Analyses
 Water

Well #	Date	TPH as Diesel	TPH as Gasoline	Benzene	Toluene	Ethyl-Benzene	Xylenes	TOG (mg/L)	MTBE	
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		
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	
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	

TOG = Total Oil & Grease

MTBE = Methyl tert butyl ether

ND = Non-detectable.

mg L = milligrams per liter.

Table 2
Summary of Laboratory Analyses
Water

- * 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.
- Indicates analysis was not performed.

Results are in micrograms per liter (µg/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
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
	5/26/92	2.4	13	3.5	ND	0.83	ND	ND
	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						

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
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
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
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

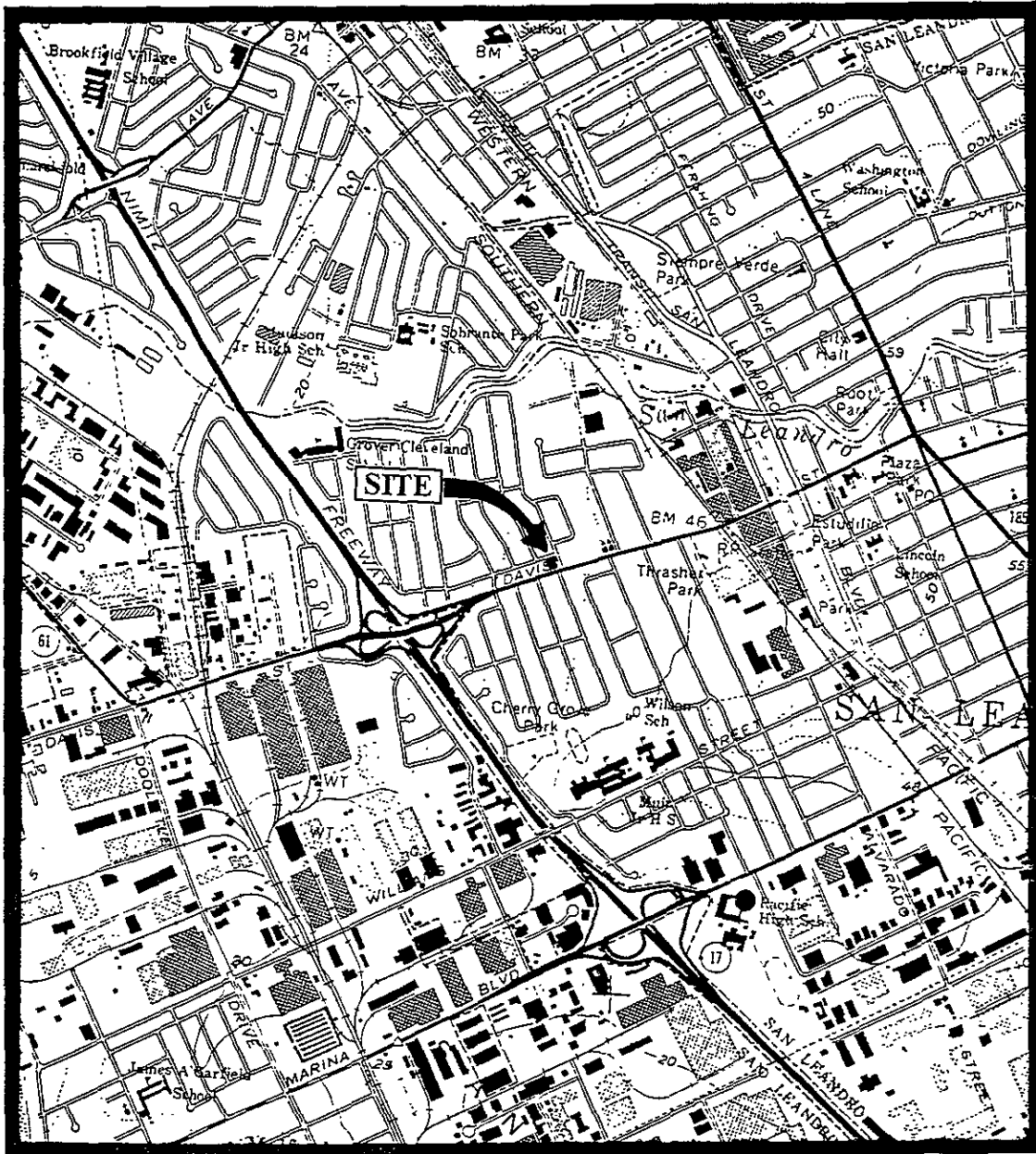
* 1,2 Dichloroethane was detected at a concentration of 4.8 µg/L.

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.



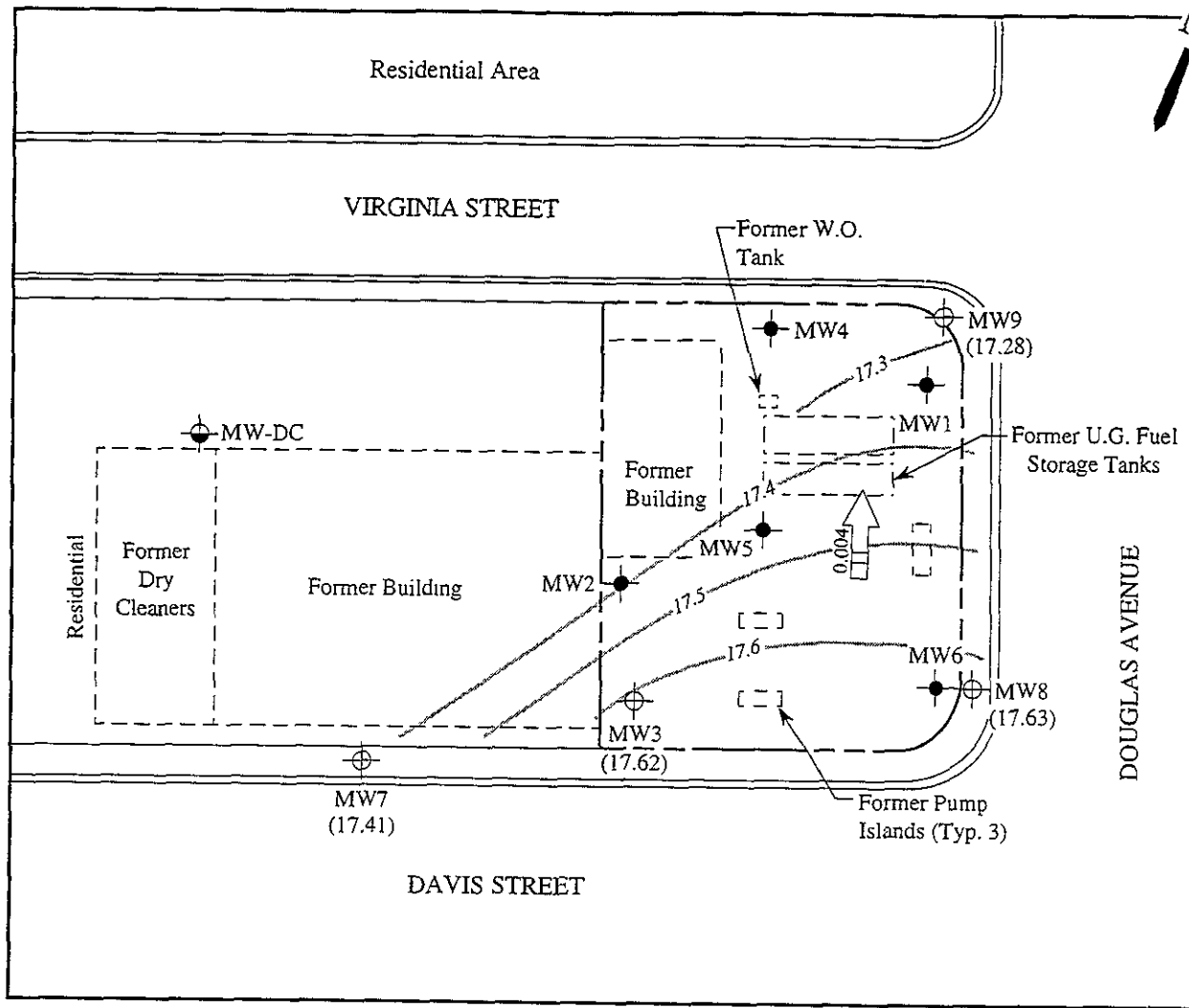
Base modified from 7.5 minute U.S.G.S. San Leandro Quadrangle
 (photorevised 1980)



MPDS SERVICES INCORPORATED

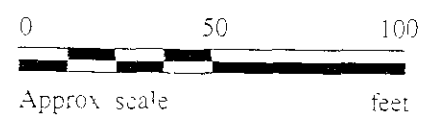
FORMER UNOCAL S/S #2512
 1300 DAVIS STREET
 SAN LEANDRO, CALIFORNIA

LOCATION
 MAP



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

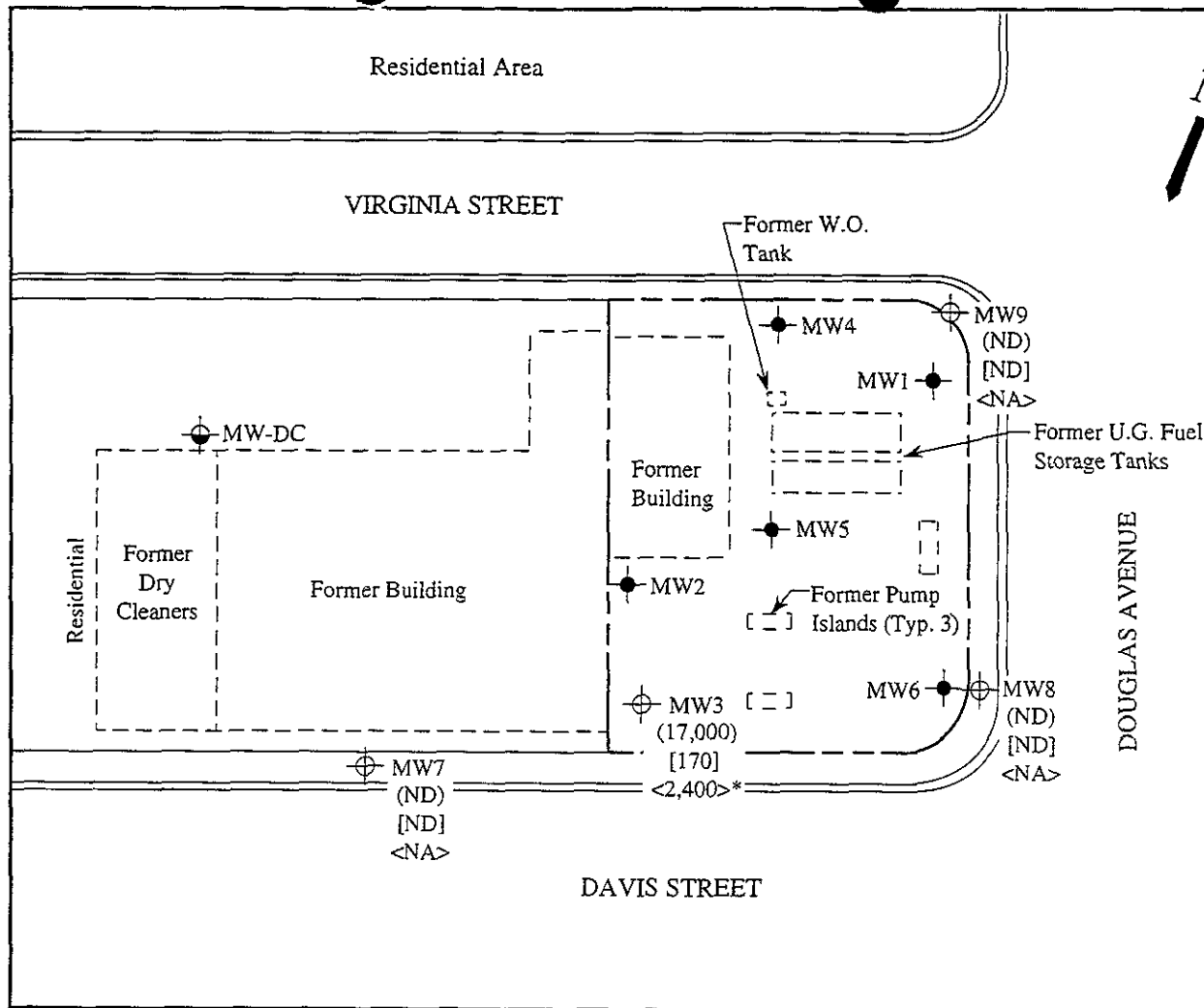


POTENTIOMETRIC SURFACE MAP FOR THE JULY 25, 1996 MONITORING EVENT

MPDS SERVICES INCORPORATED

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

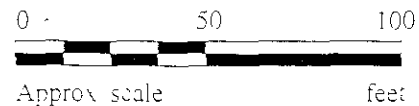
FIGURE
1



LEGEND

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

* The lab reported that the hydrocarbons detected did not appear to be diesel



PETROLEUM HYDROCARBON CONCENTRATIONS IN GROUND WATER ON JULY 25, 1996



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

FIGURE
2



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 #: 607-1826

Sampled: Jul 25, 1996
Received: Jul 25, 1996
Reported: Aug 8, 1996

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
607-1826	MW-3	17,000	170	ND	650	3,300
607-1827	MW-7	ND	ND	ND	ND	ND
607-1828	MW-8	ND	ND	ND	ND	ND
607-1829	MW-9	ND	ND	ND	ND	ND
607-1830	ES-1	ND	ND	ND	ND	ND
607-1831	ES-2	ND	ND	ND	ND	ND
607-1832	ES-3	ND	ND	ND	ND	ND

Detection Limits:	50	0.50	0.50	0.50	0.50
--------------------------	----	------	------	------	------

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 or 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 #: 607-1826

Sampled: Jul 25, 1996
Received: Jul 25, 1996
Reported: Aug 8, 1996

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
607-1826	MW-3	Gasoline	100	8/6/96	HP-11	101
607-1827	MW-7	--	1.0	8/6/96	HP-11	97
607-1828	MW-8	--	1.0	8/6/96	HP-11	96
607-1829	MW-9	--	1.0	8/6/96	HP-11	96
607-1830	ES-1	--	1.0	8/5/96	HP-4	105
607-1831	ES-2	--	1.0	8/5/96	HP-4	105
607-1832	ES-3	--	1.0	8/5/96	HP-4	104

SEQUOIA ANALYTICAL, #1271

Signature on File

Alan B Kemp
Project Manager



Sequoia Analytical

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

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

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

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

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 #: 607-1826

Sampled: Jul 25, 1996
Received: Jul 25, 1996
Analyzed: Aug 6, 1996
Reported: Aug 8, 1996

LABORATORY ANALYSIS FOR: MTBE (Modified EPA 8020)

Sample Number	Sample Description	Detection Limit µg/L	Sample Result µg/L
607-1826	MW-3	5.0	240
607-1827	MW-7	5.0	N.D.
607-1828	MW-8	5.0	N.D.
607-1829	MW-9	5.0	N.D.

Analyses 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 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 5030/8015 Mod.
First Sample #: 607-1826

Sampled: Jul 25, 1996
Received: Jul 25, 1996
Reported: Aug 8, 1996

TOTAL PURGEABLE PETROLEUM HYDROCARBONS

Analyte	Reporting Limit µg/L	Sample I.D. 607-1826 MW-3
Purgeable Hydrocarbons	50	2,400

Chromatogram Pattern: Unidentified Hydrocarbons <C15

Quality Control Data

Report Limit Multiplication Factor:	1.0
Date Analyzed:	7/29/96
Instrument Identification:	7/30/96
Surrogate Recovery: (QC Limits = 70-130%)	HP-3B

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

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
Sample Descript: Water, MW-3
Analysis Method: EPA 5030/8010
Lab Number: 607-1826

Sampled: Jul 25, 1996
Received: Jul 25, 1996
Analyzed: Jul 31, 1996
Reported: Aug 8, 1996

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.
Tetrachloroethene.....	0.50	N.D.
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 Stanwell Dr., Ste. 300
Concord, CA 94520
Attention: Jarrel Crider

Client Project ID: Unocal #2512, 1300 Davis St., San Leandro
Sample Descript: Water, MW-7
Analysis Method: EPA 5030/8010
Lab Number: 607-1827

Sampled: Jul 25, 1996
Received: Jul 25, 1996
Analyzed: Jul 31, 1996
Reported: Aug 8, 1996

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.
Tetrachloroethene.....	0.50	1.7
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 25, 1996
2401 Stanwell Dr., Ste. 300	Sample Descript: Water, MW-8	Received: Jul 25, 1996
Concord, CA 94520	Analysis Method: EPA 5030/8010	Analyzed: Jul 31, 1996
Attention: Jarrel Crider	Lab Number: 607-1828	Reported: Aug 8, 1996

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.
Tetrachloroethene.....	0.50	1.1
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 25, 1996
2401 Stanwell Dr., Ste. 300	Sample Descript: Water, MW-9	Received: Jul 25, 1996
Concord, CA 94520	Analysis Method: EPA 5030/8010	Analyzed: Jul 31, 1996
Attention: Jarrel Crider	Lab Number: 607-1829	Reported: Aug 8, 1996

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.
Tetrachloroethene.....	0.50	1.0
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 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: 6071826-832

Reported: Aug 8, 1996

QUALITY CONTROL DATA REPORT

ANALYTE	Benzene	Toluene	Ethyl Benzene	Xylenes	Diesel
Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020	EPA 8015
Analyst:	S. Chullakorn	S. Chullakorn	S. Chullakorn	S. Chullakorn	J. Dinsay

MS/MSD					
Batch#:	6072031	6072031	6072031	6072031	BLK072996
Date Prepared:	8/5/96	8/5/96	8/5/96	8/5/96	7/29/96
Date Analyzed:	8/5/96	8/5/96	8/5/96	8/5/96	7/30/96
Instrument I.D.#:	HP-4	HP-4	HP-4	HP-4	HP-3A
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L	60 µg/L	300 µg/L
Matrix Spike					
% Recovery:	90	95	90	92	100
Matrix Spike Duplicate					
% Recovery:	80	80	80	80	93
Relative % Difference:	12	17	12	14	6.9

LCS Batch#:	4LCS080596	4LCS080596	4LCS080596	4LCS080596	LCS072996
Date Prepared:	8/5/96	8/5/96	8/5/96	8/5/96	7/29/96
Date Analyzed:	8/5/96	8/5/96	8/5/96	8/5/96	7/30/96
Instrument I.D.#:	HP-4	HP-4	HP-4	HP-4	HP-3A
LCS % Recovery:	85	90	85	87	93

% Recovery Control Limits:	60-140	60-140	60-140	60-140	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.

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: 6071826-832

Reported: Aug 8, 1996

QUALITY CONTROL DATA REPORT

ANALYTE	Benzene	Toluene	Ethyl Benzene	Xylenes
Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Analyst:	S. Chullakorn	S. Chullakorn	S. Chullakorn	S. Chullakorn

MS/MSD	Benzene	Toluene	Ethyl Benzene	Xylenes
Batch#:	6071827	6071827	6071827	6071827
Date Prepared:	8/6/96	8/6/96	8/6/96	8/6/96
Date Analyzed:	8/6/96	8/6/96	8/6/96	8/6/96
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
Matrix Spike % Recovery:	120	100	110	107
Matrix Spike Duplicate % Recovery:	125	105	115	112
Relative % Difference:	4.1	4.9	4.4	4.6

LCS Batch#:	11LCS080696	11LCS080696	11LCS080696	11LCS080696
Date Prepared:	8/6/96	8/6/96	8/6/96	8/6/96
Date Analyzed:	8/6/96	8/6/96	8/6/96	8/6/96
Instrument I.D.#:	HP-11	HP-11	HP-11	HP-11
LCS % Recovery:	125	105	120	115

% Recovery Control Limits:	Benzene	Toluene	Ethyl Benzene	Xylenes
	80-140	60-140	60-140	60-140

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: 6071826-832

Reported: Aug 8, 1996

QUALITY CONTROL DATA REPORT

ANALYTE	1,1-Dichloro-ethene	Trichloro-ethene	Chloro-benzene
Method:	EPA 8010	EPA 8010	EPA 8010
Analyst:	I. Dalvand	I. Dalvand	I. Dalvand

MS/MSD			
Batch#:	6071838	6071838	6071838
Date Prepared:	7/31/96	7/31/96	7/31/96
Date Analyzed:	7/31/96	7/31/96	7/31/96
Instrument I.D.#:	HP-7	HP-7	HP-7
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L
Matrix Spike % Recovery:	135	172	97
Matrix Spike Duplicate % Recovery:	133	153	97
Relative % Difference:	1.5	12	0.0

LCS Batch#:	LCS073196	LCS073196	LCS073196
Date Prepared:	7/31/96	7/31/96	7/31/96
Date Analyzed:	7/31/96	7/31/96	7/31/96
Instrument I.D.#:	HP-7	HP-7	HP-7
LCS % Recovery:	100	112	94

% Recovery Control Limits:	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



CHAIN OF CUSTODY

9607495

OPER: HOVSIA AJEMIAN		UNOCAL SIS # 2512 CITY: San Leandro		ANALYSES REQUESTED								TURN AROUND TIME:	
RESUBMIT AGENCY:		ADDRESS: 1300 Davis St.		TPH-GAS BTX/MTBE	TPH-DIESEL	TOG	8010						Regular
													REMARKS

SAMPLE ID NO	DATE	TIME	WATER	GRAB	COMP	NO. OF CONT.	SAMPLING LOCATION	TPH-GAS BTX/MTBE	TPH-DIESEL	TOG	8010				
MW 1	7-25-96	10:55 A.M.	/	/		4 (VOA) 1 Amber	Wells	/	/		/				6071826 AC
MW 1	"	9:40 A.M.	/	/		4 VOA	"	/			/				6071827
MW 3	"	8:00 A.M.	/	/		4 VOA	"	/			/				6071828
MW 4	"	3:40 A.M.	/	/		4 VOA	"	/			/				6071829

E 10 46

RELINQUISHED BY:	DATE/TIME 3:20 P.M.	RECEIVED BY:	THE FOLLOWING <u>MUST</u> BE COMPLETED BY THE LABORATORY ACCEPTING SAMPLES FOR ANALYSES:	
(SIGNATURE)	7-25-96	(SIGNATURE)	1. HAVE ALL SAMPLES RECEIVED FOR ANALYSIS BEEN STORED ON ICE?	Y
(SIGNATURE)	7/26/96	(SIGNATURE)	2. WILL SAMPLES REMAIN REFRIGERATED UNTIL ANALYZED?	Y
(SIGNATURE)	7-26	(SIGNATURE)	3. DID ANY SAMPLES RECEIVED FOR ANALYSIS HAVE HEAD SPACE?	N
(SIGNATURE)	7/26/96 1450	(SIGNATURE)	4. WERE SAMPLES IN APPROPRIATE CONTAINERS AND PROPERLY PACKAGED?	Y
		SIGNATURE:	TITLE:	DATE:
		(SIGNATURE)	Analyst	7-25-96

9607495

CHAIN OF CUSTODY

SAMPLER (Joe) HOVSIA AJEMIAN			UNOCAL S/S # <u>2512</u> CITY: <u>San Leandro</u>				ANALYSES REQUESTED						TURN AROUND TIME:	
WITNESSING AGENCY			ADDRESS: <u>1300 Davis St.</u>				TPH-GAS BTEX	TPH-DIESEL	TOG	8010				Regular REMARKS
SAMPLE ID NO	DATE	TIME	WATER	GRAB	COMP	NO. OF CONT.	SAMPLING LOCATION	TPH-GAS BTEX	TPH-DIESEL	TOG	8010			
	7-25-96					1 vol		✓	6071830					
								✓	6071831					
								✓	6071832					

THE FOLLOWING MUST BE COMPLETED BY THE LABORATORY ACCEPTING SAMPLES FOR ANALYSES:

- HAVE ALL SAMPLES RECEIVED FOR ANALYSIS BEEN STORED ON ICE? Y
- WILL SAMPLES REMAIN REFRIGERATED UNTIL ANALYZED? Y
- DID ANY SAMPLES RECEIVED FOR ANALYSIS HAVE HEAD SPACE? N
- WERE SAMPLES IN APPROPRIATE CONTAINERS AND PROPERLY PACKAGED? Y

RELINQUISHED BY: (SIGNATURE) <i>Joe Ajemian</i>	DATE/TIME 3:20 p.m. 7-25-96	RECEIVED BY: (SIGNATURE) <i>[Signature]</i>
(SIGNATURE) <i>[Signature]</i>	7/26/96	(SIGNATURE) <i>[Signature]</i>
(SIGNATURE) <i>[Signature]</i>	7-26-1450 7/26/96	(SIGNATURE) <i>[Signature]</i>

SIGNATURE: *[Signature]* TITLE: Analyst DATE: 7-25-96



FIRE DEPARTMENT

JUL 12 1996

July 8, 1996

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

Per the request of the Unocal Corporation Project Manager, Mr. Edward C. Ralston, enclosed please find our most recent data report 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) 277-2311.

Sincerely,

MPDS Services, Inc.

Jarrel F. Crider

/dr

Enclosure

cc: Mr. Edward C. Ralston

RECEIVED
SAN LEANDRO

JUL 10 1996

DEVELOPMENT SERVICES, INC.