

MPDS-UN2512-05
May 28, 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 period 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 April 23, 1996. Prior to sampling, the wells were each purged of between 10 and 14 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. Trip blank, Equipment blank and Field 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.

May 28, 1996

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.

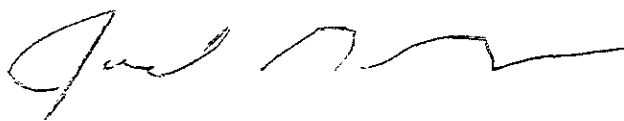
If you have any questions regarding this report, please do not hesitate to call Mr. Joel G. Greger at (510) 602-5120.

Sincerely,

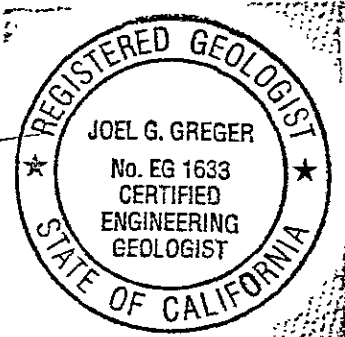
MPDS Services, Inc.



Haig (Gary) Tejirian
Senior Staff Geologist



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



License No. EG 1633

Exp. Date 8/31/96

/bp

- 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)	Screens	Water Purged (gallons)
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(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

(Monitored and Developed October 5, 1995)

MW3	17.16	14.86	33.72	0	--	110
MW8	17.17	15.56	30.10	0	--	95
MW9	17.06	15.27	30.02	0	--	75

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	TOG (mg/L)	MTEB	
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	TOC (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
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	--
	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	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	Xylene	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	
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	
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	

TOG = Total Oil & Grease

MTBE = Methyl tert butyl ether

ND = Non-detectable

mg/L = milligrams per liter.

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

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 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.

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		
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
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
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

* 1,2 Dichloroethane was detected at 4.8 µg/L

ND = Non-detectable.

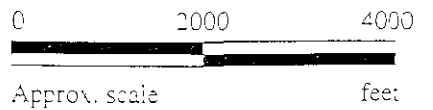
Results are in micrograms per liter (µg/L), unless otherwise indicated.


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

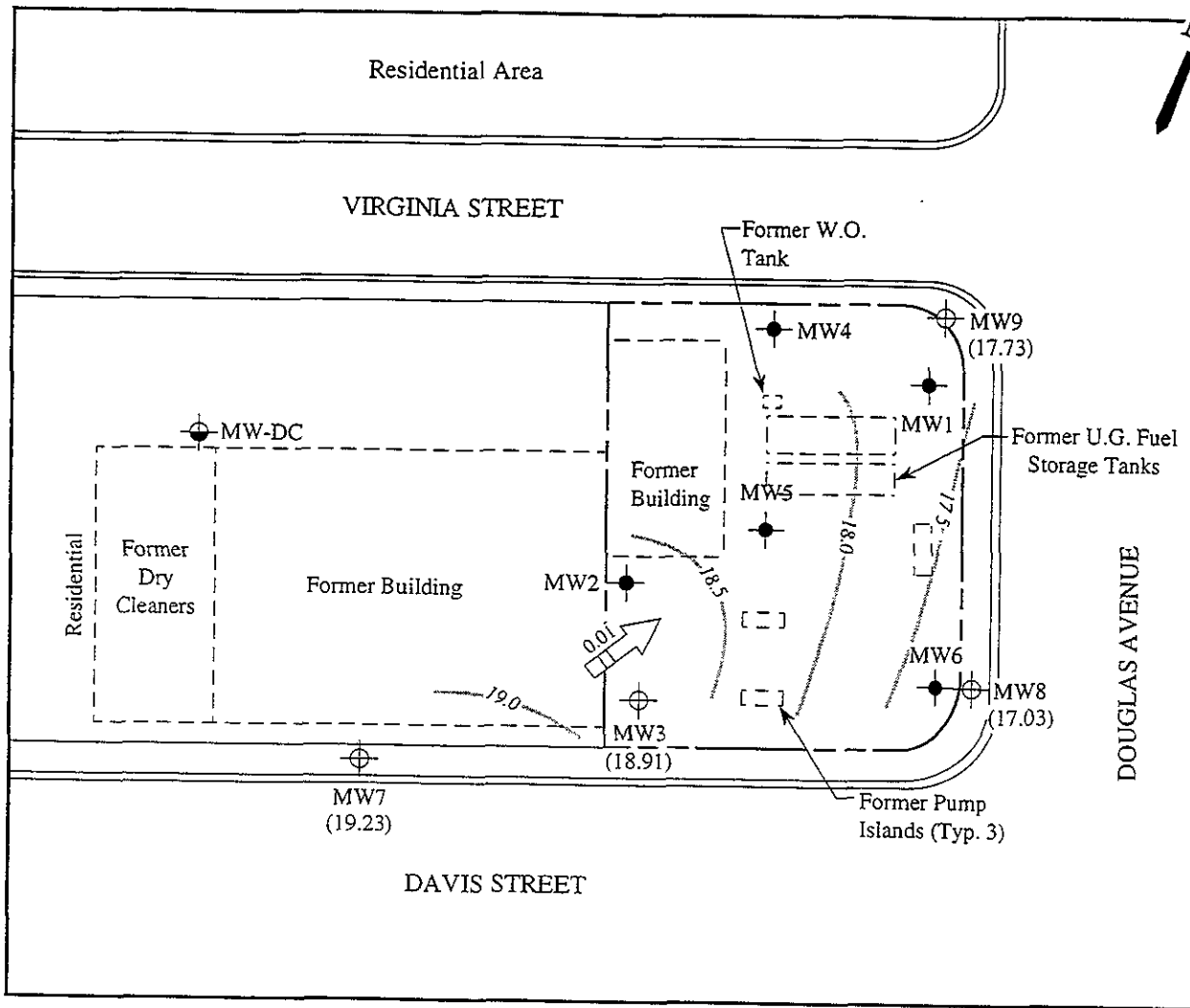
Laboratory analyses data prior to June 9, 1994, were provided by Kapreahan Engineering, Inc



Base modified from 7.5 minute U.S.G.S. San Leandro Quadrangle
(not revised 1980)

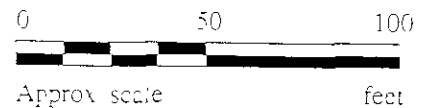


	<p>FORMER UNOCAL S/S #2512 1300 DAVIS STREET SAN LEANDRO, CALIFORNIA</p>	<p>LOCATION MAP</p>
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LEGEND

- ⊕ 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

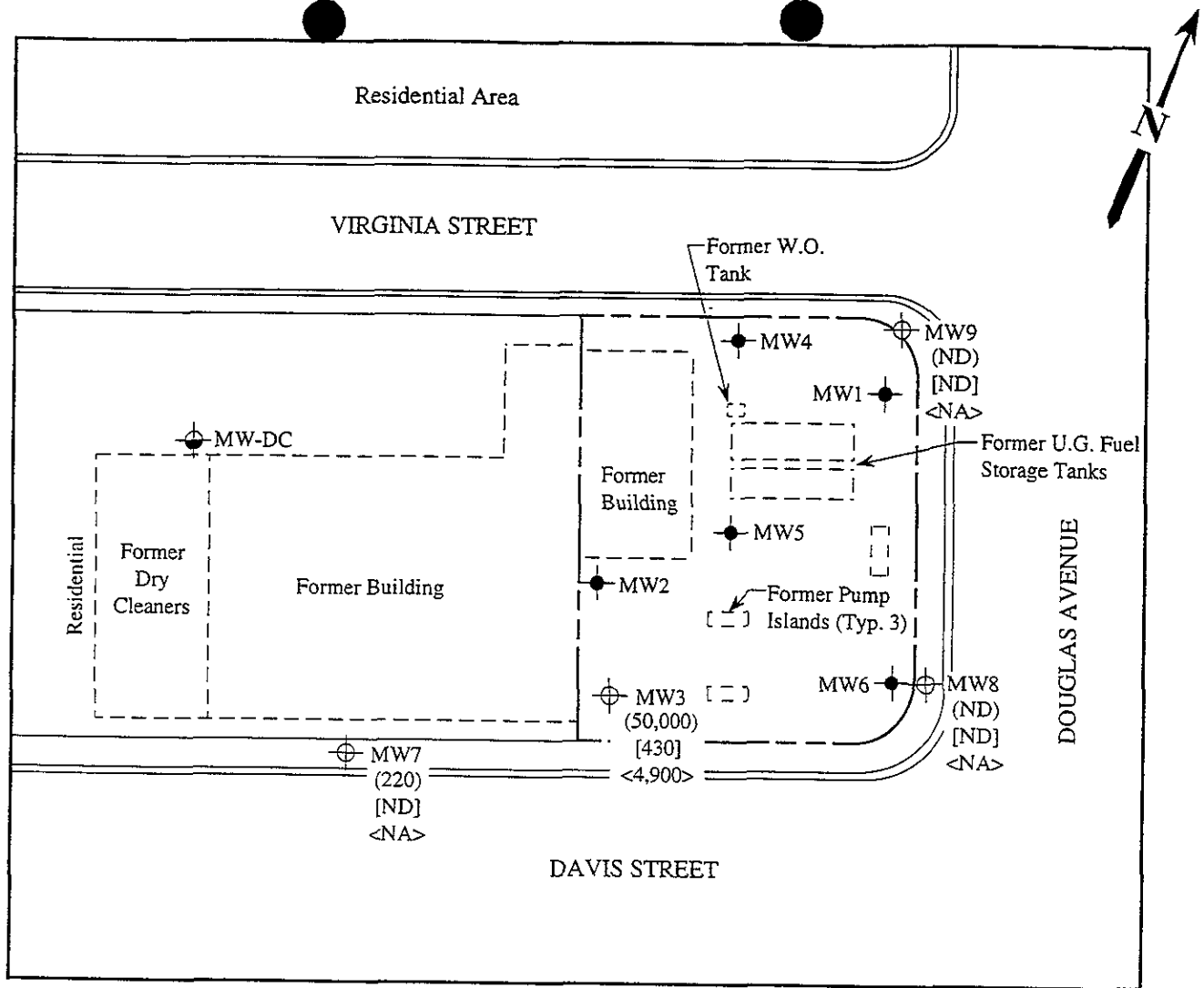


POTENTIOMETRIC SURFACE MAP FOR THE APRIL 23, 1996 MONITORING EVENT

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



PETROLEUM HYDROCARBON CONCENTRATIONS IN GROUND WATER ON APRIL 23, 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 #: 604-1691

Sampled: Apr 23, 1996
Received: Apr 23, 1996
Reported: May 21, 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
604-1691	MW-3	50,000	430	1,700	1,600	7,600
604-1692	MW-7	220	ND	0.62	0.88	5.4
604-1693	MW-8	ND	ND	ND	ND	ND
604-1694	MW-9	ND	ND	ND	ND	ND
604-1695	ES-1	ND	ND	ND	ND	ND
604-1696	ES-2	ND	ND	ND	ND	ND
604-1697	ES-3	ND	ND	ND	ND	ND

Detection Limits:	50	0.50	0.50	0.50	0.50
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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
& #1894

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 #: 604-1691	Sampled: Apr 23, 1996 Received: Apr 23, 1996 Reported: May 21, 1996
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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
604-1691	MW-3	Gasoline	500	5/4 /96	HP-2	91
604-1692	MW-7	Gasoline	1.0	5/4 /96	HP-2	75
604-1693	MW-8	--	1.0	5/4 /96	HP-2	71
604-1694	MW-9	--	1.0	5/4 /96	HP-2	80
604-1695	ES-1	--	1.0	5/2/96	HP-9	104
604-1696	ES-2	--	1.0	5/2/96	HP-9	101
604-1697	ES-3	--	1.0	5/2/96	HP-9	101

SEQUOIA ANALYTICAL, #1271
& #1894

Signature on File

Alan B Kemp
Project Manager



Sequoia Analytical

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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 #: 604-1691

Sampled: Apr 23, 1996
Received: Apr 23, 1996
Analyzed: May 4, 1996
Reported: May 21, 1996

LABORATORY ANALYSIS FOR: MTBE (Modified EPA 8020)

Sample Number	Sample Description	Detection Limit µg/L	Sample Result µg/L
604-1691	MW-3	250	N.D.
604-1692	MW-7	40	N.D.
604-1693	MW-8	40	N.D.
604-1694	MW-9	40	N.D.

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

SEQUOIA ANALYTICAL. #1894

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 3510/8015 Mod. First Sample #: 604-1691	Sampled: Apr 23, 1996 Received: Apr 23, 1996 Reported: May 21, 1996
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TOTAL EXTRACTABLE PETROLEUM HYDROCARBONS

Analyte	Reporting Limit µg/L	Sample I.D. 604-1691 MW-3*
Extractable Hydrocarbons	50	4,900

Chromatogram Pattern:

Diesel &
Unidentified
Hydrocarbons
<C15 >C20

Quality Control Data

Report Limit Multiplication Factor:	1.0
Date Extracted:	4/25/96
Date Analyzed:	4/26/96
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

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Please Note

^ This sample appears to contain diesel and non diesel mixtures. Unidentified Hydrocarbons < C15 are probably gasoline. >C20 refers to unidentified peaks in the total oil and grease range



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: 604-1691

Sampled: Apr 23, 1996
Received: Apr 23, 1996
Analyzed: Apr 26, 1996
Reported: May 21, 1996

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
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: 604-1692

Sampled: Apr 23, 1996
Received: Apr 23, 1996
Analyzed: Apr 26, 1996
Reported: May 21, 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	0.84
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-8
Analysis Method: EPA 5030/8010
Lab Number: 604-1693

Sampled: Apr 23, 1996
Received: Apr 23, 1996
Analyzed: Apr 26, 1996
Reported: May 21, 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
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: 604-1694

Sampled: Apr 23, 1996
Received: Apr 23, 1996
Analyzed: Apr 26, 1996
Reported: May 21, 1996

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	71
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 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: Liquid

QC Sample Group: 6041691-697

Reported: May 21, 1996

QUALITY CONTROL DATA REPORT

ANALYTE	Benzene	Toluene	Ethyl Benzene	Xylenes	Diesel
Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020	EPA 8015
Analyst:	L. Huang	L. Huang	L. Huang	L. Huang	J. Dinsay

MS/MSD	Benzene	Toluene	Ethyl Benzene	Xylenes	Diesel
Batch#:	6041697	6041697	6041697	6041697	BLK042596
Date Prepared:	5/2/96	5/2/96	5/2/96	5/2/96	4/25/96
Date Analyzed:	5/2/96	5/2/96	5/2/96	5/2/96	4/26/96
Instrument I.D.#:	HP-9	HP-9	HP-9	HP-9	HP-3B
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L	60 µg/L	300 µg/L
Matrix Spike % Recovery:	110	115	110	115	80
Matrix Spike Duplicate % Recovery:	120	125	125	125	90
Relative % Difference:	8.7	8.3	13	8.3	12

LCS Batch#:	9LCS050296	9LCS050296	9LCS050296	9LCS050296	LCS042596
Date Prepared:	5/2/96	5/2/96	5/2/96	5/2/96	4/25/96
Date Analyzed:	5/2/96	5/2/96	5/2/96	5/2/96	4/26/96
Instrument I.D.#:	HP-9	HP-9	HP-9	HP-9	HP-3B
LCS % Recovery:	105	110	110	112	77

% Recovery Control Limits:	Benzene	Toluene	Ethyl Benzene	Xylenes	Diesel
	60-140	60-140	60-140	60-140	50-150

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: 6041691-697

Reported: May 21, 1996

QUALITY CONTROL DATA REPORT

ANALYTE	Benzene	Toluene	Ethyl Benzene	Xylenes
Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Analyst:	Z.T.	Z.T.	Z.T.	Z.T.

MS/MSD Batch#:	MS050496	MS050496	MS050496	MS050496
Date Prepared:	5/4/96	5/4/96	5/4/96	5/4/96
Date Analyzed:	5/4/96	5/4/96	5/4/96	5/4/96
Instrument I.D.#:	HP-2	HP-2	HP-2	HP-2
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Matrix Spike % Recovery:	46	57	87	105
Matrix Spike Duplicate % Recovery:	45	57	95	105
Relative % Difference:	2.2	0.0	8.8	0.0

LCS Batch#:	LCS050496	LCS050496	LCS050496	LCS050496
Date Prepared:	5/4/96	5/4/96	5/4/96	5/4/96
Date Analyzed:	5/4/96	5/4/96	5/4/96	5/4/96
Instrument I.D.#:	HP-2	HP-2	HP-2	HP-2
LCS % Recovery:	125	78	117	129

% Recovery Control Limits:	70-130	70-130	70-130	70-130
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Please Note.

The LCS is a control sample of known, interferent free matrix that is analyzed using the same reagents, preparation and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

SEQUOIA ANALYTICAL, #1894

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: 6041691-697

Reported: May 21, 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#:	6041498	6041498	6041498
Date Prepared:	4/26/96	4/26/96	4/26/96
Date Analyzed:	4/26/96	4/26/96	4/26/96
Instrument I.D.#:	HP-6	HP-6	HP-6
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L
Matrix Spike % Recovery:	82	87	80
Matrix Spike Duplicate % Recovery:	88	92	82
Relative % Difference:	7.1	5.6	2.5

LCS Batch#:	LCS042696	LCS042696	LCS042696
Date Prepared:	4/26/96	4/26/96	4/26/96
Date Analyzed:	4/26/96	4/26/96	4/26/96
Instrument I.D.#:	HP-6	HP-6	HP-6
LCS % Recovery:	82	88	79

% Recovery Control Limits:	60-140	60-140	60-140
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SEQUOIA ANALYTICAL, #1271

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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.



