MONITORING
PURGING
DISPOSING
SAMPLING

MPDS SERVICES, INCORPORATED

97 APR 22 PM 3:43

April 21, 1997

Alameda County Health Care Services
1131 Harbor Bay Parkway
Alameda, CA 94501

RE: Unocal Service Station #5484
18950 Lake Chabot Road
Castro Valley, California

Per the request of the Tosco Marketing Company Project Professional, Ms. Tina R. Berry, enclosed please find our data report (MPDS-UN5458-11) dated April 1, 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 Professional at (510) 277-2321.

Sincerely,

MPDS Services, Inc.

Jarrel F. Crider

/jfc

Enclosure

cc: Ms. Tina R. Berry

2401 Stanwell Drive, Suite 400, Concord, CA 94520
TEL: (510) 602-5120 FAX: (510) 689-1918

MONITORING
PURGING
DISPOSING
SAMPLING
MPDS SERVICES, INCORPORATED

MPDS-UN5484-1b
April 1, 1997

Tosco Marketing Company
2000 Crow Canyon Place, Suite 400
P.O. Box 5155
San Ramon, California 94583

Attention: Ms. Tina R. Berry

RE: Annual Data Report
Unocal Service Station #5484
18950 Lake Chabot Road
Castro Valley, California

Dear Ms. Berry:

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 event 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 event is shown on the attached Figure 1.

Ground water samples were collected on March 13, 1997. Prior to sampling, the wells were each purged of between 6 and 23 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. 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 during this event 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

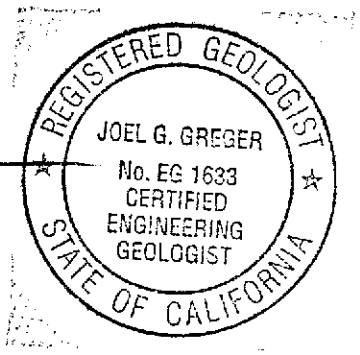
A copy of this report should be sent to the Alameda County Health Care Services Agency.

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

/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)
			(Monitored and Sampled on March 13, 1997)			
MW2*	222.30	6.58	19.20	0	--	0
MW4	217.93	9.84	27.30	0	No	22
MW5	215.55	9.56	23.85	0	No	23
MW6*	231.99	7.05	26.95	0	--	0
MW7	221.91	9.48	19.55	0	No	6
			(Monitored and Sampled on April 11, 1996)			
MW2*	224.66	4.22	19.22	0	--	0
MW4	220.22	7.55	27.33	0	No	52
MW5	217.63	7.48	23.79	0	No	43
MW6*	234.76	4.28	27.03	0	--	0
MW7	224.08	7.31	19.58	0	No	8.5
			(Monitored and Sampled on December 8, 1995)			
MW7	221.80	9.59	19.55	0	No	7
			(Monitored and Sampled on December 5, 1995)			
MW2	222.56	6.32	9.20	0	No	9
MW4	217.85	9.92	27.30	0	No	25
MW5	215.51	9.60	23.86	0	No	24
MW6	232.29	6.75	26.96	0	No	23
MW7	221.70	9.69	19.55	0	No	6.5
			(Monitored and Sampled on September 5, 1995)			
MW2	223.22	5.66	19.22	0	No	9.5
MW4	218.50	9.27	27.30	0	No	47
MW5	215.54	9.57	23.92	0	No	37.5
MW6*	233.35	5.69	†	0	--	0
MW7	222.78	8.61	19.56	0	No	7.5

Table 1

Summary of Monitoring Data

Well #	Well Casing Elevation (feet)**
MW2	228.88
MW4	227.77
MW5	225.11
MW6	239.04
MW7	231.39

♦ The depth to water level and total well depth measurements were taken from the top of the well casings.

* Monitored only.

** The elevations of the top of the well casings are relative to Mean Sea Level (MSL), per the Alameda County Benchmark (elevation = 219.68 feet MSL).

† Total well depth was not measured.

-- 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	MTBE
MW2	5/23/91	--	ND	ND	ND	ND	ND	--
	9/20/91	--	ND	ND	ND	ND	ND	--
	12/19/91	--	140	0.66	ND	0.64	1.2	--
	3/20/92	--	120	ND	ND	ND	ND	--
	6/18/92	--	140*	ND	ND	ND	ND	--
	9/10/92	--	61*	ND	ND	ND	ND	110
	12/10/92	--	100*	ND	ND	ND	ND	170
	3/10/93	--	110*	ND	ND	ND	ND	350
	6/9/93	--	120*	ND	ND	ND	ND	300
	9/9/93	--	210*	ND	ND	ND	ND	--
	12/9/93	--	96*	ND	ND	ND	ND	--
	3/3/94	--	240*	ND	ND	ND	ND	--
	6/3/94	--	190*	ND	ND	ND	ND	--
	9/2/94	--	720	ND	ND	ND	4.6	--
	12/1/94	--	200	0.70	ND	0.58	ND	--
	3/1/95	--	ND	ND	ND	ND	ND	--
	6/1/95	--	420*	ND	ND	ND	ND	--
	9/5/95	--	ND	ND	0.80	ND	0.74	•
	12/5/95	--	ND	ND	ND	ND	ND	390
	4/11/96	NOT SAMPLED††						
MW4	5/23/91	--	ND	ND	ND	ND	ND	--
	9/20/91	SAMPLED SEMI-ANNUALLY						
	12/19/91	--	ND	ND	ND	ND	ND	--
	3/20/92	SAMPLED SEMI-ANNUALLY						
	6/18/92	--	ND	0.41	0.84	ND	0.55	--
	9/10/92	SAMPLED SEMI-ANNUALLY						
	12/10/92	--	ND	ND	ND	ND	ND	--
	3/10/93	--	ND	ND	ND	ND	ND	--
	6/9/93	--	ND	ND	ND	ND	ND	--
	9/9/93	--	ND	ND	ND	ND	ND	--
	12/9/93	WELL WAS INACCESSIBLE						
	3/3/94	--	ND	ND	ND	ND	ND	--
	6/3/94	--	ND	ND	ND	ND	ND	--
	9/2/94	--	ND	ND	ND	ND	ND	--
	12/1/94	--	ND	ND	ND	ND	ND	--
	3/1/95	--	ND	ND	1.1	ND	0.75	--
	6/1/95	--	ND	ND	0.78	ND	1.7	--
	9/5/95	--	ND	ND	0.70	ND	0.71	--
	12/5/95	--	ND	ND	ND	ND	ND	0.68
	4/11/96	--	ND	ND	ND	ND	ND	ND
	3/13/97	--	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	MTBE
MW5	5/23/91	--	ND	ND	ND	ND	ND	--
	9/20/91	450	ND	ND	ND	ND	ND	--
	10/10/91	ND	--	--	--	--	--	--
	12/19/91	--	ND	ND	ND	ND	ND	--
	3/20/92	170	ND	ND	ND	ND	ND	--
	6/18/92	ND	ND	ND	ND	ND	ND	--
	9/10/92	110†	ND	ND	ND	ND	ND	--
	12/10/92	83‡	ND	ND	ND	ND	ND	--
	3/10/93	69†	ND	ND	ND	ND	ND	--
	6/9/93	64	ND	ND	ND	ND	ND	--
	9/9/93	58‡	ND	ND	ND	ND	ND	--
	12/9/93	87‡	ND	ND	ND	ND	ND	--
	3/3/94	ND	ND	ND	ND	0.71	1.7	ND
	6/3/94	80‡	ND	ND	ND	ND	ND	--
	9/2/94	130†	ND	ND	ND	ND	ND	--
	12/1/94	79†	ND	ND	ND	ND	ND	--
	3/1/95	ND	ND	ND	ND	ND	ND	--
	6/1/95	57†	ND	ND	ND	ND	ND	--
	9/5/95	210†	ND	ND	0.95	ND	0.87	•
	12/5/95	170†	ND	ND	ND	ND	ND	27
	4/11/96	--	ND	ND	ND	ND	ND	56
	3/13/97	--	ND	ND	ND	ND	ND	ND
MW6	5/23/91	--	ND	ND	ND	ND	ND	--
	9/20/91	SAMPLED SEMI-ANNUALLY						
	12/19/91	--	ND	ND	ND	ND	ND	--
	6/18/92	--	ND	ND	ND	ND	ND	--
	12/10/92	--	ND	ND	ND	ND	ND	--
	6/9/93	--	ND	ND	ND	ND	ND	--
	12/9/93	--	150	ND	ND	ND	1.7	--
	6/3/94	--	ND	ND	ND	ND	ND	--
	12/1/94	--	ND	ND	ND	ND	ND	--
	6/1/95	--	ND	ND	0.70	ND	1.7	--
	12/5/95	--	ND	ND	ND	ND	ND	1.4
	4/11/96	NOT SAMPLED††						
MW7	5/23/91	540	3,000	160	1.2	25	120	--
	9/20/91	580	1,400	160	0.75	89	130	--
	12/19/91	770	3,900	240	2.4	280	270	--
	3/20/92	3,200	11,000	980	ND	990	1,600	--
	6/18/92	990†	5,500	340	4.2	380	410	--
	9/10/92	290†	2,100	160	1.9	140	150	--

Table 2

Summary of Laboratory Analyses
Water

Well #	Date	TPH as Diesel	TPH as Gasoline	Benzene	Toluene	Ethyl-Benzene	Xylenes	MTBE
MW7	12/10/92	200‡	1,200	28	ND	37	13	--
(Cont.)	3/10/93	1,100†	4,400	310	ND	300	330	--
	6/9/93	830‡	4,600	430	ND	510	430	--
	9/9/93	550‡	2,600**	160	19	250	120	--
	12/9/93	250†	980	54	4.6	71	5.6	--
	3/3/94	1,400†	9,300	290	ND	590	400	1.7
	6/3/94	2,000†	9,400	380	5.0	820	240	--
	9/2/94	490†	3,800	77	ND	180	42	--
	12/1/94	260†	3,100	80	ND	250	190	--
	3/1/95	1,900‡	3,300	200	3.9	300	350	--
	6/1/95	1,600†	3,900	170	ND	400	430	--
	9/5/95	ND	710	32	ND	85	33	•
	12/5/95	110†	400	23	ND	34	16	1,600
	4/11/96	--	1,500	52	ND	160	130	1,500
	3/13/97	--	460	13	ND	31	4.0	430

MTBE = Methyl tert butyl ether.

† Sequoia Analytical Laboratory reported that the hydrocarbons detected did not appear to be diesel.

†† Sampling discontinued per Alameda County Health Care Services letter dated April 1, 1996.

‡ 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.

• Sequoia Analytical Laboratory has potentially identified the presence of MTBE at reportable levels in the ground water sample collected from this well.

-- Indicates analysis not performed.

ND = Non-detectable.

Table 2

Summary of Laboratory Analyses
Water

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 quantificiation range used by Sequoia Analytical Laboratory was C6 - C12.

Laboratory analyses data prior to December 9, 1993 were provided by Kaprealian Engineering, Inc.

Table 3

Summary of Laboratory Analyses
Water

Well #	Date	Total Oil & Grease (mg/L)	Bis (2-ethylhexyl) phthalate	2-Methyl-naphthalene	Naphthalene	1,2-Dichloroethane
MW4	4/11/96	--	ND	ND	ND	ND
	3/13/97	--	ND	ND	ND	ND
MW5	3/10/93	--	ND	ND	ND	ND
	6/9/93	--	--	--	--	ND
	9/9/93	--	--	--	--	ND
	12/9/93	--	--	--	--	ND
	3/3/94	--	--	--	--	ND
	6/3/94	--	--	--	--	ND
	9/2/94	--	--	--	--	ND
	12/1/94	--	--	--	--	ND
	3/1/95	--	--	--	--	ND
	6/1/95	--	--	--	--	ND
	9/5/95	--	--	--	--	ND
	12/5/95	--	--	--	--	ND
	4/11/96	--	ND	ND	ND	ND
	3/13/97	--	740	ND	ND	ND
MW7	5/23/91	ND	--	--	--	3.4
	9/20/91	ND	--	--	--	ND
	12/19/91	ND	--	--	--	3.1
	3/20/92	ND	--	--	--	ND
	6/18/92	ND	--	--	--	ND
	9/10/92	--	--	--	--	2.3
	12/10/92	--	--	--	--	2.0
	3/10/93†	--	13	19	83	1.3
	6/9/93††	--	13	19	83	1.3
	9/9/93‡	--	ND	11	48	1.5
	12/9/93	--	ND	ND	15	1.5
	3/3/94	--	ND	34	130	1.7
	6/3/94	--	ND	18	61	1.4
	9/2/94	--	ND	ND	ND	1.1
	12/1/94	--	ND	ND	2.5	1.0
	3/1/95●	--	ND	40	120	1.6
	6/1/95	--	ND	13	83	1.4
	9/5/95	--	ND	ND	7.0	1.8
	12/5/95*	--	--	--	--	ND
	12/8/95	--	ND	ND	14	--
	4/11/96	--	ND	7.6	42	0.75
	3/13/97	--	120	ND	9.0	ND

Table 3

Summary of Laboratory Analyses
Water

---

* Tetrachloroethene was detected at a concentration of 56 µg/L.

† Nine "tentatively identified compounds" were detected by the EPA method 8270 open scan at concentrations ranging from 10 µg/L to 59 µg/L. Refer to laboratory analysis sheets for the specific compounds and concentrations.

†† Ten "tentatively identified compounds" were detected by the EPA method 8270 open scan at concentrations ranging from 14 µg/L to 150 µg/L. Refer to laboratory analysis sheets for the specified compounds and concentrations.

‡ Seven "tentatively identified compounds" were detected by the EPA method 8270 open scan at concentrations ranging 11 µg/L to 88 µg/L. Refer to laboratory analysis sheets for the specific compounds and concentrations.

• Phenol was detected at a concentration of 2.1 µg/L.

-- Indicates analysis was not performed.

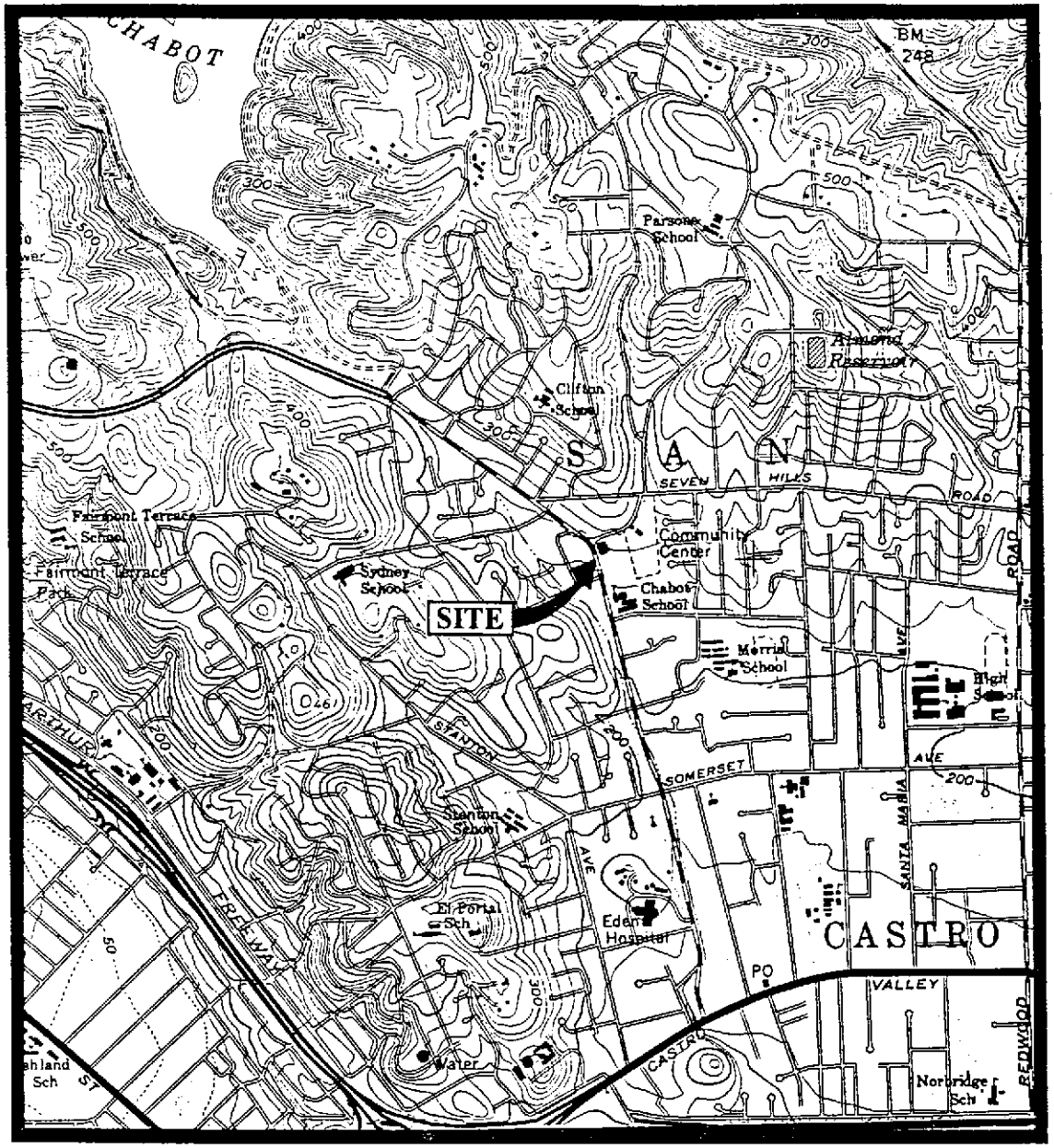
ND = Non-detectable.

mg/L = milligrams per liter.

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

Note: All EPA Method 8010 and 8270 compounds were non-detectable, except as listed above.

Laboratory analyses data prior to December 9, 1993, were provided by Kaprealian Engineering, Inc.

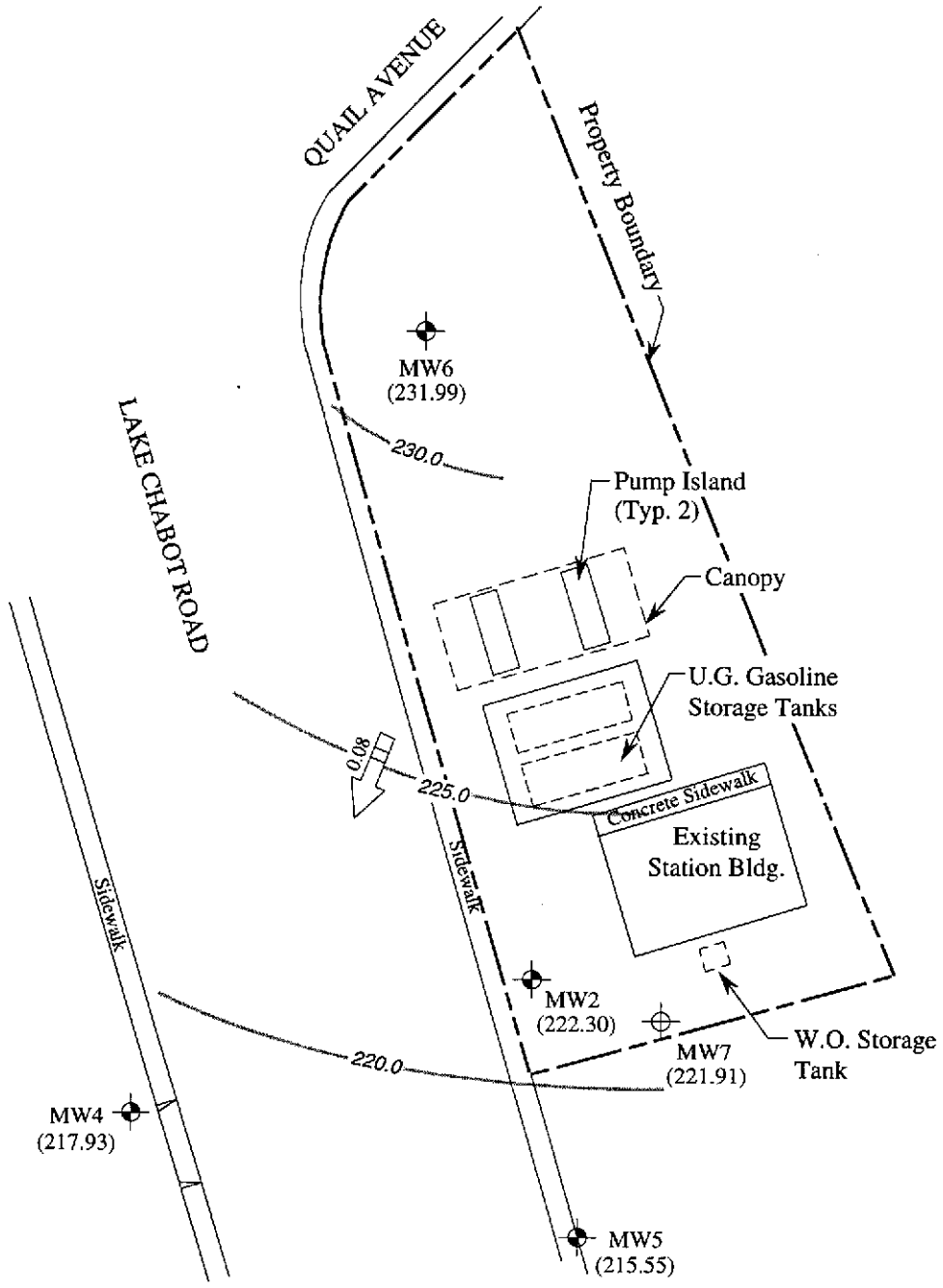


Base modified from 7.5 minute U.S.G.S. Hayward Quadrangle
(photorevised 1980)

0 2000 4000

Approx. scale feet

mpds SERVICES, INCORPORATED	**UNOCAL SERVICE STATION #5484** **18950 LAKE CHABOT ROAD** **CASTRO VALLEY, CALIFORNIA**	**LOCATION MAP**



LEGEND

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

0 40 80

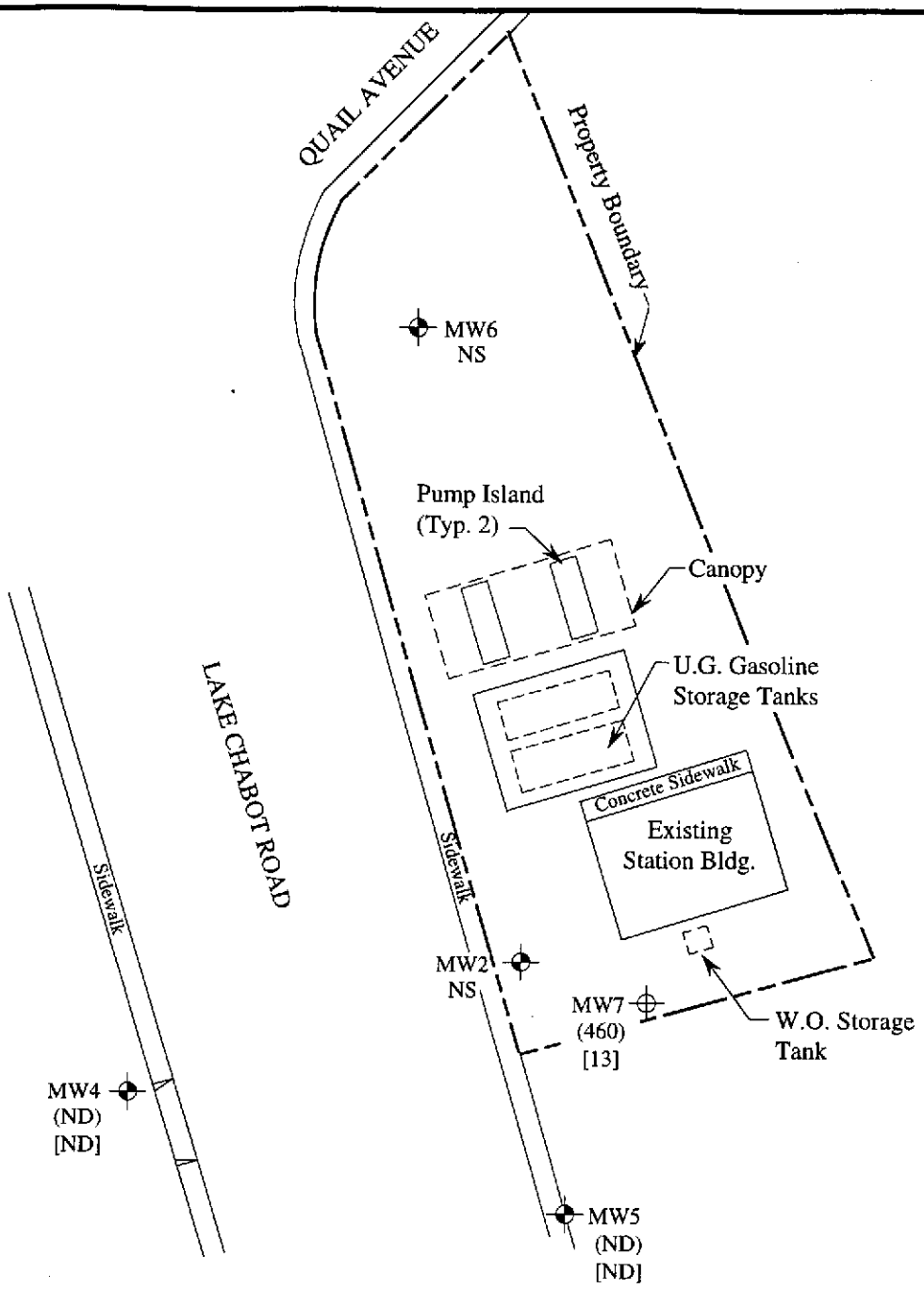
Approx. scale feet

POTENTIOMETRIC SURFACE MAP FOR THE MARCH 13, 1997 MONITORING EVENT

mpds SERVICES, INCORPORATED

UNOCAL SERVICE STATION #5484
18950 LAKE CHABOT ROAD
CASTRO VALLEY, CALIFORNIA

FIGURE
1



LEGEND

- Monitoring well (by KEI)
- Monitoring well (by AGS)
- ( ) 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, NS Not sampled

0 40 80

Approx. scale feet

PETROLEUM HYDROCARBON CONCENTRATIONS IN GROUND WATER ON MARCH 13, 1997

mpds SERVICES, INCORPORATED

UNOCAL SERVICE STATION #5484
18950 LAKE CHABOT ROAD
CASTRO VALLEY, CALIFORNIA

FIGURE
2

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	Client Project ID:	Unocal #5484, 18950 Lake Chabot Rd. Castro Valley	Sampled: Mar 13, 1997
2401 Stanwell Dr., Ste. 300	Matrix Descript:	Water	Received: Mar 13, 1997
Concord, CA 94520	Analysis Method:	EPA 5030/8015 Mod./8020	Reported: Mar 26, 1997
Attention: Jarrel Crider	First Sample #:	703-1105	

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
703-1105	MW-4	ND	ND	ND	ND	ND
703-1106	MW-5	ND	ND	ND	ND	ND
703-1107	MW-7	460	13	ND	31	4.0
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 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	Client Project ID:	Unocal #5484, 18950 Lake Chabot Rd.	Sampled:	Mar 13, 1997
2401 Stanwell Dr., Ste. 300	Matrix Descript:	Water Castro Valley	Received:	Mar 13, 1997
Concord, CA 94520	Analysis Method:	EPA 5030/8015 Mod./8020	Reported:	Mar 26, 1997
Attention: Jarrel Crider	First Sample #:	703-1105		

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
703-1105	MW-4	--	1.0	3/21/97	HP-4	95
703-1106	MW-5	--	1.0	3/21/97	HP-4	95
703-1107	MW-7	Gasoline	5.0	3/25/97	HP-5	98

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	Client Project ID:	Unocal #5484, 18950 Lake Chabot Rd.	Sampled:	Mar 13, 1997
2401 Stanwell Dr., Ste. 300	Sample Descript:	Water Castro Valley	Received:	Mar 13, 1997
Concord, CA 94520	Analysis for:	MTBE (Modified EPA 8020)		
Attention: Jarrel Crider	First Sample #:	703-1105	Analyzed:	Mar 21-25, 97
			Reported:	Mar 26, 1997

LABORATORY ANALYSIS FOR: MTBE (Modified EPA 8020)

Sample Number	Sample Description	Detection Limit µg/L	Sample Result µg/L
703-1105	MW-4	5.0	N.D.
703-1106	MW-5	5.0	N.D.
703-1107	MW-7	13	430

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

7031105.MPD <3>

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	Client Project ID:	Unocal #5484, 18950 Lake Chabot Rd.	Sampled:	Mar 13, 1997
2401 Stanwell Dr., Ste. 300	Sample Descript:	Water, MW-4 Castro Valley	Received:	Mar 13, 1997
Concord, CA 94520	Analysis Method:	EPA 5030/8010	Analyzed:	Mar 19, 1997
Attention: Jarrel Crider	Lab Number:	703-1105	Reported:	Mar 26, 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.
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

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	Client Project ID:	Unocal #5484, 18950 Lake Chabot Rd.	Sampled:	Mar 13, 1997
2401 Stanwell Dr., Ste. 300	Sample Descript:	Water, MW-7 Castro Valley	Received:	Mar 13, 1997
Concord, CA 94520	Analysis Method:	EPA 5030/8010	Analyzed:	Mar 19, 1997
Attention: Jarrel Crider	Lab Number:	703-1107	Reported:	Mar 26, 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

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	Client Project ID:	Unocal #5484, 18950 Lake Chabot Rd.	Sampled:	Mar 13, 1997
2401 Stanwell Dr., Ste. 300	Sample Descript:	Water, MW-4 Castro Valley	Received:	Mar 13, 1997
Concord, CA 94520	Analysis Method:	EPA 8270	Extracted:	Mar 14, 1997
Attention: Jarrel Crider	Lab Number:	703-1105	Analyzed:	Mar 18, 1997
			Reported:	Mar 26, 1997

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Detection Limit µg/L	Sample Results µg/L
Acenaphthene	2.0	N.D.
Acenaphthylene	2.0	N.D.
Aniline	2.0	N.D.
Anthracene	2.0	N.D.
Benzidine	50	N.D.
Benzoic Acid	10	N.D.
Benzo(a)anthracene	2.0	N.D.
Benzo(b)fluoranthene	2.0	N.D.
Benzo(k)fluoranthene	2.0	N.D.
Benzo(g,h,i)perylene	2.0	N.D.
Benzo(a)pyrene	2.0	N.D.
Benzyl alcohol	2.0	N.D.
Bis(2-chloroethoxy)methane	2.0	N.D.
Bis(2-chloroethyl)ether	2.0	N.D.
Bis(2-chloroisopropyl)ether	2.0	N.D.
Bis(2-ethylhexyl)phthalate	10	N.D.
4-Bromophenyl phenyl ether	2.0	N.D.
Butyl benzyl phthalate	2.0	N.D.
4-Chloroaniline	2.0	N.D.
2-Chloronaphthalene	2.0	N.D.
4-Chloro-3-methylphenol	2.0	N.D.
2-Chlorophenol	2.0	N.D.
4-Chlorophenyl phenyl ether	2.0	N.D.
Chrysene	2.0	N.D.
Dibenz(a,h)anthracene	2.0	N.D.
Dibenzofuran	2.0	N.D.
Di-N-butyl phthalate	10	N.D.
1,3-Dichlorobenzene	2.0	N.D.
1,4-Dichlorobenzene	2.0	N.D.
1,2-Dichlorobenzene	2.0	N.D.
3,3-Dichlorobenzidine	10	N.D.
2,4-Dichlorophenol	2.0	N.D.
Diethyl phthalate	2.0	N.D.
2,4-Dimethylphenol	2.0	N.D.
Dimethyl phthalate	2.0	N.D.
4,6-Dinitro-2-methylphenol	10	N.D.
2,4-Dinitrophenol	10	N.D.
2,4-Dinitrotoluene	2.0	N.D.
2,6-Dinitrotoluene	2.0	N.D.
Di-N-octyl phthalate	2.0	N.D.

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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	Client Project ID:	Unocal #5484, 18950 Lake Chabot Rd.	Sampled:	Mar 13, 1997
2401 Stanwell Dr., Ste. 300	Sample Descript:	Water, MW-4 Castro Valley	Received:	Mar 13, 1997
Concord, CA 94520	Analysis Method:	EPA 8270	Extracted:	Mar 14, 1997
Attention: Jarrel Crider	Lab Number:	703-1105	Analyzed:	Mar 18, 1997
			Reported:	Mar 26, 1997

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Detection Limit µg/L	Sample Results µg/L
Fluoranthene	2.0	N.D.
Fluorene	2.0	N.D.
Hexachlorobenzene	2.0	N.D.
Hexachlorobutadiene	2.0	N.D.
Hexachlorocyclopentadiene	2.0	N.D.
Hexachloroethane	2.0	N.D.
Indeno(1,2,3-cd)pyrene	2.0	N.D.
Isophorone	2.0	N.D.
2-Methylnaphthalene	2.0	N.D.
2-Methylphenol	2.0	N.D.
4-Methylphenol	2.0	N.D.
Naphthalene	2.0	N.D.
2-Nitroaniline	10	N.D.
3-Nitroaniline	10	N.D.
4-Nitroaniline	10	N.D.
Nitrobenzene	2.0	N.D.
2-Nitrophenol	2.0	N.D.
4-Nitrophenol	10	N.D.
N-Nitrosodimethylamine	2.0	N.D.
N-Nitrosodiphenylamine	2.0	N.D.
N-Nitroso-di-N-propylamine	2.0	N.D.
Pentachlorophenol	10	N.D.
Phenanthrene	2.0	N.D.
Phenol	2.0	N.D.
Pyrene	2.0	N.D.
1,2,4-Trichlorobenzene	2.0	N.D.
2,4,5-Trichlorophenol	10	N.D.
2,4,6-Trichlorophenol	2.0	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

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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	Client Project ID:	Unocal #5484, 18950 Lake Chabot Rd.	Sampled:	Mar 13, 1997
2401 Stanwell Dr., Ste. 300	Sample Descript:	Water, MW-5 Castro Valley	Received:	Mar 13, 1997
Concord, CA 94520	Analysis Method:	EPA 8270	Extracted:	Mar 14, 1997
Attention: Jarrel Crider	Lab Number:	703-1106	Analyzed:	Mar 18, 1997
			Reported:	Mar 26, 1997

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Detection Limit µg/L	Sample Results µg/L
Acenaphthene	20	N.D.
Acenaphthylene	20	N.D.
Aniline	20	N.D.
Anthracene	20	N.D.
Benzidine	500	N.D.
Benzoic Acid	100	N.D.
Benzo(a)anthracene	20	N.D.
Benzo(b)fluoranthene	20	N.D.
Benzo(k)fluoranthene	20	N.D.
Benzo(g,h,i)perylene	20	N.D.
Benzo(a)pyrene	20	N.D.
Benzyl alcohol	20	N.D.
Bis(2-chloroethoxy)methane	20	N.D.
Bis(2-chloroethyl)ether	20	N.D.
Bis(2-chloroisopropyl)ether	20	N.D.
Bis(2-ethylhexyl)phthalate	**100**	**740**
4-Bromophenyl phenyl ether	20	N.D.
Butyl benzyl phthalate	20	N.D.
4-Chloroaniline	20	N.D.
2-Chloronaphthalene	20	N.D.
4-Chloro-3-methylphenol	20	N.D.
2-Chlorophenol	20	N.D.
4-Chlorophenyl phenyl ether	20	N.D.
Chrysene	20	N.D.
Dibenz(a,h)anthracene	20	N.D.
Dibenzofuran	20	N.D.
Di-N-butyl phthalate	100	N.D.
1,3-Dichlorobenzene	20	N.D.
1,4-Dichlorobenzene	20	N.D.
1,2-Dichlorobenzene	20	N.D.
3,3-Dichlorobenzidine	100	N.D.
2,4-Dichlorophenol	20	N.D.
Diethyl phthalate	20	N.D.
2,4-Dimethylphenol	20	N.D.
Dimethyl phthalate	20	N.D.
4,6-Dinitro-2-methylphenol	100	N.D.
2,4-Dinitrophenol	100	N.D.
2,4-Dinitrotoluene	20	N.D.
2,6-Dinitrotoluene	20	N.D.
Di-N-octyl phthalate	20	N.D.

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

MPDS Services	Client Project ID:	Unocal #5484, 18950 Lake Chabot Rd.	Sampled:	Mar 13, 1997
2401 Stanwell Dr., Ste. 300	Sample Descript:	Water, MW-4 Castro Valley	Received:	Mar 13, 1997
Concord, CA 94520	Analysis Method:	EPA 8270	Extracted:	Mar 14, 1997
Attention: Jarrel Crider	Lab Number:	703-1106	Analyzed:	Mar 18, 1997
			Reported:	Mar 26, 1997

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Detection Limit µg/L	Sample Results µg/L
Fluoranthene	20	N.D.
Fluorene	20	N.D.
Hexachlorobenzene	20	N.D.
Hexachlorobutadiene	20	N.D.
Hexachlorocyclopentadiene	20	N.D.
Hexachloroethane	20	N.D.
Indeno(1,2,3-cd)pyrene	20	N.D.
Isophorone	20	N.D.
2-Methylnaphthalene	20	N.D.
2-Methylphenol	20	N.D.
4-Methylphenol	20	N.D.
Naphthalene	20	N.D.
2-Nitroaniline	100	N.D.
3-Nitroaniline	100	N.D.
4-Nitroaniline	100	N.D.
Nitrobenzene	20	N.D.
2-Nitrophenol	20	N.D.
4-Nitrophenol	100	N.D.
N-Nitrosodimethylamine	20	N.D.
N-Nitrosodiphenylamine	20	N.D.
N-Nitroso-di-N-propylamine	20	N.D.
Pentachlorophenol	100	N.D.
Phenanthrene	20	N.D.
Phenol	20	N.D.
Pyrene	20	N.D.
1,2,4-Trichlorobenzene	20	N.D.
2,4,5-Trichlorophenol	100	N.D.
2,4,6-Trichlorophenol	20	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

7031105.MPD <10>

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	Client Project ID:	Unocal #5484, 18950 Lake Chabot Rd. Castro Valley	Sampled:	Mar 13, 1997
2401 Stanwell Dr., Ste. 300	Sample Descript:	Water, MW-7	Received:	Mar 13, 1997
Concord, CA 94520	Analysis Method:	EPA 8270	Extracted:	Mar 14, 1997
Attention: Jarrel Crider	Lab Number:	703-1107	Analyzed:	Mar 18, 1997
			Reported:	Mar 26, 1997

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Detection Limit µg/L	Sample Results µg/L
Acenaphthene	2.0	N.D.
Acenaphthylene	2.0	N.D.
Aniline	2.0	N.D.
Anthracene	2.0	N.D.
Benzidine	50	N.D.
Benzoic Acid	10	N.D.
Benzo(a)anthracene	2.0	N.D.
Benzo(b)fluoranthene	2.0	N.D.
Benzo(k)fluoranthene	2.0	N.D.
Benzo(g,h,i)perylene	2.0	N.D.
Benzo(a)pyrene	2.0	N.D.
Benzyl alcohol	2.0	N.D.
Bis(2-chloroethoxy)methane	2.0	N.D.
Bis(2-chloroethyl)ether	2.0	N.D.
Bis(2-chloroisopropyl)ether	2.0	N.D.
Bis(2-ethylhexyl)phthalate	**10**	**120**
4-Bromophenyl phenyl ether	2.0	N.D.
Butyl benzyl phthalate	2.0	N.D.
4-Chloroaniline	2.0	N.D.
2-Chloronaphthalene	2.0	N.D.
4-Chloro-3-methylphenol	2.0	N.D.
2-Chlorophenol	2.0	N.D.
4-Chlorophenyl phenyl ether	2.0	N.D.
Chrysene	2.0	N.D.
Dibenz(a,h)anthracene	2.0	N.D.
Dibenzofuran	2.0	N.D.
Di-N-butyl phthalate	10	N.D.
1,3-Dichlorobenzene	2.0	N.D.
1,4-Dichlorobenzene	2.0	N.D.
1,2-Dichlorobenzene	2.0	N.D.
3,3-Dichlorobenzidine	10	N.D.
2,4-Dichlorophenol	2.0	N.D.
Diethyl phthalate	2.0	N.D.
2,4-Dimethylphenol	2.0	N.D.
Dimethyl phthalate	2.0	N.D.
4,6-Dinitro-2-methylphenol	10	N.D.
2,4-Dinitrophenol	10	N.D.
2,4-Dinitrotoluene	2.0	N.D.
2,6-Dinitrotoluene	2.0	N.D.
Di-N-octyl phthalate	2.0	N.D.

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

MPDS Services	Client Project ID:	Unocal #5484, 18950 Lake Chabot Rd.	Sampled:	Mar 13, 1997
2401 Stanwell Dr., Ste. 300	Sample Descript:	Water, MW-4 Castro Valley	Received:	Mar 13, 1997
Concord, CA 94520	Analysis Method:	EPA 8270	Extracted:	Mar 14, 1997
Attention: Jarrel Crider	Lab Number:	703-1107	Analyzed:	Mar 18, 1997
			Reported:	Mar 26, 1997

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Detection Limit µg/L	Sample Results µg/L
Fluoranthene	2.0	N.D.
Fluorene	2.0	N.D.
Hexachlorobenzene	2.0	N.D.
Hexachlorobutadiene	2.0	N.D.
Hexachlorocyclopentadiene	2.0	N.D.
Hexachloroethane	2.0	N.D.
Indeno(1,2,3-cd)pyrene	2.0	N.D.
Isophorone	2.0	N.D.
2-Methylnaphthalene	2.0	N.D.
2-Methylphenol	2.0	N.D.
4-Methylphenol	2.0	N.D.
Naphthalene	**2.0**	**9.0**
2-Nitroaniline	10	N.D.
3-Nitroaniline	10	N.D.
4-Nitroaniline	10	N.D.
Nitrobenzene	2.0	N.D.
2-Nitrophenol	2.0	N.D.
4-Nitrophenol	10	N.D.
N-Nitrosodimethylamine	2.0	N.D.
N-Nitrosodiphenylamine	2.0	N.D.
N-Nitroso-di-N-propylamine	2.0	N.D.
Pentachlorophenol	10	N.D.
Phenanthrene	2.0	N.D.
Phenol	2.0	N.D.
Pyrene	2.0	N.D.
1,2,4-Trichlorobenzene	2.0	N.D.
2,4,5-Trichlorophenol	10	N.D.
2,4,6-Trichlorophenol	2.0	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

7031105.MPD <12>

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 #5484, 18950 Lake Chabot Rd., Castro Valley
Matrix: Liquid
QC Sample Group: 7031105-107
Reported: Mar 28, 1997

QUALITY CONTROL DATA REPORT

ANALYTE	Benzene	Toluene	Ethyl Benzene	Xylenes
Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Analyst:	D. Newcomb	D. Newcomb	D. Newcomb	D. Newcomb
MS/MSD Batch#:	7031435	7031435	7031435	7031435
Date Prepared:	3/26/97	3/26/97	3/26/97	3/26/97
Date Analyzed:	3/26/97	3/26/97	3/26/97	3/26/97
Instrument I.D.#:	HP-5	HP-5	HP-5	HP-5
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L	60 µg/L
Matrix Spike % Recovery:	95	85	90	88
Matrix Spike Duplicate % Recovery:	95	85	90	88
Relative % Difference:	0.0	0.0	0.0	0.0
LCS Batch#:	5LCS032597	5LCS032597	5LCS032597	5LCS032597
Date Prepared:	3/25/97	3/25/97	3/25/97	3/25/97
Date Analyzed:	3/25/97	3/25/97	3/25/97	3/25/97
Instrument I.D.#:	HP-5	HP-5	HP-5	HP-5
LCS % Recovery:	85	80	85	78
% Recovery Control Limits:	60-140	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.

Sequoia Analytical

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

Client Project ID: Unocal #5484, 18950 Lake Chabot Rd., Castro Valley
Matrix: Liquid
QC Sample Group: 7031105-107
Reported: Mar 28, 1997

QUALITY CONTROL DATA REPORT

ANALYTE	Benzene	Toluene	Ethyl Benzene	Xylenes
Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Analyst:	D. Newcomb	D. Newcomb	D. Newcomb	D. Newcomb
MS/MSD Batch#:	7031170	7031170	7031170	7031170
Date Prepared:	3/24/97	3/24/97	3/24/97	3/24/97
Date Analyzed:	3/24/97	3/24/97	3/24/97	3/24/97
Instrument I.D.#:	HP-4	HP-4	HP-4	HP-4
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L	60 µg/L
Matrix Spike % Recovery:	80	85	80	83
Matrix Spike Duplicate % Recovery:	80	85	80	83
Relative % Difference:	0.0	0.0	0.0	0.0
LCS Batch#:	4LCS032197	4LCS032197	4LCS032197	4LCS032197
Date Prepared:	3/21/97	3/21/97	3/21/97	3/21/97
Date Analyzed:	3/21/97	3/21/97	3/21/97	3/21/97
Instrument I.D.#:	HP-4	HP-4	HP-4	HP-4
LCS % Recovery:	85	85	85	88
% Recovery Control Limits:	60-140	60-140	60-140	60-140

SEQUOIA ANALYTICAL, #1271

Signature on File

Alan B. Kemp
Project Manager

Please Note:
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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 #5484, 18950 Lake Chabot Rd., Castro Valley
Matrix: Liquid
QC Sample Group: 7031105-107

Reported: Mar 26, 1997

QUALITY CONTROL DATA REPORT

ANALYTE	1,1-Dichloro-ethene	Trichloro-ethene	Chloro-benzene
Method:	EPA 8010	EPA 8010	EPA 8010
Analyst:	P. Horton	P. Horton	P. Horton
MS/MSD Batch#:	7030961	7030961	7030961
Date Prepared:	3/18/97	3/18/97	3/18/97
Date Analyzed:	3/18/97	3/18/97	3/18/97
Instrument I.D.#:	HP-6	HP-6	HP-6
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L
Matrix Spike % Recovery:	115	113	99
Matrix Spike Duplicate % Recovery:	108	107	99
Relative % Difference:	6.3	5.5	0.0
LCS Batch#:	LCS031997	LCS031997	LCS031997
Date Prepared:	3/19/97	3/19/97	3/19/97
Date Analyzed:	3/19/97	3/19/97	3/19/97
Instrument I.D.#:	HP-6	HP-6	HP-6
LCS % Recovery:	105	108	100
% Recovery Control Limits:	60-140	60-140	60-140

SEQUOIA ANALYTICAL, #1271

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Client Project ID: Unocal #5484, 18950 Lake Chabot Rd. Castro Valley
Matrix: Liquid
QC Sample Group: 7031105-107
Reported: Mar 26, 1997

QUALITY CONTROL DATA REPORT

ANALYTE	Phenol	2-Chlorophenol	1,4-Dichloro-benzene	N-Nitroso-Di-N-propylamine	1,2,4-Trichloro-benzene	4-Chloro-3-Methylphenol
Prep. Method:	EPA 3510	EPA 3510	EPA 3510	EPA 3510	EPA 3510	EPA 3510
Method:	EPA 8270	EPA 8270	EPA 8270	EPA 8270	EPA 8270	EPA 8270
Analyst:	I. Dalvand	I. Dalvand	I. Dalvand	I. Dalvand	I. Dalvand	I. Dalvand
MS/MSD Batch#:	BLK031497	BLK031497	BLK031497	BLK031497	BLK031497	BLK031497
Date Prepared:	3/14/97	3/14/97	3/14/97	3/14/97	3/14/97	3/14/97
Date Analyzed:	3/18/97	3/18/97	3/18/97	3/18/97	3/18/97	3/18/97
Instrument I.D.#:	GC/MS 1	GC/MS 1	GC/MS 1	GC/MS 1	GC/MS 1	GC/MS 1
Conc. Spiked:	200 µg/L	200 µg/L	100 µg/L	100 µg/L	100 µg/L	200 µg/L
Matrix Spike % Recovery:	79	77	70	64	68	77
Matrix Spike Duplicate % Recovery:	80	74	70	64	68	76
Relative % Difference:	1.3	4.0	0.0	0.0	0.0	1.3
RPD Limit:	0-20	0-15	0-13	0-18	0-18	0-20
LCS Batch#:	LCS031497	LCS031497	LCS031497	LCS031497	LCS031497	LCS031497
Date Prepared:	3/14/97	3/14/97	3/14/97	3/14/97	3/14/97	3/14/97
Date Analyzed:	3/18/97	3/18/97	3/18/97	3/18/97	3/18/97	3/18/97
Instrument I.D.#:	GC/MS 1	GC/MS 1	GC/MS 1	GC/MS 1	GC/MS 1	GC/MS 1
LCS % Recovery:	156	150	70	66	66	144
% Recovery Control Limits:	12-110	27-123	36-97	41-116	39-98	23-97

SEQUOIA ANALYTICAL, #1271

Signature on File

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Project Manager

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7031105.MPD <16>

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MPDS Services
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Concord, CA 94520
Attention: Jarrel Crider

Client Project ID: Unocal #5484, 18950 Lake Chabot Rd. Castro Valley
Matrix: Liquid
QC Sample Group: 7031105-107

Reported: Mar 26, 1997

QUALITY CONTROL DATA REPORT

ANALYTE	Acenaphthene	4-Nitrophenol	2,4-Dinitro-toluene	Pentachloro-phenol	Pyrene
Prep. Method:	EPA 3510	EPA 3510	EPA 3510	EPA 3510	EPA 3510
Method:	EPA 8270	EPA 8270	EPA 8270	EPA 8270	EPA 8270
Analyst:	I. Dalvand	I. Dalvand	I. Dalvand	I. Dalvand	I. Dalvand
MS/MSD Batch#:	BLK031497	BLK031497	BLK031497	BLK031497	BLK031497
Date Prepared:	3/14/97	3/14/97	3/14/97	3/14/97	3/14/97
Date Analyzed:	3/18/97	3/18/97	3/18/97	3/18/97	3/18/97
Instrument I.D.#:	GC/MS 1	GC/MS 1	GC/MS 1	GC/MS 1	GC/MS 1
Conc. Spiked:	100 µg/L	200 µg/L	100 µg/L	200 µg/L	100 µg/L
Matrix Spike % Recovery:	72	48	66	49	88
Matrix Spike Duplicate % Recovery:	72	47	66	48	90
Relative % Difference:	0.0	2.1	0.0	2.1	2.2
RPD Limit:	0-18	0-47	0-13	0-27	0-17
LCS Batch#:	LCS031497	LCS031497	LCS031497	LCS031497	LCS031497
Date Prepared:	3/14/97	3/14/97	3/14/97	3/14/97	3/14/97
Date Analyzed:	3/18/97	3/18/97	3/18/97	3/18/97	3/18/97
Instrument I.D.#:	GC/MS 1	GC/MS 1	GC/MS 1	GC/MS 1	GC/MS 1
LCS % Recovery:	70	51	66	52	86
% Recovery Control Limits:	46-118	10-80	24-96	9-103	26-127

SEQUOIA ANALYTICAL, #1271

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Project Manager

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M P D S Services, Inc.

2401 Stanwell Drive, Suite 400, Concord, CA 94520
Tel: (510) 602-5120 Fax: (510) 609-1918

9703308

CHAIN OF CUSTODY

SAMPLER: (JOE) HOVSIA AJEMIAN

WITNESSING AGENCY

UNOCAL S/S # 5484 CITY: Castro Valley

ADDRESS: 18950 Lake Chabot Rd.

SAMPLE ID NO.	DATE	TIME	WATER	CRAB	COMP	NO. OF CONT.	SAMPLING LOCATION	TPH-GAS BTEX & MTBE	TPH-DIESEL	TOG	8010	8270			
MW-4	3-13-97	9:00 A.M	✓			4 (VOA) 1 Amber	Wells	✓			✓	✓	7031105		
MW-5	"	9:40 A.M	✓			"	"	✓			✓	✓	~~7031105~~	7031106	
MW-7	"	10:35 A.M	✓			"	"	✓			✓	✓		7031107	

ANALYSES REQUESTED

TURN AROUND TIME: Regular

REMARKS: MTBE: 5ppb - AE

RELINQUISHED BY:	DATE/TIME	RECEIVED BY:
(SIGNATURE)	3-13-97 2:30 P.M	(SIGNATURE) 1430
(SIGNATURE) L D Cardenas	3-14-97 1215	L D Cardenas 3-13-97 (SIGNATURE)
(SIGNATURE)	3-14 1330	(SIGNATURE)
(SIGNATURE)		(SIGNATURE)

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

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

SIGNATURE: L D Cardenas TITLE: analyst DATE: 3-13-97