MONITORING
PURGING
DISPOSING
SAMPLING
MPDS SERVICES, INCORPORATED

MPDS-UN5043-13
November 14, 1997

Tosco Marketing Company
Environmental Compliance Department
2000 Crow Canyon Place, Suite 400
San Ramon, California 94583

Attention: Ms. Tina R. Berry

5043 SS ✓
✓ TRB
5

RE: Quarterly Data Report
Unocal Service Station #5043
449 Hegenberger Road
Oakland, California

Dear Ms. Berry:

This data report presents the results of the most recent quarter of 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 October 9, 1997. Prior to sampling, the wells were purged of between 1 and 6 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 Tosco Refinery located in Rodeo, California, for treatment and discharge to San Pablo Bay under NPDES permit.

ANALYTICAL RESULTS

The ground water samples were analyzed at Sequoia Analytical Laboratory and were accompanied by properly executed Chain of Custody documentation. The analytical results of the ground water samples collected to date are summarized in Table 2. 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.

2401 Stanwell Drive, Suite 300, Concord, CA 94520
TEL (510) 602-5120 FAX (510) 689-1918

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. Nubar Srabian at (510) 602-5120.

Sincerely,

MPDS Services, Inc.

Haig (Gary) Tejirian
Senior Staff Geologist

Hagop Kevork, P.E.
Senior Staff Engineer

License No. C55734
Exp. Date December 31, 2000

REGISTERED PROFESSIONAL ENGINEER
HAGOP KEVORK
No. C 55734
Exp. 12/31/00
CIVIL
STATE OF CALIFORNIA

Attachments: Tables 1 & 2
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 October 9, 1997)						
MW3	4.34	3.70	14.07	0	No	6
MW6*	4.06†	4.84	12.75	0.04	N/A	1 [15 oz.]
MW7	4.53	4.30	13.15	0	No	5
MW8	4.79	3.73	14.82	0	No	6
MW9	6.53	1.76	11.98	0	No	6
MW10	3.87	4.75	12.80	0	No	6
(Monitored and Purged on September 2, 1997)						
MW6	4.16†	4.75	★	0.05	N/A	0 [15 oz.]
(Monitored and Purged on August 20, 1997)						
MW6	4.40†	4.55	★	0.10	N/A	0 [25 oz.]
(Monitored and Purged on August 6, 1997)						
MW6	4.45†	4.50	★	0.10	N/A	0 [20 oz.]
(Monitored and Purged on July 21, 1997)						
MW6	4.31†	4.75	★	0.25	N/A	0 [35 oz.]
(Monitored and Sampled on July 15, 1997)						
MW3	4.33	3.71	14.09	0	No	5.5
MW6*	4.56†	4.63	12.84	0.42	N/A	0[26 oz.]
MW7‡‡	4.13	4.70	13.19	0	No	4.5
MW8‡‡	5.03	3.49	14.87	0	No	6
MW9	6.39	1.90	11.95	0	No	5.5
MW10	4.43	4.19	12.81	0	No	4.5
(Monitored and Sampled on June 1, 1997)**						
MW3	4.54	3.50	14.20	0	No	6
MW7‡‡	4.29	4.54	13.20	0	No	4.5
MW8‡‡	5.06	3.46	13.90	0	No	6

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 May 27, 1997)**						
MW3	4.59	3.45	14.20	0	No	6
MW6*	4.56†	4.50	12.90	0.25	N/A	0[zero oz.]
MW7‡‡	4.33	4.50	13.20	0	No	4.5
MW8‡‡	5.10	3.42	13.90	0	No	6
MW9*	7.24	1.05	13.00	0	No	0
MW10*	4.22	4.40	12.90	0	No	0
(Monitored and Sampled on April 15, 1997)						
MW3	WELL WAS INACCESSIBLE - OBSTRUCTED WITH DEBRIS AT A DEPTH OF 1.61 FEET					
MW6*	4.76†	4.90	12.74	1.03	N/A	0.5[65 oz.]
MW9	6.41	1.88	11.98	0	No	6
MW10	4.55	4.07	12.80	0	No	6
(Monitored and Sampled on January 29, 1997)						
MW3	WELL WAS INACCESSIBLE - OBSTRUCTED WITH DEBRIS AT A DEPTH OF 1.65 FEET					
MW6*	5.87†	3.24	12.75	0.31	N/A	0.25[17.5]
MW9	7.24	1.05	11.96	0	No	6.5
MW10	5.68	2.94	12.80	0	No	7

Well #	Well Casing Elevation (feet)***
MW3‡	8.04
MW6	8.87
MW7‡‡	8.83
MW8‡‡	8.52
MW9	8.29
MW10	8.62

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.

* Monitored only.

** Data provided by Kaprealian Engineering, Inc.

*** The elevations of the top of the well casings are relative to Mean Sea Level (MSL), per the City of Oakland Benchmark #3880 (elevation = 20.37 feet MSL).

§ The well was obstructed with debris at 0.55 feet. A water sample was collected but was not analyzed, as it was considered not representative of ground water in this well.

† The ground water elevation was corrected for the presence of free product (correction factor = 0.77).

★ Total well depth was not measured.

‡ Well MW3 was reconstructed in April 1997, and was resurveyed in May 1997. Prior to the May 27, 1997, monitoring and sampling event the surveyed well casing elevation of MW3 was 7.42 feet MSL.

‡‡ Wells MW7 and MW8 were installed in April 1997.

|x| Amount of product purged.

-- Sheen determination was not performed.

N/A = Not applicable.

Table 2

Summary of Laboratory Analyses
Water

Well #	Date	TPH as Diesel	TPH as Gasoline	Benzene	Toluene	Ethyl-Benzene	Xylenes	MTBE
MW1	2/18/92	13,000	150,000	17,000	26,000	5,200	26,000	--
	5/20/92	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT						
	8/31/92	8,900†	64,000	13,000	12,000	2,500	22,000	--
	11/30/92	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT						
	2/4/93	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT						
	5/4/93	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT						
	8/4/93	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT						
	11/3/93	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT						
	2/7/94	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT						
	5/19/94	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT						
	8/15/94	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT						
	11/14/94	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT						
	2/21/95	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT						
	5/18/95	WELL DESTROYED IN MARCH 1995						
MW2	2/18/92	4,300	29,000	1,000	5,300	260	7,900	--
	5/20/92	4,300†	24,000	2,200	7,600	630	11,000	--
	8/31/92	1,600†	9,000	1,800	640	140	2,000	--
	11/30/92	5,700†	29,000	2,000	3,400	1,200	6,900	--
	2/4/93	6,100†	18,000	1,600	3,000	ND	6,900	--
	5/4/93	7,100†	63,000	3,200	17,000	470	17,000	--
	8/4/93	1,800††	45,000	2,100	6,600	1,400	12,000	--
	11/3/93	2,600††	72,000	3,700	16,000	3,700	20,000	--
	2/7/94	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT						
	5/19/94	3,000††	42,000	2,500	1,300	2,300	13,000	--
	8/15/94	2,800††	35,000	2,400	850	1,700	15,000	--
	11/14/94	10,000†	43,000	2,200	6,500	1,800	14,000	--
	2/21/95	2,000††	44,000	2,200	3,200	1,300	1,500	--
	5/18/95	WELL DESTROYED IN MARCH 1995						
MW3	2/18/92	ND	230	4.8	22	1.8	33	--
	5/20/92	WELL WAS INACCESSIBLE						
	8/31/92	92††	210**	1	ND	ND	ND	--
	11/30/92	94	790**	ND	ND	ND	ND	--
	2/4/93	550††	3,300	320	ND	96	6.1	--
	5/4/93	250††	1,800*	95	ND	ND	ND	--
	8/4/93	100	210**	ND	ND	ND	ND	--
	11/3/93	160	640**	ND	ND	ND	ND	--
	2/7/94	620††	2,700	110	ND	17	ND	--
	5/19/94	480††	1,800	83	ND	6.2	9.1	--
	8/15/94	110††	130	1.1	0.54	ND	0.97	--
	11/14/94	150††	1,600**	ND	ND	ND	ND	--
	2/21/95	850††	3,800	350	ND	130	22	--

Table 2

Summary of Laboratory Analyses
Water

Well #	Date	TPH as Diesel	TPH as Gasoline	Benzene	Toluene	Ethyl-Benzene	Xylenes	MTBE
MW3	5/18/95	150†	1,300*	42	ND	ND	ND	--
(Cont.)	8/17/95	WELL WAS INACCESSIBLE (FILLED WITH DIRT)						
	7/26/96	WELL WAS INACCESSIBLE (FILLED WITH DIRT)						
	10/28/96	WELL WAS INACCESSIBLE (FILLED WITH DIRT)§						
	1/29/97	WELL WAS INACCESSIBLE - OBSTRUCTED WITH DEBRIS AT A DEPTH OF 1.65 FEET						
	4/15/97	WELL WAS INACCESSIBLE - OBSTRUCTED WITH DEBRIS AT A DEPTH OF 1.61 FEET						
	5/27/97★	--	670	6.5	ND	ND	ND	250
	6/1/97★	610††	--	--	--	--	--	--
	7/15/97	240††	240	ND	ND	ND	ND	490
	10/9/97	500††	270	1.1	ND	2.4	1.4	910
MW4	8/31/92	90††	240**	ND	ND	ND	0.54	--
	11/30/92	61	420**	ND	ND	ND	ND	--
	2/4/93	ND	ND	ND	ND	ND	ND	--
	5/4/93	ND	110*	0.95	ND	ND	ND	--
	8/4/93	81	250**	ND	3.5	ND	4.1	--
	11/3/93	68	130**	ND	ND	ND	ND	--
	2/7/94	ND	56**	ND	ND	ND	ND	--
	5/19/94	90††	140**	ND	ND	ND	ND	--
	8/15/94	72††	59**	ND	0.6	ND	ND	--
	11/14/94	ND	130**	ND	ND	ND	ND	--
	2/21/95	WELL DESTROYED IN JANUARY 1995						
MW5	8/31/92	690†	78	0.89	ND	ND	13	--
	11/30/92‡	470††	930	70	290	0.79	14	--
	2/4/93‡	5,500††	5,700	38	ND	620	170	--
	5/4/93‡	4,600†	7,400	41	ND	1,000	35	--
	8/4/93‡	970††	1,500	130	1	460	11	--
	11/3/93	2,100††	13,000	350	ND	3,500	530	--
	2/7/94	830††	2,000	87	ND	370	110	--
	5/19/94	600††	260	44	ND	32	4.1	--
	8/15/94	860††	1,600	110	ND	340	72	--
	11/14/94	290†	250	40	ND	ND	5	--
	2/21/95	WELL DESTROYED IN JANUARY 1995						
MW6	8/31/92	750††	ND	ND	ND	ND	ND	--
	11/30/92	1,400†	9,200	550	ND	740	1,600	--
	2/4/93	890††	3,600	340	ND	290	550	--
	5/4/93	1,800†	4,900	360	18	450	430	--
	8/4/93	1,100††	3,400	390	ND	440	190	--
	11/3/93	390††	1,400	320	ND	200	7.7	--
	2/7/94	970††	4,900	650	ND	250	35	--
	5/19/94	1,400††	3,600	300	1.7	210	41	--

Table 2

Summary of Laboratory Analyses
Water

Well #	Date	TPH as Diesel	TPH as Gasoline	Benzene	Toluene	Ethyl-Benzene	Xylenes	MTBE
MW6	8/15/94	790††	1,300	130	6.7	54	57	--
(Cont.)	11/14/94	800††	730	50	ND	ND	39	--
	2/21/95	730††	2,000	250	4.6	25	30	--
	5/18/95	WELL WAS INACCESSIBLE						
	8/17/95	WELL WAS INACCESSIBLE (PAVED OVER)						
	7/26/96	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT						
	10/28/96	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT						
	1/29/97	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT						
	4/15/97	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT						
	7/15/97	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT						
	10/9/97	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT						
MW7	5/27/97★	--	68	ND	ND	ND	ND	ND
	6/1/97★	69††	--	--	--	--	--	--
	7/15/97	ND	ND	ND	ND	ND	ND	ND
	10/9/97	190†	ND	ND	ND	ND	ND	ND
MW8	5/27/97★	--	310	0.88	0.67	15	70	ND
	6/1/97★	320††	--	--	--	--	--	--
	7/15/97	ND	ND	ND	ND	2.7	3.8	ND
	10/9/97	390†	590	1.4	ND	32	4.1	ND
MW9	2/21/95	71††	70**	ND	ND	ND	ND	--
	5/18/95	ND	52	ND	1.1	ND	1.9	--
	8/17/95	ND	ND	ND	ND	ND	ND	--
	7/26/96	98	ND	ND	ND	ND	ND	ND
	10/28/96	99†	ND	ND	ND	ND	ND	7.6
	1/29/97	54	ND	ND	ND	ND	ND	5.4
	4/15/97	94†	ND	ND	ND	ND	ND	5.4
	7/15/97	ND	ND	ND	ND	ND	ND	ND
	10/9/97	160†	ND	ND	ND	ND	ND	ND
MW10	2/21/95	270††	1,500	250	26	9.1	160	--
	5/18/95	75†	810	520	ND	18	23	--
	8/17/95	ND	67	25	ND	2.4	ND	--
	7/26/96	ND	ND	3.7	ND	ND	ND	ND
	10/28/96	ND	ND	1.1	ND	ND	ND	ND
	1/29/97	ND	210	41	0.67	7.2	4.8	11
	4/15/97	ND	110	12	ND	0.77	ND	9.7
	7/15/97	ND	ND	2.1	ND	0.67	0.73	ND
	10/9/97	ND	190	38	0.92	6.6	7.6	ND

Table 2

Summary of Laboratory Analyses
Water

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

†† 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 appeared to be a gasoline and non-gasoline mixture.

** Sequoia Analytical Laboratory reported that the hydrocarbons detected did not appear to be gasoline.

‡ Total Oil & Grease was non-detectable.

§ The well was obstructed with debris at 0.55 feet. A water sample was collected but was not analyzed as it was considered not representative of ground water in this well.

★ Analytical data provided by Kaprealian Engineering, Inc.

MTBE = Methyl tert butyl ether.

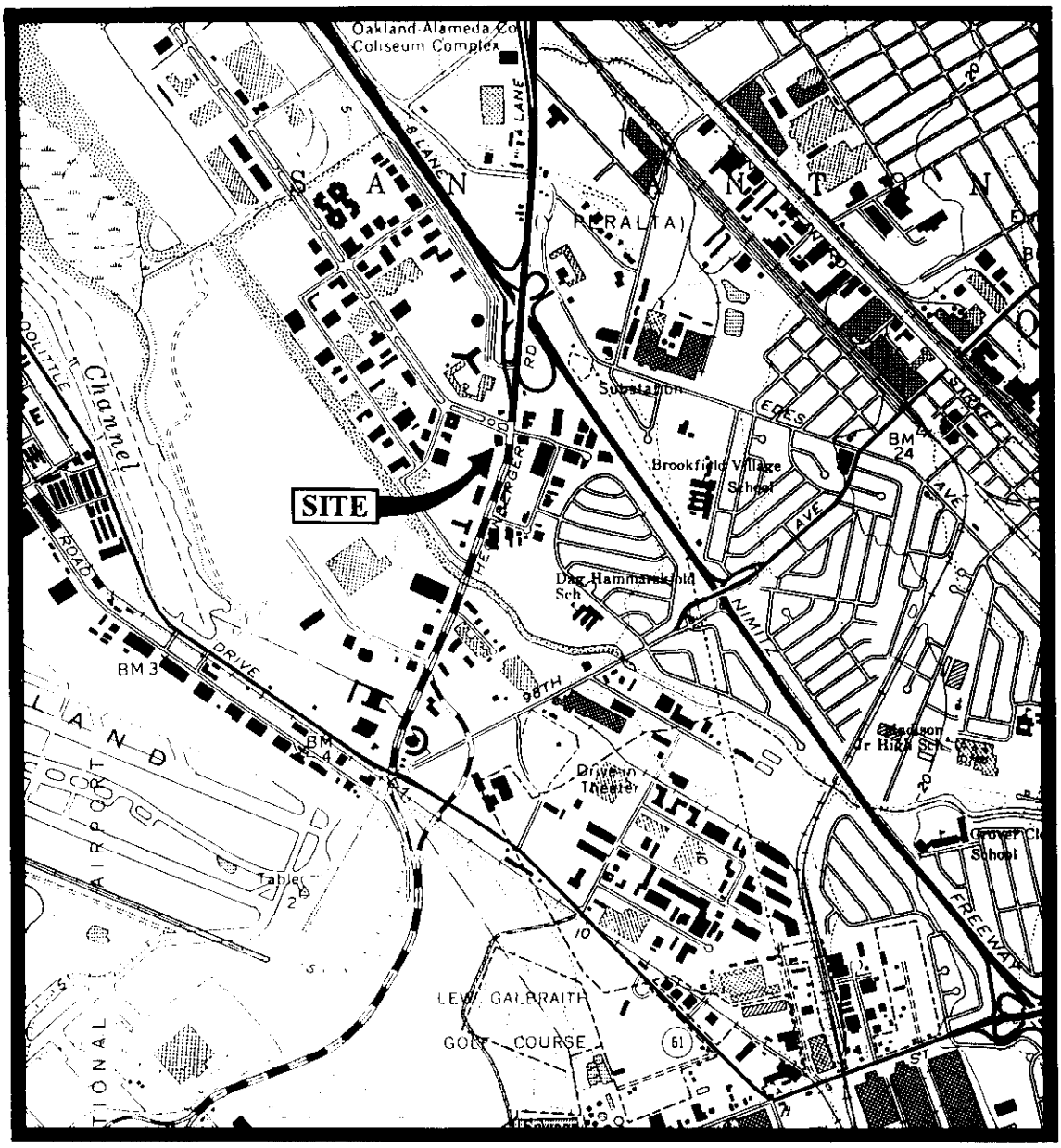
ND = Non-detectable.

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.

Laboratory analyses data prior to February 7, 1994, were provided by Kaprealian Engineering, Inc.

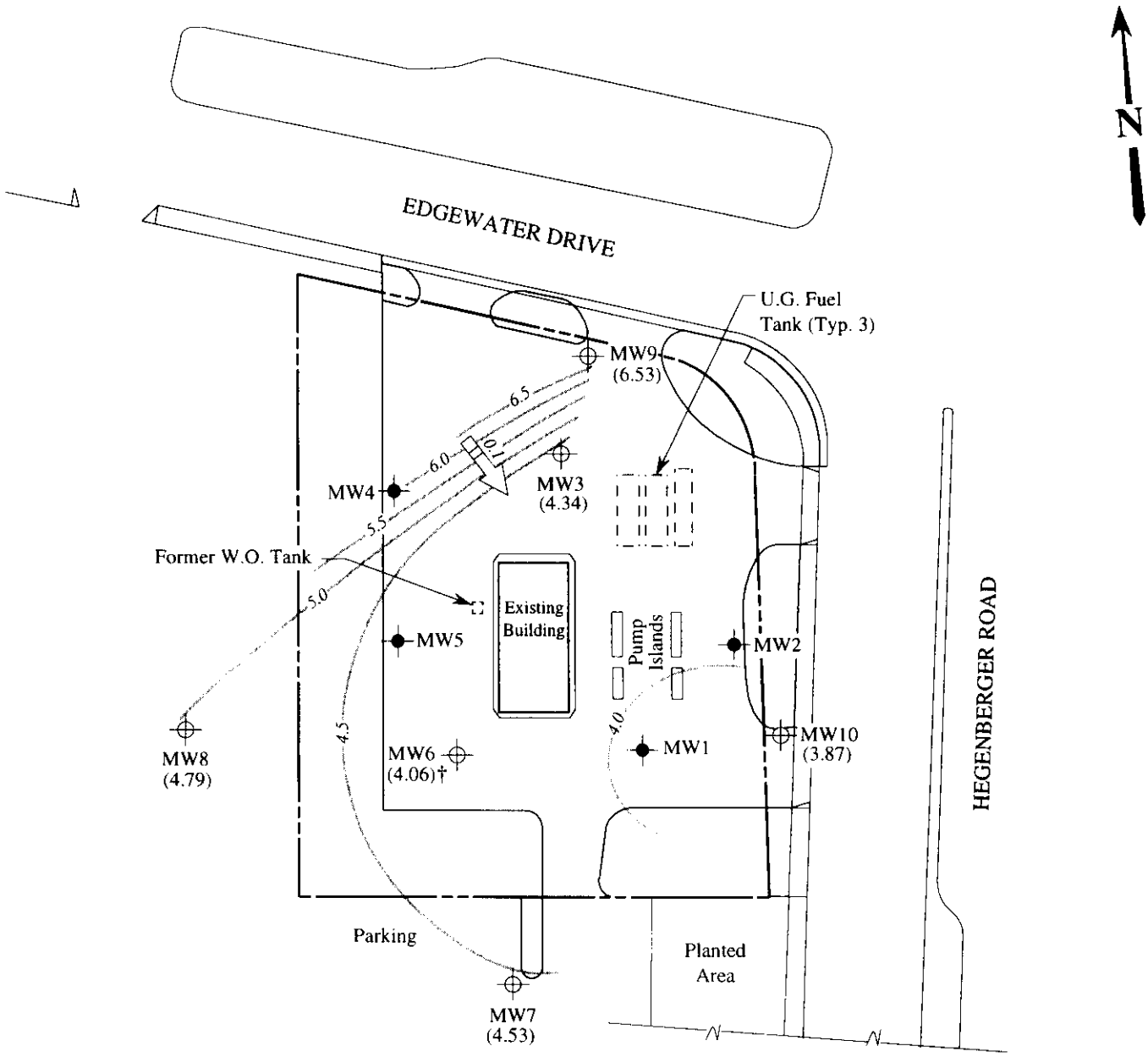


Base modified from 7.5 minute U.S.G.S. San Leandro Quadrangle
(photorevised 1980)

0 2000 4000

Approx. scale feet

mpds SERVICES, INCORPORATED	**UNOCAL SERVICE STATION #5043** **449 HEGENBERGER ROAD** **OAKLAND, CALIFORNIA**	**LOCATION MAP**



LEGEND

- Monitoring well (existing)
- Monitoring well (destroyed)
- ( ) Ground water elevation in feet above Mean Sea Level
- #.## Direction of ground water flow with approximate hydraulic gradient
- Contours of ground water elevation
- † Ground water elevation was corrected due to the presence of free product.

0 60 120

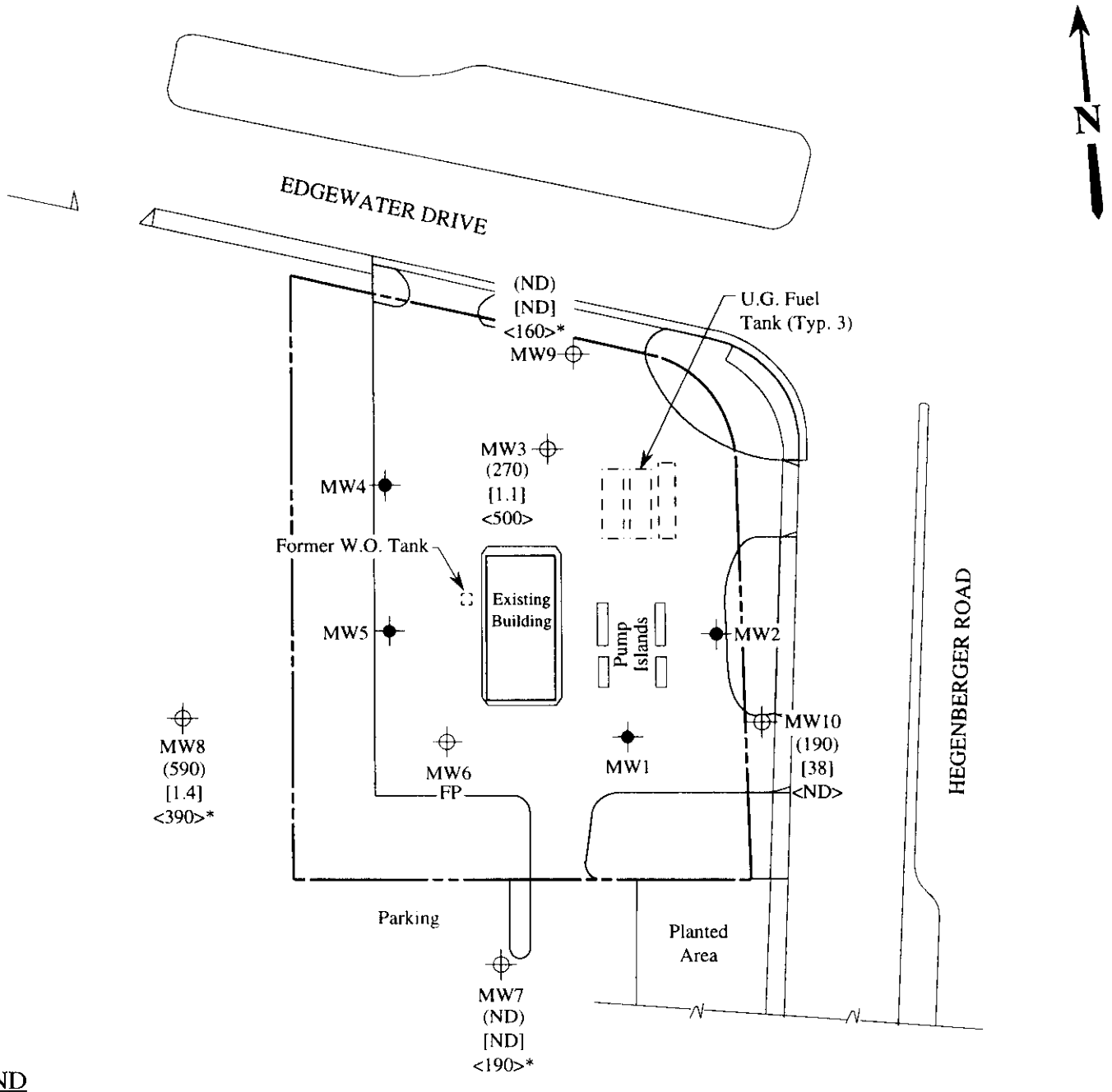
Approx. scale feet

POTENTIOMETRIC SURFACE MAP FOR THE OCTOBER 9, 1997 MONITORING EVENT

mpds SERVICES, INCORPORATED

UNOCAL SERVICE STATION #5043
449 HEGENBERGER ROAD
OAKLAND, CALIFORNIA

FIGURE
1



LEGEND

- ⊕ Monitoring well (existing)
- ✦ Monitoring well (destroyed)
- ( ) Concentrations of TPH as gasoline in µg/L
- [ ] Concentrations of benzene in µg/L
- < > Concentrations of TPH as diesel in µg/L
- ND Non-detectable, FP Free product
- * The lab reported that the hydrocarbons detected did not appear to be diesel.

0 60 120

Approx. scale feet

PETROLEUM HYDROCARBON CONCENTRATIONS IN GROUND WATER ON OCTOBER 9, 1997

mpds SERVICES, INCORPORATED

UNOCAL SERVICE STATION #5043
449 HEGENBERGER ROAD
OAKLAND, CALIFORNIA

FIGURE
2

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 940(, (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 #5043, 449 Hegenberger, Oakland	Sampled:	Oct 9, 1997
2401 Stanwell Dr., Ste. 300	Matrix Descript:	Water	Received:	Oct 9, 1997
Concord, CA 94520	Analysis Method:	EPA 5030/8015 Mod./8020	Reported:	Oct 24, 1997
Attention: Jarrel Crider	First Sample #:	710-0578		

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
710-0578	MW-3	270	1.1	ND	2.4	1.4
710-0579	MW-7	ND	ND	ND	ND	ND
710-0580	MW-8	590	1.4	ND	32	4.1
710-0581	MW-9	ND	ND	ND	ND	ND
710-0582	MW-10	190	38	0.92	6.6	7.6

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

7100578.MPD <1>

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 940[illegible], (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 #5043, 449 Hegenberger, Oakland	Sampled:	Oct 9, 1997
2401 Stanwell Dr., Ste. 300	Matrix Descript:	Water	Received:	Oct 9, 1997
Concord, CA 94520	Analysis Method:	EPA 5030/8015 Mod./8020	Reported:	Oct 24, 1997
Attention: Jarrel Crider	First Sample #:	710-0578		

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
710-0578	MW-3	Gasoline	2.0	10/23/97	HP-2	109
710-0579	MW-7	--	1.0	10/17/97	HP-4	93
710-0580	MW-8	Gasoline	1.0	10/17/97	HP-4	80
710-0581	MW-9	--	1.0	10/17/97	HP-4	107
710-0582	MW-10	Gasoline	1.0	10/17/97	HP-4	103

SEQUOIA ANALYTICAL, #1271

Signature on File

Alan B. Kemp
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 940[illegible], (415) 364-9600, FAX (415) 364-9233
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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 #5043, 449 Hegenberger, Oakland	Sampled:	Oct 9, 1997
2401 Stanwell Dr., Ste. 300	Sample Descript:	Water	Received:	Oct 9, 1997
Concord, CA 94520	Analysis for:	MTBE (Modified EPA 8020)		
Attention: Jarrel Crider	First Sample #:	710-0578	Analyzed:	Oct 17 - 23, 97
			Reported:	Oct 24, 1997

LABORATORY ANALYSIS FOR: MTBE (Modified EPA 8020)

Sample Number	Sample Description	Detection Limit µg/L	Sample Result µg/L
710-0578	MW-3	5.0	910
710-0579	MW-7	5.0	N.D.
710-0580	MW-8	5.0	N.D.
710-0581	MW-9	5.0	N.D.
710-0582	MW-10	5.0	N.D.

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

SEQUOIA ANALYTICAL, #1271

Signature on File

Alan B. Kemp
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 940c, (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 #5043, 449 Hegenberger, Oakland	Sampled: Oct 9, 1997
2401 Stanwell Dr., Ste. 300	Sample Matrix:	Water	Received: Oct 9, 1997
Concord, CA 94520	Analysis Method:	EPA 3510/8015 Mod.	Reported: Oct 24, 1997
Attention: Jarrel Crider	First Sample #:	710-0578	

TOTAL EXTRACTABLE PETROLEUM HYDROCARBONS

Analyte	Reporting Limit µg/L	Sample I.D. 710-0578 MW-3 ^	Sample I.D. 710-0579 MW-7 *	Sample I.D. 710-0580 MW-8 *	Sample I.D. 710-0581 MW-9 *	Sample I.D. 710-0582 MW-10
Extractable Hydrocarbons	50	500	190	390	160	N.D.
Chromatogram Pattern:		Diesel & Discrete Peaks	Unidentified Hydrocarbons >C18	Unidentified Hydrocarbons <C15	Unidentified Hydrocarbons >C18	--

Quality Control Data

Report Limit Multiplication Factor:	1.0	1.0	1.0	1.0	1.4
Date Extracted:	10/13/97	10/13/97	10/13/97	10/13/97	10/13/97
Date Analyzed:	10/18/97	10/18/97	10/18/97	10/18/97	10/18/97
Instrument Identification:	HP-3B	HP-3B	HP-3B	HP-3B	HP-3B

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

SEQUOIA ANALYTICAL, #1271

Signature on File

Alan B. Kemp
Project Manager

Please Note:
^This sample appears to contain diesel and non-diesel mixtures. "Discrete Peaks" refers to unidentified peaks in the EPA 8270 range.
*This sample does not appear to contain diesel. "Unidentified Hydrocarbons <C15" are probably gasoline "Unidentified Hydrocarbons >C18" refers to unidentified peaks in the total oil and grease range.

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

Client Project ID: Unocal #5043, 449 Hegenberger, Oakland
Matrix: Liquid
QC Sample Group: 7100578-582
Reported: Oct 24, 1997

QUALITY CONTROL DATA REPORT

ANALYTE	Benzene	Toluene	Ethyl Benzene	Xylenes	Diesel
Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020	EPA 8015M
Analyst:	D. Newcomb	D. Newcomb	D. Newcomb	D. Newcomb	A. Kemp
MS/MSD Batch#:	7100581	7100581	7100581	7100581	B101397
Date Prepared:	10/17/97	10/17/97	10/17/97	10/17/97	10/13/97
Date Analyzed:	10/17/97	10/17/97	10/17/97	10/17/97	10/15/97
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	500 µg/L
Matrix Spike % Recovery:	90	95	95	98	60
Matrix Spike Duplicate % Recovery:	90	95	95	98	61
Relative % Difference:	0.0	0.0	0.0	0.0	1.7
LCS Batch#:	4lcs101797	4lcs101797	4lcs101797	4lcs101797	-
Date Prepared:	10/17/97	10/17/97	10/17/97	10/17/97	-
Date Analyzed:	10/17/97	10/17/97	10/17/97	10/17/97	-
Instrument I.D.#:	HP-4	HP-4	HP-4	HP-4	-
LCS % Recovery:	90	95	95	98	-
% Recovery Control Limits:	70-130	70-130	70-130	70-130	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.

UNOCAL 76

819 Striker Ave., Suite 8 • Sacramento, CA 95834 • (916) 921-9600
404 N. Wiget Lane • Walnut Creek, CA 94598 • (510) 988-9600
East 11115 Montgomery, Suite B • Spokane, WA 99206 • (509) 924-9200
15055 S.W. Sequoia Pkwy, Suite 110 • Portland, OR 97222 • (503) 624-9800

Consultant Company: MPDS	Project Name: #5043 - Oakland
Address: 2401 Stanwell #420	UNOCAL Project Manager: Tina Berry
City: CONCORD State: CA. Zip Code: 94520	AFE #:
Telephone: (510) 602-5123 FAX #: (510) 689-1918	Site #, City, State: 4-49 Hegenberger
Report To:	Sampler:

QC Data: ☒ Level D (Standard) ☐ Level C ☐ Level B ☐ Level A

Turnaround Time: ☒ 10 Work Days ☐ 5 Work Days ☐ 3 Work Days ☐ 2 Work Days ☐ 1 Work Day ☐ 2-8 Hours

CODE: ☐ Misc. ☐ Detect. ☐ Eval. ☐ Remed. ☐ Demol. ☐ Closure

☐ Drinking Water ☐ Waste Water ☐ Other

Analyses Requested: TPH(G,BTEX) / MTBE / TPH(D)

	Client Sample I.D.	Date/Time Sampled	Matrix Desc.	# of Cont.	Cont. Type	Laboratory Sample #	TPH(G,BTEX)	MTBE	TPH(D)	Comments
1	MW-3	10/9/97 12:40 P.M.		2 VOA 1 Amber		7100578	—	—	—	Regular
2	MW-7	" 10:00 A.M.		"		7100579	—	—	—	
3	MW-8	" 11:10 A.M.		"		7100580	—	—	—	
4	MW-9	" 10:35 A.M.		"		7100581	—	—	—	
5	MW-10	" 12:00 P.M.		"		7100582	—	—	—	
6										
7										
8										
9										
10										

Relinquished By:	Date: 10-9-97	Time: 6:30 P.M.	Received By:	Date: 10/9/97	Time: 1830
Relinquished By:	Date: 10-10	Time: 0500	Received By:	Date: 10-10-	Time: 0900
Relinquished By:	Date: 10-10	Time:	Received By Lab:	Date: 10/10/97	Time: 1020

Were Samples Received in Good Condition? ☐ Yes ☐ No Samples on Ice? ☐ Yes ☐ No Method of Shipment _____ Page __ of __

To be completed upon receipt of report:

1) Were the analyses requested on the Chain of Custody reported? ☐ Yes ☐ No If no, what analyses are still needed?

2) Was the report issued within the requested turnaround time? ☐ Yes ☐ No If no, what was the turnaround time?

Approved by: Signature: Company: Date:

Pink - Client
Yellow - Laboratory
White - Laboratory

Please review and return form BY FAX within 15 days of this report to:
MPDS Services, Inc., (510) 687-0602.

REPORT: MPDS-UN5043-13

DATE SENT: DECEMBER 2, 1997 **RETURN BY:** DECEMBER 17, 1997

UNOCAL SS #	ADDRESS	CITY
#5043	449 HEGENBERGER ROAD	OAKLAND

☐ **No change to current monitoring/sampling frequency or analyses.**

☐ **Change in monitoring schedule. Specify change:** _____

☐ **Change in sampling schedule. Specify change:** _____

☐ **Change in analyses requested. Specify change:** _____

☐ **Comments:** _____

☐ **I authorize release of this report to the proper agencies and individuals.**

☐ **Please hold this report until further notice.**

APPROVED
DEC 22 1997

Tosco Project Manager: Ms. Tina R. Berry

Signature: T. Berry **Date:** TINA R. BERRY

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