MONITORING PURGING DISPOSING SAMPLING mpds SERVICES, INCORPORATED

MPDS-UN5043-05
March 17, 1995

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

Attention: Mr. David B. DeWitt

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

Dear Mr. DeWitt:

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. A skimmer was present in well MW1. 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 directions during the most recent quarter are shown on the attached Figures 1, 2, and 3.

Ground water samples were collected on February 21, 1995. Prior to sampling, the wells were purged of between 6 and 29 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 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

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

attached Figure 4. 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. Nubar Srabian at (510) 602-5120.

Sincerely,

MPDS Services, Inc.

Sarkis A. Karkarian
Staff Engineer

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

License No. EG 1633
Exp. Date 8/31/96

/bp

Attachments: Tables 1 & 2
Location Map
Figures 1 through 4
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 Thick-ness (feet)	Sheen	Water Purged (gallons)	Product Purged (ounces)
(Monitored and Sampled on February 21, 1995)							
MW1*	5.87▲	1.53	12.65	0.02	N/A	25	<1
MW2	6.93	1.65	14.34	0	No	29	0
MW3	5.61	1.81	14.03	0	No	8.5	0
MW4	WELL DESTROYED ON FEBRUARY 1995						
MW5	WELL DESTROYED ON FEBRUARY 1995						
MW6	5.67	3.20	13.75	0	No	7.5	0
MW9	6.31	1.98	13.02	0	No	8	0
MW10	3.93	4.69	13.24	0	No	6	0
(Monitored on January 17, 1995)							
MW1	5.97▲	1.44	12.70	0.04	--	25	<1
MW2	7.00	1.58	14.36	0	--	15	0
MW3	5.82	1.60	14.06	0	--	0	0
MW4	6.23	2.18	13.00	0	--	0	0
MW5	6.05	2.90	13.60	0	--	0	0
MW6	5.35	3.52	13.80	0	--	0	0
(Monitored on December 9, 1994)							
MW1	5.23	2.15	12.60	0	--	10	<1
MW2	6.82	1.76	14.28	0	--	15	0
MW3	4.86	2.56	13.98	0	--	0	0
MW4	4.88	3.53	12.91	0	--	0	0
MW5	3.50	5.45	13.51	0	--	0	0
MW6	4.12	4.75	13.71	0	--	0	0
(Monitored and Sampled on November 14, 1994)							
MW1*	4.50▲	2.97	12.71	0.12	N/A	9(5.0)	<1
MW2	6.45	2.13	14.36	0	No	8.5(4.5)	0
MW3	4.24	3.18	14.04	0	No	8	0
MW4	4.36	4.05	13.00	0	No	7	0
MW5	3.32	5.63	13.58	0	No	6	0
MW6	3.25	5.62	13.76	0	No	6	0

TABLE 1 (Continued)

SUMMARY OF MONITORING DATA

Well #	Ground Water Elevation (feet)	Depth to Water (feet)◆	Total Well Depth (feet)◆	Product Thick-ness (feet)	Sheen	Water Purged (gallons)	Product Purged (ounces)
(Monitored and Sampled on August 15, 1994)							
MW1*	4.61▲	2.85	12.53	0.11	N/A	35	2
MW2	5.33	3.25	14.33	0	No	25	0
MW3	2.77	4.65	14.02	0	No	6.5	0
MW4	4.14	4.27	12.94	0	No	6	0
MW5	3.27	5.68	13.54	0	No	5.5	0
MW6	3.50	5.37	13.74	0	No	6	0
(Monitored and Sampled on May 19, 1994)							
MW1*	5.16▲	2.23	12.67	0.01	N/A	25	<1
MW2	6.45	2.13	14.35	0	No	30	0
MW3	3.82	3.60	14.05	0	No	7.5	0
MW4	4.49	3.92	12.95	0	No	6.5	0
MW5	3.86	5.09	13.56	0	No	6	0
MW6	4.25	4.62	13.77	0	No	6.5	0

Well #	Well Casing Elevation (feet)**
MW1	7.38
MW2	8.58
MW3	7.42
MW4	8.41
MW5	8.95
MW6	8.87
MW9	8.29
MW10	8.62

TABLE 1 (Continued)

SUMMARY OF MONITORING DATA

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

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

* Monitored only.

** 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).

(x) Amount of water purged after sampling.

-- Sheen determination was not performed.

N/A = Not applicable.

TABLE 2

SUMMARY OF LABORATORY ANALYSES
WATER

Date	Well #	TPH as Diesel	TPH as Gasoline	Benzene	Toluene	Ethyl-benzene	Xylenes
2/21/95	MW1	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT					
	MW2	2,000◆◆	44,000	2,200	3,200	1,300	1,500
	MW3	850◆◆	3,800	350	ND	130	22
	MW4	WELL DESTROYED ON FEBRUARY 1995					
	MW5	WELL DESTROYED ON FEBRUARY 1995					
	MW6	730◆◆	2,000	250	4.6	25	30
	MW9	71◆◆	70**	ND	ND	ND	ND
	MW10	270◆◆	1,500	250	26	9.1	160
11/14/94	MW1	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT					
	MW2	10,000◆	43,000	2,200	6,500	1,800	14,000
	MW3	150◆◆	1,600**	ND	ND	ND	ND
	MW4	ND	130**	ND	ND	ND	ND
	MW5	290◆	250	40	ND	ND	5.0
	MW6	800◆◆	730	50	ND	ND	39
8/15/94	MW1	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT					
	MW2	2,800◆◆	35,000	2,400	850	1,700	15,000
	MW3	110◆◆	130	1.1	0.54	ND	0.97
	MW4	72◆◆	59**	ND	0.60	ND	ND
	MW5	860◆◆	1,600	110	ND	340	72
	MW6	790◆◆	1,300	130	6.7	54	57
5/19/94	MW1	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT					
	MW2	3,000◆◆	42,000	2,500	1,300	2,300	13,000
	MW3	480◆◆	1,800	83	ND	6.2	9.1
	MW4	90◆◆	140**	ND	ND	ND	ND
	MW5	600◆◆	260	44	ND	32	4.1
	MW6	1,400◆◆	3,600	300	1.7	210	41
2/07/94	MW1	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT					
	MW2	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT					
	MW3	620◆◆	2,700	110	ND	17	ND
	MW4	ND	56**	ND	ND	ND	ND
	MW5	830◆◆	2,000	87	ND	370	110
	MW6	970◆◆	4,900	650	ND	250	35

TABLE 2 (Continued)

SUMMARY OF LABORATORY ANALYSES
WATER

Date	Well #	TPH as Diesel	TPH as Gasoline	Benzene	Toluene	Ethyl-benzene	Xylenes
11/03/93	MW1	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT					
	MW2	2,600♦♦	72,000	3,700	16,000	3,700	20,000
	MW3	160	640**	ND	ND	ND	ND
	MW4	68	130**	ND	ND	ND	ND
	MW5	2,100♦♦	13,000	350	ND	3,500	530
	MW6	390♦♦	1,400	320	ND	200	7.7
8/04/93	MW1	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT					
	MW2	1,800♦♦	45,000	2,100	6,600	1,400	12,000
	MW3	100	210**	ND	ND	ND	ND
	MW4	81	250**	ND	3.5	ND	4.1
	MW5▲	970♦♦	1,500	130	1.0	460	11
	MW6	1,100♦♦	3,400	390	ND	440	190
5/04/93	MW1	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT					
	MW2	7,100♦	63,000	3,200	17,000	470	17,000
	MW3	250♦♦	1,800*	95	ND	ND	ND
	MW4	ND	110*	0.95	ND	ND	ND
	MW5▲	4,600♦	7,400	41	ND	1,000	35
	MW6	1,800♦	4,900	360	18	450	430
2/04/93	MW1	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT					
	MW2	6,100♦	18,000	1,600	3,000	ND	6,900
	MW3	550♦♦	3,300	320	ND	96	6.1
	MW4	ND	ND	ND	ND	ND	ND
	MW5▲	5,500♦♦	5,700	38	ND	620	170
	MW6	890♦♦	3,600	340	ND	290	550
11/30/92	MW1	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT					
	MW2	5,700♦	29,000	2,000	3,400	1,200	6,900
	MW3	94	790**	ND	ND	ND	ND
	MW4	61	420**	ND	ND	ND	ND
	MW5▲	470♦♦	930	70	290	0.79	14
	MW6	1,400♦	9,200	550	ND	740	1,600

TABLE 2 (Continued)

SUMMARY OF LABORATORY ANALYSES
WATER

Date	Well #	TPH as Diesel	TPH as Gasoline	Benzene	Toluene	Ethyl-benzene	Xylenes
8/31/92	MW1	8,900♦	64,000	13,000	12,000	2,500	22,000
	MW2	1,600♦	9,000	1,800	640	140	2,000
	MW3	92♦♦	210**	1.0	ND	ND	ND
	MW4	90♦♦	240**	ND	ND	ND	0.54
	MW5	690♦	78	0.89	ND	ND	13
	MW6	750♦♦	ND	ND	ND	ND	ND
5/20/92	MW1	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT					
	MW2	4,300♦	24,000	2,200	7,600	630	11,000
	MW3	WELL WAS INACCESSIBLE					
2/18/92	MW1	13,000	150,000	17,000	26,000	5,200	26,000
	MW2	4,300	29,000	1,000	5,300	260	7,900
	MW3	ND	230	4.8	22	1.8	33

♦ 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.

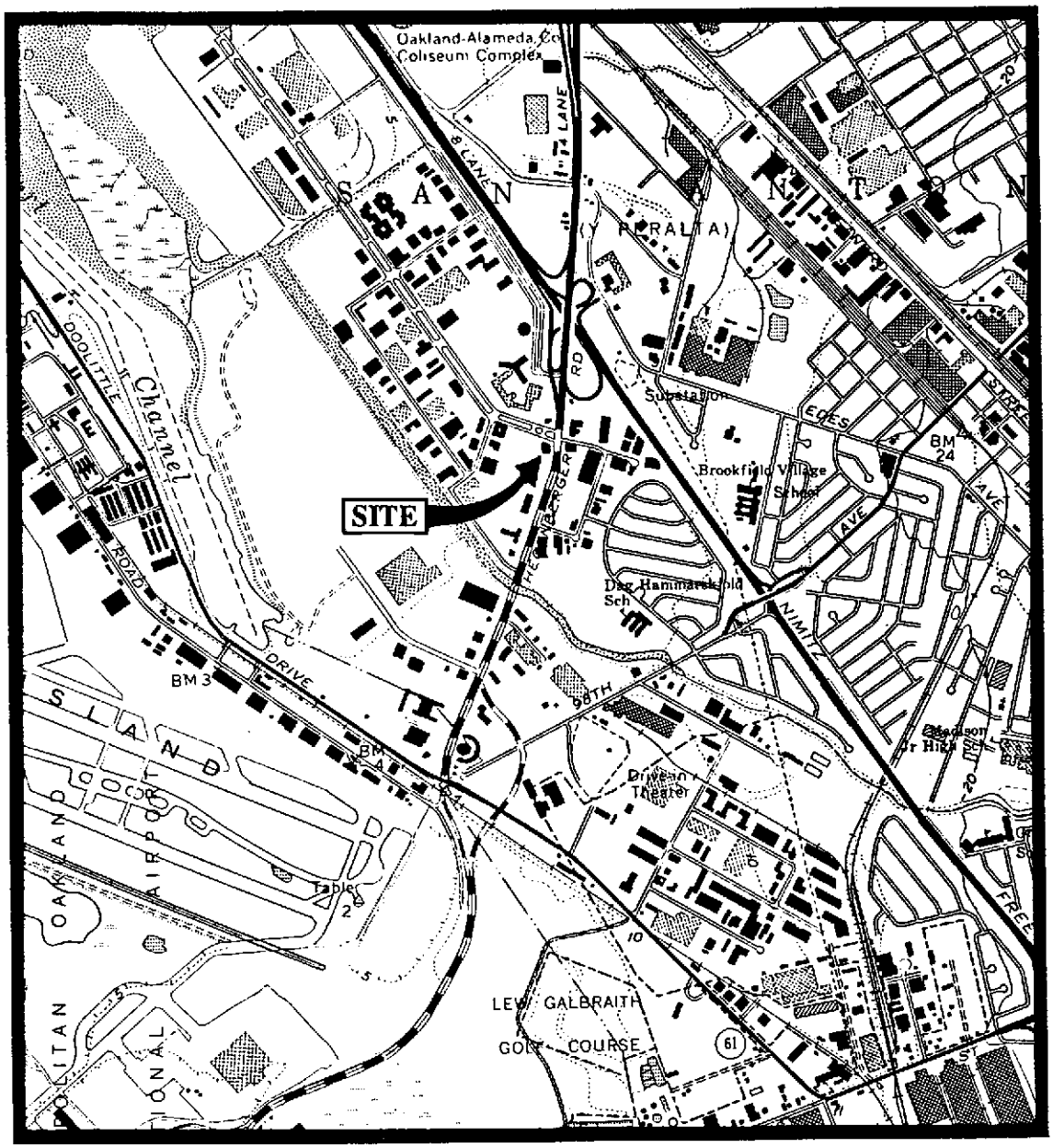
** Sequoia Analytical Laboratory reported that the hydrocarbons detected did not appear to be gasoline.

▲ Total Oil & Grease was non-detectable.

ND = Non-detectable.

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

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

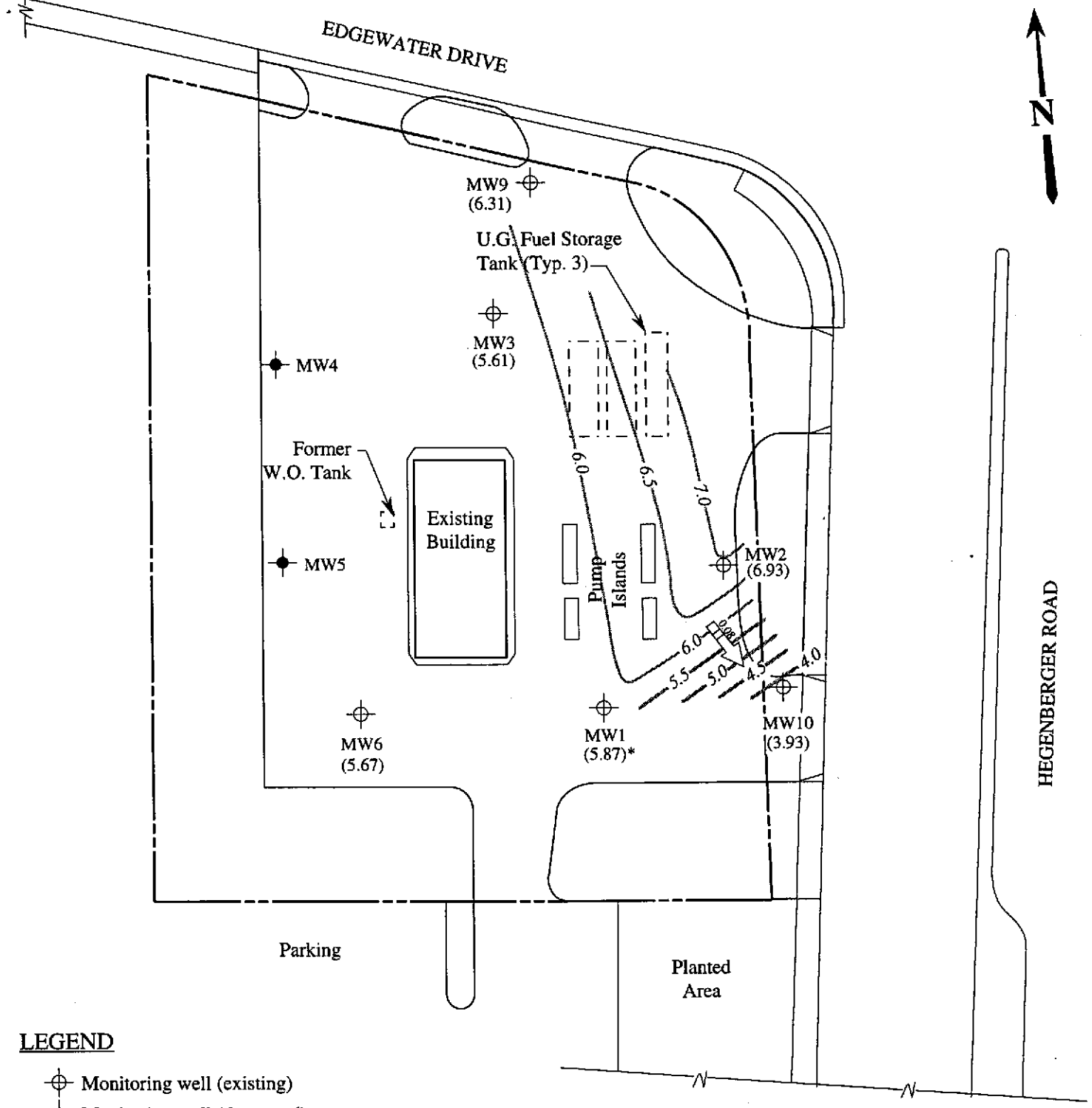


Base modified from 7.5 minute U.S.G.S. San Leandor Quadrangle
(photorevised 1980)

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 corrected due to the presence of free product.

0 40 80

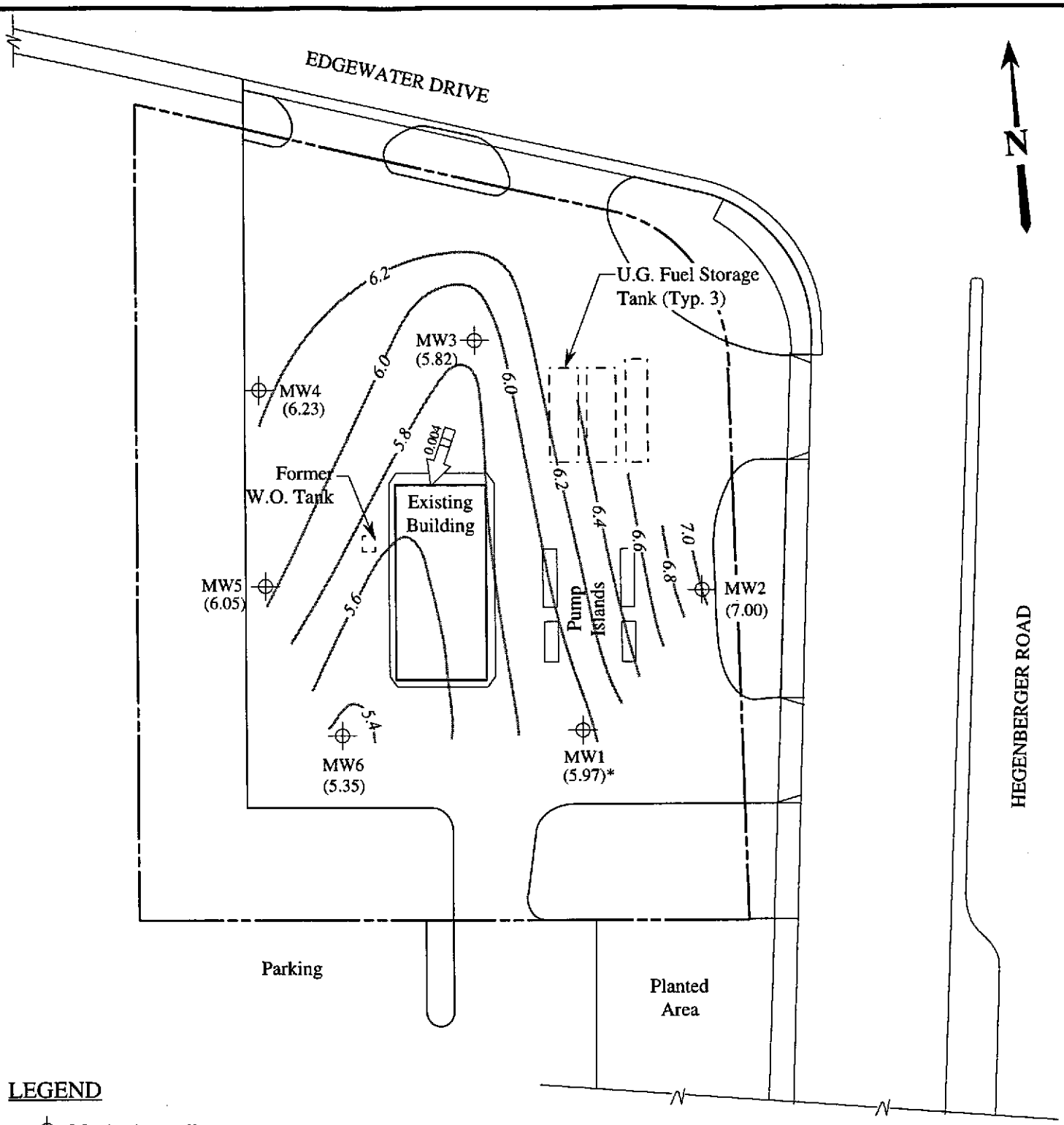
Approx. scale feet

POTENTIOMETRIC SURFACE MAP FOR THE FEBRUARY 21, 1995 MONITORING EVENT

mpds SERVICES, INCORPORATED

UNOCAL SERVICE STATION #5043
449 HEGENBERGER ROAD
OAKLAND, CALIFORNIA

FIGURE
1



LEGEND

- Monitoring well
- ( ) 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 corrected due to the presence of free product.

0 40 80

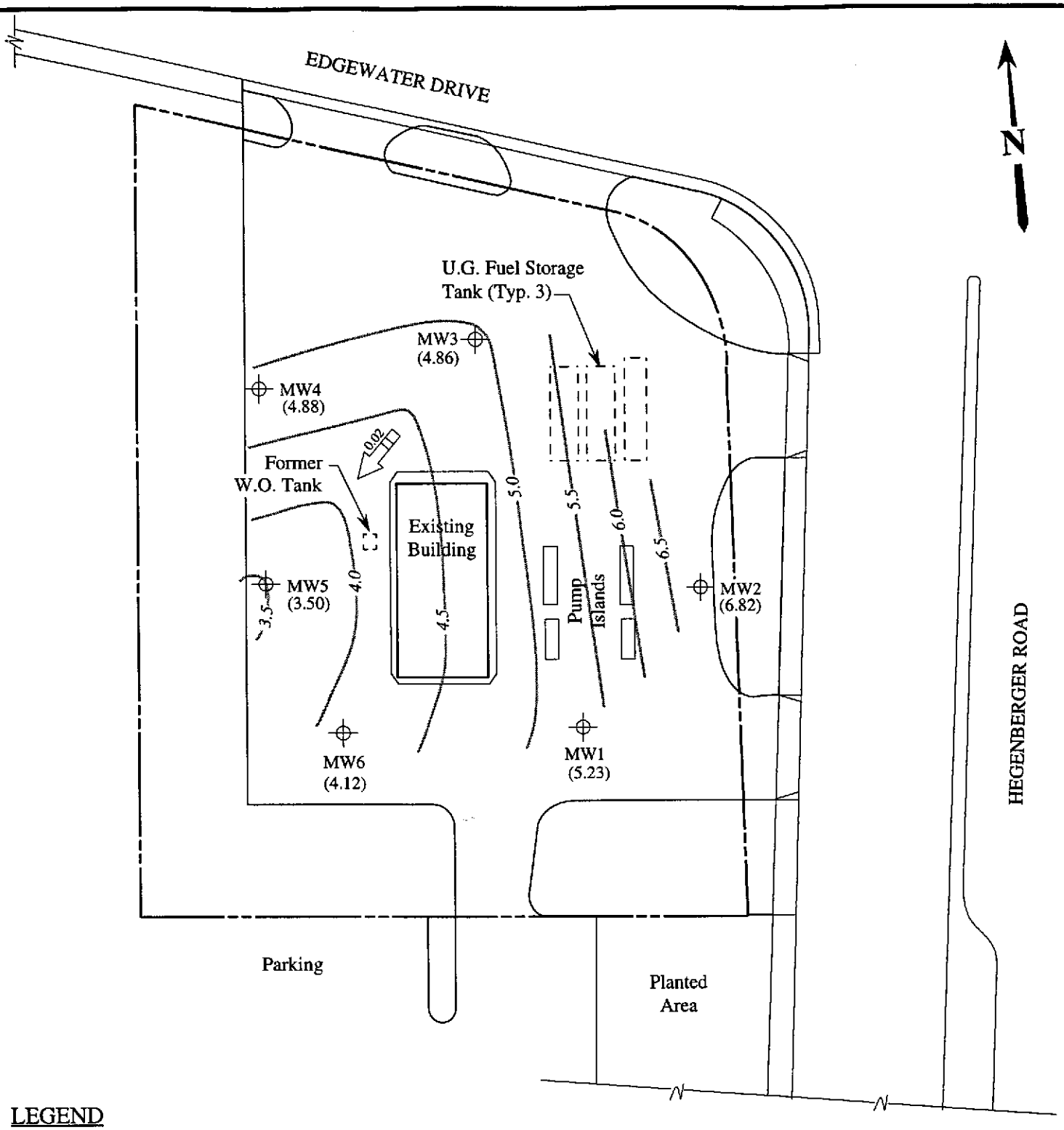
Approx. scale feet

POTENTIOMETRIC SURFACE MAP FOR THE JANUARY 17, 1995 MONITORING EVENT

mpds SERVICES, INCORPORATED

UNOCAL SERVICE STATION #5043
449 HEGENBERGER ROAD
OAKLAND, CALIFORNIA

FIGURE
2



LEGEND

- Monitoring well
- ( ) 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

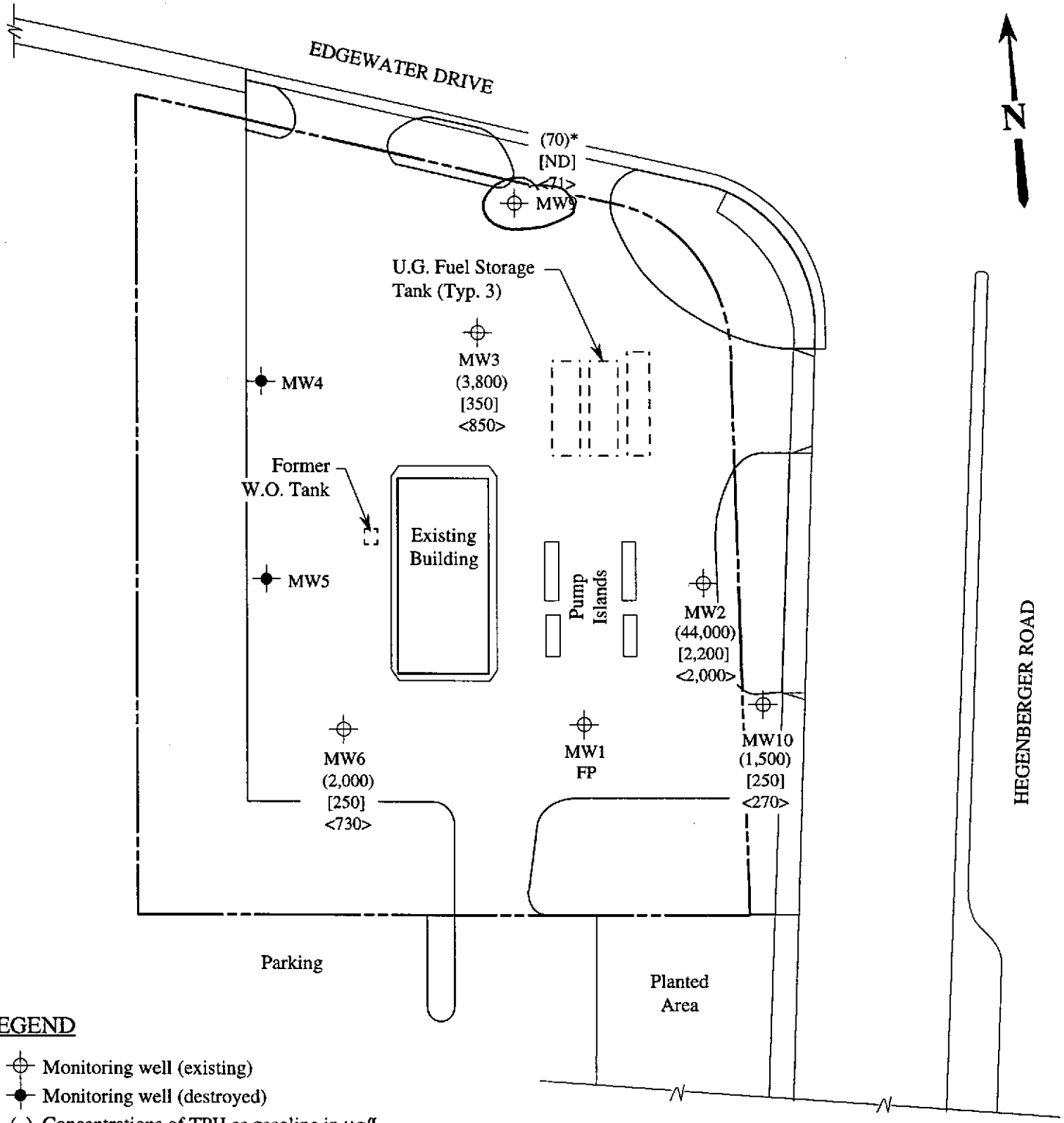
Approx. scale feet

POTENTIOMETRIC SURFACE MAP FOR THE DECEMBER 9, 1994 MONITORING EVENT

mpds SERVICES, INCORPORATED

UNOCAL SERVICE STATION #5043
449 HEGENBERGER ROAD
OAKLAND, CALIFORNIA

FIGURE
3



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 gasoline.

0 40 80

Approx. scale feet

PETROLEUM HYDROCARBON CONCENTRATIONS IN GROUND WATER ON FEBRUARY 21, 1995

mpds SERVICES, INCORPORATED

UNOCAL SERVICE STATION #5043
449 HEGENBERGER ROAD
OAKLAND, CALIFORNIA

FIGURE
4

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
1900 Bates Avenue, Suite L, Concord, CA 94520, (510) 686-9600, FAX (510) 686-9689
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:	Feb 21, 1995
2401 Stanwell Dr., Ste. 300	Matrix Descript:	Water	Received:	Feb 21, 1995
Concord, CA 94520	Analysis Method:	EPA 5030/8015/8020	Reported:	Mar 7, 1995
Attention: Sarkis Karkarian	First Sample #:	502-1160		

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
502-1160	MW-2	44,000	2,200	3,200	1,300	1,500
502-1161	MW-3	3,800	350	ND	130	22
502-1162	MW-6	2,000	250	4.6	25	30
502-1163	MW-9	70*	ND	ND	ND	ND
502-1164	MW-10	1,500	250	26	9.1	160

* Hydrocarbons detected did not appear to be gasoline.

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

5021160.MPD <1>

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (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:	Feb 21, 1995
2401 Stanwell Dr., Ste. 300	Matrix Descript:	Water	Received:	Feb 21, 1995
Concord, CA 94520	Analysis Method:	EPA 5030/8015/8020	Reported:	Mar 7, 1995
Attention: Sarkis Karkarian	First Sample #:	502-1160		

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
502-1160	MW-2	Gasoline	200	2/28/95	HP-2	98
502-1161	MW-3	Gasoline	10	2/27/95	HP-4	77
502-1162	MW-6	Gasoline	10	3/1/95	HP-2	100
502-1163	MW-9	Discrete Peak*	1.0	2/27/95	HP-4	93
502-1164	MW-10	Gasoline	10	3/1/95	HP-2	100

SEQUOIA ANALYTICAL, #1271

Signature on File

Alan B. Kemp
Project Manager

Please Note:
* "Discrete Peak" refers to an unidentified peak in the MTBE range.

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (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: Feb 21, 1995
2401 Stanwell Dr., Ste. 300	Sample Matrix:	Water	Received: Feb 21, 1995
Concord, CA 94520	Analysis Method:	EPA 3510/3520/8015	Reported: Mar 7, 1995
Attention: Sarkis Karkarian	First Sample #:	502-1160	

TOTAL EXTRACTABLE PETROLEUM HYDROCARBONS

Analyte	Reporting Limit µg/L	Sample I.D. 502-1160 MW-2^	Sample I.D. 502-1161 MW-3^	Sample I.D. 502-1162 MW-6^	Sample I.D. 502-1163 MW-9^	Sample I.D. 502-1164 MW-10^
Extractable Hydrocarbons	50	2,600	850	730	71	270
Chromatogram Pattern:		Diesel and Unidentified Hydrocarbons <C14	Diesel and Unidentified Hydrocarbons <C14 & >C20	Diesel and Unidentified Hydrocarbons <C14	Diesel and Unidentified Hydrocarbons >C20	Diesel and Unidentified Hydrocarbons <C14

Quality Control Data

Report Limit Multiplication Factor:	1.0	1.0	1.0	1.0	1.0
Date Extracted:	2/24/95	2/24/95	2/24/95	2/24/95	2/24/95
Date Analyzed:	2/28/95	2/28/95	2/28/95	2/28/95	2/28/95
Instrument Identification:	HP-3A	HP-3A	HP-3A	HP-3A	HP-3A

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

SEQUOIA ANALYTICAL, #1271

Signature on File

Alan B. Kemp
Project Manager

Please Note:
^ This sample appears to contain diesel and non-diesel mixtures. "Unidentified Hydrocarbons <C14" are probably gasoline; ">C20" refers to unidentified peaks in the total oil and grease range.

Sequoia Analytical

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MPDS Services
2401 Stanwell Dr., Ste. 300
Concord, CA 94520
Attention: Sarkis Karkarian

Client Project ID: Unocal #5043, 449 Hegenberger, Oakland
Matrix: Liquid
QC Sample Group: 5021160-164

Reported: Mar 14, 1995

QUALITY CONTROL DATA REPORT

ANALYTE	Benzene	Toluene	Ethyl Benzene	Xylenes
Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Analyst:	A. Tuzon	A. Tuzon	A. Tuzon	A. Tuzon
MS/MSD Batch#:	5021272	5021272	5021272	5021272
Date Prepared:	2/28/95	2/28/95	2/28/95	2/28/95
Date Analyzed:	2/28/95	2/28/95	2/28/95	2/28/95
Instrument I.D.#:	HP-2	HP-2	HP-2	HP-2
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L	60 µg/L
Matrix Spike % Recovery:	100	100	105	103
Matrix Spike Duplicate % Recovery:	100	100	105	103
Relative % Difference:	0.0	0.0	0.0	0.0
LCS Batch#:	1LCS022895	1LCS022895	1LCS022895	1LCS022895
Date Prepared:	2/28/95	2/28/95	2/28/95	2/28/95
Date Analyzed:	2/28/95	2/28/95	2/28/95	2/28/95
Instrument I.D.#:	HP-2	HP-2	HP-2	HP-2
LCS % Recovery:	103	101	105	105
% Recovery Control Limits:	71-133	72-128	72-130	71-120

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

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
1900 Bates Avenue, Suite L, Concord, CA 94520, (510) 686-9600, FAX (510) 686-9689
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: Sarkis Karkarian

Client Project ID: Unocal #5043, 449 Hegenberger, Oakland
Matrix: Liquid
QC Sample Group: 5021160-164
Reported: Mar 14, 1995

QUALITY CONTROL DATA REPORT

ANALYTE	Benzene	Toluene	Ethyl Benzene	Xylenes
Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Analyst:	A. Tuzon	A. Tuzon	A. Tuzon	A. Tuzon
MS/MSD Batch#:	5021249	5021249	5021249	5021249
Date Prepared:	3/1/95	3/1/95	3/1/95	3/1/95
Date Analyzed:	3/1/95	3/1/95	3/1/95	3/1/95
Instrument I.D.#:	HP-2	HP-2	HP-2	HP-2
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L	60 µg/L
Matrix Spike % Recovery:	100	95	100	100
Matrix Spike Duplicate % Recovery:	100	95	100	103
Relative % Difference:	0.0	0.0	0.0	0.0
LCS Batch#:	1LCS022895	1LCS022895	1LCS022895	1LCS022895
Date Prepared:	3/1/95	3/1/95	3/1/95	3/1/95
Date Analyzed:	3/1/95	3/1/95	3/1/95	3/1/95
Instrument I.D.#:	HP-2	HP-2	HP-2	HP-2
LCS % Recovery:	105	104	102	102
% Recovery Control Limits:	71-133	72-128	72-130	71-120

SEQUOIA ANALYTICAL, #1271

Signature on File

Alan B. Kemp
Project Manager

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Client Project ID: Unocal #5043, 449 Hegenberger, Oakland
Matrix: Liquid
QC Sample Group: 5021160-164
Reported: Mar 14, 1995

QUALITY CONTROL DATA REPORT

ANALYTE	Benzene	Toluene	Ethyl Benzene	Xylenes	Diesel
Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020	EPA 8015 Mod
Analyst:	A. Tuzon	A. Tuzon	A. Tuzon	A. Tuzon	K. Wimer
MS/MSD Batch#:	5021234	5021234	5021234	5021234	BLK022495
Date Prepared:	2/27/95	2/27/95	2/27/95	2/27/95	2/24/95
Date Analyzed:	2/27/95	2/27/95	2/27/95	2/27/95	2/28/95
Instrument I.D.#:	HP-4	HP-4	HP-4	HP-4	HP-3A
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L	60 µg/L	300 µg/L
Matrix Spike % Recovery:	89	95	95	96	77
Matrix Spike Duplicate % Recovery:	95	100	100	101	83
Relative % Difference:	6.5	5.1	5.1	5.1	8.3
LCS Batch#:	2LCS022795	2LCS022795	2LCS022795	2LCS022795	BLK022495
Date Prepared:	2/27/95	2/27/95	2/27/95	2/27/95	2/24/95
Date Analyzed:	2/27/95	2/27/95	2/27/95	2/27/95	2/28/95
Instrument I.D.#:	HP-4	HP-4	HP-4	HP-4	HP-3A
LCS % Recovery:	86	92	92	92	77
% Recovery Control Limits:	71-133	72-128	72-130	71-120	28-122

SEQUOIA ANALYTICAL, #1271

Signature on File

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Project Manager

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MPDS SERVICES, INCORPORATED
2401 Stanwell Drive, Suite 400
Concord, California 94520
Tel: (510) 602-5100, Fax: (510) 689-1918

CHAIN OF CUSTODY

SAMPLER: NICHOLAS PERROW

WITNESSING AGENCY:

UNOCAL S/S # 5043 CITY: OAKLAND

ADDRESS: 449 HEGENBERGER

ANALYSES REQUESTED

TURN AROUND TIME: REGULAR

SAMPLE ID NO.	DATE	TIME	WATER	GRAB	COMP	NO. OF CONT.	SAMPLING LOCATION	TPH-GAS BTEX	TPH-DIESEL	TOG	8010					REMARKS
MW-2	2/21/95	11:15	✓	✓		2 VOAS 1 AMBER	WELL	✓	✓							502160 AC
MW-3	"	10:00	✓	✓		"	"	✓	✓							502161
MW-6	"	10:40	✓	✓		"	"	✓	✓							502162
MW-9	"	9:25	✓	✓		"	"	✓	✓							502163
MW-10	"	11:45	✓	✓		"	"	✓	✓							502164

RELINQUISHED BY:	DATE/TIME	RECEIVED BY:	DATE/TIME
(SIGNATURE)	2/21/95 1:35PM	(SIGNATURE) Melinda Chevarria	2/21/95 1335
(SIGNATURE)		(SIGNATURE)	
(SIGNATURE)		(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? yes
2. WILL SAMPLES REMAIN REFRIGERATED UNTIL ANALYZED? yes
3. DID ANY SAMPLES RECEIVED FOR ANALYSIS HAVE HEAD SPACE? NO
4. WERE SAMPLES IN APPROPRIATE CONTAINERS AND PROPERLY PACKAGED? yes

SIGNATURE: Melinda Chevarria TITLE: Lab Tech DATE: 2/21/95

Note: All water containers to be sampled for TPHG/BTEX, 8010 & 8240 are preserved with HCL. All water containers to be sampled for Lead or Metals are preserved with HNO3. All other containers are unpreserved.