MONITORING
PURGING
DISPOSING
SAMPLING
MPDS SERVICES, INCORPORATED

MPDS-UN7376-05
April 1, 1996

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

Attention: Mr. Robert A. Boust

RE: Quarterly Data Report
Unocal Service Station #7376
4191 First Street
Pleasanton, California

Dear Mr. Boust:

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 March 1, 1996. Prior to sampling, the wells were each purged of between 8 and 13 gallons of water. During purging operations, the field parameters pH, temperature, and electrical conductivity were recorded and are presented in Table 2. Once the field parameters were observed to stabilize, and where possible, a minimum of approximately four casing volumes had been removed from each well, 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. Field blank and Trip blank samples (denoted as ES1 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

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

date are summarized in Table 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 3. 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

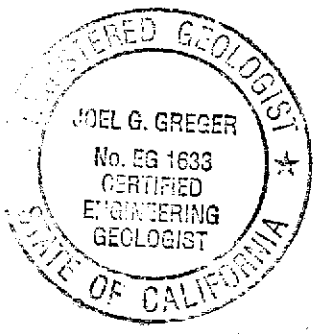
A copy of this report should be sent to Mr. Scott Seery of the Alameda County Health Care Services Agency.

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 8/31/96

/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)	Sheen	Water Purged (gallons)
(Monitored and Sampled on March 1, 1996)						
MW1	291.90	75.09	86.39	0	No	8
MW2B	291.78	73.27	85.25	0	No	8.5
MW3	291.83	75.18	94.10	0	No	13
(Monitored and Sampled on December 12, 1995)						
MW1	289.44	77.55	86.47	0	No	6.5
MW2B	289.09	75.96	85.33	0	No	6.5
MW3	289.28	77.73	94.20	0	No	11.5
(Monitored and Sampled on September 9, 1995)						
MW1	287.99	79.00	86.38	0	No	5
MW2B	287.51	77.54	85.25	0	No	5.5
MW3	287.73	79.28	94.17	0	No	10
(Monitored and Sampled on June 1, 1995)						
MW1	289.46	77.53	86.44	0	No	6.5
MW2B	289.36	75.69	85.32	0	No	7
MW3	289.41	77.60	94.17	0	No	11.5

Well #	Well Casing Elevation (feet)*
MW1	366.99
MW2B	365.05
MW3	367.01

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 elevations of the top of the well casings were surveyed relative to City of Pleasanton Benchmark V1, a brass disk on the north curb of Ray Street, approximately 200 feet northwest of the centerline of First Street (elevation = 367.17 feet Mean Sea Level).

TABLE 2

RECORD OF THE TEMPERATURE, CONDUCTIVITY, AND pH VALUES
IN THE MONITORING WELLS DURING PURGING AND PRIOR TO SAMPLING

(Measured on March 1, 1996)

Well #	Gallons per Casing Volume	Time	Gallons Purged	Casing Volumes Purged	Temperature (°F)	Conductivity ([μmhos/cm] x100)	pH
MW1	1.92	09:28	0	0	63.0	4.96	7.83
			2	1.04	65.7	4.87	7.62
			4	2.08	66.6	4.79	7.45
			6	3.13	66.9	4.74	7.39
		09:39	8	4.17	67.2	4.71	7.34
MW2B	2.04	11:10	0	0	69.3	4.98	7.61
			2	0.98	68.9	4.86	7.42
			4	1.96	68.5	4.89	7.30
			6	2.94	68.3	4.86	7.25
		11:22	8.5	4.17	68.1	4.82	7.21
MW3	3.22	10:18	0	0	66.9	5.29	7.68
			3	0.93	67.2	5.36	7.49
			6	1.86	67.5	5.26	7.38
			9	2.80	67.8	5.20	7.34
			12	3.73	67.9	5.23	7.30
		10:31	13	4.04			

TABLE 3

SUMMARY OF LABORATORY ANALYSES
WATER

Well #	Date	TPH as Diesel	TPH as Gasoline	Benzene	Toluene	Ethyl-benzene	Xylenes	MTBE
MW1	3/01/96	56	ND	ND	ND	ND	ND	37[illegible]
	12/12/95	190♦♦	ND	ND	ND	ND	ND	--
	9/06/95▲	690	ND	ND	ND	ND	ND	--
	6/01/95	54♦♦	130	1.0	2.9	0.79	4.5	--
	3/01/95	120	ND	ND	1.1	ND	1.3	--
	12/07/94	--	ND	ND	ND	ND	ND	--
MW2	12/07/94	WELL DAMAGED						
MW2B	3/01/96	[illegible]70♦	[illegible],900	[redacted]	ND	ND	5.3	[illegible]0
	12/12/95▲▲	850♦	1,200	630	ND	15	57	--
	9/06/95▲	ND	ND	90	ND	ND	ND	--
	6/01/95	280	350	19	5.8	ND	7.7	--
	3/01/95	320	ND	ND	ND	ND	ND	--
MW3	3/01/96	[illegible],500♦♦	[illegible],400	[redacted]	3.2	1,900	290	[illegible]9[illegible]
	12/12/95▲▲	3,100♦	19,000	600	380	2,100	5,300	--
	9/06/95▲	880♦♦	4,100	380	490	130	710	--
	6/01/95	140♦♦	62	7.8	0.90	ND	1.6	--
	3/01/95	140♦	ND	ND	1.1	ND	1.1	--
	12/07/94	--	ND	ND	ND	ND	ND	--

♦ Sequoia Analytical Laboratory reported that the hydrocarbons detected appeared to be a diesel and non-diesel mixture.

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

▲ Sequoia Analytical Laboratory has potentially identified the presence of MTBE at reportable levels in the ground water 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 $\mu g/L$ in the sample collected from this well.

MTBE = Methyl tert butyl ether.

TABLE 3

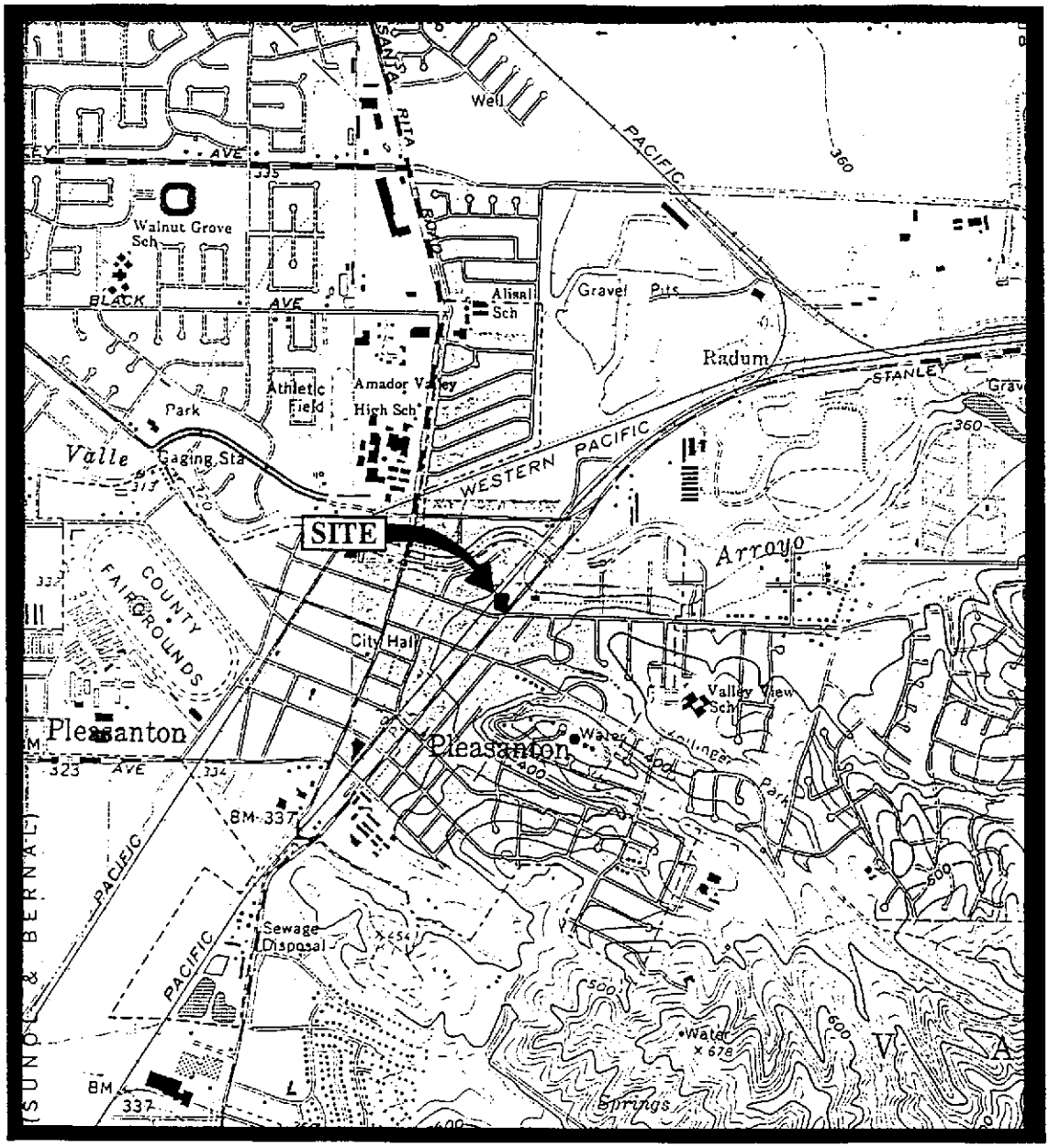
SUMMARY OF LABORATORY ANALYSES
WATER

ND = Non-detectable.

-- Indicates analysis was not performed.

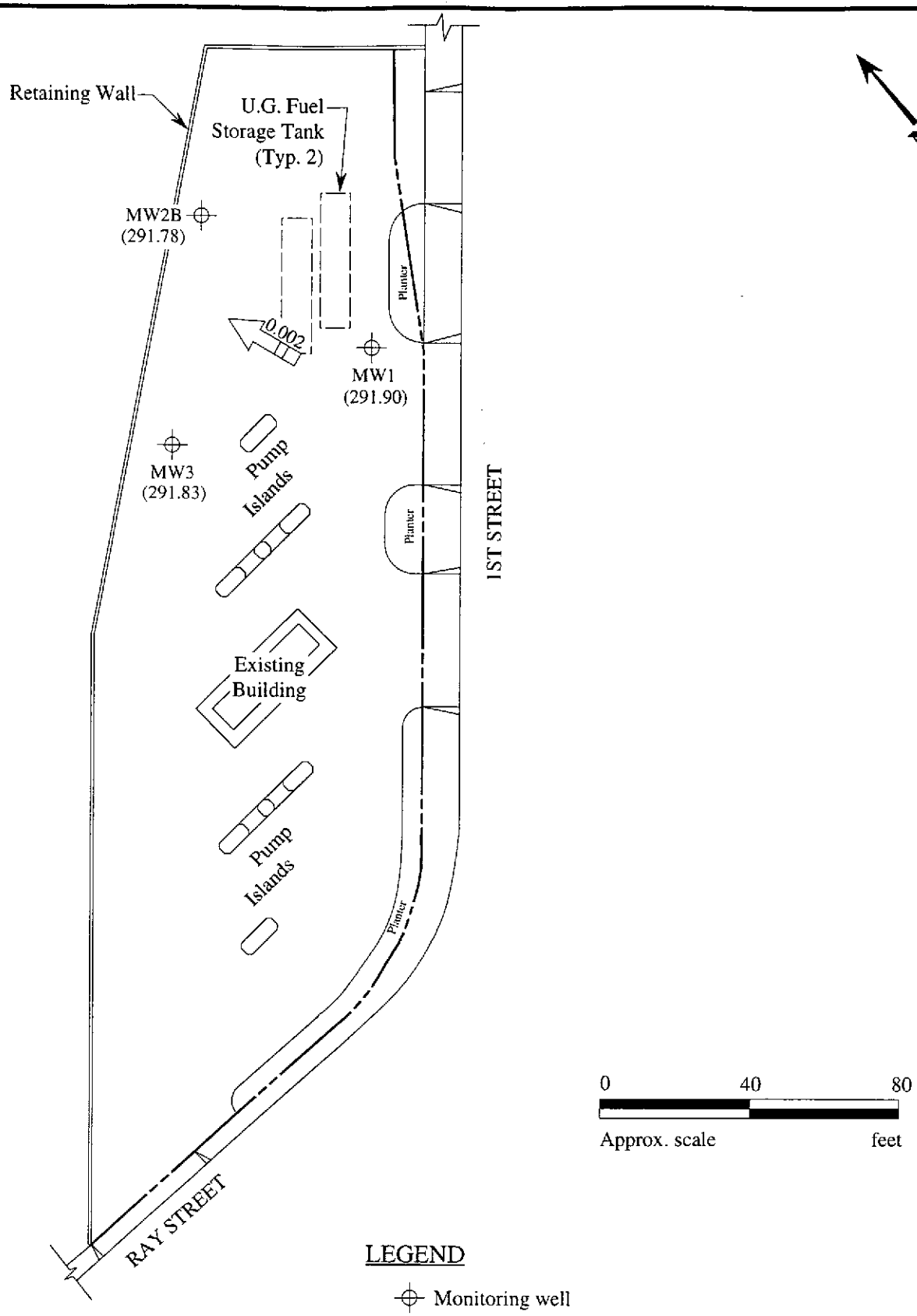
Results are in micrograms per liter (µg/L), unless otherwise indicated.

Note:
- The detection limit for results reported as ND by Sequoia Analytical Laboratory is equal to the stated detection limit times the dilution factor indicated on the laboratory analytical sheets.
- Prior to August 1, 1995, the total purgeable petroleum hydrocarbon (TPH as gasoline) quantification range used by Sequoia Analytical Laboratory was C4 - C12. Since August 1, 1995, the quantification range used by Sequoia Analytical Laboratory is C6 - C12.
- Laboratory analyses data prior to March 1, 1995 were provided by Kaprealian Engineering, Inc.



Base modified from 7.5 minute U.S.G.S. Dublin and Livermore Quadrangles (both photorevised 1980)

mpds SERVICES, INCORPORATED	**UNOCAL SERVICE STATION #7376** **4191 1ST STREET** **PLEASANTON, CALIFORNIA**	**LOCATION MAP**

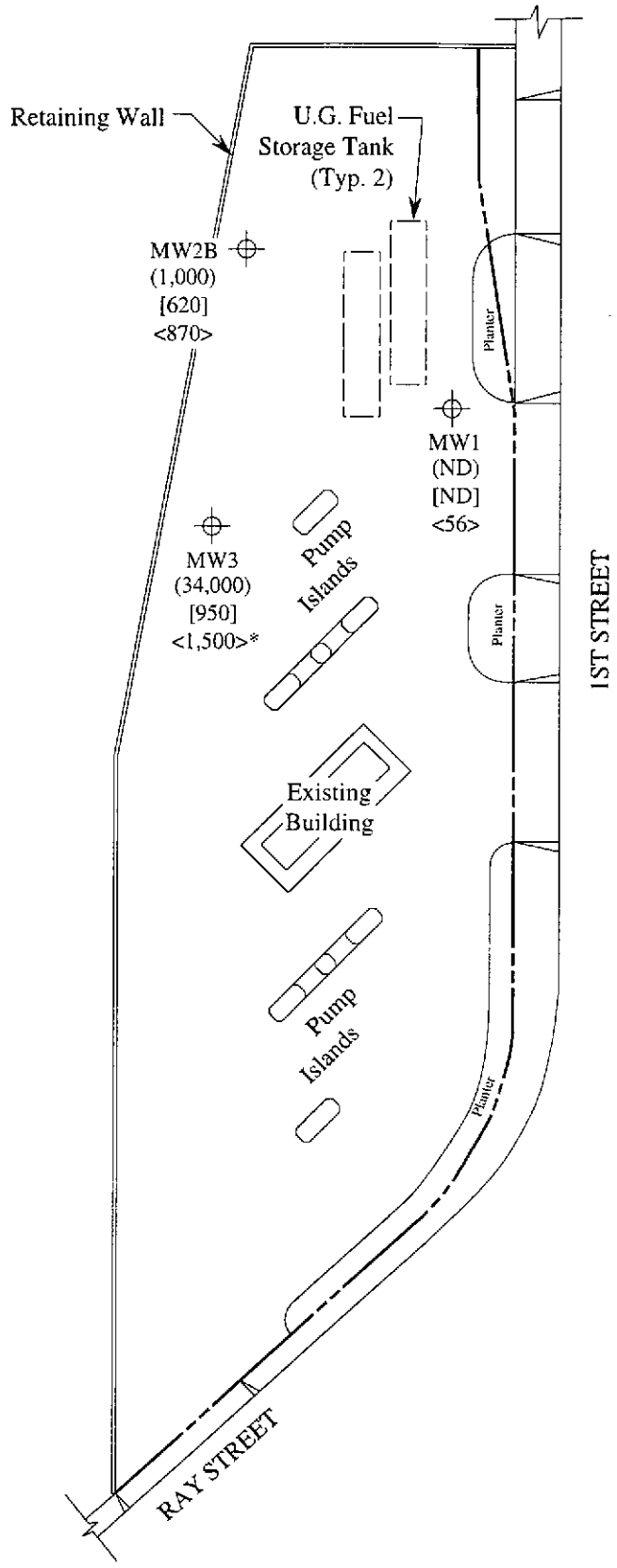


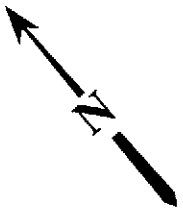
LEGEND

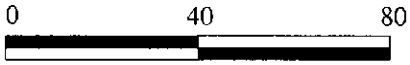
- Monitoring well
- ( ) Ground water elevation in feet above Mean Sea Level
- #.## Direction of ground water flow with approximate hydraulic gradient

GROUND WATER FLOW DIRECTION MAP FOR THE MARCH 1, 1996 MONITORING EVENT

MPDS SERVICES, INCORPORATED	**UNOCAL SERVICE STATION #7376** **4191 1ST STREET** **PLEASANTON, CALIFORNIA**	FIGURE **1**







LEGEND

- ⊕ Monitoring well
- ( ) 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
- * The lab reported that the hydrocarbons detected did not appear to be diesel.

PETROLEUM HYDROCARBON CONCENTRATIONS IN GROUND WATER ON MARCH 1, 1996

mpds SERVICES, INCORPORATED	**UNOCAL SERVICE STATION #7376** **4191 1ST STREET** **PLEASANTON, 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#7376, 4191 1st St., Pleasanton	Sampled:	Mar 1, 1996
2401 Stanwell Dr., Ste. 300	Matrix Descript:	Water	Received:	Mar 1, 1996
Concord, CA 94520	Analysis Method:	EPA 5030/8015 Mod./8020	Reported:	Mar 18, 1996
Attention: Jarrel Crider	First Sample #:	603-0116		

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
603-0116	MW 1	--	1.0	3/9/96	HP-2	107
603-0117	MW 2 B	Gasoline	10	3/11/96	HP-2	103
603-0118	MW 3	Gasoline	5.0	3/11/96	HP-2	126
603-0119	ES 1	--	1.0	3/8/96	HP-5	92
603-0120	ES 3	--	1.0	3/11/96	HP-2	104

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#7376, 4191 1st St., Pleasanton	Sampled: Mar 1, 1996
2401 Stanwell Dr., Ste. 300	Sample Matrix:	Water	Received: Mar 1, 1996
Concord, CA 94520	Analysis Method:	EPA 3510/8015 Mod.	Reported: Mar 18, 1996
Attention: Jarrel Crider	First Sample #:	603-0116	

TOTAL EXTRACTABLE PETROLEUM HYDROCARBONS

Analyte	Reporting Limit µg/L	Sample I.D. 603-0116 MW 1	Sample I.D. 6030117^ MW 2 B	Sample I.D. 6030118* MW 3
Extractable Hydrocarbons	50	56	870	1500
Chromatogram Pattern:		Diesel	Diesel & Unidentified Hydrocarbons <C15	Unidentified Hydrocarbons <C15

Quality Control Data

Report Limit Multiplication Factor:	1.0	1.0	1.0
Date Extracted:	3/5/96	3/5/96	3/5/96
Date Analyzed:	3/7/96	3/7/96	3/7/96
Instrument Identification:	HP3A	HP3A	HP3A

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 <C15" are probably gasoline.
*This sample does not appear to contain diesel. Unidentified Hydrocarbons <C15 are probably gasoline.
Revised Report, 4/1/96

Sequoia Analytical

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

Client Project ID: Unocal#7376, 4191 1st St., Pleasanton
Matrix: Liquid
QC Sample Group: 6030116-120

Reported: Mar 18, 1996

QUALITY CONTROL DATA REPORT

ANALYTE	Benzene	Toluene	Ethyl Benzene	Xylenes
Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Analyst:	L. Huang	L. Huang	L. Huang	L. Huang
MS/MSD Batch#:	6030290	6030290	6030290	6030290
Date Prepared:	3/9/96	3/9/96	3/9/96	3/9/96
Date Analyzed:	3/9/96	3/9/96	3/9/96	3/9/96
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:	80	75	80	78
Matrix Spike Duplicate % Recovery:	135	130	135	130
Relative % Difference:	51	54	51	50

LCS Batch#:	1LCSD030996	1LCSD030996	1LCSD030996	1LCSD030996
Date Prepared:	3/9/96	3/9/96	3/9/96	3/9/96
Date Analyzed:	3/9/96	3/9/96	3/9/96	3/9/96
Instrument I.D.#:	HP-2	HP-2	HP-2	HP-2
LCS % Recovery:	110	105	110	107
% 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

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

Client Project ID: Unocal#7376, 4191 1st St., Pleasanton
Matrix: Liquid
QC Sample Group: 6030116-120

Reported: Mar 18, 1996

QUALITY CONTROL DATA REPORT

ANALYTE	Benzene	Toluene	Ethyl Benzene	Xylenes	Diesel
Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020	EPA 8015
Analyst:	M. Brewer	M. Brewer	M. Brewer	M. Brewer	J. Dinsay
MS/MSD Batch#:	6030267	6030267	6030267	6030267	BLK030596
Date Prepared:	3/8/96	3/8/96	3/8/96	3/8/96	3/5/96
Date Analyzed:	3/8/96	3/8/96	3/8/96	3/8/96	3/7/96
Instrument I.D.#:	HP-5	HP-5	HP-5	HP-5	GCHP-3A
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L	60 µg/L	300 µg/L
Matrix Spike % Recovery:	95	95	95	97	73
Matrix Spike Duplicate % Recovery:	95	95	95	97	67
Relative % Difference:	0.0	0.0	0.0	0.0	9.5
LCS Batch#:	3LCS030896	3LCS030896	3LCS030896	3LCS030896	LCS030596
Date Prepared:	3/8/96	3/8/96	3/8/96	3/8/96	3/5/96
Date Analyzed:	3/8/96	3/8/96	3/8/96	3/8/96	3/7/96
Instrument I.D.#:	HP-5	HP-5	HP-5	HP-5	GCHP-3A
LCS % Recovery:	95	90	95	95	70
% Recovery Control Limits:	71-133	72-128	72-130	71-120	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, INCORPORATED
2401 Stanwell Drive, Suite 400
Concord, California 94520
Tel: (510) 602-5100, Fax: (510) 689-1918

CHAIN OF CUSTODY

9603029

SAMPLER: VARTKES TASHDJIAN

WITNESSING AGENCY:

UNOCAL S/S # 7376 CITY: Pleasanton

ADDRESS: 4191 1st st.

TURN AROUND TIME: Regular

SAMPLE ID NO.	DATE	TIME	WATER	GRAB	COMP	NO. OF CONT.	SAMPLING LOCATION	ANALYSES REQUESTED: TPH-GAS BTEX	TPH-DIESEL	TOG	8010	MTBE				REMARKS
MW 1	3/1/96	10:00 AM	X	X		2 VOA's 1 Amber	Well	X	X			X		9603011	6	AL
MW 2B	"	11:45 AM	X	X		"	"	X	X			X		9603011	7	
MW 3	"	10:52 AM	X	X		"	"	X	X			X		9603011	8	

RELINQUISHED BY:	DATE/TIME	RECEIVED BY:	DATE/TIME
Vartkes Tashdjian (SIGNATURE)	3/1/96 1:05 PM	(SIGNATURE)	3/1/96 1305
(SIGNATURE)		(SIGNATURE)	1700
(SIGNATURE)	3-4	(SIGNATURE)	3-4
(SIGNATURE)		(SIGNATURE)	
(SIGNATURE)		(SIGNATURE) K. Holanda	3/4/96 1410

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: TITLE: Lab Asst DATE: 3/1/96

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

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

CHAIN OF CUSTODY

9603023

SAMPLER: VARTKES TASHDJIAN

WITNESSING AGENCY:

UNOCAL S/S # 7376 CITY: Pleasanton

ADDRESS: 4491 1st St.

SAMPLE ID NO.	DATE	TIME	WATER	GRAB	COMP	NO. OF CONT.	SAMPLING LOCATION	TPH-GAS BTEX	TPH-DIESEL	TOG	8010				REMARKS
ANALYSES REQUESTED															TURN AROUND TIME: Regular
ES 1	3/1/96	8:50 AM	X	X		1 VOA		X		6030119					
ES 3	"	7:30 AM	X	X		"		X		6030120					

RELINQUISHED BY:	DATE/TIME	RECEIVED BY:	DATE/TIME
Vartkes Tashdjian (SIGNATURE)	3/1/96 1:05PM	(SIGNATURE)	3/1/96 1305
(SIGNATURE)		(SIGNATURE)	1300 3-4
(SIGNATURE)	3-4	(SIGNATURE)	
(SIGNATURE)		(SIGNATURE)	
(SIGNATURE)		(SIGNATURE) R. Rolando	3/4/96 1430

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: TITLE: Regional DATE: 3/1/96

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