MONITORING
PURGING
DISPOSING
SAMPLING
mpds SERVICES, INCORPORATED

MPDS-UN7176-03
May 15, 1996

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

Attention: Mr. Edward C. Ralston

FILE # 7176 SS ✓ BP ____
RPT ____ QM ✓ TRANSMITTAL ____
1 ____ 2 ____ 3 ____ 4 ____ 5 ____ 6 ____

RE: Quarterly Data Report
Unocal Service Station #7176
7850 Amador Valley Boulevard
Dublin, California

Dear Mr. Ralston:

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. Oxygen Release Compound (ORC) filter socks were present in monitoring wells U-1, U-2, and U-3. Prior to sampling, the wells were checked for depth to water and the presence of free product or sheen. The monitoring data and the ground water elevations are summarized in Table 1. The ground water flow direction during the most recent quarter is shown on the attached Figure 1.

Ground water samples were collected on April 11, 1996. Prior to sampling, the wells were each purged of between 10 and 12 gallons of water. In addition, dissolved oxygen concentrations were also measured and are presented in Table 4. 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. Equipment blank, Field blank and Trip blank samples (denoted as ES1, ES2 and ES3 respectively) were also collected for quality assurance and control. MPDS Services, Inc. transported the purged ground water to the Unocal Refinery located in Rodeo, California, for treatment and discharge to San Pablo Bay under NPDES permit.

ANALYTICAL RESULTS

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

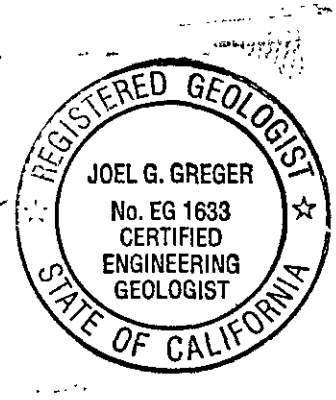
A copy of this report should be sent to Ms. Eva Chu of the Alameda County Health Care Services Agency.

If you have any questions regarding this report, please do not hesitate to call 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 through 4
Location Map
Figures 1 & 2
Laboratory Analyses
Chain of Custody documentation

cc: Clyde Galantine, Enviros, 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 April 11, 1996)						
U-1	343.42	12.20	28.60	0	No	12
U-2	343.84	12.75	26.70	0	No	10
U-3	344.93	13.20	29.26	0	No	11
(Monitored and Sampled January 11, 1996)						
U-1	339.29	16.33	28.85	0	No	9
U-2	339.53	17.06	27.25	0	No	7
U-3	339.48	18.65	29.33	0	No	7.5
(Monitored and Sampled October 12, 1995)						
U-1	340.24	15.38	29.15	0	No	10
U-2	340.58	16.01	26.15	0	No	7.5
U-3	340.53	17.6	29.06	0	No	8.5
(Monitored and Sampled on July 8, 1995)						
U-1	343.03	12.59	30.00	0	--	NA
U-2	343.91	12.68	30.00	0	--	NA
U-3	343.55	14.58	30.00	0	--	NA

Well #	Well Casing Elevation (feet)*
U-1	355.62
U-2	356.59
U-3	358.13

Table 1

Summary of Monitoring Data

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

* The elevations of the top of the well casings are relative to Mean Sea Level (MSL), per the Benchmark AM-STW1977 located at the easterly return at the most easterly corner of intersection of Amador Valley Blvd. and Starward Street (Elevation = 344.17 feet MSL).

-- Sheen determination was not performed.

NA = Not available.

Note: Monitoring data prior to October 12, 1995, were provided by Enviros, Inc.

Table 2

Record of the Temperature, Conductivity, and pH values
in the Monitoring Wells During Purging and Prior to Sampling

Well #	Gallons per Casing Volume	Time	Gallons Purged	Casing Volumes Purged	Temperature (°F)	Conductivity ([µmhos/cm] x1000)	pH
(Measured on April 11, 1996)							
U-1	2.79	9:10	0	0	72.0	0.88	6.91
			3	1.08	73.1	0.85	6.85
			6	2.15	73.8	0.81	6.84
			9	3.23	73.9	0.85	6.85
		9:23	12	4.30	74.1	0.84	6.84
U-2	2.37	8:30	0	0	70.2	0.99	6.90
			2.5	1.05	73.6	0.83	6.86
			5	2.11	74.0	0.85	6.88
			7.5	3.16	74.0	0.87	6.88
		8:40	10	4.22	74.0	0.85	6.87
U-3	2.73	8:00	0	0	67.2	0.96	7.15
			3	1.10	71.5	0.89	7.05
			6	2.20	74.2	0.89	7.00
			9	3.30	74.6	0.82	6.96
		8:10	11	4.03	74.3	0.85	6.98

Table 3

Summary of Laboratory Analyses
Water

Date	Well #	TPH as Diesel	TPH as Gasoline	Benzene	Toluene	Ethyl-Benzene	Xylenes	MTBE
4/11/96	U-1✹	630♦	3,200	110	ND	180	290	790
	U-2✹	1,900♦	7,700	130	27	1,100	110	340
	U-3	ND	68★	ND	ND	ND	ND	ND
1/11/96⩓	U-1⩛⩛	8,200♦	8,300	690	11	680	1,500	--
	U-2⩛⩛	8,600♦	10,000	210	55	1,400	240	--
	U-3	260♦♦	230	0.62	0.91	0.97	1.9	--
10/12/95	U-1⩛	4,200♦	33,000	1,400	ND	1,400	3,100	--
	U-2⩛	3,600♦	24,000	310	60	1,900	190	--
	U-3	470♦♦	560	ND	0.87	0.7	1.1	--
7/8/95	U-1	9,400*	39,000	1,500	19	1,600	5,200	--
	U-2	4,700*	17,000	430	ND	2,200	590	--
	U-3	710*	1,100**	0.57	2.1	1.7	2.4	--

✹ On April 11, 1996, all PNA compounds were non-detectable.

⩓ On January 11, 1996, PNA compound naphthalene was detected in well U-1 at a concentration of 320 µg/L, and at a concentration of 310 µg/L in well U-2. All other PNA compounds were non-detectable in both wells.

⩛ 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 µg/L in the sample collected from this well.

* Unidentified Hydrocarbon C9-C26

** Gas and Unidentified Hydrocarbons >C12

★ Sequoia Analytical Laboratory reported that the hydrocarbons detected did not apepar to be gasoline.

♦ 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.

PNA = Polynuclear aromatic hydrocarbons (EPA method 8100).

MTBE = methyl tert butyl ether.

ND = Non-detectable.

Table 3

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 quantification range used by Sequoia Analytical Laboratory is C6 - C12.

Laboratory analyses data prior to October 12, 1995, were provided by Enviros, Inc.

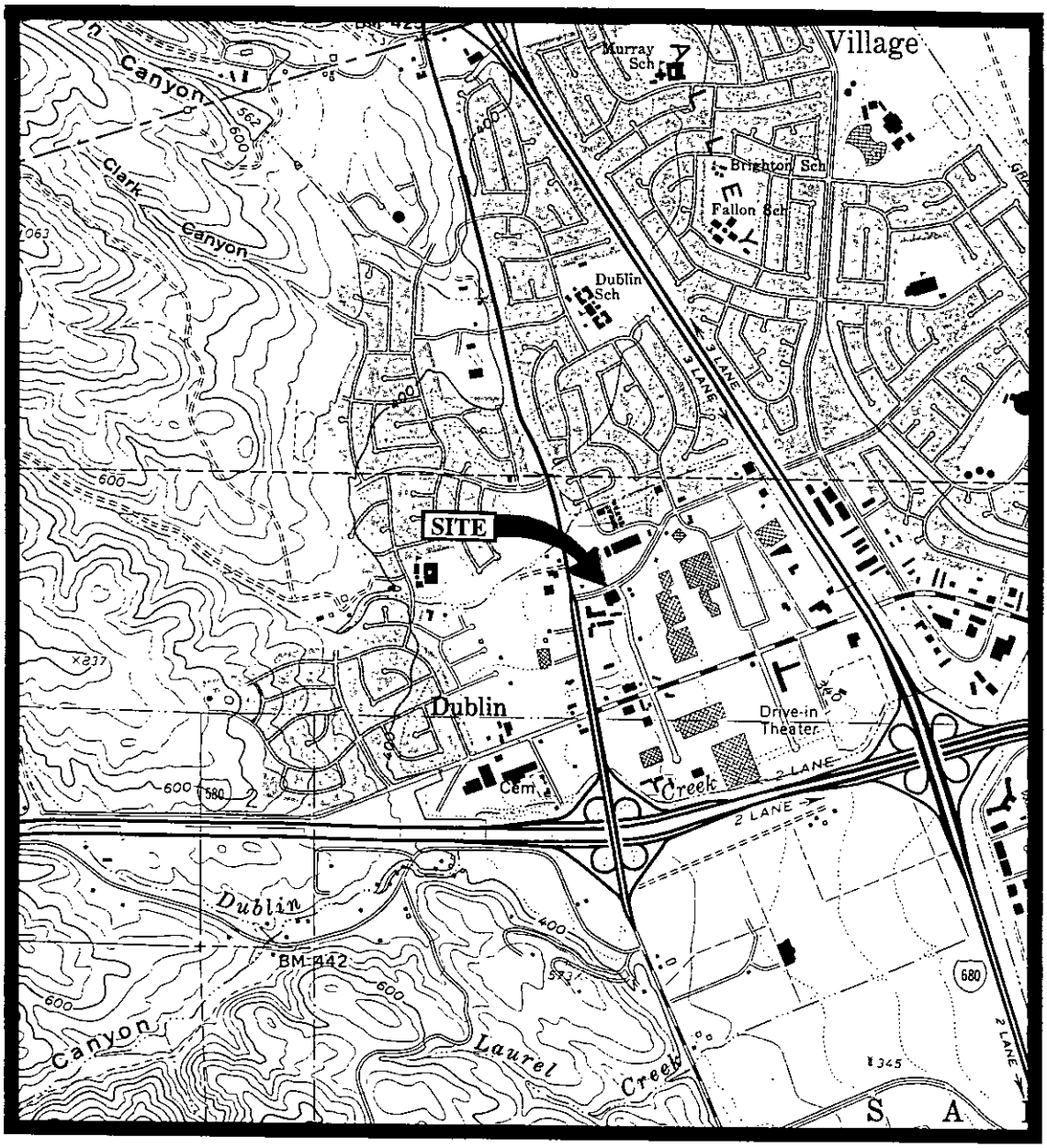
Table 4

Summary of Monitoring Data

Date	Well #	Dissolved Oxygen Concentrations	
		Before Purging	After Purging
4/11/96	U-1	3.77	3.78
	U-2	3.32	3.41
	U-3	5.16	4.96
1/11/96	U-1	--	3.41
	U-2	--	3.99
	U-3	--	5.05
10/2/95	CC1*	2.83	--

* For the location of sample point CC1, see Figure 1.

-- Indicates reading was not taken.



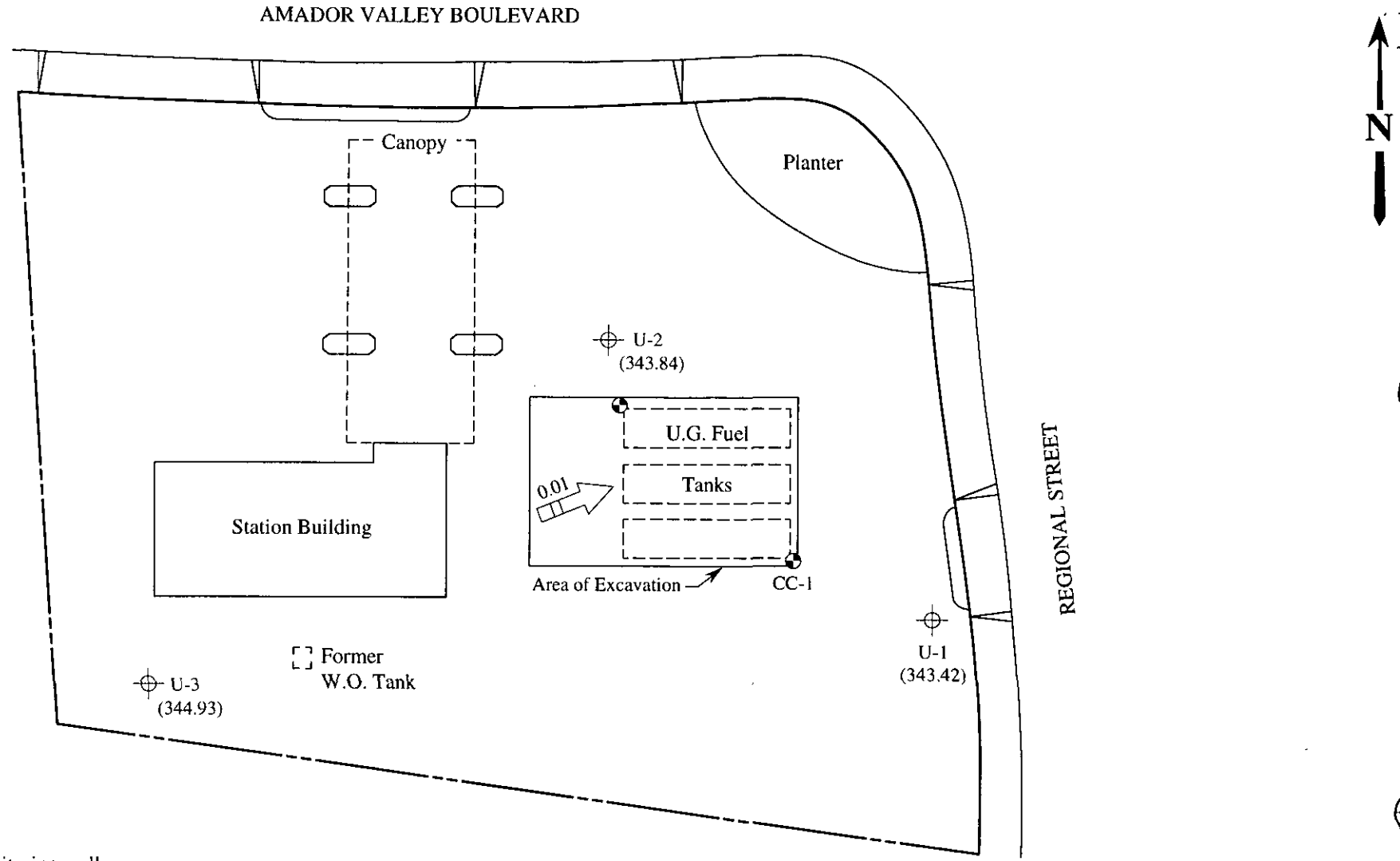
N

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

0 2000 4000

Approx. scale feet

mpds SERVICES, INCORPORATED	**UNOCAL SERVICE STATION #7176** **7850 AMADOR VALLEY BOULEVARD** **DUBLIN, CALIFORNIA**	**LOCATION MAP**



LEGEND

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

0 30 60

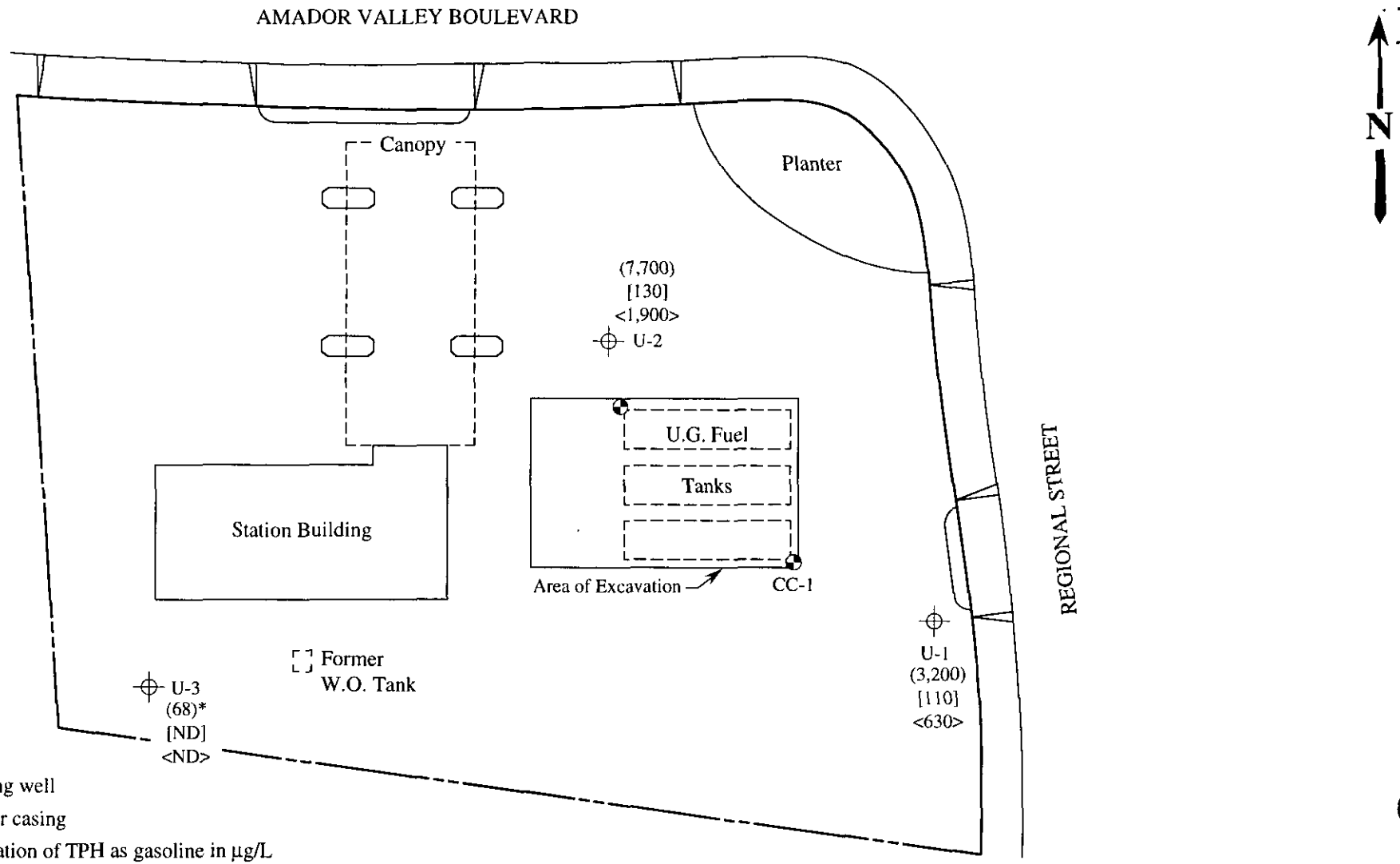
Approx. scale feet

GROUND WATER FLOW DIRECTION MAP FOR THE APRIL 11, 1996 MONITORING EVENT

UNOCAL SERVICE STATION #7176
7850 AMADOR VALLEY BOULEVARD
DUBLIN, CALIFORNIA

MPDS SERVICES, INCORPORATED

FIGURE
1



PETROLEUM HYDROCARBON CONCENTRATIONS IN GROUND WATER ON APRIL 11, 1996

UNOCAL SERVICE STATION #7176
7850 AMADOR VALLEY BOULEVARD
DUBLIN, CALIFORNIA

mpds SERVICES, INCORPORATED

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 #7176, 7850 Amador Valley Blvd. Dublin	Sampled:	Apr 11, 1996
2401 Stanwell Dr., Ste. 300	Matrix Descript:	Water	Received:	Apr 11, 1996
Concord, CA 94520	Analysis Method:	EPA 5030/8015 Mod./8020	Reported:	May 3, 1996
Attention: Jarrel Crider	First Sample #:	604-1055		

TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX DISTINCTION

Sample Number	Sample Description	Purgeable Hydrocarbons µg/L	Benzene µg/L	Toluene µg/L	Ethyl Benzene µg/L	Total Xylenes µg/L
604-1055	U-1	3,200	110	ND	180	290
604-1056	U-2	7,700	130	27	1,100	110
604-1057	U-3	68*	ND	ND	ND	ND
604-1058	ES-1	ND	ND	ND	ND	ND
604-1059	ES-2	ND	ND	ND	ND	ND
604-1060	ES-3	ND	ND	ND	ND	ND

* 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

6041055.MPD <1>

Sequoia Analytical

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MPDS Services	Client Project ID:	Unocal #7176, 7850 Amador Valley Blvd. Dublin	Sampled:	Apr 11, 1996
2401 Stanwell Dr., Ste. 300	Matrix Descript:	Water	Received:	Apr 11, 1996
Concord, CA 94520	Analysis Method:	EPA 5030/8015 Mod./8020	Reported:	May 3, 1996
Attention: Jarrel Crider	First Sample #:	604-1055		

TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX DISTINCTION

Sample Number	Sample Description	Chromatogram Pattern	DL Mult. Factor	Date Analyzed	Instrument ID	Surrogate Recovery, % QC Limits: 70-130
604-1055	U-1	Gasoline	10	4/25/96	HP-2	106
604-1056	U-2	Gasoline	10	4/24/96	HP-2	215
604-1057	U-3	Unidentified Hydrocarbons >C8 ^	1.0	4/24/96	HP-2	102
604-1058	ES-1	--	1.0	4/26/96	HP-2	103
604-1059	ES-2	--	1.0	4/26/96	HP-2	110
604-1060	ES-3	--	1.0	4/29/96	HP-2	101

SEQUOIA ANALYTICAL, #1271

Signature on File

Alan B. Kemp
Project Manager

Please Note:
^ "Unidentified Hydrocarbons >C8" refers to unidentified peaks in the total extractable petroleum hydrocarbon range.

Sequoia Analytical

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MPDS Services	Client Project ID:	Unocal #7176, 7850 Amador Valley Blvd. Dublin	Sampled:	Oct 17, 1997
2401 Stanwell Dr., Ste. 300	Sample Descript:	Water	Received:	Oct 21, 1997
Concord, CA 94520	Analysis for:	MTBE (Modified EPA 8020)		
Attention: Jarrel Crider	First Sample #:	710-1566	Analyzed:	Oct 28 - Nov 3, 97
			Reported:	Nov 3, 1997

LABORATORY ANALYSIS FOR: MTBE (Modified EPA 8020)

Sample Number	Sample Description	Detection Limit µg/L	Sample Result µg/L
710-1566	U-1	13	220
710-1567	U-2	100	N.D.
710-1568	U-3	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

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MPDS Services	Client Project ID:	Unocal #7176, 7850 Amador Valley Blvd. Dublin	Sampled:	Oct 17, 1997
2401 Stanwell Dr., Ste. 300	Sample Matrix:	Water	Received:	Oct 21, 1997
Concord, CA 94520	Analysis Method:	EPA 3510/8015 Mod.	Reported:	Nov 3, 1997
Attention: Jarrel Crider	First Sample #:	710-1566		

TOTAL EXTRACTABLE PETROLEUM HYDROCARBONS W/SILICA GEL CLEANUP

Analyte	Reporting Limit µg/L	Sample I.D. 710-1566 U-1 *	Sample I.D. 710-1567 U-2 *	Sample I.D. 710-1568 U-3 *
Extractable Hydrocarbons	50	510	1,400	63
Chromatogram Pattern:		Unidentified Hydrocarbons <C16	Unidentified Hydrocarbons <C16	Unidentified Hydrocarbons >C22

Quality Control Data

Report Limit Multiplication Factor:	1.1	1.0	1.0
Date Extracted:	10/24/97	10/24/97	10/24/97
Date Analyzed:	10/29/97	10/29/97	10/29/97
Instrument Identification:	GCHP-3A	GCHP-3A	GCHP-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 does not appear to contain diesel. "Unidentified Hydrocarbons <C16" are probably gasoline; ">C22" refers to unidentified peaks in the total oil and grease range.

Sequoia Analytical

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MPDS Services	Client Project ID:	Unocal #7176, 7850 Amador Valley Blvd. Dublin	Sampled:	Apr 16, 1996
2401 Stanwell Dr., Ste. 300	Sample Descript:	Water, U-1	Received:	Apr 16, 1996
Concord, CA 94520	Analysis Method:	EPA 8100	Extracted:	Apr 19, 1996
Attention: Jarrel Crider	Lab Number:	604-1055	Analyzed:	Apr 22, 1996
			Reported:	May 3, 1996

POLYNUCLEAR AROMATIC HYDROCARBONS (EPA 8100)

Analyte	Detection Limit µg/L	Sample Results µg/L
Acenaphthene	1.0	N.D.
Acenaphthylene	1.0	N.D.
Anthracene	1.0	N.D.
Benzo (a) anthracene	1.0	N.D.
Benzo (a) pyrene	1.0	N.D.
Benzo (b) fluoranthene	1.0	N.D.
Benzo (ghi) perylene	1.0	N.D.
Benzo (k) fluoranthene	1.0	N.D.
Chrysene	1.0	N.D.
Dibenzo (a,h) anthracene	1.0	N.D.
Fluoranthene	1.0	N.D.
Fluorene	1.0	N.D.
Indeno (1,2,3-cd) pyrene	1.0	N.D.
Naphthalene	1.0	N.D.
Phenanthrene	1.0	N.D.
Pyrene	1.0	N.D.

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

SEQUOIA ANALYTICAL, #1210

Signature on File

Alan B. Kemp
Project Manager

Sequoia Analytical

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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 #7176, 7850 Amador Valley Blvd. Dublin	Sampled:	Apr 16, 1996
2401 Stanwell Dr., Ste. 300	Sample Descript:	Water, U-2	Received:	Apr 16, 1996
Concord, CA 94520	Analysis Method:	EPA 8100	Extracted:	Apr 19, 1996
Attention: Jarrel Crider	Lab Number:	604-1056	Analyzed:	Apr 22, 1996
			Reported:	May 3, 1996

POLYNUCLEAR AROMATIC HYDROCARBONS (EPA 8100)

Analyte	Detection Limit µg/L	Sample Results µg/L
Acenaphthene	1.0	N.D.
Acenaphthylene	1.0	N.D.
Anthracene	1.0	N.D.
Benzo (a) anthracene	1.0	N.D.
Benzo (a) pyrene	1.0	N.D.
Benzo (b) fluoranthene	1.0	N.D.
Benzo (ghi) perylene	1.0	N.D.
Benzo (k) fluoranthene	1.0	N.D.
Chrysene	1.0	N.D.
Dibenzo (a,h) anthracene	1.0	N.D.
Fluoranthene	1.0	N.D.
Fluorene	1.0	N.D.
Indeno (1,2,3-cd) pyrene	1.0	N.D.
Naphthalene	1.0	N.D.
Phenanthrene	1.0	N.D.
Pyrene	1.0	N.D.

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

SEQUOIA ANALYTICAL, #1210

Signature on File

Alan B. Kemp
Project Manager

Sequoia Analytical

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

Client Project ID: Unocal #7176, 7850 Amador Valley Blvd. Dublin
Matrix: Liquid
QC Sample Group: 6041055-060
Reported: May 3, 1996

QUALITY CONTROL DATA REPORT

ANALYTE	Benzene	Toluene	Ethyl Benzene	Xylenes	Diesel
Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020	EPA 8015
Analyst:	L. Huang	L. Huang	L. Huang	L. Huang	J. Dinsay
MS/MSD Batch#:	6041112	6041112	6041112	6041112	BLK041596
Date Prepared:	4/24/96	4/24/96	4/24/96	4/24/96	4/15/96
Date Analyzed:	4/24/96	4/24/96	4/24/96	4/24/96	4/16/96
Instrument I.D.#:	HP-2	HP-2	HP-2	HP-2	HP-3A
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L	60 µg/L	300 µg/L
Matrix Spike % Recovery:	115	110	115	113	83
Matrix Spike Duplicate % Recovery:	115	110	115	115	93
Relative % Difference:	0.0	0.0	0.0	0.0	11
LCS Batch#:	2LCS042496	2LCS042496	2LCS042496	2LCS042496	LCS041596
Date Prepared:	4/24/96	4/24/96	4/24/96	4/24/96	4/15/96
Date Analyzed:	4/24/96	4/24/96	4/24/96	4/24/96	4/16/96
Instrument I.D.#:	HP-2	HP-2	HP-2	HP-2	HP-3A
LCS % Recovery:	110	105	110	112	90
% Recovery Control Limits:	70-130	70-130	70-130	70-130	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.

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

Client Project ID: Unocal #7176, 7850 Amador Valley Blvd. Dublin
Matrix: Liquid

QC Sample Group: 6041055-060

Reported: May 3, 1996

QUALITY CONTROL DATA REPORT

ANALYTE	Benzene	Toluene	Ethyl Benzene	Xylenes
Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Analyst:	K. Nill	K. Nill	K. Nill	K. Nill
MS/MSD Batch#:	6040134	6040134	6040134	6040134
Date Prepared:	4/25/96	4/25/96	4/25/96	4/25/96
Date Analyzed:	4/25/96	4/25/96	4/25/96	4/25/96
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:	110	110	120	115
Matrix Spike Duplicate % Recovery:	110	105	110	112
Relative % Difference:	0.0	4.7	8.7	2.9
LCS Batch#:	2LCS042596	2LCS042596	2LCS042596	2LCS042596
Date Prepared:	4/25/96	4/25/96	4/25/96	4/25/96
Date Analyzed:	4/25/96	4/25/96	4/25/96	4/25/96
Instrument I.D.#:	HP-2	HP-2	HP-2	HP-2
LCS % Recovery:	100	100	105	102
% Recovery Control Limits:	70-130	70-130	70-130	70-130

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
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 #7176, 7850 Amador Valley Blvd. Dublin
Matrix: Liquid
QC Sample Group: 6041055-060

Reported: May 3, 1996

QUALITY CONTROL DATA REPORT

ANALYTE	Benzene	Toluene	Ethyl Benzene	Xylenes
Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Analyst:	S. Chullakorn	S. Chullakorn	S. Chullakorn	S. Chullakorn
MS/MSD Batch#:	6041469	6041469	6041469	6041469
Date Prepared:	4/26/96	4/26/96	4/26/96	4/26/96
Date Analyzed:	4/26/96	4/26/96	4/26/96	4/26/96
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:	95	95	100	95
Matrix Spike Duplicate % Recovery:	100	100	105	102
Relative % Difference:	5.1	5.1	4.9	6.8
LCS Batch#:	2LCS042696	2LCS042696	2LCS042696	2LCS042696
Date Prepared:	4/26/96	4/26/96	4/26/96	4/26/96
Date Analyzed:	4/26/96	4/26/96	4/26/96	4/26/96
Instrument I.D.#:	HP-2	HP-2	HP-2	HP-2
LCS % Recovery:	95	95	100	100
% Recovery Control Limits:	70-130	70-130	70-130	70-130

SEQUOIA ANALYTICAL, #1271

Signature on File

Alan B. Kemp
Project Manager

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Attention: Jarrel Crider

Client Project ID: Unocal #7176, 7850 Amador Valley Blvd. Dublin
Matrix: Liquid
QC Sample Group: 6041055-060
Reported: May 3, 1996

QUALITY CONTROL DATA REPORT

ANALYTE	Benzene	Toluene	Ethyl Benzene	Xylenes
Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Analyst:	S. Chullakorn	S. Chullakorn	S. Chullakorn	S. Chullakorn
MS/MSD Batch#:	6041060	6041060	6041060	6041060
Date Prepared:	4/29/96	4/29/96	4/29/96	4/29/96
Date Analyzed:	4/29/96	4/29/96	4/29/96	4/29/96
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:	115	115	120	117
Matrix Spike Duplicate % Recovery:	105	105	105	107
Relative % Difference:	9.1	9.1	13	9.0
LCS Batch#:	2LCS042996	2LCS042996	2LCS042996	2LCS042996
Date Prepared:	4/29/96	4/29/96	4/29/96	4/29/96
Date Analyzed:	4/29/96	4/29/96	4/29/96	4/29/96
Instrument I.D.#:	HP-2	HP-2	HP-2	HP-2
LCS % Recovery:	110	110	110	112
% Recovery Control Limits:	70-130	70-130	70-130	70-130

SEQUOIA ANALYTICAL, #1271

Signature on File

Alan B. Kemp
Project Manager

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Attention: Jarrel Crider

Client Project ID: Unocal #7176, 7850 Amador Valley Blvd. Dublin
Matrix: Liquid
QC Sample Group: 6041055-060

Reported: May 3, 1996

QUALITY CONTROL DATA REPORT

ANALYTE	Naphthalene	Acenaphthene	Pyrene
Method:	EPA 8100	EPA 8020	EPA 8020
Analyst:	D. Nelson	D. Nelson	D. Nelson
MS/MSD Batch#:	9604877-03	9604877-03	9604877-03
Date Prepared:	4/15/96	4/15/96	4/15/96
Date Analyzed:	4/16/96	4/15/96	4/15/96
Instrument I.D.#:	GCHP-11	GCHP-11	GCHP-11
Conc. Spiked:	50 mg/L	50 mg/L	50 mg/L
Matrix Spike % Recovery:	94	86	84
Matrix Spike Duplicate % Recovery:	98	86	86
Relative % Difference:	4.2	0.0	2.4
LCS Batch#:	BLK041996	BLK041996	BLK041996
Date Prepared:	4/19/96	4/15/96	4/15/96
Date Analyzed:	4/22/96	4/15/96	4/15/96
Instrument I.D.#:	GCHP-11	GCHP-11	GCHP-11
LCS % Recovery:	63	63	80
% Recovery Control Limits:	30-120	30-120	30-120

SEQUOIA ANALYTICAL, #1210

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, Inc.
2401 Stanwell Drive, Suite 400, Concord, CA 94520
Tel: (510) 602-5120 Fax: (510) 689-1918

9604234

CHAIN OF CUSTODY

SAMPLER: (Joe) HOVSIA AJEMIAN

WITNESSING AGENCY:

UNOCAL S/S # 7176 CITY: Dublin

ADDRESS: 7850 Amador Valley Blvd.

TURN AROUND TIME: Regular

SAMPLE ID NO.	DATE	TIME	WATER	GRAB	COMP	NO. OF CONT.	SAMPLING LOCATION	TPH-GAS BTEX/MTBE	TPH-DIESEL	TOG	8010	~~8020~~ PNA EPA 8100				REMARKS
U-1	4-11-96	9:45 A.M.	✓	✓		4 VoA 1 Amber	Wells	✓	✓			✓		6041055		AE
U-2	"	8:45 A.M.	✓	✓		4 VoA 1 Amber	"	✓	✓			✓		6041056		
U-3	"	8:22 A.M.	✓	✓		2 VoA 1 Amber	"	✓	✓					6041057		AC

RELINQUISHED BY:	DATE/TIME	RECEIVED BY:
Joe Ajemian (SIGNATURE)	4-11-96 7:30 p.m.	Tony Mueller (SIGNATURE)
[signature] (SIGNATURE)	4/12/96 1400	[signature] (SIGNATURE)
[signature] (SIGNATURE)	4/12 1615	Charlie [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? 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: Tony Mueller TITLE: analyst DATE: 4/11/96 @ 1940

M P D S Services, Inc.
2401 Stanwell Drive, Suite 400, Concord, CA 94520
Tel: (510) 602-5120 Fax: (510) 689-1918

9604234

CHAIN OF CUSTODY

SAMPLER: (JOE) HOVSIA AJEMIAN

WITNESSING AGENCY

UNOCAL S/S # 7176 CITY: Dublin

ADDRESS: 7850 Amador Valley Blvd

SAMPLE ID NO.	DATE	TIME	WATER	GRAB	COMP	NO. OF CONT.	SAMPLING LOCATION	TPH-GAS BTEX	TPH-DIESEL	TOG	8010	PNA EPA 8100				ANALYSES REQUESTED
U-1	4-16-96	1:30 P.M	✓	✓		1 Amber	Wells					✓	6041055			
U-2	"	1:45 P.M	✓	✓		"	"					✓	6041056			

TURN AROUND TIME: Regular

REMARKS

RELINQUISHED BY:

(SIGNATURE) Joe Ajemian — DATE/TIME 4-16-96 1450

(SIGNATURE) — 4-17 1400

(SIGNATURE) — 4-17 1600

(SIGNATURE)

RECEIVED BY:

(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? N/A
4. WERE SAMPLES IN APPROPRIATE CONTAINERS AND PROPERLY PACKAGED? yes

SIGNATURE: TITLE: DATE: 4/16/96

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2401 Stanwell Drive, Suite 400, Concord, CA 94520
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9604234

CHAIN OF CUSTODY

SAMPLER: (JOE) HOVSIA AJEMIAN
WITNESSING AGENCY

UNOCAL S/S # 7176 CITY: Dublin
ADDRESS: 7850 Amador Valley Blvd.

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
ES1	4-11-96					1 VOA		/		6041058						
ES2	"					"		/		6041059						
ES3	"					"		/		6041060						

RELINQUISHED BY:	DATE/TIME	RECEIVED BY:
(SIGNATURE)	7:30 P.M. 4-11-96	(SIGNATURE)
(SIGNATURE)	4/12/96 1500	(SIGNATURE)
(SIGNATURE)	4/12 1615	(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: TITLE: analyst DATE: 4/11/96