MONITORING
PURGING
DISPOSING
SAMPLING

MPDS SERVICES, INCORPORATED

November 15, 1995

Mr. Scott Seery
Alameda County Health Care Services
1131 Harbor Bay Parkway
Alameda, California 94502

RE: Unocal Service Station #5430
1935 Washington Avenue
San Leandro, California

Per the request of the Unocal Corporation Project Manager, Mr. David J. Camille, enclosed please find our report (MPDS-UN5430-08) dated October 18, 1995 for the above referenced site.

Should you have any questions regarding the reporting of data, please feel free to call our office at (510) 602-5120. Any other questions may be directed to the Project Manager at (510) 277-2335.

Sincerely,

MPDS Services, Inc.

Jarrel F. Crider

Jarrel F. Crider

/jfc

Enclosure

cc: Mr. David J. Camille

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

PACIFIC
ENVIRONMENTAL
GROUP, INC.

October 6, 1995
Project 310-038.1C

Mr. John Jang
Regional Water Quality Control Board
San Francisco Bay Region
2101 Webster Street, Suite 500
Oakland, California 94612

Re: Unocal Corporation
Quarterly Summary Report
Third Quarter 1995

Dear Mr. Jang:

As directed by Mr. Dave Camille of Unocal Corporation, Pacific Environmental Group, Inc. is forwarding the quarterly summary report for the following location:

Service Station	Location
5430	1935 Washington Avenue, San Leandro

If you have questions or comments, please do not hesitate to contact our office at (408) 441-7500.

Sincerely,

Pacific Environmental Group, Inc.

Joseph Muzzio
Project Geologist

Enclosure

cc: Mr. Dave Camille, Unocal Corporation
Mr. Michael Bakaldin, San Leandro Fire Department
Mr. Scott Seery, Alameda County Environmental Health Care Services

ENVIRONMENTAL PROTECTION 95 OCT 10 PM 1:30

Quarterly Summary Report
Third Quarter 1995

Unocal Service Station 5430
1935 Washington Avenue at Castro Street
San Leandro, California

County STID #: 1747
County: Alameda

BACKGROUND

Unocal files suggest that a product line leak occurred in June 1976, and that one of the original underground gasoline storage tanks failed a precision test in October 1981. In December 1981, the two original steel gasoline storage tanks were replaced with two fiberglass gasoline storage tanks. Groundwater Monitoring Wells U-1 through U-3 and Borings U-A through U-E were installed by PACIFIC in August 1993. Perimeter wells U-4 through U-7 were installed in June 1995 to further delineate the extent of hydrocarbon impacted groundwater. Hydrocarbons were detected in the groundwater samples collected from all wells. Monthly groundwater monitoring and quarterly groundwater sampling of the wells was initiated in December 1993.

RECENT QUARTER ACTIVITIES

Quarterly groundwater monitoring and sampling were performed in September 1995.

NEXT QUARTER ACTIVITIES

Fourth quarter 1995 groundwater monitoring and sampling will be performed.

CHARACTERIZATION/REMEDIAL STATUS

Soil contamination delineated? None encountered.
Dissolved groundwater delineated? No.
Free product delineated? Not applicable.
Amount of groundwater contaminant recovered this quarter? None
Soil remediation in progress? Not Applicable.
Anticipated start date? Not Applicable.
Anticipated completion date? Not Applicable.
Dissolved/free product remediation in progress? No.
Anticipated start? Unknown.
Anticipated completion? Unknown.

CONSULTANT: Pacific Environmental Group, Inc.

MONITORING
PURGING
DISPOSING
SAMPLING

MPDS SERVICES, INCORPORATED

MPDS-UN5430-08
October 18, 1995

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

Attention: Mr. David J. Camille

RE: Quarterly Data Report
Unocal Service Station #5430
1935 Washington Avenue
San Leandro, California

Dear Mr. Camille:

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 September 18, 1995. Prior to sampling, the wells were each purged of between 6 and 7.5 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. Trip blank, Equipment blank and Field 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

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

date are summarized in Tables 3 and 4. 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 Mr. Scott Seery of the Alameda County Environmental Health Care Services, Mr. Michael Bakaldin of the San Leandro Fire Department.

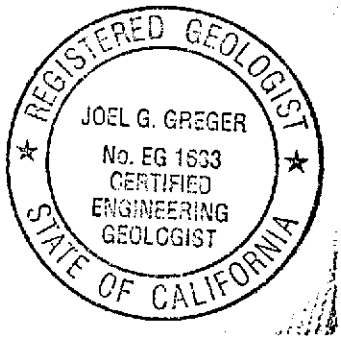
If you have any questions regarding this report, please do not hesitate to call Mr. Nubar Srabian at (510) 602-5120.

Sincerely,

MPDS Services, Inc.

Haig (Gary) Tejirian
Senior Staff Geologist

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: Mr. Joe Muzzio, Pacific Environmental Group, 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 September 18, 1995)						
U-1	25.44	30.65	39.66	0	No	6.5
U-2	25.64	29.65	39.40	0	No	7
U-3	25.68	29.55	38.61	0	No	6.5
U-4	25.60	29.79	39.20	0	No	6.5
U-5	25.63	28.55	38.76	0	No	7.5
U-6	25.41	29.95	40.12	0	No	7
U-7	25.84	29.21	37.91	0	No	6
(Monitored and Sampled on June 20, 1995)						
U-1	27.89	28.20	39.62	0	No	8
U-2	28.55	26.74	36.40	0	No	9
U-3	28.53	26.70	38.57	0	No	8.5
U-4	28.49	26.90	39.17	0	No	8.5
U-5	28.58	25.60	38.80	0	No	9
U-6	28.21	27.15	40.10	0	No	9
U-7	28.67	26.38	37.95	0	No	8
(Monitored and Sampled on March 14, 1995)						
U-1	28.23	27.86	39.70	0	No	8.5
U-2	28.93	26.36	39.40	0	No	9
U-3	29.79	25.44	38.62	0	No	9
U-4	28.87	26.52	39.42	0	No	9
U-5	28.98	25.20	39.22	0	No	10
U-6	28.42	26.94	40.22	0	No	9.5
U-7	28.92	26.13	38.00	0	No	8.5
(Monitored and Sampled on December 6, 1994)						
U-1	23.73	32.37	39.64	0	No	5
U-2	23.83	31.44	39.35	0	No	5.5
U-3	23.90	31.34	38.44	0	No	5

TABLE 1 (Continued)

SUMMARY OF MONITORING DATA

Well #	Well Casing Elevation (feet)*	Well Casing Elevation (feet)**
U-1	56.10	56.09
U-2	55.27	55.29
U-3	55.24	55.23
U-4	-	55.39
U-5	-	54.18
U-6	-	55.36
U-7	-	55.05

◆ 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. These elevations were used prior to March 1995.

** The elevation of the top of the well casings were resurveyed on March 1995, based on benchmark provided by City of San Leandro, City Engineers Office, Datum 1929, USGS adjusted.

TABLE 2

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

(Measured on September 18, 1995)

Well #	Gallons per Casing Volume	Time	Gallons Purged	Casing Volumes Purged	Temperature (°F)	Conductivity ([μmhos/cm] x100)	pH
U-1	1.53	12:55	0	0	71.2	11.77	7.00
			1.5	0.98	70.4	11.14	6.82
			3	1.96	70.0	11.45	6.75
			4.5	2.94	69.7	11.52	6.62
		13:25	6.5	4.25	70.8	12.30	6.77
U-2	1.66	10:10	0	0	73.3	9.66	6.90
			2	1.20	69.9	9.18	6.51
			4	2.41	69.3	9.36	6.44
			6	3.61	69.0	9.32	6.43
		10:25	7	4.22	69.1	8.95	6.44
U-3	1.54	14:50	0	0	74.9	13.08	6.62
			1.5	0.97	74.1	12.29	6.63
			3	1.95	73.4	12.03	6.51
			4.5	2.92	72.6	12.16	6.37
		15:05	6.5	4.22	71.9	11.73	6.33
U-4	1.60	12:00	0	0	72.8	12.38	7.14
			1.5	0.94	69.7	10.76	6.79
			3	1.88	69.3	10.19	6.57
			4.5	2.81	69.4	10.19	6.50
		12:15	6.5	4.06	69.2	9.99	6.48

TABLE 2 (Continued)

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

(Measured on September 18, 1995)

Well #	Gallons per Casing Volume	Time	Gallons Purged	Casing Volumes Purged	Temperature (°F)	Conductivity ([µmhos/cm] x100)	pH
U-5	1.74	09:20	0	0	66.0	9.93	7.01
			2	1.15	67.0	8.22	6.90
			4	2.30	67.3	8.72	6.64
			6	3.45	67.9	7.95	7.06
		09:35	7.5	4.31	68.4	8.56	6.96
U-6	1.73	14:05	0	0	75.1	14.91	6.73
			1.5	0.87	72.8	13.05	6.48
			3	1.73	71.7	13.50	6.49
			4.5	2.60	71.6	13.52	6.35
		14:20	7	4.05	71.8	13.06	6.47
U-7	1.48	11:00	0	0	71.7	7.98	7.21
			1.5	1.01	70.3	7.23	7.06
			3	2.03	69.9	7.12	6.79
			4.5	3.04	69.5	7.27	6.68
		11:15	6	4.05	69.2	7.37	6.68

TABLE 3

SUMMARY OF LABORATORY ANALYSES
WATER

Date	Well#	TPH as Diesel	TPH as Gasoline	Benzene	Toluene	Ethyl-benzene	Xylenes
9/18/95	U-1▼	72	57	1.2	0.75	0.57	2.2
6/20/95	U-1	170**	500	50	ND	ND	4.4
3/14/95	U-1	71**	380	20	ND	ND	10
12/06/94	U-1▲	ND	ND	ND	ND	ND	ND
9/15/94	U-1▲	83**	ND	0.50	0.85	ND	0.77
6/19/94	U-1▲	61**	51	ND	1.4	ND	2.7
3/25/94	U-1▲	57**	58	0.63	0.79	ND	0.65
12/16/93	U-1▲	130**	ND	ND	ND	ND	ND
8/13/93	U-1▲	50*	310	0.84	ND	2.6	1
9/18/95	U-2▼	--	ND	ND	ND	ND	0.85
6/20/95	U-2	--	ND	ND	0.58	ND	1.7
3/14/95	U-2	--	89	ND	ND	ND	1.2
12/06/94	U-2	--	250	19	ND	ND	ND
9/15/94	U-2	--	1,000♦♦	44	ND	ND	ND
6/19/94	U-2	--	180♦	ND	ND	ND	0.86
3/25/94	U-2	--	130	0.70	0.78	0.65	0.64
12/16/93	U-2	--	330	1.7	ND	11	8.5
8/13/93	U-2	--	1,400	ND	ND	ND	ND
9/18/95	U-3▼	--	9,800	600	ND	1,000	760
6/20/95	U-3	--	9,800	590	ND	800	1,000
3/14/95	U-3	--	13,000	860	120	1,300	1,700
12/06/94	U-3	--	17,000	390	ND	990	560
9/15/94	U-3	--	12,000	370	ND	970	610
6/19/94	U-3	--	17,000	580	ND	1,300	90
3/25/94	U-3	--	18,000	560	40	1,000	770
12/16/93	U-3	--	15,000	570	ND	940	670
8/13/93	U-3	--	23,000	1,000	ND	1,700	1,600
9/18/95	U-4▼	--	ND	ND	ND	ND	ND
6/20/95	U-4	--	ND	ND	ND	ND	1.5
3/14/95	U-4	--	490	3.2	2.1	0.79	1.2

TABLE 3 (Continued)

SUMMARY OF LABORATORY ANALYSES
WATER

Date	Well#	TPH as Diesel	TPH as Gasoline	Benzene	Toluene	Ethyl-benzene	Xylenes
9/18/95	U-5	--	ND	ND	ND	ND	0.66
6/20/95	U-5	--	ND	ND	ND	ND	1.6
3/14/95	U-5	--	ND	ND	ND	ND	1.2
9/18/95	U-6▼	--	9,500	260	ND	1,400	1,800
6/20/95	U-6	--	8,500	170	11	950	1,300
3/14/95	U-6	--	14,000	170	36	790	1,500
9/18/95	U-7	--	ND	ND	ND	ND	ND
6/20/95	U-7	--	ND	ND	ND	ND	ND
3/14/95	U-7	--	ND	ND	ND	ND	ND

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

▲ Total Oil and Grease was non-detectable.

♦ 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.

* Not a typical diesel pattern; lower boiling hydrocarbons in the boiling range of stoddard calculated as diesel.

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

ND = Non-detectable.

-- Indicates analysis was not performed.

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

Note: Laboratory analyses data prior to December 16, 1993, were provided by Pacific Environmental Group, Inc.

TABLE 4

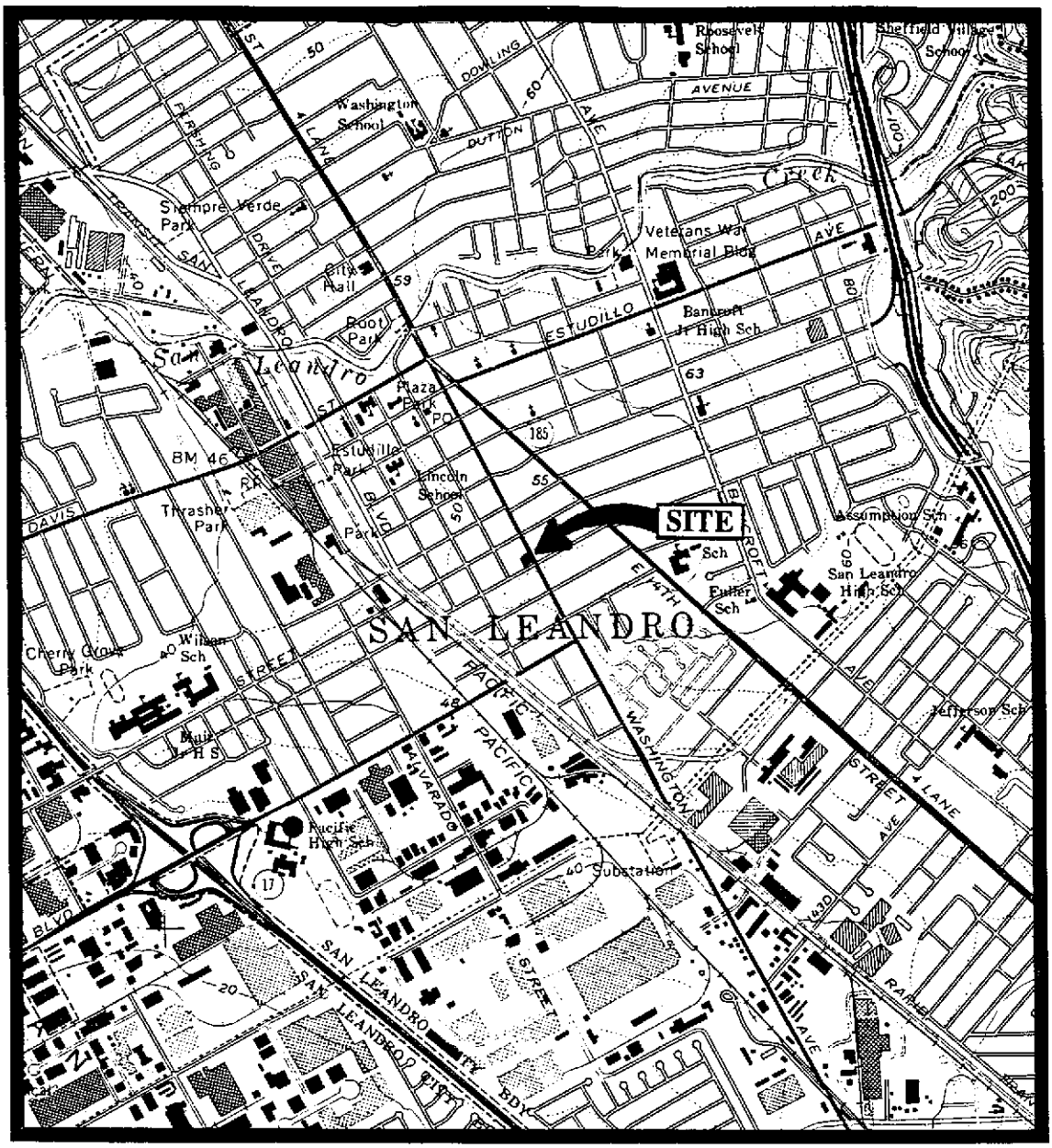
SUMMARY OF LABORATORY ANALYSES
WATER

Date	Well #	1,2-Dichloro-benzene	1,2-Dichloro-ethane
12/06/94	U-1	ND	5.8
9/15/94	U-1	ND	9.5
6/19/94	U-1	ND	7.4
3/25/94	U-1	ND	11
12/06/94	U-2	ND	ND
9/15/94	U-2	ND	0.66
6/19/94	U-2	ND	0.54
3/25/94	U-2	ND	ND
12/06/94	U-3	ND	430
9/15/94	U-3	ND	420
6/19/94	U-3	ND	410
3/25/94	U-3	ND	480
3/14/95	U-4	ND	ND
3/14/95	U-5	ND	ND
3/14/95	U-6	ND	210
3/14/95	U-7	ND	ND

ND = Non-detectable.

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

Note: All EPA method 8010 constituents were non-detectable, except as indicated above.

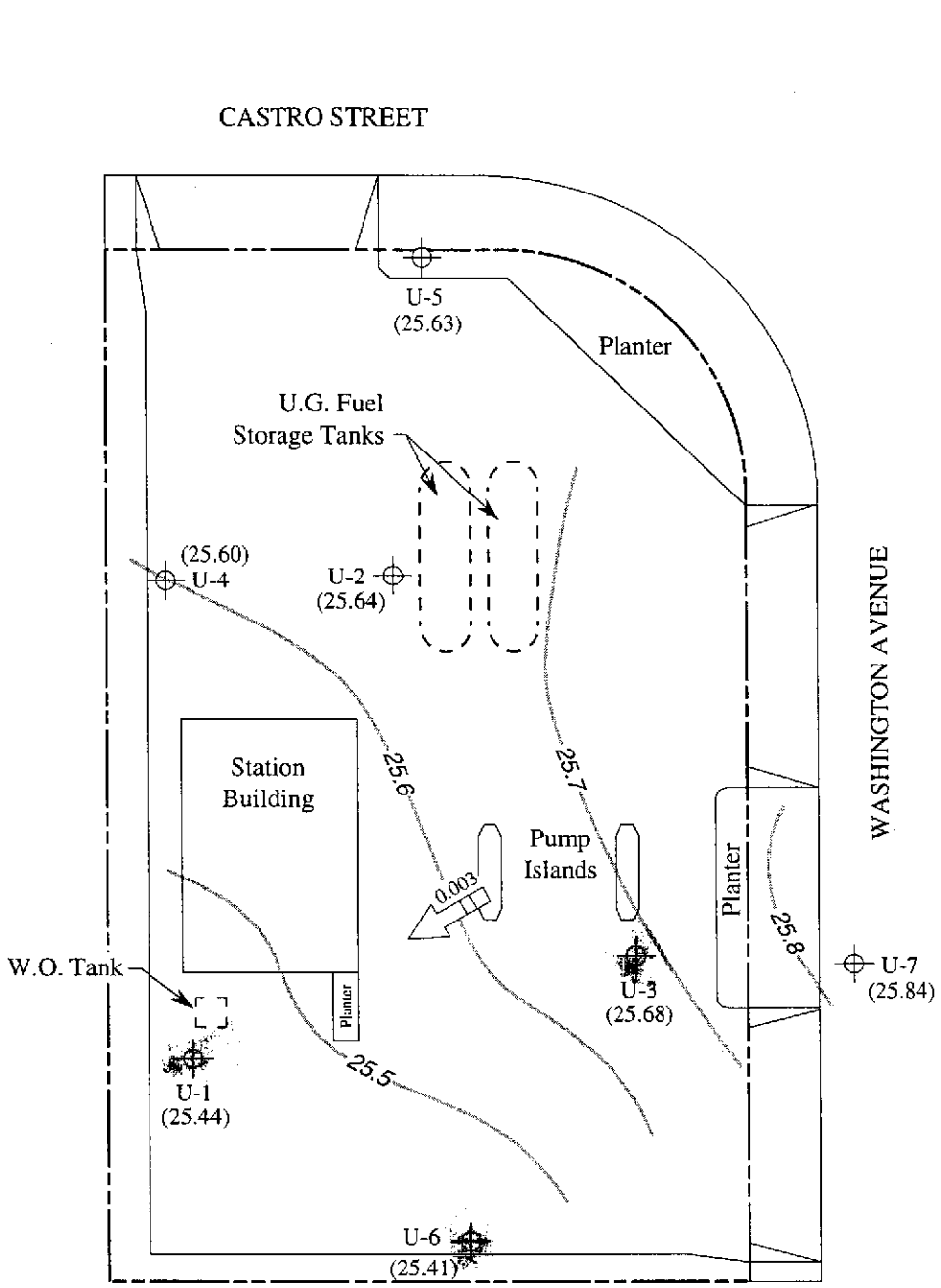


Base modified from 7.5 minute U.S.G.S. San Leandro Quadrangle
(photorevised 1980)

0 2000 4000

Approx. scale feet

mpds SERVICES, INCORPORATED	**UNOCAL SERVICE STATION #5430** **1935 WASHINGTON AVENUE** **SAN LEANDRO, CALIFORNIA**	**LOCATION MAP**



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 30 60

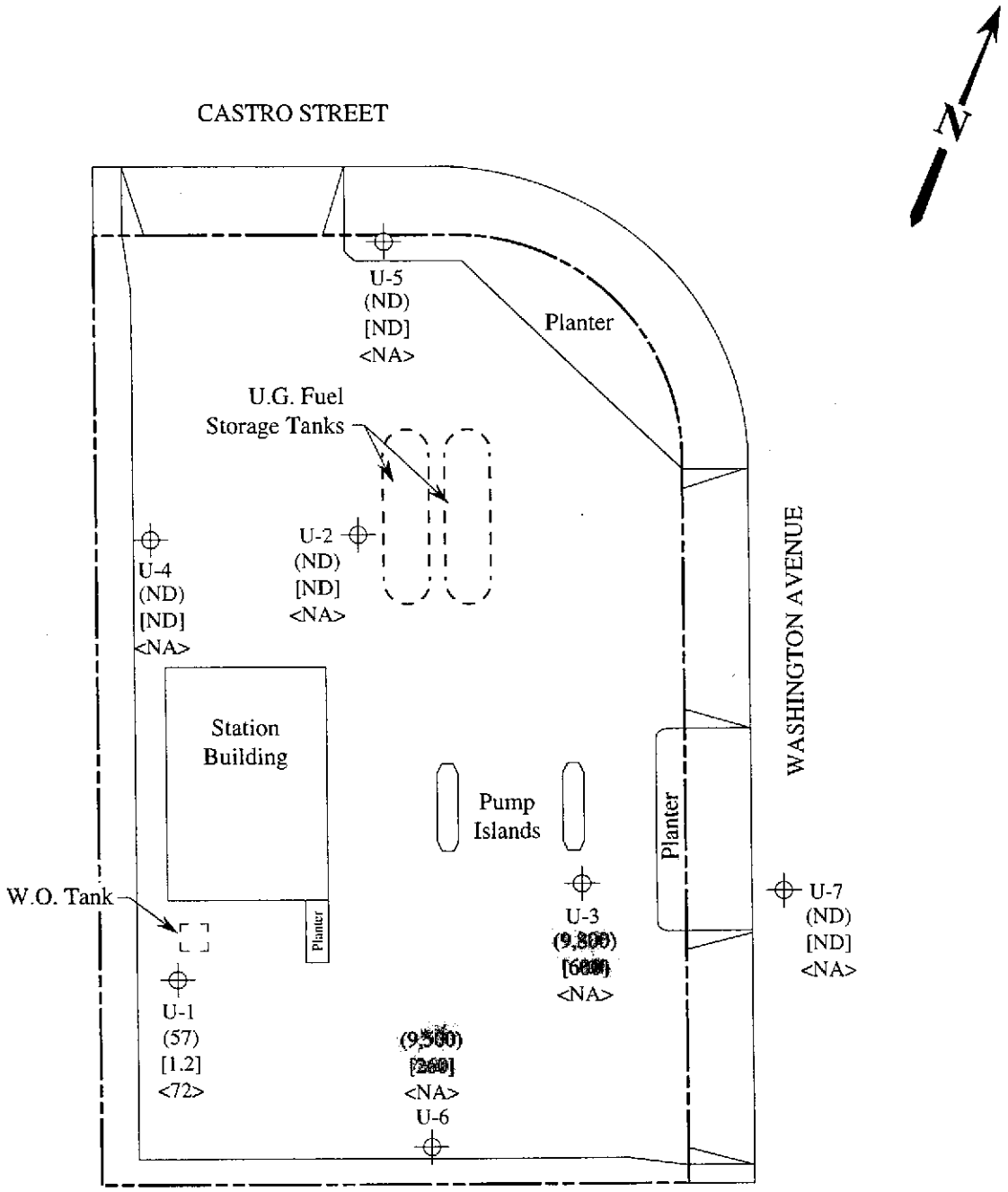
Approx. scale feet

POTENTIOMETRIC SURFACE MAP FOR THE SEPTEMBER 18, 1995 MONITORING EVENT

mpds SERVICES, INCORPORATED

UNOCAL SERVICE STATION #5430
1935 WASHINGTON AVENUE
SAN LEANDRO, 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.

0 30 60

Approx. scale feet

PETROLEUM HYDROCARBON CONCENTRATIONS IN GROUND WATER ON SEPTEMBER 18, 1995

mpds SERVICES, INCORPORATED

UNOCAL SERVICE STATION #5430
1935 WASHINGTON AVENUE
SAN LEANDRO, 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 #5430, 1935 Washington Ave., San Leandro	Sampled: Sep 18, 1995
2401 Stanwell Dr., Ste. 300	Matrix Descript:	Water	Received: Sep 18, 1995
Concord, CA 94520	Analysis Method:	EPA 5030/8015 Mod./8020	Reported: Oct 5, 1995
Attention: Sarkis Karkarian	First Sample #:	509-1221	

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
509-1221	U1	57	1.2	0.75	0.57	2.2
509-1222	U2	ND	ND	ND	ND	0.85
509-1223	U3	9,800	600	ND	1,000	760
509-1224	U4	ND	ND	ND	ND	ND
509-1225	U5	ND	ND	ND	ND	0.66
509-1226	U6	9,500	260	ND	1,400	1,800
509-1227	U7	ND	ND	ND	ND	ND
509-1228	ES1	ND	ND	ND	ND	ND
509-1229	ES2	ND	ND	ND	ND	ND
509-1230	ES3	ND	ND	ND	ND	ND
Detection Limits:		**50**	**0.50**	**0.50**	**0.50**	**0.50**

Total Purgeable Petroleum Hydrocarbons are quantitated against a fresh gasoline standard.
Analytes reported as ND were not present above the stated limit of detection.

SEQUOIA ANALYTICAL, #1271

Signature on File

Alan B. Kemp
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

MPDS Services	Client Project ID:	Unocal #5430, 1935 Washington Ave., San Leandro	Sampled: Sep 18, 1995
2401 Stanwell Dr., Ste. 300	Matrix Descript:	Water	Received: Sep 18, 1995
Concord, CA 94520	Analysis Method:	EPA 5030/8015 Mod./8020	Reported: Oct 5, 1995
Attention: Sarkis Karkarian	First Sample #:	509-1221	

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
509-1221	U1	Gasoline	1.0	10/2/95	HP-9	102
509-1222	U2	--	1.0	10/2/95	HP-2	92
509-1223	U3	Gasoline	25	10/2/95	HP-2	116
509-1224	U4	--	1.0	10/2/95	HP-5	88
509-1225	U5	--	1.0	10/2/95	HP-5	86
509-1226	U6	Gasoline	20	10/2/95	HP-2	105
509-1227	U7	--	1.0	10/2/95	HP-5	87
509-1228	ES1	--	1.0	10/2/95	HP-9	107
509-1229	ES2	--	1.0	10/2/95	HP-9	97
509-1230	ES3	--	1.0	10/2/95	HP-9	100

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
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MPDS Services	Client Project ID:	Unocal #5430, 1935 Washington Ave., San Leandro	Sampled: Sep 18, 1995
2401 Stanwell Dr., Ste. 300	Sample Matrix:	Water	Received: Sep 18, 1995
Concord, CA 94520	Analysis Method:	EPA 3510/8015 Mod.	Reported: Oct 5, 1995
Attention: Sarkis Karkarian	First Sample #:	509-1221	

TOTAL EXTRACTABLE PETROLEUM HYDROCARBONS

Analyte	Reporting Limit µg/L	Sample I.D. 509-1221 U1
Extractable Hydrocarbons	50	72
Chromatogram Pattern:		Diesel

Quality Control Data

Report Limit Multiplication Factor:	1.0
Date Extracted:	9/25/95
Date Analyzed:	9/26/95
Instrument Identification:	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

Sequoia Analytical

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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 #5430, 1935 Washington Ave., San Leandro
Matrix: Liquid
QC Sample Group: 5091221-30
Reported: Oct 5, 1995

QUALITY CONTROL DATA REPORT

ANALYTE	Benzene	Toluene	Ethyl Benzene	Xylenes	Diesel
Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020	EPA 8015
Analyst:	K. Nill	K. Nill	K. Nill	K. Nill	J. Dinsay
MS/MSD Batch#:	5091211	5091211	5091211	5091211	-
Date Prepared:	10/2/95	10/2/95	10/2/95	10/2/95	-
Date Analyzed:	10/2/95	10/2/95	10/2/95	10/2/95	-
Instrument I.D.#:	HP-5	HP-5	HP-5	HP-5	-
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L	60 µg/L	-
Matrix Spike % Recovery:	90	95	95	97	-
Matrix Spike Duplicate % Recovery:	85	90	95	95	-
Relative % Difference:	5.7	5.4	0.0	1.7	-
LCS Batch#:	3LCS100295	3LCS100295	3LCS100295	3LCS100295	LCS092595
Date Prepared:	10/2/95	10/2/95	10/2/95	10/2/95	9/25/95
Date Analyzed:	10/2/95	10/2/95	10/2/95	10/2/95	9/26/95
Instrument I.D.#:	HP-5	HP-5	HP-5	HP-5	GCHP-3A
LCS % Recovery:	93	92	94	96	113
% Recovery Control Limits:	71-133	72-128	72-130	71-120	38-122

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
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MPDS Services
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Concord, CA 94520
Attention: Sarkis Karkarian

Client Project ID: Unocal #5430, 1935 Washington Ave., San Leandro
Matrix: Liquid
QC Sample Group: 5091221-30
Reported: Oct 5, 1995

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#:	5091208	5091208	5091208	5091208
Date Prepared:	10/2/95	10/2/95	10/2/95	10/2/95
Date Analyzed:	10/2/95	10/2/95	10/2/95	10/2/95
Instrument I.D.#:	HP-4	HP-4	HP-4	HP-4
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L	60 µg/L
Matrix Spike % Recovery:	90	95	95	97
Matrix Spike Duplicate % Recovery:	90	95	95	97
Relative % Difference:	0.0	0.0	0.0	0.0
LCS Batch#:	2LCS100295	2LCS100295	2LCS100295	2LCS100295
Date Prepared:	10/2/95	10/2/95	10/2/95	10/2/95
Date Analyzed:	10/2/95	10/2/95	10/2/95	10/2/95
Instrument I.D.#:	HP-4	HP-4	HP-4	HP-4
LCS % Recovery:	92	96	98	97
% 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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Concord, CA 94520
Attention: Sarkis Karkarian

Client Project ID: Unocal #5430, 1935 Washington Ave., San Leandro
Matrix: Liquid
QC Sample Group: 5091221-30
Reported: Oct 5, 1995

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#:	5091229	5091229	5091229	5091229
Date Prepared:	10/2/95	10/2/95	10/2/95	10/2/95
Date Analyzed:	10/2/95	10/2/95	10/2/95	10/2/95
Instrument I.D.#:	HP-9	HP-9	HP-9	HP-9
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L	60 µg/L
Matrix Spike % Recovery:	100	105	105	115
Matrix Spike Duplicate % Recovery:	110	115	115	123
Relative % Difference:	9.5	9.1	9.1	7.0
LCS Batch#:	9LCS100295	9LCS100295	9LCS100295	9LCS100295
Date Prepared:	10/2/95	10/2/95	10/2/95	10/2/95
Date Analyzed:	10/2/95	10/2/95	10/2/95	10/2/95
Instrument I.D.#:	HP-9	HP-9	HP-9	HP-9
LCS % Recovery:	91	99	101	111
% Recovery Control Limits:	71-133	72-128	72-130	71-120

SEQUOIA ANALYTICAL, #1271

Signature on File

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Project Manager

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MPDS Services
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Concord CA 94520
Attention: Sarkis Karkarian

Date: 10/6/95

Sequoia Analytical has potentially identified the presence of MTBE at reportable levels for the following site(s):

Client Project I.D. - **Unocal #5430, San Leandro** Sequoia Work Order # - **9509304**

Sample Number:	Sample Description:
5091221	U1
5091222	U2
5091223	U3
5091224	U4
5091226	U6

SEQUOIA ANALYTICAL, #1271

Alan B. Kemp
Project Manager

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

CHAIN OF CUSTODY

9503041

SAMPLER: RAY MARANGOSIAN

WITNESSING AGENCY:

UNOCAL S/S # 5340 CITY: SAN LEANDRO

ADDRESS: 1935 Washington Ave

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
U1	9.18.95	13:45	x	x		3	Well	X	X			5091221	AC		
U2	"	10:35	x	x		2	"	X				5091222	AB		
U3	"	15:15	x	x		4	"	X				5091223			
U4	"	12:25	x	x		4	"	X				5091224			
U5	"	9:40	x	x		4	"	X				5091225			
U6	"	14:30	x	x		4	"	x				5091226			
U7	"	11:25	x	x		6	"	x				5091227			

RELINQUISHED BY:	DATE/TIME	RECEIVED BY:	DATE/TIME
Ray Marangosian	9/18/95 16:25		9/18/95 1625
(SIGNATURE)	9-19 1510	(SIGNATURE)	9-19 1510
(SIGNATURE)	9-19	(SIGNATURE)	9/19 1445
(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: [signature] TITLE: analyst DATE: 9/18

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 HN03. All other containers are unpreserved.

mpds SERVICES, INCORPORATED
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Concord, California 94520
Tel: (510) 602-5100, Fax: (510) 689-1918

CHAIN OF CUSTODY

9509304

SAMPLER: RAY MARANGOSIAN

WITNESSING AGENCY:

UNOCAL #3
S/S # 5340 CITY: SAN LEANDRO
ADDRESS: 1935 WASHINGTON AVE

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	9/18/95		L	X		1		X			5091228				
ES2	"		X	X		1		X			5091229				
ES3	"		L	X		1		X			5091230				

RELINQUISHED BY:	DATE/TIME	RECEIVED BY:	DATE/TIME
Ray Marangosian	9/18/95 16:25		9/18/95 1625
(SIGNATURE)	1510 9-19	(SIGNATURE)	1510 9-19
(SIGNATURE)	9-19	(SIGNATURE)	9/19 1145
(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: [signature] TITLE: analyst DATE: 9/18

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.