MONITORING
PURGING
DISPOSING
SAMPLING
MPDS SERVICES, INCORPORATED

November 7, 1996

STID
1747

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 data report (MPDS-UN5430-12) dated October 2, 1996 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

/jfc

Enclosure

cc: Mr. David J. Camille

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

PACIFIC
ENVIRONMENTAL
GROUP, INC.

October 18, 1996
Project 310-038.1D

SHD
1747

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 1996

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. Dale Klettke, Alameda County Environmental Health Care Services

2025 Gateway Place, Suite 440, San Jose, California 95110 (408) 441-7500 FAX (408) 441-7539

Quarterly Summary Report
Third Quarter 1996

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 in August 1993. Perimeter wells U-4 through U-7 were installed in June 1995 for further delineation of hydrocarbon impacted groundwater. Monthly groundwater monitoring and quarterly sampling of the wells was initiated in December 1993.

Alameda County Health Services (ACHS) submitted a request for delineation of hydrocarbon impacted groundwater in the southern portion of the site. Unocal submitted a workplan in January 1996. Unocal investigated former usage of the site located south of their site. The review found that the adjacent site was formerly a service station which included four USTs. Unocal proceeded with access agreement negotiations to install borings on properties south and west of the facility.

RECENT QUARTER ACTIVITIES

Quarterly groundwater monitoring and sampling were performed in September 1996. Unocal attempted to obtain a site access agreement for the site south of the Unocal facility, but was denied access by the property owner. Therefore, Unocal's proposed groundwater assessment cannot be implemented at this time.

NEXT QUARTER ACTIVITIES

Fourth quarter 1996 groundwater monitoring and sampling will be performed, and a summary report will be submitted. Unocal will request asistance from the ACHS in obtaining site access from the property owner.

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-UN5430-12
October 2, 1996

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 6, 1996. Prior to sampling, the wells were each purged of between 4.5 and 7.5 gallons of water. During purging operations, the field parameters pH, temperature, and electrical conductivity were recorded on the purging/sampling data sheets which are attached to this report. 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, Equipment 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 Tables 2 and 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

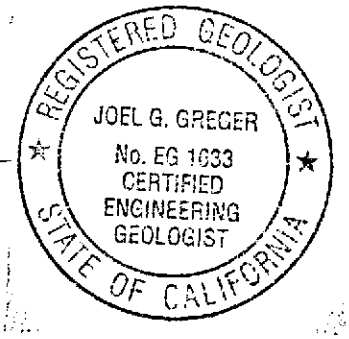
A copy of this report should be sent to Mr. Scott Seery of the Alameda County Environmental Health Care Services, and Mr. Michael Bakaldin of the San Leandro Fire Department.

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 8/31/98

Attachments: Tables 1, 2 & 3
Location Map
Figures 1 & 2
Laboratory Analyses
Chain of Custody documentation
Purging/Sampling Data Sheets

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 6, 1996)			
U-1	25.84	30.25	39.62	0	No	4.5
U-2	26.11	29.18	39.28	0	No	7
U-3	26.17	29.06	38.54	0	No	6.5
U-4	26.07	29.32	39.08	0	No	7
U-5	26.12	28.06	38.56	0	No	7.5
U-6	25.95	29.41	40.02	0	No	7.5
U-7	26.30	28.75	37.77	0	No	6.5
			(Monitored and Sampled on June 4, 1996)			
U-1	28.66	27.43	39.62	0	No	8.5
U-2	29.26	26.03	39.35	0	No	9.5
U-3	29.23	26.00	38.54	0	No	9.5
U-4	29.20	26.19	39.08	0	No	9
U-5	29.27	24.91	38.58	0	No	9.5
U-6	28.84	26.52	40.03	0	No	9.5
U-7	29.38	25.67	37.75	0	No	8.5
			(Monitored and Sampled on March 6, 1996)			
U-1	29.56	26.53	39.63	0	No	6
U-2	30.12	25.17	39.30	0	No	10
U-3	29.98	25.25	38.57	0	No	9.5
U-4	30.09	25.30	39.10	0	No	9.5
U-5	30.15	24.03	38.65	0	No	10
U-6	29.65	25.71	40.02	0	No	10
U-7	29.95	25.10	37.82	0	No	9
			(Monitored and Sampled on December 14, 1995)			
U-1	23.89	32.20	39.66	0	No	5.5
U-2	24.19	31.10	39.40	0	No	6
U-3	24.21	31.02	38.61	0	No	5.5
U-4	24.16	31.23	39.20	0	No	6
U-5	24.24	29.94	38.74	0	No	6
U-6	24.04	31.32	40.09	0	No	6
U-7	24.30	30.75	37.90	0	No	5

Table 1
Summary of Monitoring Data

Well #	Well Casing Elevation (feet)*
U-1	56.09
U-2	55.29
U-3	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 elevation of the top of the well casings were surveyed March 1995, based on benchmark provided by City of San Leandro, City Engineers Office, Datum 1929, USGS adjusted.

Table 2

Summary of Laboratory Analyses
Water

Well #	Date	TPH as Diesel	TPH as Gasoline	Benzene	Toluene	Ethyl-Benzene	Xylenes	MTBE
U-1	8/13/93†	50*	310	0.84	ND	2.6	1.0	--
	12/16/93†	130**	ND	ND	ND	ND	ND	--
	3/25/94†	57**	58	0.63	0.79	ND	0.65	--
	6/19/94†	61**	51	ND	1.4	ND	2.7	--
	9/15/94†	83**	ND	0.50	0.85	ND	0.77	--
	12/6/94†	ND	ND	ND	ND	ND	ND	--
	3/14/95	71**	380	20	ND	ND	10	--
	6/20/95	170**	500	50	ND	ND	4.4	--
	9/18/95	72	57	1.2	0.75	0.57	2.2	§
	12/14/95	ND	ND	0.72	1.4	1.2	3.6	--
	3/6/96	ND	96	4.5	ND	ND	3.7	ND
	6/4/96	170**	410	48	ND	3.4	7.9	ND
	9/6/96	ND	ND	ND	ND	ND	ND	ND
U-2	8/13/93	--	1,400	ND	ND	ND	ND	--
	12/16/93	--	330	1.7	ND	11	8.5	--
	3/25/94	--	130	0.70	0.78	0.65	0.64	--
	6/19/94	--	180♦	ND	ND	ND	0.86	--
	9/15/94	--	1,000♦♦	44	ND	ND	ND	--
	12/6/94	--	250	19	ND	ND	ND	--
	3/14/95	--	89	ND	ND	ND	1.2	--
	6/20/95	--	ND	ND	0.58	ND	1.7	--
	9/18/95	--	ND	ND	ND	ND	0.85	§
	12/14/95	--	ND	ND	0.89	ND	2.0	§§
	3/6/96	--	ND	ND	ND	ND	ND	80
	6/4/96	--	ND	ND	ND	ND	ND	110
	9/6/96	--	ND	ND	ND	ND	ND	ND
U-3	8/13/93	--	23,000	1,000	ND	1,700	1,600	--
	12/16/93	--	15,000	570	ND	940	670	--
	3/25/94	--	18,000	560	40	1,000	770	--
	6/19/94	--	17,000	580	ND	1,300	90	--
	9/15/94	--	12,000	370	ND	970	610	--
	12/6/94	--	17,000	390	ND	990	560	--
	3/14/95	--	13,000	860	120	1,300	1,700	--
	6/20/95	--	9,800	590	ND	800	1,000	--
	9/18/95	--	9,800	600	ND	1,000	760	§
	12/14/95	--	10,000	520	ND	920	630	§§
	3/6/96	--	19,000	1,400	ND	1,800	3,000	73
	6/4/96	--	8,800	510	ND	600	830	ND
	9/6/96	--	**15,000**	**360**	**20**	**540**	**450**	ND

Table 2

Summary of Laboratory Analyses
Water

Well #	Date	TPH as Diesel	TPH as Gasoline	Benzene	Toluene	Ethyl-Benzene	Xylenes	MTBE
U-4	3/14/95	--	490	3.2	2.1	0.79	1.2	--
	6/20/95	--	ND	ND	ND	ND	1.5	--
	9/18/95	--	ND	ND	ND	ND	ND	§
	12/14/95	--	ND	ND	0.59	ND	0.79	§§
	3/6/96	--	ND	ND	ND	ND	0.62	50
	6/4/96	--	ND	ND	ND	ND	ND	290
	9/6/96	--	ND	ND	ND	ND	ND	ND
U-5	3/14/95	--	ND	ND	ND	ND	1.2	--
	6/20/95	--	ND	ND	ND	ND	1.6	--
	9/18/95	--	ND	ND	ND	ND	0.66	--
	12/14/95	--	ND	ND	ND	ND	ND	--
	3/6/96	--	ND	ND	ND	ND	ND	ND
	6/4/96	--	ND	ND	ND	ND	ND	ND
	9/6/96	--	ND	ND	ND	ND	ND	ND
U-6	3/14/95	--	14,000	170	36	790	1,500	--
	6/20/95	--	8,500	170	11	950	1,300	--
	9/18/95	--	9,500	260	ND	1,400	1,800	§
	12/14/95	--	15,000	240	ND	1,400	1,700	§§
	3/6/96	--	2,400	54	ND	170	250	ND
	6/4/96	--	4,600	83	ND	400	520	46
	9/6/96	--	12,000	180	6.4	690	600	95
U-7	3/14/95	--	ND	ND	ND	ND	ND	--
	6/20/95	--	ND	ND	ND	ND	ND	--
	9/18/95	--	ND	ND	ND	ND	ND	--
	12/14/95	--	ND	ND	ND	ND	0.88	--
	3/6/96	--	ND	ND	ND	ND	ND	ND
	6/4/96	--	ND	ND	ND	ND	ND	ND
	9/6/96	--	ND	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.

§§ 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.

† Total Oil and Grease was non-detectable.

Table 2

Summary of Laboratory Analyses
Water

♦ 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.

MTBE = Methyl tert butyl ether.

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

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

Table 3

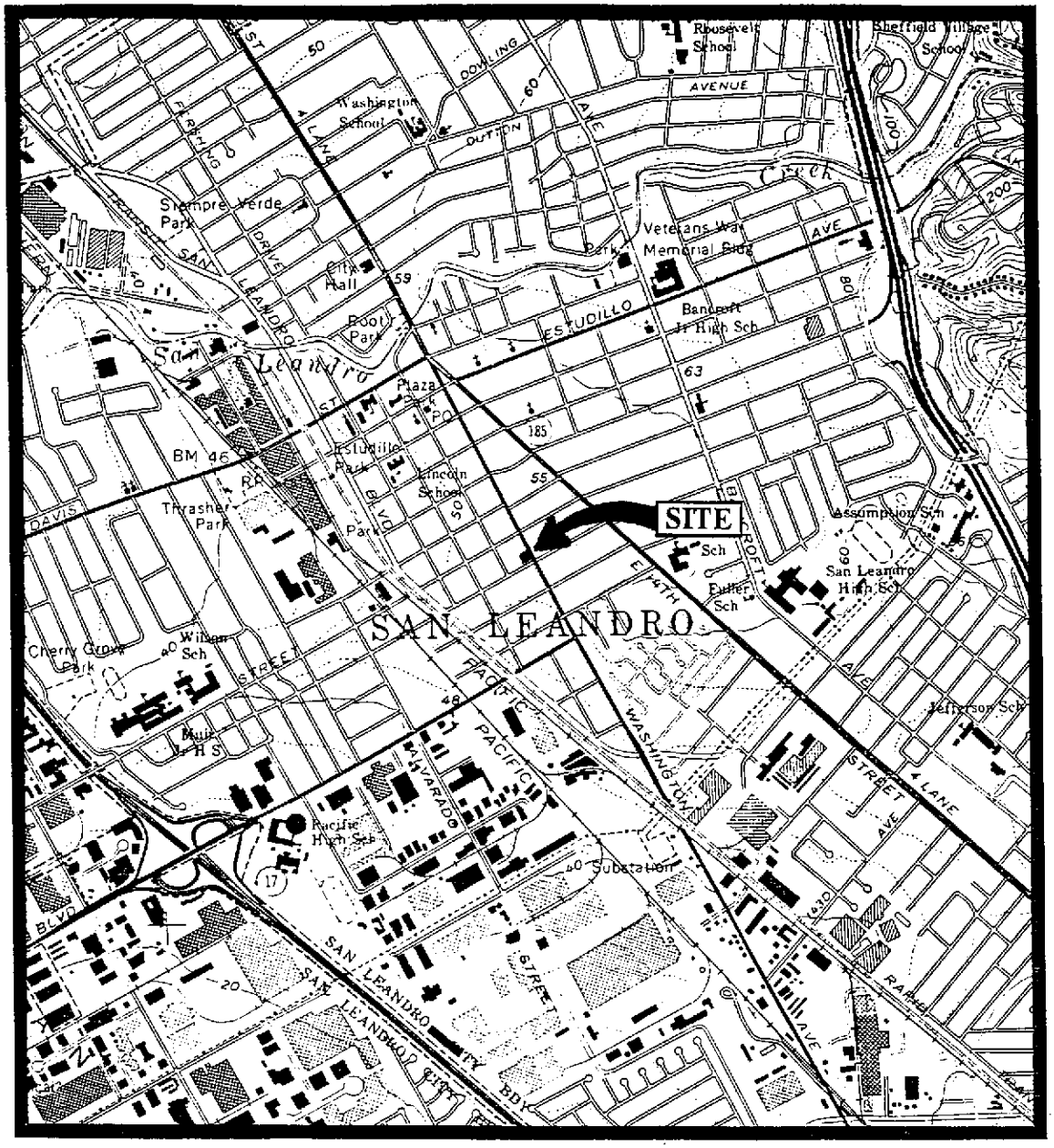
Summary of Laboratory Analyses
Water

Well #	Date	1,2-Dichlorobenzene	1,2-Dichloroethane
U-1	6/19/94	ND	7.4
	9/15/94	ND	9.5
	12/6/94	ND	5.8
	12/14/95	ND	3.8
U-2	3/25/94	ND	11
	3/25/94	ND	ND
	6/19/94	ND	0.54
	9/15/94	ND	0.66
	12/6/94	ND	ND
	12/14/95	ND	ND
U-3	3/25/94	ND	480
	6/19/94	ND	410
	9/15/94	ND	420
	12/6/94	ND	430
	12/14/95	ND	240
U-4	3/14/95	ND	ND
	12/14/95	ND	ND
U-5	3/14/95	ND	ND
	12/14/95	ND	ND
U-6	3/14/95	ND	210
	12/14/95	ND	370
U-7	3/14/95	ND	ND
	12/14/95	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.

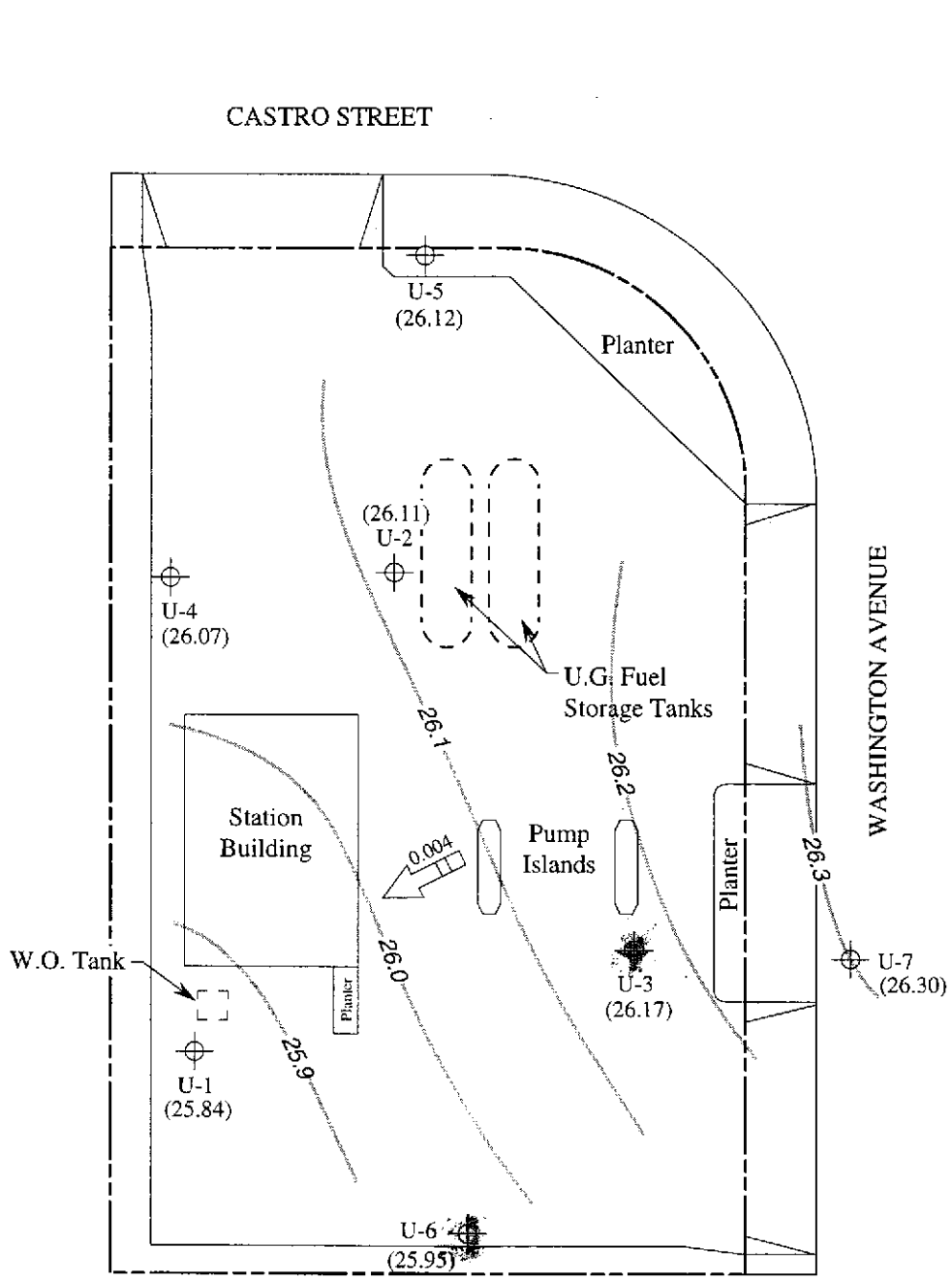


Base modified from 7.5 minute U.S.G.S. San Leandro Quadrangle
(photorevised 1980)

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

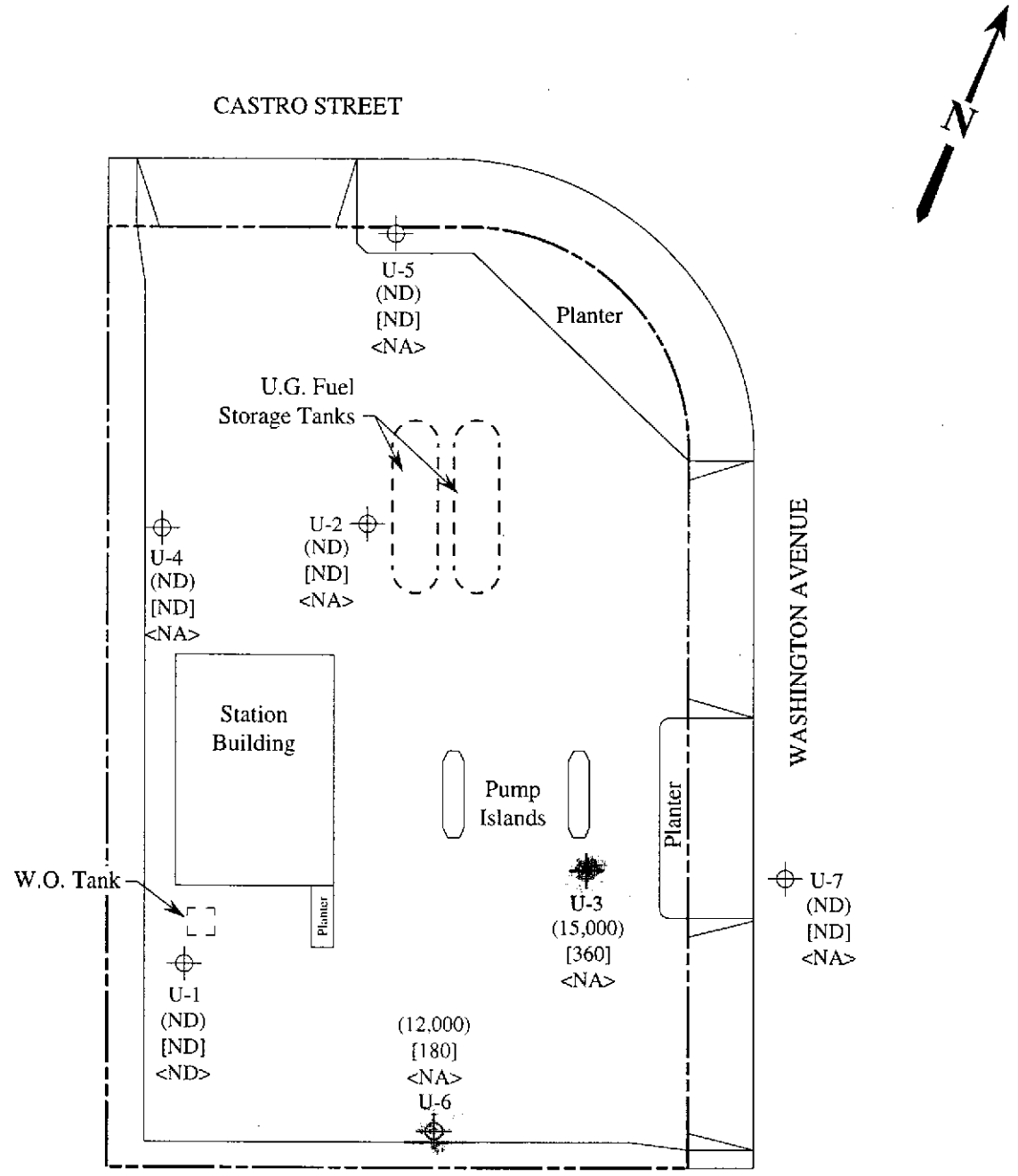
Approx. scale feet

POTENTIOMETRIC SURFACE MAP FOR THE SEPTEMBER 6, 1996 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, NA Not analyzed

0 30 60

Approx. scale feet

PETROLEUM HYDROCARBON CONCENTRATIONS IN GROUND WATER ON SEPTEMBER 6, 1996

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.	Sampled:	Sep 6, 1996
2401 Stanwell Dr., Ste. 300	Matrix Descript:	Water San Leandro	Received:	Sep 6, 1996
Concord, CA 94520	Analysis Method:	EPA 5030/8015 Mod./8020	Reported:	Sep 27, 1996
Attention: Jarrel Crider	First Sample #:	609-0410		

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
609-0410	U-1	ND	ND	ND	ND	ND
609-0411	U-2	ND	ND	ND	ND	ND
609-0412	U-3	15,000	360	20	540	450
609-0413	U-4	ND	ND	ND	ND	ND
609-0414	U-5	ND	ND	ND	ND	ND
609-0415	U-6	12,000	180	6.4	690	600
609-0416	U-7	ND	ND	ND	ND	ND
609-0417	ES-1	ND	ND	ND	ND	ND
609-0418	ES-2	ND	ND	ND	ND	ND
609-0419	ES-3	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
& #1894

Signature on File

Alan B. Kemp
Project Manager

6090410.MPD <1>

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.	Sampled:	Sep 6, 1996
2401 Stanwell Dr., Ste. 300	Matrix Descript:	Water San Leandro	Received:	Sep 6, 1996
Concord, CA 94520	Analysis Method:	EPA 5030/8015 Mod./8020	Reported:	Sep 27, 1996
Attention: Jarrel Crider	First Sample #:	609-0410		

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
609-0410	U-1	--	1.0	9/14/96	HP-2	106
609-0411	U-2	--	1.0	9/13/96	HP-3	102
609-0412	U-3	Gasoline	10	9/13/96	HP-3	89
609-0413	U-4	--	1.0	9/13/96	HP-3	100
609-0414	U-5	--	1.0	9/13/96	HP-3	108
609-0415	U-6	Gasoline	10	9/13/96	HP-3	73
609-0416	U-7	--	1.0	9/13/96	HP-3	101
609-0417	ES-1	--	1.0	9/26/96	HP-4	96
609-0418	ES-2	--	1.0	9/26/96	HP-4	95
609-0419	ES-3	--	1.0	9/26/96	HP-4	94

SEQUOIA ANALYTICAL, #1271
& #1894

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.	Sampled: Sep 6, 1996
2401 Stanwell Dr., Ste. 300	Sample Descript:	Water San Leandro	Received: Sep 6, 1996
Concord, CA 94520	Analysis for:	MTBE (Modified EPA 8020)	
Attention: Jarrel Crider	First Sample #:	609-0410	Analyzed: Sep 13-14, 1996
			Reported: Sep 27, 1996

LABORATORY ANALYSIS FOR: MTBE (Modified EPA 8020)

Sample Number	Sample Description	Detection Limit µg/L	Sample Result µg/L
609-0410	U-1	40	N.D.
609-0411	U-2	40	N.D.
609-0412	U-3	40	N.D.
609-0413	U-4	40	N.D.
609-0414	U-5	40	N.D.
609-0415	U-6	40	95
609-0416	U-7	40	N.D.

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

SEQUOIA ANALYTICAL, #1894

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 6, 1996
2401 Stanwell Dr., Ste. 300	Sample Matrix:	Water	Received:	Sep 6, 1996
Concord, CA 94520	Analysis Method:	EPA 3510/8015 Mod.	Reported:	Sep 27, 1996
Attention: Jarrel Crider	First Sample #:	609-0410		

TOTAL EXTRACTABLE PETROLEUM HYDROCARBONS

Analyte	Reporting Limit µg/L	Sample I.D. 609-0410 U-1
Extractable Hydrocarbons	50	N.D.
Chromatogram Pattern:		--

Quality Control Data

Report Limit Multiplication Factor:	1.0
Date Extracted:	9/11/96
Date Analyzed:	9/12/96
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

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 #5430, 1935 Washington Ave. San Leandro
Matrix: Liquid
QC Sample Group: 6090410-419
Reported: Sep 27, 1996

QUALITY CONTROL DATA REPORT

ANALYTE	Benzene	Toluene	Ethyl Benzene	Xylenes
Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Analyst:	Z.T.	Z.T.	Z.T.	Z.T.
MS/MSD Batch#:	MS091496	MS091496	MS091496	MS091496
Date Prepared:	9/14/96	9/14/96	9/14/96	9/14/96
Date Analyzed:	9/14/96	9/14/96	9/14/96	9/14/96
Instrument I.D.#:	HP-2	HP-2	HP-2	HP-2
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Matrix Spike % Recovery:	84	115	117	92
Matrix Spike Duplicate % Recovery:	80	111	112	122
Relative % Difference:	4.9	5.3	4.4	28
LCS Batch#:	LCS091496	LCS091496	LCS091496	LCS091496
Date Prepared:	9/14/96	9/14/96	9/14/96	9/14/96
Date Analyzed:	9/14/96	9/14/96	9/14/96	9/14/96
Instrument I.D.#:	HP-2	HP-2	HP-2	HP-2
LCS % Recovery:	97	108	99	116
% Recovery Control Limits:	60-140	60-140	60-140	60-140

SEQUOIA ANALYTICAL, #1894

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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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 #5430, 1935 Washington Ave. San Leandro
Matrix: Liquid
QC Sample Group: 6090410-419

Reported: Sep 27, 1996

QUALITY CONTROL DATA REPORT

ANALYTE	Benzene	Toluene	Ethyl Benzene	Xylenes
Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Analyst:	Z.T.	Z.T.	Z.T.	Z.T.
MS/MSD Batch#:	6090824	6090824	6090824	6090824
Date Prepared:	9/13/96	9/13/96	9/13/96	9/13/96
Date Analyzed:	9/13/96	9/13/96	9/13/96	9/13/96
Instrument I.D.#:	HP-3	HP-3	HP-3	HP-3
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Matrix Spike % Recovery:	-	-	-	-
Matrix Spike Duplicate % Recovery:	-	-	-	-
Relative % Difference:	-	-	-	-
LCS Batch#:	LCS091396	LCS091396	LCS091396	LCS091396
Date Prepared:	9/13/96	9/13/96	9/13/96	9/13/96
Date Analyzed:	9/13/96	9/13/96	9/13/96	9/13/96
Instrument I.D.#:	HP-3	HP-3	HP-3	HP-3
LCS % Recovery:	91	99	102	101
% Recovery Control Limits:	60-140	60-140	60-140	60-140

SEQUOIA ANALYTICAL, #1894

Signature on File

Alan B. Kemp
Project Manager

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

Client Project ID: Unocal #5430, 1935 Washington Ave. San Leandro
Matrix: Liquid
QC Sample Group: 6090410-419
Reported: Sep 27, 1996

QUALITY CONTROL DATA REPORT

ANALYTE	Benzene	Toluene	Ethyl Benzene	Xylenes	Diesel
Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020	EPA 8015
Analyst:	-	-	-	-	I.Dalvand
MS/MSD Batch#:	-	-	-	-	BLK091196
Date Prepared:	9/26/96	9/26/96	9/26/96	9/26/96	9/11/96
Date Analyzed:	9/26/96	9/26/96	9/26/96	9/26/96	9/11/96
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:	84	115	117	92	23
Matrix Spike Duplicate % Recovery:	80	111	112	122	40
Relative % Difference:	4.9	5.3	4.4	28	55
LCS Batch#:	LCS091496	LCS091496	LCS091496	LCS091496	LCS091196
Date Prepared:	9/26/96	9/26/96	9/26/96	9/26/96	9/11/96
Date Analyzed:	9/26/96	9/26/96	9/26/96	9/26/96	9/11/96
Instrument I.D.#:	HP-4	HP-4	HP-4	HP-4	HP-3A
LCS % Recovery:	97	108	99	116	83
% Recovery Control Limits:	60-140	60-140	60-140	60-140	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

96090107

SAMPLER	UNOCAL	ANALYSES REQUESTED	TURN AROUND TIME:
VARTKES TASHDJIAN	S/S # 5430 CITY: San Leandro		Regular
WITNESSING AGENCY	ADDRESS: 1935 Washington Ave.		

SAMPLE ID NO.	DATE	TIME	WATER	GRAB	COMP	NO. OF CONT.	SAMPLING LOCATION	TPH-GAS BTEX	TPH-DIESEL	TOG	8010	MTBE				REMARKS
U1	9/6/96	12:55 PM	X	X		2 VOAs 1 Amber.	Well	X	X			X				6090410
U2	"	10:21 AM	X	X		2 VOAs	"	X				X				6090411
U3	"	2:10 PM	X	X		"	"	X				X				6090412
U4	"	11:35 AM	X	X		"	"	X				X				6090413
U5	"	12:10 PM	X	X		"	"	X				X				6090414
U6	"	1:30 PM	X	X		"	"	X				X				6090415
U7	"	10:54 AM	X	X		"	"	X				X				6090416

RELINQUISHED BY:	DATE/TIME	RECEIVED BY:	DATE/TIME
Vartkes Tashdjian	9/6/96 3:25PM	J.D. Cardenas	9-6-96 1525
(SIGNATURE)		(SIGNATURE)	
(SIGNATURE)		(SIGNATURE)	
(SIGNATURE)	9-9	(SIGNATURE)	1550 9/9/96
(SIGNATURE) J.D. Cardenas	9-9-96 1525	(SIGNATURE)	1330 9-9

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: J.D. Cardenas TITLE: Analyst DATE: 9-6-96

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 unpreserved.

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

CHAIN OF CUSTODY

9609107

SAMPLER: VARTKES TASHDJIAN

WITNESSING AGENCY:

UNOCAL S/S # 5430 CITY: San Leandro

ADDRESS: 1935 Washington Ave

SAMPLE ID NO.	DATE	TIME	WATER	GRAB	COMP	NO. OF CONT.	SAMPLING LOCATION	TPH-GAS BTEX	TPH-DIESEL	TOG	8010				REMARKS
ES 1	9/6/96					1 VOA		X							6090417
ES 2	"					"		X							6090418
ES 3	"					"		X							6090419

TURN AROUND TIME: Regular

RELINQUISHED BY:	DATE/TIME	RECEIVED BY:	DATE/TIME
Vartkes Tashdjian (SIGNATURE)	9/6/96 3:25 pm	L D Cardenas (SIGNATURE)	9-6-96 1525
(SIGNATURE)		(SIGNATURE)	9-13 1330
(SIGNATURE)		(SIGNATURE)	9/9/96 1550
(SIGNATURE)		(SIGNATURE)	
(SIGNATURE) L D Cardenas	9-6-96 1525	(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: L D Cardenas TITLE: analyst DATE: 9-6-96

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 unpreserved.

MPDS Services Inc.
2401 Stanwell Drive
Concord, California 94520

Tel: (510) 602-5120
Fax: (510) 689-1918

PURGING/SAMPLING DATA SHEET

SAMPLING LOCATION: #5430 - San Leandro
1935 Washington Ave.

DATE & TIME SAMPLED: 9/6/96 12:55 A.M. (P.M.)

FIELD TECHNICIAN: Varthes

PURGE METHOD: Pump.

DATE(S) PURGED: 9/6/96

WELL NUMBER: U 1

WATER LEVEL-**INITIAL**: 30.25

SAMPLING METHOD: Bail

WATER LEVEL-**FINAL**: 33.53

CONTAINERS: 3

WELL DEPTH: 39.62

PRESERVATIVES: VOA's HCl

WELL CASING VOLUME: 1.59

†CASING DIAMETER: 2"

TIME	GALLONS PURGED	TEMPERATURE (°F) (± 1°F)	ELECTRICAL CONDUCTIVITY ([µmhos/cm]x100) (± 10% of TOTAL	pH (± 0.2)
12:35	0	29.1	6.63	7.85
	1.5	74.0	6.73	7.63
	3	72.2	6.86	7.54
12:42	4.5	71.3	6.98	7.49
	1.	Dewatered	—	—

† Correction Factors:

Well Diameter	Factor
2"	0.17
3"	0.37
4"	0.65
4.5"	0.82
6"	1.46
8"	2.6
12"	5.87

/P&S

MPDS Services Inc.
2401 Stanwell Drive
Concord, California 94520

Tel: (510) 602-5120
Fax: (510) 689-1918

PURGING/SAMPLING DATA SHEET

SAMPLING LOCATION: # 5430 - San Leandro
1935 Washington Ave.

DATE & TIME SAMPLED 9/6/96 10:21 (A.M.) P.M.

FIELD TECHNICIAN Vaetkis

PURGE METHOD Pump

DATE(S) PURGED 9/6/96

WELL NUMBER U 2

WATER LEVEL-**INITIAL** 29.18

SAMPLING METHOD Bail

WATER LEVEL-**FINAL** 29.24

CONTAINERS 2

WELL DEPTH 39.28

PRESERVATIVES VOA's HCl

WELL CASING VOLUME 1.72

†CASING DIAMETER 2"

TIME	GALLONS PURGED	TEMPERATURE (°F) (± 1°F)	ELECTRICAL CONDUCTIVITY ([µmhos/cm]x100) (± 10% of TOTAL	pH (± 0.2)
10:02	~~0~~ 0	67.1	4.94	7.93
	1.5	68.3	4.70	7.76
	3	68.9	5.05	7.62
	4.5	69.2	5.17	7.55
10:10	6	69.7	5.11	7.50
	7	—	—	—

† Correction Factors:

Well Diameter	Factor
2"	0.17
3"	0.37
4"	0.65
4.5"	0.82
6"	1.46
8"	2.6
12"	5.87

/P&S

MPDS Services Inc.
2401 Stanwell Drive
Concord, California 94520

Tel: (510) 602-5120
Fax: (510) 689-1918

PURGING/SAMPLING DATA SHEET

SAMPLING LOCATION: #5430 - San Leandro
1935 Washington Ave.

DATE & TIME SAMPLED 9/6/96 2:10 A.M. (P.M)

FIELD TECHNICIAN Vartkes

PURGE METHOD Pump.

DATE(S) PURGED 9/6/96

WELL NUMBER U3

WATER LEVEL-**INITIAL** 29.06

SAMPLING METHOD Bail

WATER LEVEL-**FINAL** 29.21

CONTAINERS 2

WELL DEPTH 38.54

PRESERVATIVES VOA's HCl

WELL CASING VOLUME 1.61

†CASING DIAMETER 2"

TIME	GALLONS PURGED	TEMPERATURE (°F) (± 1°F)	ELECTRICAL CONDUCTIVITY ([µmhos/cm]x100) (± 10% of TOTAL	pH (± 0.2)
1:48	0	79.2	7.74	7.58
	1.5	74.7	7.18	7.43
	3	73.0	7.13	7.39
	4.5	71.1	7.38	7.34
1:56	6.5	70.9	7.50	7.30

† Correction Factors:

Well Diameter	Factor
2"	0.17
3"	0.37
4"	0.65
4.5"	0.82
6"	1.46
8"	2.6
12"	5.87

/P&S

MPDS Services Inc.
2401 Stanwell Drive
Concord, California 94520

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Fax: (510) 689-1918

PURGING/SAMPLING DATA SHEET

SAMPLING LOCATION: #5430 - San Leandro
1935 Washington Ave.

DATE & TIME SAMPLED 9/6/96 11:35 A.M. P.M.

FIELD TECHNICIAN Varthes

PURGE METHOD Pump

DATE(S) PURGED 9/6/96

WELL NUMBER U4

WATER LEVEL-**INITIAL** 29.32

SAMPLING METHOD Bail

WATER LEVEL-**FINAL** 29.46

CONTAINERS 2

WELL DEPTH 39.08

PRESERVATIVES VOA; HCl

WELL CASING VOLUME 1.66

†CASING DIAMETER 2"

TIME	GALLONS PURGED	TEMPERATURE (°F) (± 1°F)	ELECTRICAL CONDUCTIVITY ([µmhos/cm]x100) (± 10% of TOTAL	pH (± 0.2)
11:13	0	75.6	6.11	7.90
	1.5	73.2	6.00	7.73
	3	71.8	5.86	7.62
	4.5	71.2	5.75	7.53
11:22	6	70.6	5.71	7.48
	7	—	—	—

† Correction Factors:

Well Diameter	Factor
2"	0.17
3"	0.37
4"	0.65
4.5"	0.82
6"	1.46
8"	2.6
12"	5.87

/P&S

MPDS Services Inc.
2401 Stanwell Drive
Concord, California 94520

Tel: (510) 602-5120
Fax: (510) 689-1918

PURGING/SAMPLING DATA SHEET

SAMPLING LOCATION: #5430 - San Leandro
1935 Washington Ave.

DATE & TIME SAMPLED 9/6/96 12:10 A.M. (P.M.)

FIELD TECHNICIAN Vasthus

PURGE METHOD Pump

DATE(S) PURGED 9/6/96

WELL NUMBER U 5

WATER LEVEL-**INITIAL** 28.06

SAMPLING METHOD Bail

WATER LEVEL-**FINAL** 28.11

CONTAINERS 2

WELL DEPTH 38.56

PRESERVATIVES VOA's HCl

WELL CASING VOLUME 1.79

†CASING DIAMETER 2"

TIME	GALLONS PURGED	TEMPERATURE (°F) (± 1°F)	ELECTRICAL CONDUCTIVITY ([µmhos/cm]x100) (± 10% of TOTAL	pH (± 0.2)
11:50	0	77.4	4.75	7.96
	2	73.6	4.51	7.79
	4	71.9	4.40	7.68
	6	71.0	4.33	7.60
11:59	7.5	70.9	4.31	7.56

† Correction Factors:

Well Diameter	Factor
2"	0.17
3"	0.37
4"	0.65
4.5"	0.82
6"	1.46
8"	2.6
12"	5.87

/P&S

MPDS Services Inc.
2401 Stanwell Drive
Concord, California 94520

Tel: (510) 602-5120
Fax: (510) 689-1918

PURGING/SAMPLING DATA SHEET

SAMPLING LOCATION: #5430 - San Leandro
1935 Washington Ave.

DATE & TIME SAMPLED: 9/6/96 1:30 A.M. (P.M)

FIELD TECHNICIAN: Vartkes

PURGE METHOD: Pump.

DATE(S) PURGED: 9/6/96

WELL NUMBER: U6

WATER LEVEL-**INITIAL**: 29.41

SAMPLING METHOD: Bail

WATER LEVEL-**FINAL**: 30.56

CONTAINERS: 2

WELL DEPTH: 40.02

PRESERVATIVES: VOA; HCl

WELL CASING VOLUME: 1.80

†CASING DIAMETER: 2"

TIME	GALLONS PURGED	TEMPERATURE (°F) (± 1°F)	ELECTRICAL CONDUCTIVITY ([µmhos/cm]x100) (± 10% of TOTAL	pH (± 0.2)
1:10	0	78.6	8.08	7.60
	2	73.5	7.44	7.48
	4	71.9	7.52	7.38
	6	70.8	7.63	7.31
1:19	7.5	70.6	7.67	7.28

† Correction Factors:

Well Diameter	Factor
2"	0.17
3"	0.37
4"	0.65
4.5"	0.82
6"	1.46
8"	2.6
12"	5.87

/P&S

MPDS Services Inc.
2401 Stanwell Drive
Concord, California 94520

Tel: (510) 602-5120
Fax: (510) 689-1918

PURGING/SAMPLING DATA SHEET

SAMPLING LOCATION: #5432. San Leandro
1935 Washington Ave

DATE & TIME SAMPLED 9/6/96 10:54 (A.M) P.M.

FIELD TECHNICIAN Vasthes

PURGE METHOD Pump.

DATE(S) PURGED 9/6/96

WELL NUMBER U 7

WATER LEVEL-**INITIAL** 28.75

SAMPLING METHOD Bail

WATER LEVEL-**FINAL** 29.03

CONTAINERS 2

WELL DEPTH 37.77

PRESERVATIVES VOA's HCl

WELL CASING VOLUME 1.53

†CASING DIAMETER 2"

TIME	GALLONS PURGED	TEMPERATURE (°F) (± 1°F)	ELECTRICAL CONDUCTIVITY ([µmhos/cm]x100) (± 10% of TOTAL	pH (± 0.2)
10:36	0	74.3	4.35	8.02
	1.5	71.9	4.30	7.87
	3	71.0	4.23	7.69
	4.5	70.6	4.14	7.62
10:43	6.5	70.4	4.09	7.59

† Correction Factors:

Well Diameter	Factor
2"	0.17
3"	0.37
4"	0.65
4.5"	0.82
6"	1.46
8"	2.6
12"	5.87

/P&S