



**KAPREALIAN ENGINEERING, INC.**

**Consulting Engineers**

P.O. BOX 996 • BENICIA, CA 94510

(707) 746-6915 • (707) 746-6916 • FAX: (707) 746-5581

May 8, 1990

Alameda County Health Care Services  
80 Swan Way, Room 200  
Oakland, CA 94621

RE: Unocal Service Station #6277 78  
15803 E. 14th Street  
San Leandro, California

Gentlemen:

Per the request of Mr. Ron Bock of Unocal Corporation, enclosed please find our report dated May 2, 1990, for the above referenced site.

Should you have any questions, please feel free to call our office at (707) 746-6915.

Sincerely,

Kaprealian Engineering, Inc.

Judy A. Dewey

jad\82

Enclosure

cc: Ron Bock, Unocal Corporation



# KAPREALIAN ENGINEERING, INC.

Consulting Engineers

P.O. BOX 996 • BENICIA, CA 94510  
(707) 746-6915 • (707) 746-6916 • FAX: (707) 746-5581

KEI-P89-0301.R7  
May 2, 1990

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

Attention: Mr. Ron Bock

RE: Soil Sampling Report  
Unocal Service Station #6277  
15803 E. 14th Street  
San Leandro, California

Dear Mr. Bock:

This report summarizes the soil sampling performed by Kaprealian Engineering, Inc. (KEI) at the referenced site. All work was performed in compliance with the guidelines established by the Regional Water Quality Control Board (RWQCB), and the Alameda County Health Care Services (ACHCS).

The scope of the work performed by KEI consisted of the following:

Collection of soil samples from the sidewalls of the excavation around previously abandoned monitoring well MW2.

Delivery of samples, including proper Chain of Custody documentation, to a certified analytical laboratory.

Technical review and preparation of this report.

## SITE DESCRIPTION AND BACKGROUND

The subject site is presently used as a gasoline station. A Site Location Map and Site Plan are attached to this report.

KEI's work at the site began when KEI was asked to supervise the installation of two exploratory borings at the site. The borings were drilled at the request of Alameda County to explore for the possible presence of soil contamination in the vicinity of the proposed new underground storage tank pit location. The borings were drilled on March 6, 1989 to depths of 10.5 and 13.5 feet. Water was encountered in the borings at depths of 11 and 12 feet. Analytical results of selected soil samples collected from the borings showed total petroleum hydrocarbons (TPH) as gasoline

ranging from non-detectable to 620 ppm. Based on the analytical results, KEI recommended that the contractor excavate the tank pit to a depth of approximately 13 feet. Results of the exploratory borings are presented in KEI's report (KEI-P89-0301.R1) dated March 13, 1989.

On March 13, 1989, KEI collected soil samples following the removal of two 10,000 gallon underground fuel storage tanks and one waste oil tank at the site. Water was encountered in the excavation at a depth of 11 feet, prohibiting the collection of soil samples from immediately beneath the tank. Sidewall samples (collected at a depth of 10.5 feet) were analyzed for TPH as gasoline, and benzene, toluene, xylenes and ethylbenzene (BTX&E). One sample was taken from beneath the waste oil tank and additionally analyzed for TPH as diesel, total oil and grease (TOG) and EPA method 8240 compounds.

Based on the subjective evidence observed in the field, it was decided to excavate additional soil from three of the four tank pit walls. The analytical results of the final sidewall samples collected from the fuel tank pit had TPH as gasoline levels ranging from 24 ppm to 150 ppm, and benzene levels ranging from 1.6 ppm to 4.0 ppm. Results of the soil samples from the tank excavation are summarized in KEI's report (KEI-P89-0301.R3) dated March 27, 1989. To comply with the requirements of the regulatory agencies and based on results of the preliminary investigations, KEI proposed installation of four monitoring wells.

On May 24, 1989, four two-inch diameter monitoring wells, designated as MW1 through MW4, were installed at the site. Documentation of the well installation, sampling and sample results are provided in KEI's report (KEI-P89-0301.R6) dated June 26, 1989. Based on the sample results, KEI recommended a monthly monitoring and quarterly sampling program for all of the wells and additional excavation of contaminated soil in the vicinity of MW2. The monitoring and sampling program was initiated in July, 1989, and the wells have been monitored on a monthly basis and sampled on a quarterly basis since that time. In KEI's second quarterly report (KEI-P89-0301.QR2) dated January 16, 1990, KEI recommended the installation of one additional off-site well (MW5) to further define the extent of ground water contamination at the site.

On February 1, 1990, well MW2 was destroyed in preparation for additional excavation in the vicinity of well MW2. Documentation of the well destruction is presented in a letter report dated March 7, 1990 addressed to Unocal. Copies of the letter were also sent to Mr. Wyman Hong of the Alameda County Flood Control District, Zone 7, and to the Regional Water Quality Control Board (RWQCB), San Francisco Bay Region.

Water samples were collected from the existing wells on March 29, 1990. The samples were analyzed for TPH as gasoline using EPA method 5030 in conjunction with modified 8015, and BTX&E using EPA method 8020. The analytical results show that TPH as gasoline was detected in all of the wells at concentrations ranging from 85 to 320 ppb, and benzene was detected in wells MW1 and MW4 at concentrations of 12 and 0.39 ppb, respectively. Documentation of this sampling is included in KEI's report (KEI-P89-0301.QR3) dated April 20, 1990.

#### FIELD ACTIVITIES

In an attempt to remove as much of the contaminated soil as possible, KEI visited the site on March 30 and April 3, 1990 to observe soil excavation in the vicinity of previously abandoned monitoring well MW2. The location of MW2 is indicated on the attached Site Plan. Soil was excavated to a grade corresponding to approximately 6 to 12 inches below ground water, encountered at a depth of about 11.5 feet below grade.

After excavation, four soil samples, labeled SW8A, SW9A, SW10A and SW11A, were collected from the sidewalls of the excavation approximately 6 to 12 inches above ground water. Samples were collected from bulk material excavated by backhoe. Samples were placed in clean, two-inch diameter brass tubes, sealed with aluminum foil, plastic caps and tape, and stored in a cooled ice chest for delivery to a certified laboratory. Sample locations and the area excavated are as shown on the attached Site Plan, Figure 1. Soil excavation activities were terminated due to the close proximity of the former and new underground storage tank pits and the property line of the site. After sampling, approximately 9,400 gallons of water were pumped from the excavation. The excavated soil was stockpiled on-site for sampling to determine proper disposal.

*H<sub>2</sub>O -  
9400 gal  
removed*

#### REGIONAL GEOLOGY AND SUBSURFACE CONDITIONS

Based on review of regional geologic maps (U.S. Geological Survey Professional Paper 943 "Flatland Deposits - Their Geology and Engineering Properties and Their Importance to Comprehensive Planning" by E.J. Helley and K.R. Lajoie, 1979), the subject site is underlain by Late Pleistocene alluvium (Qpa). The Late Pleistocene alluvium is described as typically consisting of weakly consolidated, poorly sorted, irregular interbedded clay, silt, sand, and gravel with a reported unknown maximum thickness, but is at least 150 feet thick. This alluvium is assumed to overly bedrock and deformed older sedimentary deposits on the alluvial plain marginal to San Francisco Bay.

In addition, the site is situated approximately 1,700 to 3,600 feet southwest of various mapped splays of the active Hayward Fault.

The subsurface soils exposed in the excavations consisted primarily of silt, sand and gravel fill to a depth of about 3 feet below grade, underlain by sandy gravel with clay to a depth of about 7 feet below grade, and in turn underlain by clay to the maximum depth excavated (about 12 feet).

#### ANALYTICAL RESULTS

All samples were analyzed by Sequoia Analytical Laboratory in Redwood City, California and were accompanied by properly executed Chain of Custody documentation. All soil samples were analyzed for total petroleum hydrocarbons (TPH) as gasoline using EPA method 5030 in conjunction with modified 8015, and benzene, toluene, xylenes and ethylbenzene (BTX&E) using EPA method 8020. In addition, the samples were analyzed for TPH as diesel using EPA method 3550 in conjunction with modified 8015, total oil and grease (TOG) by EPA 418.1 with clean up, and EPA 8010 constituents.

Analyses of soil sample SW9A indicate non-detectable levels of TPH as gasoline and TPH as diesel. Analyses of soil samples SW8A, SW10A, and SW11A indicate levels of TPH as gasoline ranging from 140 ppm to 1,100 ppm, while levels of TPH as diesel range from non-detectable to 280 ppm. Analyses indicate non-detectable levels of all EPA 8010 constituents and TOG for all four samples, except for sample SW11A, which showed 210 ppm of TOG. Results of the soil analyses are summarized in Table 1. Copies of the laboratory analyses and the chain of custody documentation are attached to this report.

#### DISCUSSION AND RECOMMENDATIONS

It is KEI's understanding that Unocal Corporation is making arrangements with the off-site property owner for site access for installation of the proposed off-site monitoring well (MW5). Once permission for off-site access is obtained, KEI will acquire the necessary permits and schedule the monitoring well installation. In addition, KEI will obtain necessary permits for the installation of monitoring well MW2A, which is replacement for well MW2. The location of proposed well MW2A is shown on the attached Site Plan, Figure 2.

DISTRIBUTION

A copy of this report should be sent to the ACHCS, to Alameda County Flood Control District, and to the RWQCB, San Francisco Bay Region.

LIMITATIONS

Soil deposits and rock formations may vary in thickness, lithology, saturation, strength and other properties across any site. In addition, environmental changes, either naturally-occurring or artificially-induced, may cause changes in the extent and concentration of any contaminants. Our studies assume that the field and laboratory data are reasonably representative of the site as a whole, and assume that subsurface conditions are reasonably conducive to interpolation and extrapolation.

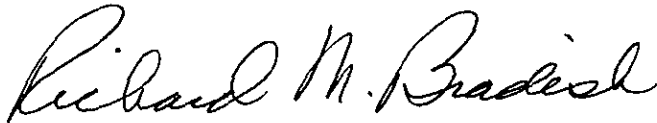
The results of this study are based on the data obtained from the field and laboratory analyses obtained from a state certified laboratory. We have analyzed this data using what we believe to be currently applicable engineering techniques and principles in the Northern California region. We make no warranty, either expressed or implied, regarding the above, including laboratory analyses, except that our services have been performed in accordance with generally accepted professional principles and practices existing for such work.

KEI-P89-0301.R7  
May 2, 1990  
Page 6

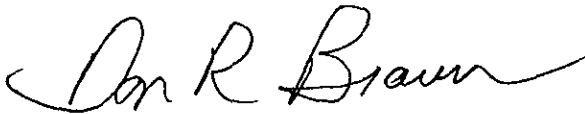
Should you have any questions regarding this report, please feel free to call me at (707) 746-6915.

Sincerely,

Kaprealian Engineering, Inc.



Richard M. Bradish  
Staff Engineer



Don R. Braun  
Certified Engineering Geologist

License No. 1310  
Exp. Date 6/30/90



Mardo Kaprealian  
President

jad

Attachments: Table 1  
Location Map  
Site Plans - Figures 1 & 2  
Laboratory Analyses  
Chain of Custody documentation

KEI-P89-0301.R7  
May 2, 1990

TABLE 1  
SUMMARY OF LABORATORY ANALYSES  
(Samples collected on April 3, 1990)

<u>Sample</u>	<u>Depth (feet)</u>	<u>TPH as Diesel</u>	<u>TPH as Gasoline</u>	<u>Benzene</u>	<u>Toluene</u>	<u>Xylenes</u>	<u>Ethyl-benzene</u>
SW8A*	10.5	62	260	1.4	8.0	40	7.0
SW9A*	10.5	ND	ND	0.017	0.041	0.033	0.0092
SW10A*	10.5	ND	140	0.085	0.12	5.0	1.4
SW11A**	10.5	280	1,100	8.0	43	230	37

Detection  
Limits                    1.0            1.0            0.0050      0.0050      0.0050      0.0050

\* TOG and all EPA 8010 constituents were non-detectable for these samples.

\*\* TOG showed 210 ppm, while all EPA 8010 constituents were non-detectable.

ND = Non-detectable.

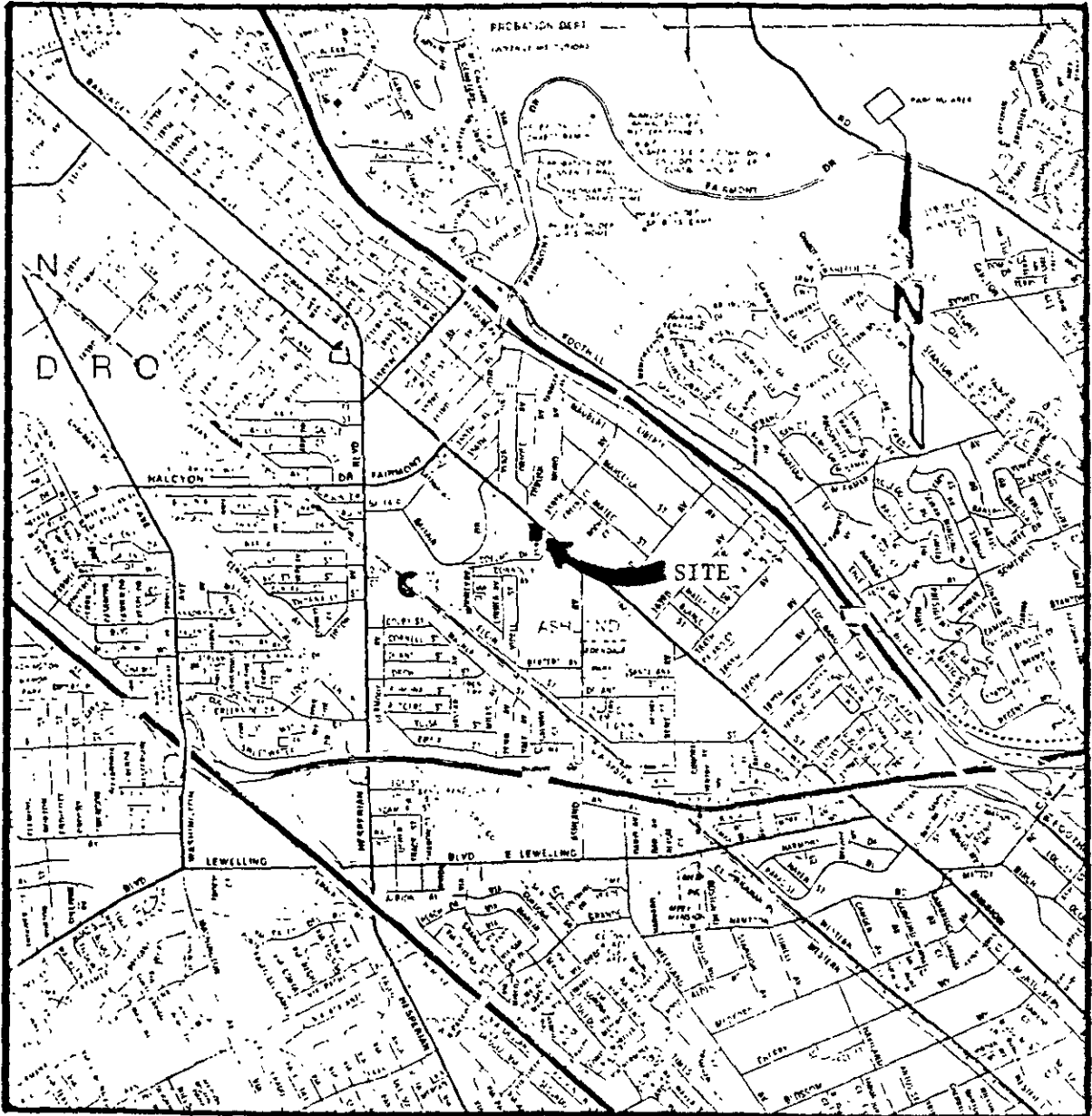
Results in parts per million (ppm), unless otherwise indicated.





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LOCATION MAP

Unocal Service Station #6277  
15803 E. 14th Street  
San Leandro, California

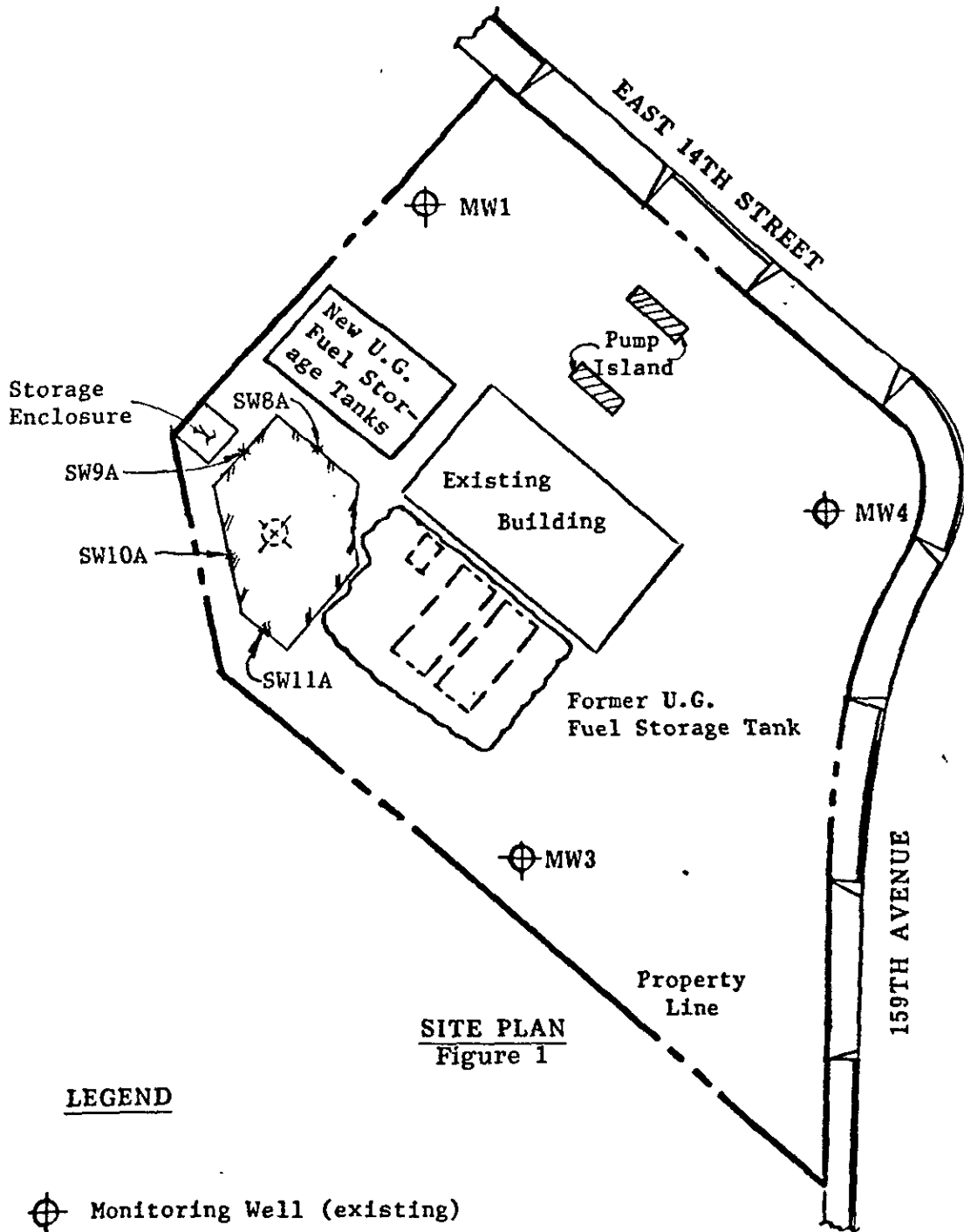


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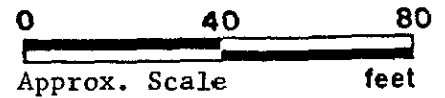
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**SITE PLAN**  
Figure 1

### LEGEND

- Monitoring Well (existing)
- Monitoring Well (abandoned)
- Area of Excavation
- \* Sample Point Location



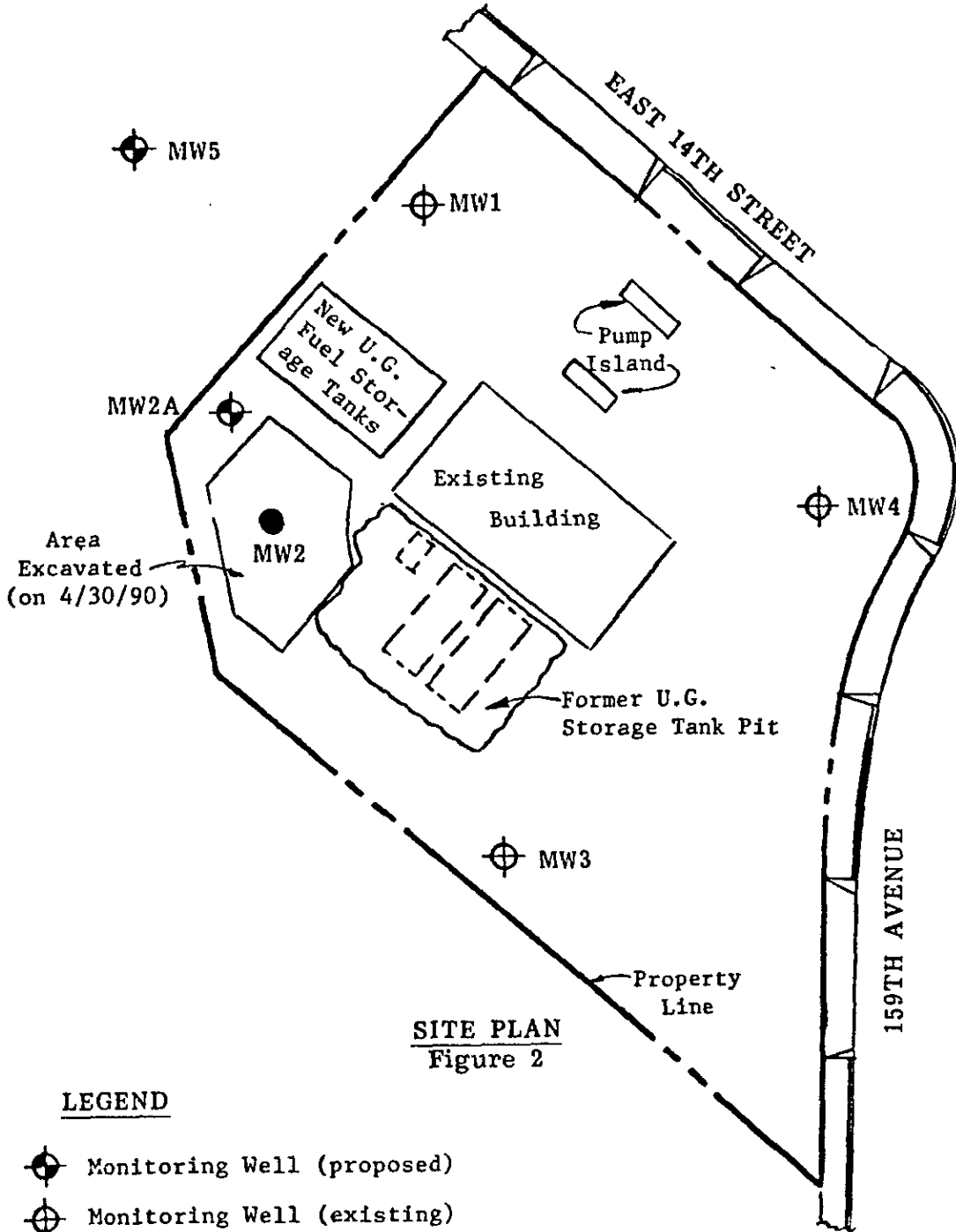
Unocal Service Station #6277  
15803 East 14th Street  
San Leandro, California



# KAPREALIAN ENGINEERING, INC.






Consulting Engineers

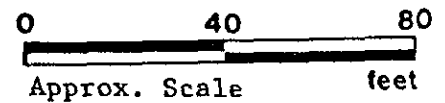
PO BOX 996 • BENICIA, CA 94510  
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**SITE PLAN**  
Figure 2

### LEGEND

-  Monitoring Well (proposed)
-  Monitoring Well (existing)
-  Water table elevation in feet on . Top of MW4 well cover assumed 100.00' as datum.
-  Ground water flow direction.
-  Monitoring Well (abandoned 2/1/90)



Unocal Service Station #6277  
15803 East 14th Street  
San Leandro, California



# SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063  
(415) 364-9600 • FAX (415) 364-9233

Kaprealian Engineering, Inc.	Client Project ID: Unocal #6277, San Leandro, 15803 E. 14th	Sampled: Apr 3, 1990
P.O. Box 996	Matrix Descript: Soil	Received: Apr 5, 1990
Benicia, CA 94510	Analysis Method: EPA 418.1 (I.R. with clean-up)	Extracted: Apr 16, 1990
Attention: Mardo Kaprealian, P.E.	First Sample #: 004-0705	Analyzed: Apr 19, 1990
		Reported: Apr 20, 1990

## TOTAL RECOVERABLE PETROLEUM HYDROCARBONS

Sample Number	Sample Description	Petroleum Oil mg/kg (ppm)
004-0705	SW8A	N.D.
004-0706	SW9A	N.D.
004-0707	SW10A	N.D.
004-0708	SW11A	210

Detection Limits:

50

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

SEQUOIA ANALYTICAL

  
Belinda C. Vega  
Project Manager

40705.KEI <1>



# SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063  
(415) 364-9600 • FAX (415) 364-9233

Kaprealian Engineering, Inc.	Client Project ID:	Unocal #6277, San Leandro, 15803 E. 14th	Sampled:	Apr 3, 1990
P.O. Box 996	Matrix Descript:	Soil	Received:	Apr 5, 1990
Benicia, CA 94510	Analysis Method:	EPA 3550/8015	Extracted:	Apr 17, 1990
Attention: Mardo Kaprealian, P.E.	First Sample #:	004-0705	Analyzed:	Apr 19, 1990
			Reported:	Apr 23, 1990

## TOTAL PETROLEUM FUEL HYDROCARBONS (EPA 8015)

Sample Number	Sample Description	High B.P. Hydrocarbons mg/kg (ppm)
004-0705	SW8A	62
004-0706	SW9A	N.D.
004-0707	SW10A	94
004-0708	SW11A	280

Detection Limits: 1.0

High Boiling Point Hydrocarbons are quantitated against a diesel fuel standard.  
Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL

  
Belinda C. Vega  
Project Manager

Please Note:

The above samples do not appear to contain diesel.



# SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063  
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Kaprealian Engineering, Inc. P.O. Box 996 Benicia, CA 94510 Attention: Mardo Kaprealian, P.E.	Client Project ID: Unocal #6277, San Leandro, 15803 E. 14th Matrix Descript: Soil Analysis Method: EPA 5030/8015/8020 First Sample #: 004-0705	Sampled: Apr 3, 1990 Received: Apr 5, 1990 Analyzed: Apr 17, 1990 Reported: Apr 23, 1990
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## TOTAL PETROLEUM FUEL HYDROCARBONS with BTEX DISTINCTION (EPA 8015/8020)

Sample Number	Sample Description	Low/Medium B.P. Hydrocarbons mg/kg (ppm)	Benzene mg/kg (ppm)	Toluene mg/kg (ppm)	Ethyl Benzene mg/kg (ppm)	Xylenes mg/kg (ppm)
004-0705	SW8A	260	1.4	8.0	7.0	40
004-0706	SW9A	N.D.	0.017	0.041	0.0092	0.033
004-0707	SW10A	140	0.085	0.12	1.4	5.0
004-0708	SW11A	1,100	8.0	43	37	230

<b>Detection Limits:</b>	<b>1.0</b>	<b>0.0050</b>	<b>0.0050</b>	<b>0.0050</b>	<b>0.0050</b>
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Low to Medium Boiling Point Hydrocarbons are quantitated against a gasoline standard.  
Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL

Belinda C. Vega  
Project Manager



# SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063  
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Kaprelian Engineering, Inc.	Client Project ID: Unocal #6277, San Leandro, 15803 E. 14th	Sampled: Apr 3, 1990
P.O. Box 996	Sample Descript: Soil, SW8A	Received: Apr 5, 1990
Benicia, CA 94510	Analysis Method: EPA 5030/8010	Analyzed: Apr 17, 1990
Attention: Mardo Kaprelian, P.E.	Lab Number: 004-0705	Reported: Apr 23, 1990

## HALOGENATED VOLATILE ORGANICS (EPA 8010)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
Bromodichloromethane.....	5.0	N.D.
Bromoform.....	5.0	N.D.
Bromomethane.....	5.0	N.D.
Carbon tetrachloride.....	5.0	N.D.
Chlorobenzene.....	5.0	N.D.
Chloroethane.....	25	N.D.
2-Chloroethylvinyl ether.....	5.0	N.D.
Chloroform.....	5.0	N.D.
Chloromethane.....	5.0	N.D.
Dibromochloromethane.....	5.0	N.D.
1,2-Dichlorobenzene.....	10	N.D.
1,3-Dichlorobenzene.....	10	N.D.
1,4-Dichlorobenzene.....	10	N.D.
1,1-Dichloroethane.....	5.0	N.D.
1,2-Dichloroethane.....	5.0	N.D.
1,1-Dichloroethene.....	5.0	N.D.
Total 1,2-Dichloroethene.....	5.0	N.D.
1,2-Dichloropropane.....	5.0	N.D.
cis-1,3-Dichloropropene.....	5.0	N.D.
trans-1,3-Dichloropropene.....	5.0	N.D.
Methylene chloride.....	10	N.D.
1,1,2,2-Tetrachloroethane.....	5.0	N.D.
Tetrachloroethene.....	5.0	N.D.
1,1,1-Trichloroethane.....	5.0	N.D.
1,1,2-Trichloroethane.....	5.0	N.D.
Trichloroethene.....	5.0	N.D.
Trichlorofluoromethane.....	5.0	N.D.
Vinyl chloride.....	10	N.D.

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

SEQUOIA ANALYTICAL

Belinda C. Vega  
Project Manager



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Kaprealian Engineering, Inc.	Client Project ID: Unocal #6277, San Leandro, 15803 E. 14th	Sampled: Apr 3, 1990
P.O. Box 996	Sample Descript: Soil, SW9A	Received: Apr 5, 1990
Benicia, CA 94510	Analysis Method: EPA 5030/8010	Analyzed: Apr 17, 1990
Attention: Mardo Kaprealian, P.E.	Lab Number: 004-0706	Reported: Apr 23, 1990

## HALOGENATED VOLATILE ORGANICS (EPA 8010)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
Bromodichloromethane.....	5.0	N.D.
Bromoform.....	5.0	N.D.
Bromomethane.....	5.0	N.D.
Carbon tetrachloride.....	5.0	N.D.
Chlorobenzene.....	5.0	N.D.
Chloroethane.....	25	N.D.
2-Chloroethylvinyl ether.....	5.0	N.D.
Chloroform.....	5.0	N.D.
Chloromethane.....	5.0	N.D.
Dibromochloromethane.....	5.0	N.D.
1,2-Dichlorobenzene.....	10	N.D.
1,3-Dichlorobenzene.....	10	N.D.
1,4-Dichlorobenzene.....	10	N.D.
1,1-Dichloroethane.....	5.0	N.D.
1,2-Dichloroethane.....	5.0	N.D.
1,1-Dichloroethene.....	5.0	N.D.
Total 1,2-Dichloroethene.....	5.0	N.D.
1,2-Dichloropropane.....	5.0	N.D.
cis-1,3-Dichloropropene.....	5.0	N.D.
trans-1,3-Dichloropropene.....	5.0	N.D.
Methylene chloride.....	10	N.D.
1,1,2,2-Tetrachloroethane.....	5.0	N.D.
Tetrachloroethene.....	5.0	N.D.
1,1,1-Trichloroethane.....	5.0	N.D.
1,1,2-Trichloroethane.....	5.0	N.D.
Trichloroethene.....	5.0	N.D.
Trichlorofluoromethane.....	5.0	N.D.
Vinyl chloride.....	10	N.D.

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

SEQUOIA ANALYTICAL

Belinda C. Vega  
Project Manager





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Kaprealian Engineering, Inc.	Client Project ID: Unocal #6277, San Leandro, 15803 E. 14th	Sampled: Apr 3, 1990
P.O. Box 996	Sample Descript: Soil, SW10A	Received: Apr 5, 1990
Benicia, CA 94510	Analysis Method: EPA 5030/8010	Analyzed: Apr 17, 1990
Attention: Mardo Kaprealian, P.E.	Lab Number: 004-0707	Reported: Apr 23, 1990

## HALOGENATED VOLATILE ORGANICS (EPA 8010)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
Bromodichloromethane.....	5.0	N.D.
Bromoform.....	5.0	N.D.
Bromomethane.....	5.0	N.D.
Carbon tetrachloride.....	5.0	N.D.
Chlorobenzene.....	5.0	N.D.
Chloroethane.....	25	N.D.
2-Chloroethylvinyl ether.....	5.0	N.D.
Chloroform.....	5.0	N.D.
Chloromethane.....	5.0	N.D.
Dibromochloromethane.....	5.0	N.D.
1,2-Dichlorobenzene.....	10	N.D.
1,3-Dichlorobenzene.....	10	N.D.
1,4-Dichlorobenzene.....	10	N.D.
1,1-Dichloroethane.....	5.0	N.D.
1,2-Dichloroethane.....	5.0	N.D.
1,1-Dichloroethene.....	5.0	N.D.
Total 1,2-Dichloroethene.....	5.0	N.D.
1,2-Dichloropropane.....	5.0	N.D.
cis-1,3-Dichloropropene.....	5.0	N.D.
trans-1,3-Dichloropropene.....	5.0	N.D.
Methylene chloride.....	10	N.D.
1,1,2,2-Tetrachloroethane.....	5.0	N.D.
Tetrachloroethene.....	5.0	N.D.
1,1,1-Trichloroethane.....	5.0	N.D.
1,1,2-Trichloroethane.....	5.0	N.D.
Trichloroethene.....	5.0	N.D.
Trichlorofluoromethane.....	5.0	N.D.
Vinyl chloride.....	10	N.D.

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

SEQUOIA ANALYTICAL

Belinda C. Vega  
Project Manager



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Kapreallan Engineering, Inc.	Client Project ID: Unocal #6277, San Leandro, 15803 E. 14th	Sampled: Apr 3, 1990
P.O. Box 996	Sample Descript: Soil, SW11A	Received: Apr 5, 1990
Benicia, CA 94510	Analysis Method: EPA 5030/8010	Analyzed: Apr 17, 1990
Attention: Mardo Kapreallan, P.E.	Lab Number: 004-0708	Reported: Apr 23, 1990

## HALOGENATED VOLATILE ORGANICS (EPA 8010)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
Bromodichloromethane.....	5.0	N.D.
Bromoform.....	5.0	N.D.
Bromomethane.....	5.0	N.D.
Carbon tetrachloride.....	5.0	N.D.
Chlorobenzene.....	5.0	N.D.
Chloroethane.....	25	N.D.
2-Chloroethylvinyl ether.....	5.0	N.D.
Chloroform.....	5.0	N.D.
Chloromethane.....	5.0	N.D.
Dibromochloromethane.....	5.0	N.D.
1,2-Dichlorobenzene.....	10	N.D.
1,3-Dichlorobenzene.....	10	N.D.
1,4-Dichlorobenzene.....	10	N.D.
1,1-Dichloroethane.....	5.0	N.D.
1,2-Dichloroethane.....	5.0	N.D.
1,1-Dichloroethene.....	5.0	N.D.
Total 1,2-Dichloroethene.....	5.0	N.D.
1,2-Dichloropropane.....	5.0	N.D.
cis-1,3-Dichloropropene.....	5.0	N.D.
trans-1,3-Dichloropropene.....	5.0	N.D.
Methylene chloride.....	10	N.D.
1,1,2,2-Tetrachloroethane.....	5.0	N.D.
Tetrachloroethene.....	5.0	N.D.
1,1,1-Trichloroethane.....	5.0	N.D.
1,1,2-Trichloroethane.....	5.0	N.D.
Trichloroethene.....	5.0	N.D.
Trichlorofluoromethane.....	5.0	N.D.
Vinyl chloride.....	10	N.D.

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

SEQUOIA ANALYTICAL

Belinda C. Vega  
Project Manager



# KAPREALIAN ENGINEERING, INC.

## CHAIN OF CUSTODY

SAMPLER <i>R.M. Braddock</i>		SITE NAME & ADDRESS <i>Unocal #6277 15803 E. 14<sup>th</sup> (x 159<sup>th</sup>) San Leandro</i>					ANALYSES REQUESTED <i>TPH-G &amp; BVE TPH-D TOG BOD</i>				TURN AROUND TIME: <i>Regular</i>	
WITNESSING AGENCY												
SAMPLE ID NO.	DATE	TIME	SOIL	WATER	GRAB	NO. OF COMP. CONT.	SAMPLING LOCATION				REMARKS	
<i>✓ SW8A</i>	<i>4-3-90</i>		<i>✓</i>		<i>✓</i>	<i>1</i>	<i>MW2 EXCAVATION</i>	<i>✓</i>	<i>✓</i>	<i>✓</i>	<i>✓</i>	<i>0040705</i>
<i>✓ SW9A</i>	<i>"</i>		<i>✓</i>		<i>✓</i>	<i>1</i>	<i>"</i>	<i>✓</i>	<i>✓</i>	<i>✓</i>	<i>✓</i>	<i>0040706</i>
<i>✓ SW10A</i>	<i>"</i>		<i>✓</i>		<i>✓</i>	<i>1</i>	<i>"</i>	<i>✓</i>	<i>✓</i>	<i>✓</i>	<i>✓</i>	<i>0040707</i>
<i>✓ SW11A</i>	<i>"</i>		<i>✓</i>		<i>✓</i>	<i>1</i>	<i>"</i>	<i>✓</i>	<i>✓</i>	<i>✓</i>	<i>✓</i>	<i>0040708</i>
Relinquished by: (Signature) <i>R.M. Braddock</i>		Date/Time <i>4-5-90 1035</i>		Received by: (Signature) <i>T. Bolan</i>		The following MUST BE completed by the laboratory accepting samples for analysis: 1. Have all samples received for analysis been stored in ice? <input checked="" type="checkbox"/> 2. Will samples remain refrigerated until analyzed? <input checked="" type="checkbox"/> 3. Did any samples received for analysis have head space? <i>NO</i> 4. Were samples in appropriate containers and properly packaged? <input checked="" type="checkbox"/>						
Relinquished by: (Signature) <i>T. Bolan</i>		Date/Time <i>4-5-90 1035</i>		Received by: (Signature) <i>[Signature]</i>								
Relinquished by: (Signature)		Date/Time		Received by: (Signature)								
Relinquished by: (Signature)		Date/Time		Received by: (Signature)								
						Signature <i>[Signature]</i>		Title <i>[Signature]</i>		Date <i>4-5-90</i>		