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

KEI-J91-0102.R1
March 6, 1991

Unocal Corporation
2000 Crow Canyon Place, Suite 400
San Ramon, CA 94583

Attention: Mr. Ron Bock

RE: **Soil Sampling Report**
Unocal Service Station #3292
15008 East 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 Department of Environmental Health.

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

Coordination with regulatory agencies.

Collection of soil samples from the fuel tank pit, and from beneath the waste oil tank and piping trenches.

Collection of a water sample from the fuel storage tank pit.

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. The site is situated on gently sloping, northeast trending topography, and is located at the east corner of the intersection of East 14th and 150th Avenue in San Leandro, California. A Location Map and Site Plan are attached to this report. No leaks or previous subsurface work performed at the site are known to KEI at this time.

FIELD ACTIVITIES

KEI's field work was conducted on January 16, 1991, when two underground fuel storage tanks and one waste oil tank were removed from the site. The tanks consisted of one 10,000 gallon regular unleaded fuel tank, one 10,000 gallon super unleaded fuel storage tank and one 280 gallon waste oil tank. The tanks were made of steel and two holes about 1/2 inch in diameter were observed in the super unleaded fuel tank. Mr. William Faulhaber of the Alameda County Health Agency (ACHA) was present during tank removal and subsequent soil sampling. Mr. James Kneeland of the Eden Consolidated Fire Protection District was also present during tank removal.

One soil sample, labeled WO1, was collected from beneath the waste oil tank at a depth of approximately 8.25 feet below grade. Four soil samples, labeled A1, A2, B1 and B2 collected from beneath the fuel tank at depths between 15 and 16 feet below grade. Due to obvious contamination, additional soil was excavated beneath sample points A1, A2, B1 and B2 in order to further define the vertical extent of soil contamination. During excavation activities ground water was encountered in the fuel tank pit at a depth of approximately 16.5 feet, thus prohibiting the collection of any additional soil samples from beneath samples A1, A2, B1 and B2. 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 are as shown on the attached Site Plan.

In an attempt to remove as much of the contaminated soil as possible, and in order to collect a water sample, the fuel tank pit was excavated to a depth of about 17.5 feet below grade. The excavated soil was stockpiled on-site for further sampling.

After soil excavation was completed, approximately 15,700 gallons of ground water were pumped from the fuel tank pit. On January 28, 1991, one water sample, labeled W1, was collected from the fuel tank pit in four clean glass VOA vials with Teflon screw caps. The water sample was stored and delivered as described above.

KEI returned to the site on February 11, 1991, in order to collect soil samples from the product pipe trenches requested by Mr. William Faulhaber of the ACHA. Seven samples, labeled P1 through P7, were collected from bulk material excavated by backhoe at depths ranging from 3.5 to 5 feet below grade. These samples were also collected in clean two-inch diameter brass tubes, handled as described above.

KEI again returned to the site on February 12, 1991, in order to complete the collection of pipe trench samples. Two samples, labeled P8 and P9, were collected at depths of 3.5 feet and 7.5 feet, respectively. These samples were also collected and handled as described above. After the soil sampling was completed, pipe trenches were excavated to the sample points. Pipe trench sample point locations are shown on the attached Site Plan.

REGIONAL GEOLOGY AND SUBSURFACE CONDITIONS

The subsurface soils exposed in the fuel tank pit excavation appeared to consist primarily of clayey and sandy silt to a depth of about 10 feet and silty clay between 10 feet and the maximum depth explored (17.5 feet). The subsurface soils exposed in the waste oil tank pit and product pipe trench excavation appeared to consist primarily of silty clay. Ground water was encountered at a depth of approximately 16.5 feet within the fuel tank pit excavation.

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 situated closely adjacent to a mapped geologic contact separating Coarse-grained alluvium (Qhac) from Late Pleistocene alluvium (Qpa). The Coarse-grained alluvium is described as typically consisting of unconsolidated, permeable sand and silt locally with coarse sand and gravel. The thickness of this unit ranges from less than 10 feet to as much as 50 feet. The Late Pleistocene alluvium is described as consisting of weakly consolidated, irregular interbedded clay, silt, sand and gravel. This unit has a reported maximum thickness of at least 150 feet. Also, the site is located approximately 2,000 feet southwest of a mapped splay of the active Hayward Fault Zone.

ANALYTICAL RESULTS

All samples were analyzed by Sequoia Analytical Laboratory in Concord, California, and were accompanied by properly executed Chain of Custody documentation. All soil and water 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 soil sample WO1, collected from the waste oil tank pit, was analyzed for TPH as diesel using EPA method 3550 in conjunction with modified 8015, total oil and grease (TOG) by Standard Method 5520E&F, metals - cadmium, chromium, lead, nickel and zinc, and EPA method 8010 constituents.

Analytical results of the soil samples, collected from the fuel tank pit, indicate levels of TPH as gasoline ranging from 150 ppm to 840 ppm, except for sample A1, which showed a level of TPH as gasoline at 2,600 ppm. Note that soil represented by these samples was removed during excavation of the fuel tank pit to a depth of about 17.5 feet or approximately 1 foot below ground water level.

Analyses of soil samples collected from the product pipe trenches, indicated non-detectable levels of TPH as gasoline for samples P1, P3 through P6, and P8. The detectable levels of gasoline in samples P2, P7 and P9 were 1.2 ppm, 7.1 ppm, and 130 ppm, respectively. Benzene was detected at concentrations ranging from non-detectable to 0.89 ppm.

Analytical results of the soil sample WO1, collected from beneath the waste oil tank pit, indicate non-detectable levels of all constituents analyzed except for zinc which showed 31 ppm. Results of the soil analyses are summarized in Table 1.

Analytical results of the water sample (W1), collected from the fuel tank pit, indicated 13,000 ppb TPH as gasoline and 64 ppb benzene. The results of the water analyses are summarized in Table 2. Copies of the laboratory analyses and the Chain of Custody documentation are attached to this report.

DISCUSSION AND RECOMMENDATIONS

Based on the analytical results and in accordance with the guidelines established by the RWQCB, further work is necessary at the site because of the level of contamination found in the soil and ground water. To comply with the requirements of the RWQCB and the Alameda County Department of Environmental Health, KEI recommends the installation of five monitoring wells at the site to begin to define the extent of the soil and ground water contamination, and to determine the ground water flow direction. KEI's work plan/proposal for this work is attached for your review and consideration.

DISTRIBUTION

A copy of this report should be sent to Mr. Lou Jug of Tri-Equity Properties of San Ramon, to Ms. Beth Theis of Lloyd's Investment of San Jose, Mr. William Faulhaber of the ACHA, 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 work and laboratory analyses. 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, except that our services have been performed in accordance with generally accepted professional principles and practices existing for such work.

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

Sincerely,

Kaprealian Engineering, Inc.

Hagop Kevork
Staff Engineer

Don R. Braun
Certified Engineering Geologist

License No. 1310
Exp. Date 6/30/92

Mardo Kaprealian
President

\bam:jad

Attachments: Tables 1 & 2
Location Map
Site Plan
Laboratory Analyses
Chain of Custody documentation
Work Plan/Proposal

KEI-J91-0102.R1
March 6, 1991

TABLE 1

SUMMARY OF LABORATORY ANALYSES
SOIL

(Collected on January 16, and
February 11 & 12, 1991)

Sample	Depth (feet)	TPH as Gasoline	Benzene	Toluene	Xylenes	Ethylbenzene
A1	15.5	2,600	7.1	55	170	55
A2	16.0	290	1.3	1.1	1.2	1.5
B1	15.5	840	1.5	2.7	9.9	1.3
B2	15.0	150	1.6	3.3	11	2.0
P1	3.5	ND	0.0072	0.019	0.026	ND
P2	4.75	1.2	0.014	0.041	0.11	0.019
P3	3.75	ND	ND	ND	ND	ND
P4	3.75	ND	ND	ND	ND	ND
P5	3.5	ND	ND	ND	ND	ND
P6	5	ND	ND	ND	ND	ND
P7	5	7.1	0.89	0.23	0.70	0.57
P8	3.5	ND	ND	ND	ND	ND
P9	7.5	130	0.068	0.37	0.076	0.66
WO1*	8.25	ND	ND	ND	ND	ND
Detection Limits		1.0	0.0050	0.0050	0.0050	0.0050

ND = Non-detectable.

* TOG, TPH as diesel and all EPA method 8010 constituents and metals were non-detectable except for zinc, which showed 31 ppm.

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

KEI-J91-0102.R1
March 6, 1991

TABLE 2

SUMMARY OF LABORATORY ANALYSES
WATER

(Collected on January 28, 1991)

Sample #	TPH as Gasoline	Benzene	Toluene	Xylenes	Ethylbenzene
W1	13,000	64	37	85	25
Detection Limits	30	0.30	0.30	0.30	0.30

ND = Non-detectable.

Results in parts per billion (ppb), unless otherwise indicated.

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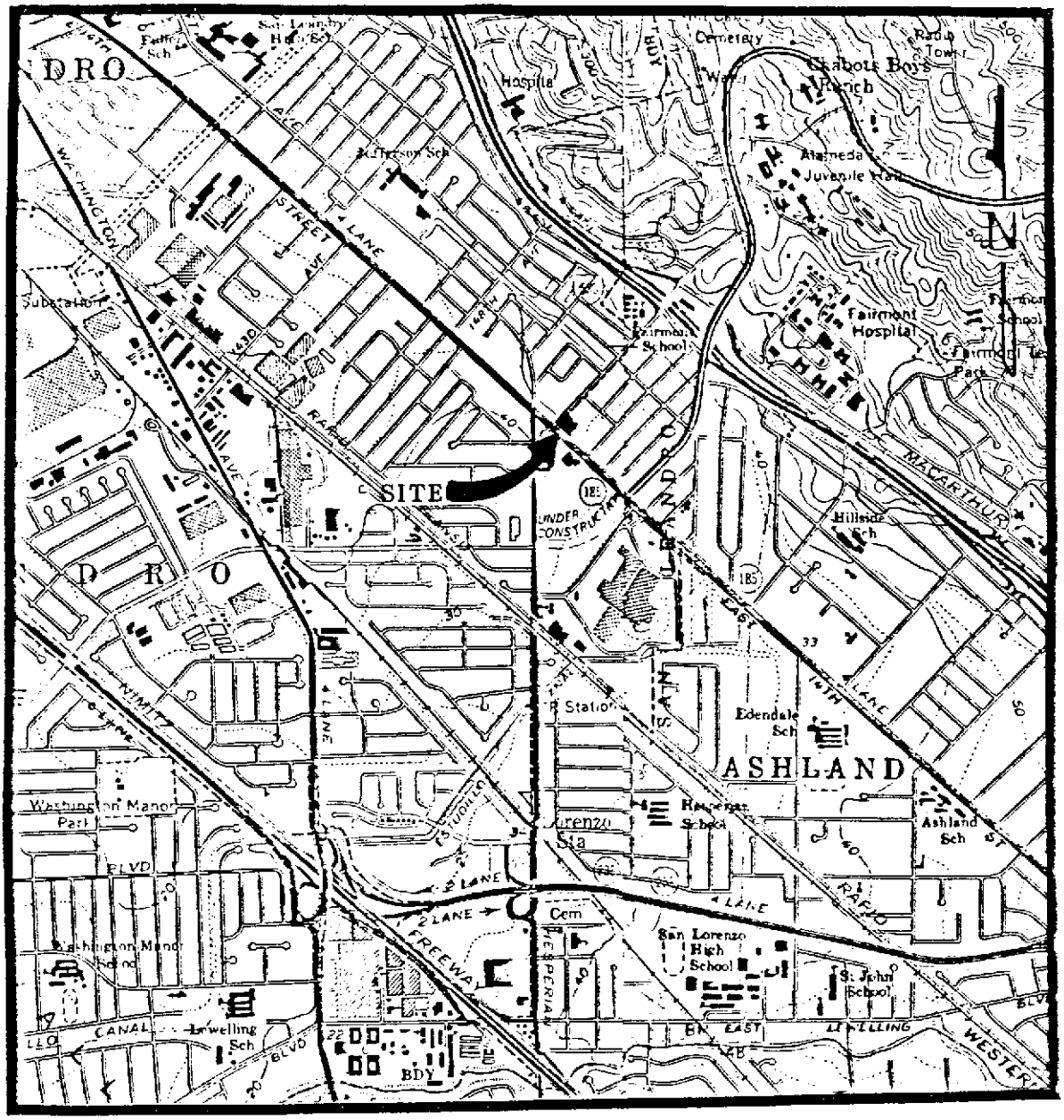

LOCATION MAP

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

Unocal S/S #3292
15008 E. 14th Street
San Leandro, CA

SEQUOIA ANALYTICAL

1900 Bates Avenue • Suite LM • Concord, California 94520
(415) 686-9600 • FAX (415) 686-9689

Kaprealian Engineering, Inc.	Client Project ID:	Unocal, 15008 E. 14th St., San Leandro	Sampled:	Jan 16, 1991
P.O. Box 996	Matrix Descript:	Soil	Received:	Jan 16, 1991
Benicia, CA 94510	Analysis Method:	EPA 5030/8015/8020	Analyzed:	Jan 16, 1991
Attention: Mardo Kaprealian, P.E.	First Sample #:	101-0260	Reported:	Jan 17, 1991

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)
101-0260	A1 *	2,600	7.1	55	55	170
101-0261	A2	290	1.3	1.1	1.5	1.2
101-0262	B1	840	1.5	2.7	1.3	9.9
101-0263	B2	150	1.6	3.3	2.0	11
Detection Limits:		**1.0**	**0.0050**	**0.0050**	**0.0050**	**0.0050**

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
Laboratory Director

Please Note:
* The above sample appears to contain gasoline.

1010260.KEI <1>

KAPREALIAN ENGINEERING, INC.

CHAIN OF CUSTODY

SAMPLER: Haig

WITNESSING AGENCY: Alameda County

SITE NAME & ADDRESS: Unocal - San Leandro, 15008 E. 14th Street

TURN AROUND TIME: 24 Hrs

SAMPLE ID NO.	DATE	TIME	SOIL	WATER	GRAB	COMP	NO. OF CONT.	SAMPLING LOCATION	TPH-G	BTXE	ANALYSES REQUESTED	REMARKS
A1	1/16/91		✓		✓		1	Fuel Tank Pit	✓	✓	10/0260	Please Fax the results by 12:00 Noon 1/17/91
A2	1/16/91		✓		✓		1		✓	✓	261	
B1	1/16/91		✓		✓		1		✓	✓	262	
B2	1/16/91		✓		✓		1		✓	✓	263	

Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Haig Kapreal	1/16/91	13:15 Jen Wheeler
Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Relinquished by: (Signature)	Date/Time	Received by: (Signature)

The following MUST BE completed by the laboratory accepting samples for analysis:

1. Have all samples received for analysis been stored in ice? ✓
2. Will samples remain refrigerated until analyzed? ✓
3. Did any samples received for analysis have head space? ND
4. Were samples in appropriate containers and properly packaged? ✓

Signature	Title	Date
JW	SR	1/16

SEQUOIA ANALYTICAL

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(415) 686-9600 • FAX (415) 686-9689

Kaprealian Engineering, Inc.	Client Project ID:	Unocal, 15008 E 14th St., San Leandro	Sampled:	Feb 11, 1991
P.O. Box 996	Matrix Descript:	Soil	Received:	Feb 11, 1991
Benicia, CA 94510	Analysis Method:	EPA 5030/8015/8020	Analyzed:	Feb 11, 1991
Attention: Mardo Kaprealian, P.E.	First Sample #:	102-0209	Reported:	Feb 12, 1991

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)
102-0209	P1	N.D.	0.0072	0.019	N.D.	0.026
102-0210	P2	1.2	0.014	0.041	0.019	0.11
102-0211	P3	N.D.	N.D.	N.D.	N.D.	N.D.
102-0212	P4	N.D.	N.D.	N.D.	N.D.	N.D.
102-0213	P5	N.D.	N.D.	N.D.	N.D.	N.D.
102-0214	P6	N.D.	N.D.	N.D.	N.D.	N.D.
102-0215	P7	7.1	0.89	0.23	0.57	0.70
Detection Limits:		**1.0**	**0.0050**	**0.0050**	**0.0050**	**0.0050**

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
Laboratory Director

1020209.KEI <1>

KAPREALIAN ENGINEERING, INC.

CHAIN OF CUSTODY

SAMPLER: Tom Mascarenas
WITNESSING AGENCY:

SITE NAME & ADDRESS: UNOCAL-San Leandro #3292, 15008 E. 14th Street

ANALYSES REQUESTED: TPH-G; BTEX

TURN AROUND TIME: 24 hrs.

SAMPLE ID NO.	DATE	TIME	SOIL	WATER	GRAB	COMP	NO. OF CONT.	SAMPLING LOCATION	TPH-G	BTEX					REMARKS
P1	2-11-91		✓		✓		1	Product Pipe trench	✓	✓	1020209				Please fax the results Thanks
P2	"		✓		✓		1	"	✓	✓			210		
P3	"		✓		✓		1	"	✓	✓			211		
P4	"		✓		✓		1	"	✓	✓			212		
P5	"		✓		✓		1	"	✓	✓			213		
P6	"		✓		✓		1	"	✓	✓			214		
P7	"		✓		✓		1	"	✓	✓			215		

Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Tom Mascarenas	2/11/91	JR Malerat
Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Relinquished by: (Signature)	Date/Time	Received by: (Signature)

The following MUST BE completed by the laboratory accepting samples for analysis:

1. Have all samples received for analysis been stored in 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: JR Malerat — Title: Proj Manager — Date: 2/11/91

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Kaprealian Engineering, Inc.	Client Project ID:	Unocal, 15008 E 14th St., San Leandro	Sampled:	Feb 12, 1991
P.O. Box 996	Matrix Descript:	Soil	Received:	Feb 13, 1991
Benicia, CA 94510	Analysis Method:	EPA 5030/8015/8020	Analyzed:	Feb 13, 1991
Attention: Mardo Kaprealian, P.E.	First Sample #:	102-0264	Reported:	Feb 13, 1991

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)
102-0264	P8	N.D.	N.D.	N.D.	N.D.	N.D.
102-0265	P9	130	0.068	0.37	0.66	0.076
Detection Limits:		**1.0**	**0.0050**	**0.0050**	**0.0050**	**0.0050**

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
Laboratory Director

1020264.KEI <1>

KAPREALIAN ENGINEERING, INC.

CHAIN OF CUSTODY

SAMPLER: Haig

WITNESSING AGENCY:

SITE NAME & ADDRESS: Unocal - San Leandro
15008 E. 14th Street

TURN AROUND TIME: 24 Hrs

SAMPLE ID NO.	DATE	TIME	SOIL	WATER	GRAB	COMP	NO. OF CONT.	SAMPLING LOCATION	TPH-D	BTEX	ANALYSES REQUESTED	REMARKS
✓ P8	2/12/91		✓		✓		1	Product Pipe Trench	✓	✓	1020264	Please Fax the results
✓ P9	2/12/91		✓		✓		1	Product Pipe Trench	✓	✓	265	

Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Haig Kreger	2/13/91	
Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Relinquished by: (Signature)	Date/Time	Received by: (Signature)
inquished by: (Signature)	Date/Time	Received by: (Signature)
	8:20 2/13	

The following MUST BE completed by the laboratory accepting samples for analysis:

1. Have all samples received for analysis been stored in ice? ✓
2. Will samples remain refrigerated until analyzed? ✓
3. Did any samples received for analysis have head space? NO
4. Were samples in appropriate containers and properly packaged? ✓

Signature	Title	Date
	SR	2/13

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Kaprealian Engineering, Inc.	Client Project ID:	Unocal, 15008 E. 14th St., San Leandro	Sampled:	Jan 16, 1991
P.O. Box 996	Sample Descript.:	Soil, WO1	Received:	Jan 16, 1991
Benicia, CA 94510	Analysis Method:	EPA 5030/8015/8020	Analyzed:	Jan 16, 1991
Attention: Mardo Kaprealian, P.E.	Lab Number:	101-0264	Reported:	Jan 17, 1991

TOTAL PETROLEUM FUEL HYDROCARBONS WITH BTEX DISTINCTION (EPA 8015/8020)

Analyte	Detection Limit mg/kg (ppm)	Sample Results mg/kg (ppm)
Low to Medium Boiling Point Hydrocarbons	1.0	N.D.
Benzene	0.0050	N.D.
Toluene	0.0050	N.D.
Ethyl Benzene	0.0050	N.D.
Xylenes	0.0050	N.D.

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
Laboratory Director

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Kaprealian Engineering, Inc.	Client Project ID:	Unocal, 15008 E. 14th St., San Leandro	Sampled:	Jan 16, 1991
P.O. Box 996	Matrix Descript:	Soil	Received:	Jan 16, 1991
Benicia, CA 94510	Analysis Method:	EPA 3550/8015	Extracted:	Jan 16, 1991
Attention: Mardo Kaprealian, P.E.	First Sample #:	101-0264	Analyzed:	Jan 17, 1991
			Reported:	Jan 17, 1991

TOTAL PETROLEUM FUEL HYDROCARBONS (EPA 8015)

Sample Number	Sample Description	High B.P. Hydrocarbons mg/kg (ppm)
101-0264	WO1	N.D.

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
Laboratory Director

1010264.KEI <2>

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Kaprealian Engineering, Inc.	Client Project ID:	Unocal, 15008 E. 14th St., San Leandro	Sampled:	Jan 16, 1991
P.O. Box 996	Matrix Descript:	Soil	Received:	Jan 16, 1991
Benicia, CA 94510	Analysis Method:	SM 503 D&E (Gravimetric)	Extracted:	Jan 16, 1991
Attention: Mardo Kaprealian, P.E.	First Sample #:	101-0264	Analyzed:	Jan 16, 1991
			Reported:	Jan 17, 1991

TOTAL RECOVERABLE PETROLEUM OIL

Sample Number	Sample Description	Oil & Grease mg/kg (ppm)
101-0264	WO1	N.D.

Detection Limits:	30

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

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Belinda C. Vega
Laboratory Director

1010264.KEI <3>

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Kaprealian Engineering, Inc.	Client Project ID:	Unocal, 15008 E. 14th St., San Leandro	Sampled:	Jan 16, 1991
P.O. Box 996	Sample Descript:	Soil, WO1	Received:	Jan 16, 1991
Benicia, CA 94510	Analysis Method:	EPA 5030/8010	Analyzed:	Jan 16, 1991
Attention: Mardo Kaprealian, P.E.	Lab Number:	101-0264	Reported:	Jan 17, 1991

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
Laboratory Director

1010264.KEI <4>

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Kaprealian Engineering, Inc.	Client Project ID:	Unocal, 15008 E. 14th St., San Leandro	Sampled:	Jan 16, 1991
P.O. Box 996	Sample Descript:	Soil, WO1	Received:	Jan 16, 1991
Benicia, CA 94510			Extracted:	Jan 16, 1991
Attention: Mardo Kaprealian, P.E.	Lab Number:	101-0264	Analyzed:	Jan 17, 1991
			Reported:	Jan 17, 1991

LABORATORY ANALYSIS

Analyte	Detection Limit mg/kg	Sample Results mg/kg
Cadmium	0.50	N.D.
Chromium	0.25	N.D.
Lead	0.25	N.D.
Nickel	2.5	N.D.
Zinc	0.50	31

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

SEQUOIA ANALYTICAL

Belinda C. Vega
Laboratory Director

1010264.KEI <5>

KAPREALIAN ENGINEERING, INC.

CHAIN OF CUSTODY

SAMPLER: Haig

WITNESSING AGENCY: Alameda County

SITE NAME & ADDRESS: Unocal - San Leandro, 5008 E. 14th Street

TURN AROUND TIME: 24 Hrs

SAMPLE ID NO.	DATE	TIME	SOIL	WATER	GRAB	COMP	NO. OF CONT.	SAMPLING LOCATION	TPH-G/BTXE	TPH-D/TOG	CL HC 8010	Metals:	Cd, Cr, Pb	Ni, Zn	REMARKS
W01	1/16/91		✓		✓		1	Waste Oil Tank Pit	✓	✓	✓	✓	✓	✓	Please Fax the results
								1010264							

	Relinquished by: (Signature)	Date/Time	Received by: (Signature)
1	Haig Kaprealian	1/16/91	Jan Udiew
2			
3			
4			

The following MUST BE completed by the laboratory accepting samples for analysis:

1. Have all samples received for analysis been stored in ice? ✓
2. Will samples remain refrigerated until analyzed? ✓
3. Did any samples received for analysis have head space? no
4. Were samples in appropriate containers and properly packaged? ✓

Signature	Title	Date
	SR	1/16

SEQUOIA ANALYTICAL

1900 Bates Avenue • Suite LM • Concord, California 94520
(415) 686-9600 • FAX (415) 686-9689

Kaprealian Engineering, Inc.	Client Project ID:	Unocal, 15008 E 14th St., San Leandro	Sampled:	Jan 28, 1991
P.O. Box 996	Sample Descript.:	Water, W1	Received:	Jan 29, 1991
Benicia, CA 94510	Analysis Method:	EPA 5030/ 8015/8020	Analyzed:	Jan 29, 1991
Attention: Mardo Kaprealian, P.E.	Lab Number:	101-0722 A-D	Reported:	Jan 29, 1991

TOTAL PETROLEUM FUEL HYDROCARBONS WITH BTEX DISTINCTION (EPA 8015/8020)

Analyte	Detection Limit µg/L (ppb)	Sample Results µg/L (ppb)
Low to Medium Boiling Point Hydrocarbons	30	13,000
Benzene	0.30	64
Toluene	0.30	37
Ethyl Benzene	0.30	25
Xylenes	0.30	85

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
Laboratory Director

1010722.KEI <1>

KAPREALIAN ENGINEERING, INC.

CHAIN OF CUSTODY

SAMPLER: Harry

WITNESSING AGENCY:

SITE NAME & ADDRESS: Unocal - San Leandro
15008 E. 14th Street

TURN AROUND TIME: 24 Hrs

SAMPLE ID NO.	DATE	TIME	SOIL	WATER	GRAB	COMP	NO. OF CONT.	SAMPLING LOCATION	TPH-D	BTXE		REMARKS
W1	1/28/91			✓	✓		4	Fuel Tank Pit	✓	✓	10/0 72 AD	Please Fax the results

ANALYSES REQUESTED

Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Heather Kenoff	1/29 9:43	M. Knight DPHS
Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Relinquished by: (Signature)	Date/Time	Received by: (Signature)

The following MUST BE completed by the laboratory accepting samples for analysis:

1. Have all samples received for analysis been stored in 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

M. Knight — Signature; Analyst — Title; 29 JAN 91 — Date