



KAPREALIAN ENGINEERING
INCORPORATED

TRANSMITTAL PAGE

DATE: 8-11-92

TO: MR. KARL BUSCHÉ
CITY OF SAN LEANDRO FIRE DEPT.

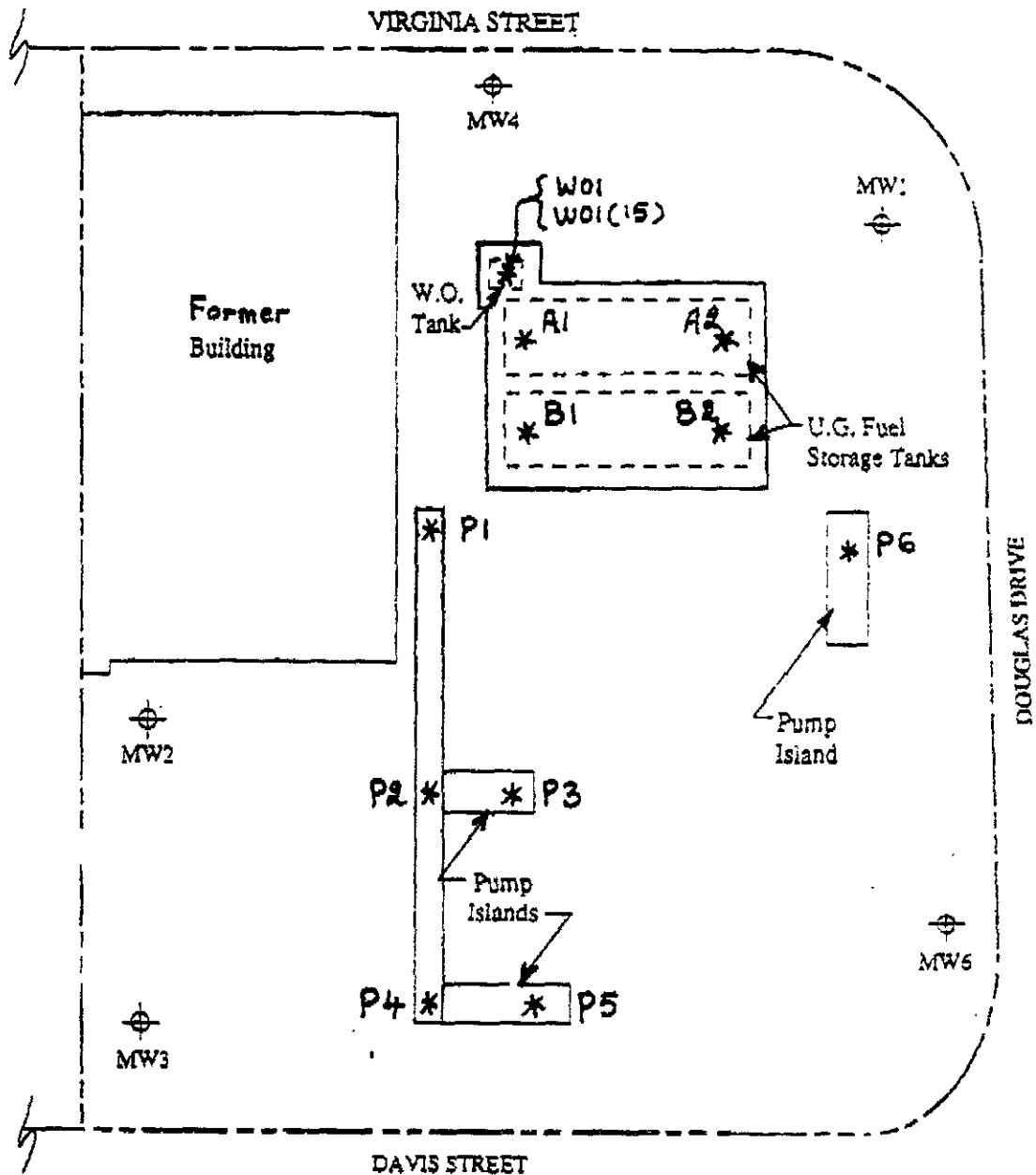
FROM: HAIG KEVORK

Number of Pages (including Cover): 12

SUBJECT: _____

8-12-92 →

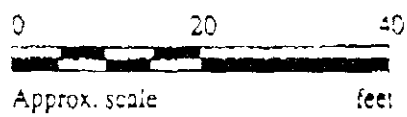
If any problems occur in receiving, please
call the number listed below



LEGEND

- ⊕ Monitoring Well
- * Sample Point Location

SITE PLAN



UNOCAL SERVICE STATION #2512
 1300 DAVIS STREET
 SAN LEANDRO, CA

FIGURE
 1

KEI-J
May 1, 1992

TABLE 1
SUMMARY OF LABORATORY ANALYSES
SOIL

PPM

<u>Date</u>	<u>Sample Number</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>Ethylbenzene</u>	<u>TOG</u>
7/28/92	A1	14	--	23	0.078	0.093	0.16	0.061	--
	A2	14	--	ND	ND	ND	ND	ND	--
	B1	14	--	3.2	0.0056	ND	0.023	ND	--
	B2	14	--	8.4	0.0086	0.019	0.054	0.069	--
	P1	3.5	--	ND	0.013	ND	0.0060	ND	--
	P2	3.5	--	5.8	0.042	0.022	0.11	0.024	--
	P3	3.5	--	ND	ND	0.012	0.025	ND	--
	P4	3.5	--	ND	ND	ND	0.0067	ND	--
	P5	3.5	--	6.8	ND	ND	1.7	0.21	--
	P6	3.5	--	91	0.72	0.32	1.4	0.34	--
	w01	10	210	150	0.61	3.3	12	1.8	3,001
	w01(15)	15	--	--	--	--	--	--	210

~~CONFIDENTIAL~~



SEQUOIA ANALYTICAL

1900 Bates Avenue • Suite LM • Concord, California 94520
(510) 686-9600 • FAX (510) 686-9669

Kaprealian Engineering, Inc. 2401 Starwell Drive, Suite 400 Concord, CA 94520 Attention: Mardo Kaprealian, P.E.	Client Project ID: Unocal, 1300 Davis St., San Leandro Sample Matrix: Soil Analysis Method: EPA 5030/8015/8020 First Sample #: 207-0855	Sampled: Jul 28, 1992 Received: Jul 26, 1992 Reported: Jul 31, 1992
--	--	---

TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX DISTINCTION

Analyte	Reporting Limit mg/kg	Sample I.D. 207-0855 A1	Sample I.D. 207-0856 A2	Sample I.D. 207-0857 B1	Sample I.D. 207-0858 B2	Sample I.D. Matrix Blank
Purgeable Hydrocarbons	1.0	23	N.D.	3.2	8.4	
Benzene	0.005	0.078	N.D.	0.0056	0.0086	
Toluene	0.005	0.093	N.D.	N.D.	0.019	
Ethyl Benzene	0.005	0.061	N.D.	N.D.	0.069	
Total Xylenes	0.005	0.16	N.D.	0.023	0.054	
Chromatogram Pattern:		Gasoline	--	Gasoline	Gasoline	

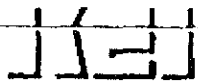
Quality Control Data

Report Limit Multiplication Factor:	2.0	1.0	1.0	1.0	1.0
Date Analyzed:	7/29/92	7/29/92	7/29/92	7/29/92	7/29/92
Instrument Identification:	HP-4	HP-4	HP-4	HP-4	HP-4
Surrogate Recovery, %: (QC Limits = 70-130%)	94	110	116	100	111

Purgeable Hydrocarbons are quantitated against a fresh gasoline standard.
Analytes reported as N.D. were not detected above the stated reporting limit

SEQUOIA ANALYTICAL

Scott A. Chieffo
Scott A. Chieffo
Project Manager



KAPREALIAN ENGINEERING
INCORPORATED

CHAIN OF CUSTODY

COLLECTOR		MESSAGING AGENCY		SITE NAME & ADDRESS					ANALYSES REQUESTED				TURN AROUND TIME:	REMARKS
Haig				Unocal - San Leandro 1300 Davis Street					TPH-G	BTXE				
SAMPLE ID NO.	DATE	TIME	SOIL	WATER	GRAB	COMP	NO. OF CONT.	SAMPLING LOCATION						
A1	1/28/92		✓		✓		1	Fuel Tank Pit	✓	✓	2070	855		Please Fax
A2	↓		✓		✓		1	↓	✓	✓	↓	856		
B1	↓		✓		✓		1	↓	✓	✓	↓	857		
B2	↓		✓		✓		1	↓	✓	✓	↓	858		

Dispatched by: (Signature) <i>[Signature]</i>	Date/Time 1/28/92	Received by: (Signature) <i>[Signature]</i>	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? 4. Were samples in appropriate containers and properly packaged? Yes Yes NA Yes
Inquished by: (Signature)	Date/Time	Received by: (Signature)	
Inquished by: (Signature)	Date/Time	Received by: (Signature)	
Inquished by: (Signature)	Date/Time	Received by: (Signature)	

Signature	analyst	1/28/92
	Title	Date

08-11-1992 08:04
5106877602
KAPREALIAN ENGINEERING
11:08



SEQUOIA ANALYTICAL

1900 Bates Avenue • Suite LM • Concord, California 94520
(510) 886-9600 • FAX (510) 886-9689

Kaprealian Engineering, Inc. 2401 Stanwell Drive, Suite 400 Concord, CA 94520 Attention: Mardo Kaprealian, P.E.	Client Project ID: Unocal, 1300 Davis St., San Leandro Sample Matrix: Soil Analysis Method: EPA 5030/8015/8020 First Sample #: 207-1004	Sampled: Jul 28, 1992 Received: Jul 28, 1992 Reported: Jul 31, 1992
--	--	---

TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX DISTINCTION

Analyte	Reporting Limit mg/kg	Sample I.D. 207-1004 P1	Sample I.D. 207-1005 P2	Sample I.D. 207-1006 P3	Sample I.D. 207-1007 P4	Sample I.D. 207-1008 P5	Sample I.D. 207-1009 P6
Purgeable Hydrocarbons	1.0	N.D.	5.8	N.D.	N.D.	6.8	91
Benzene	0.005	0.013	0.042	N.D.	N.D.	N.D.	0.72
Toluene	0.005	N.D.	0.022	0.012	N.D.	N.D.	0.32
Ethyl Benzene	0.005	N.D.	0.024	N.D.	N.D.	0.21	0.34
Total Xylenes	0.005	0.0060	0.11	0.025	0.0067	1.7	1.4
Chromatogram Pattern:		--	Gasoline	--	--	Gasoline	Gasoline

Quality Control Data

Report Limit Multiplication Factor:	1.0	1.0	1.0	1.0	1.0	10
Date Analyzed:	7/29/92	7/29/92	7/29/92	7/29/92	7/29/92	7/29/92
Instrument Identification:	HP-4	HP-4	HP-4	HP-4	HP-2	HP-2
Surrogate Recovery, %: (QC Limits = 70-130%)	105	105	109	107	108	100

Purgeable Hydrocarbons are quantitated against a fresh gasoline standard.
Analytes reported as N.D. were not detected above the stated reporting limit.

SEQUOIA ANALYTICAL

Scott A. Chieffo
Scott A. Chieffo
Project Manager



KAPREALIAN ENGINEERING
INCORPORATED

CHAIN OF CUSTODY

AMPLER Haig		SITE NAME & ADDRESS Unocal - San Leandro 1300 Davis Street							ANALYSES REQUESTED				TURN AROUND TIME: 3 Days	
MESSAGING AGENCY									TPH-G	BTEX				
SAMPLE ID NO.	DATE	TIME	SOIL	WATER	GRAB	COMP	NO. OF CONT.	SAMPLING LOCATION	TPH-G	BTEX				REMARKS
P1	11/28/99		✓		✓		1	Product Pipe Trench	✓	✓	207	1004		Please Fax
P2			✓		✓		1	Product Pipe Trench	✓	✓		1005		
P3			✓		✓		1	Beneath Dispenser	✓	✓		1006		
P4			✓		✓		1	Product Pipe Trench	✓	✓		1007		
P5			✓		✓		1	Beneath Dispenser	✓	✓		1008		
P6			✓		✓		1	Product Pipe Trench	✓	✓		1009		

Requested by: (Signature) <i>[Signature]</i>	Date/Time 11/29/99	Received by: (Signature) <i>[Signature]</i>
Requested by: (Signature)	Date/Time	Received by: (Signature)
Requested by: (Signature)	Date/Time	Received by: (Signature)
Requested 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? *Yes*
4. Were samples in appropriate containers and properly packaged? *Yes*

[Signature] Analyst *11/29/99* Date

2101 Starwell Drive, Suite 410
Concord, California 94521
Tel: 510 602 5100 Fax: 510 607 0602

08-11-1999 08:05
510687-02
KAPREALIAN ENGINEERING



SEQUOIA ANALYTICAL

1900 Bates Avenue • Suite LM • Concord, California 94520
(510) 666-9600 • FAX (510) 666-9669

Kaprealian Engineering, Inc. 2401 Stanwell Drive, Suite 400 Concord, CA 94520 Attention: Mardo Kaprealian, P.E.	Client Project ID: Unocal, 1300 Davis Street, San Leandro Sample Matrix: Soil Analysis Method: EPA 5030/8015/8020 First Sample #: 207-1010	Sampled: Jul 28, 1992 Received: Jul 28, 1992 Reported: Aug 3, 1992
--	---	--

TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX DISTINCTION

Analyte	Reporting Limit mg/kg	Sample I.D. 207-1010 WO1	Sample I.D. Matrix Blank
Purgeable Hydrocarbons	1.0	150	
Benzene	0.005	0.61	
Toluene	0.005	3.3	
Ethyl Benzene	0.005	1.8	
Total Xylenes	0.005	12	

Chromatogram Pattern: Gasoline

Quality Control Data

Report Limit Multiplication Factor:	25	1.0
Date Analyzed:	7/29/92	7/29/92
Instrument Identification:	HP-4	HP-4
Surrogate Recovery, %: (QC Limits = 70-130%)	100	111

Purgeable Hydrocarbons are quantitated against a fresh gasoline standard.
Analytes reported as N.D. were not detected above the stated reporting limit.

SEQUOIA ANALYTICAL

Scott A. Chieffo
Scott A. Chieffo
Project Manager

2071010.XEI <1>



SEQUOIA ANALYTICAL

1900 Bates Avenue • Suite LM • Concord, California 94520
(510) 686-9600 • FAX (510) 686-9689

Kaprealian Engineering, Inc. 2401 Starwell Drive, Suite 400 Concord, CA 94520 Attention: Mardo Kaprealian, P.E.	Client Project ID: Unocal, 1300 Davis Street, San Leandro Sample Matrix: Soil Analysis Method: EPA 3550/8015 First Sample #: 207-1010	Sampled: Jul 28, 1992 Received: Jul 28, 1992 Reported: Aug 3, 1992
--	--	--

TOTAL EXTRACTABLE PETROLEUM HYDROCARBONS

Analyte	Reporting Limit mg/kg	Sample I.D. 207-1010 W01	Sample I.D. Matrx Blank
Extractable Hydrocarbons	1.0	210	N.D.
Chromatogram Pattern:		Diesel & Non Diesel Mixture (> C22 & < C13)	..

Quality Control Data

Report Limit Multiplication Factor:	10.0	1.0
Date Extracted:	7/29/92	7/29/92
Date Analyzed:	7/30/92	7/30/92
Instrument Identification:	HP-3	HP-3

Extractable Hydrocarbons are quantitated against a fresh diesel standard.
Analytes reported as N.D. were not detected above the stated reporting limit.

SEQUOIA ANALYTICAL

Scott A. Chieffo
Scott A. Chieffo
Project Manager



SEQUOIA ANALYTICAL

1900 Bates Avenue • Suite LM • Concord, California 94520
(510) 686-9600 • FAX (510) 686-9689

Kaprealian Engineering, Inc.	Client Project ID:	Unocal, 1300 Davis Street, San Leandro	Sampled:	Jul 28, 1992
2401 Stanwell Drive, Suite 400	Matrix Descript:	Soil	Received:	Jul 28, 1992
Concord, CA 94520	Analysis Method:	SM 5520 E&F (Gravimetric)	Extracted:	Jul 30, 1992
Attention: Mardo Kaprealian, P.E.	First Sample #:	207-1010	Analyzed:	Aug 3, 1992
			Reported:	Aug 3, 1992

TOTAL RECOVERABLE PETROLEUM OIL

Sample Number	Sample Description	Oil & Grease mg/kg (ppm)
207-1010	WO1	3,000
207-1011	WO1 (15)	210

Detection Limits:	30
-------------------	----

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

SEQUOIA ANALYTICAL

Scott A. Chieffo
 Scott A. Chieffo
 Project Manager



SEQUOIA ANALYTICAL

1900 Bates Avenue • Suite LM • Concord, California 94520
(510) 886-9600 • FAX (510) 886-9689

Kaprealian Engineering, Inc. 2401 Starrwell Drive, Suite 400 Concord, CA 94520 Attention: Mardo Kaprealian, P.E.	Client Project ID: Unocal, 1300 Davis Street, San Leandro Sample Descript: Soil, WO1 Lab Number: 207-1010	Sampled: Jul 28, 1992 Received: Jul 28, 1992 Extracted: Jul 29, 1992 Analyzed: 7/30-8/3/92 Reported: Aug 3, 1992
---	---	--

LABORATORY ANALYSIS

Analyte	Detection Limit mg/kg	Sample Results mg/kg
Cadmium	0.50	0.95
Chromium	0.25	48
...
...
...

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

SEQUOIA ANALYTICAL



SEQUOIA ANALYTICAL

1900 Bates Avenue • Suite LM • Concord, California 94520
 (510) 886-9600 • FAX (510) 886-9689

Kaprealian Engineering, Inc. 2401 Starwell Drive, Suite 400 Concord, CA 94520 Attention: Mardo Kaprealian, P.E.	Client Project ID: Sample Descript: Analysis Method: Lab Number:	Unocal, 1300 Davis Street, San Leandro Soil, WO1 EPA 5030/8010 207-1010	Sampled: Received: Analyzed: Reported:	Jul 26, 1992 Jul 28, 1992 Jul 31, 1992 Aug 3, 1992
--	---	--	---	---

Analyte	Detection Limit µg/kg	Sample Results µg/kg
Bromodichloromethane.....	50	N.D.
Bromoform.....	50	N.D.
Bromomethane.....	50	N.D.
Carbon tetrachloride.....	50	N.D.
Chlorobenzene.....	50	N.D.
Chloroethane.....	50	N.D.
2-Chloroethylvinyl ether.....	50	N.D.
Chloroform.....	50	N.D.
Chloromethane.....	50	N.D.
Dihromochloromethane.....	50	N.D.
1,2-Dichloroethane.....	50	N.D.
1,3-Dichlorobenzene.....	50	N.D.
1,4-Dichlorobenzene.....	50	N.D.
1,1-Dichloroethane.....	50	120
1,2-Dichloroethane.....	50	N.D.
1,1-Dichloroethane.....	50	N.D.
cis-1,2-Dichloroethene.....	50	N.D.
trans-1,2-Dichloroethene.....	50	N.D.
1,2-Dichloropropane.....	50	N.D.
cis-1,3-Dichloropropene.....	50	N.D.
trans-1,3-Dichloropropene.....	50	N.D.
Methylene chloride.....	50	N.D.
1,1,2,2-Tetrachloroethane.....	50	N.D.
Tetrachloroethane.....	50	55
1,1,1-Trichloroethane.....	50	250
1,1,2-Trichloroethane.....	50	N.D.
Trichloroethene.....	50	N.D.
Trichlorofluoromethane.....	50	N.D.
Vinyl chloride.....	50	N.D.

Analytes reported as N.D. were not present above the stated limit of detection. Because matrix effects and/or other factors required additional sample dilution, detection limits for this sample have been raised.

SEQUOIA ANALYTICAL

Scott A. Chieffo
 Scott A. Chieffo
 Project Manager



KAPREALIAN ENGINEERING
INCORPORATED

CHAIN OF CUSTODY

SAMPLER		SITE NAME & ADDRESS							ANALYSES REQUESTED						TURN AROUND TIME:		
Haig		Unocal - San Leandro 1300 Davis Street							TPH-G	BTXE	TPH-D	EPA8010	TOG	Metals: Cu, Pb, Zn, Ni	3 Days		
WITNESSING AGENCY		SAMPLE ID NO.	DATE	TIME	SOIL	WATER	GRAB	COMP							NO. OF CONT.	SAMPLING LOCATION	REMARKS
		W01	7/28/92		✓		✓		1	Waste Oil Tank Pit	✓	✓	✓	✓	✓	✓	2071010 Please Fax ↓ 1011
		W01(15)	7/28/92		✓		✓		1	↓				✓			
Relinquished by: (Signature)		Date/Time		Received by: (Signature)		Date/Time		Received by: (Signature)		Date/Time		Received by: (Signature)		Date/Time		Received by: (Signature)	
Haig		7/28/92		[Signature]		7/28/92		[Signature]									

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

- Have all samples received for analysis been stored in ice? Yes
- Will samples remain refrigerated until analyzed? Yes
- Did any samples received for analysis have head space? Yes
- Were samples in appropriate containers and properly packaged? Yes

Signature: [Signature] Title: analyst Date: 7/28/92

05-11-1992 09:09 S1088 2 KAPREALIAN ENGINEERING