



KAPREALIAN ENGINEERING, INC.

Consulting Engineers

PO. BOX 996 • BENICIA, CA 94510
(707) 746-6515 • (707) 746-6916 • FAX: (707) 746-6581

89 DEC 29 PM 12:24

CSC

1.12.89

TO: *Mr. [unclear]*

FROM: *H. H. [unclear]*

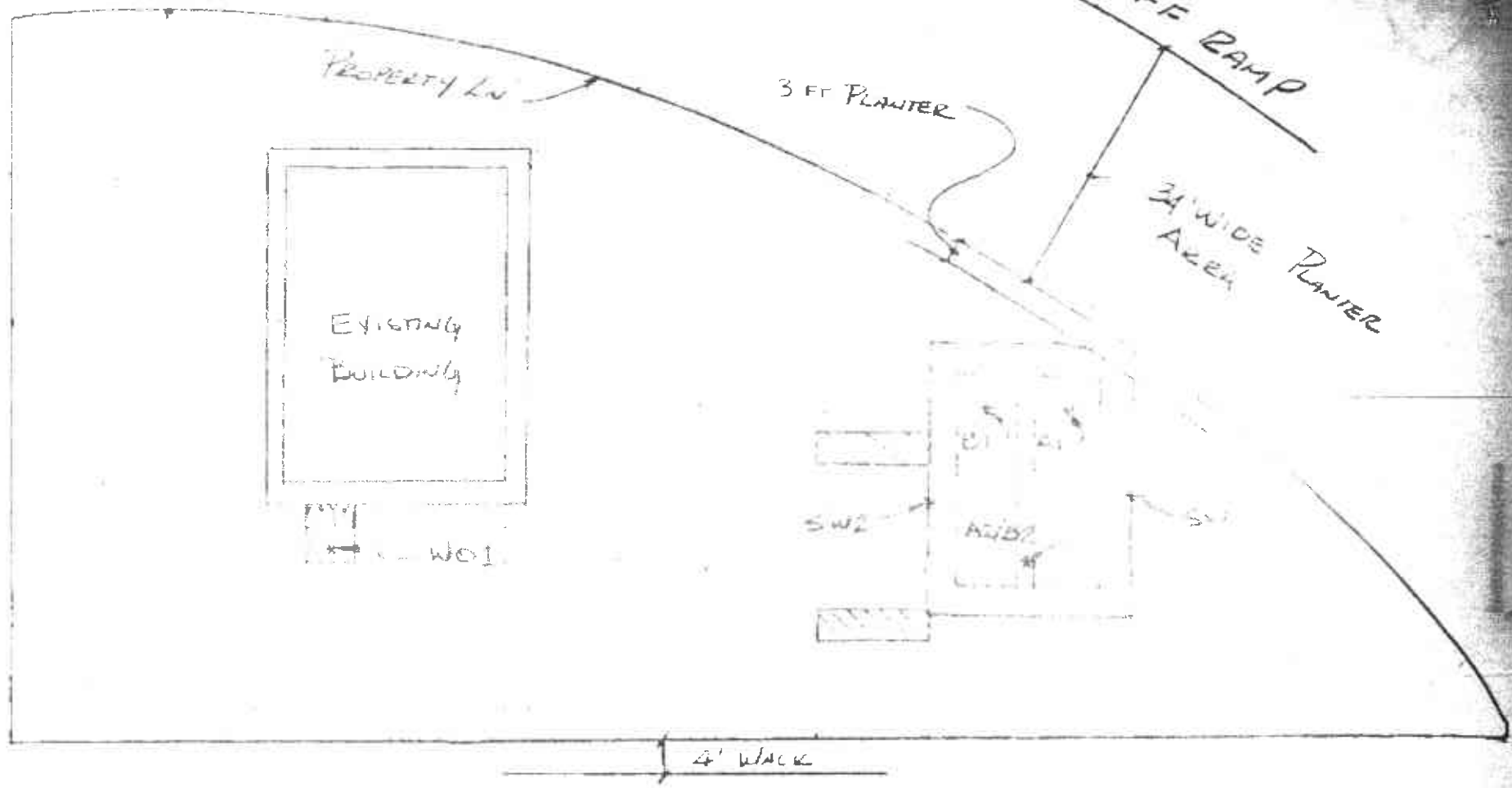
Number of Pages: *20*
(including covers)

SUBJECT: *Classical # 575, 3835 Pioneer St, Oakland*

attached are a site plan and chain of custody documentation for tank pit samples collected on 10/29/89 at above referenced site.

Also attached is a site plan indicating sample point locations.

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



PIERSON

SCALE: APPROX. 1" = 20'

UNOCAL SS # 5781
 3535 PIERSON ST.
 (PIERSON & MACARTHUR)
 OAKLAND

12/29/89 11:38 23/01/148 5581 KAPRELIAN ENG.

0002



SEQUOIA ANALYTICAL

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

Kaprealian Engineering, Inc.

P.O. Box 996

Benicia, CA 94510

Attention: Mardo Kaprealian, P.E.

Client: *State of California*

Main: *912-2064*

Analysis: *912-2064*

First Sample #: *912-2064*

Analyst: *M. Person*

Sampled: Dec 14, 1989

Received: Dec 15, 1989

Analyzed: Dec 18, 1989

Reported: Dec 19, 1989

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

Sample Number	Sample Description	Low/Medium B.P.	Benzene	Toluene	Ethyl Benzene	Xylenes
		Hydrocarbons mg/kg (ppm)	mg/kg (ppm)	mg/kg (ppm)	mg/kg (ppm)	mg/kg (ppm)
912-2064	A1	3.0	N.D.	N.D.	N.D.	N.D.
912-2065	B1	N.D.	N.D.	N.D.	N.D.	N.D.
912-2066	A2/B2	5.8	0.10	N.D.	N.D.	N.D.
912-2067	SW1	15	N.D.	N.D.	N.D.	N.D.
912-2068	SW2	46	0.65	N.D.	N.D.	N.D.

Detection Limits:

1.0

0.05

0.1

0.1

0.1

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
 Belinda C. Vega
 Project Manager



KAPREALIAN ENGINEERING, INC.
CHAIN OF CUSTODY

12/29/89 11:39 0707 746 5581 KAPREALIAN ENG.

SAMPLER: K.M. Bredish SITE NAME & ADDRESS: Unocal SS # 5781
3535 Pierson (Pierson & MacArthur)
Oakland
 WITNESSING AGENCY: ARLU LEVI
- ALAMEDA CTY HAZARDOUS AGENCY

TURN AROUND TIME:
24 HR

SAMPLE ID NO.	DATE	TIME	SOIL	WATER	GRAB	COMP	NO. OF CONT.	SAMPLING LOCATION	ANALYSES REQUESTED	REMARKS
A1	12/14/89		✓		✓		1	FUEL TK PIT - BTM	✓	
B1	-		✓		✓		1	- - -	✓	
A2/B2	-		✓		✓		1	- - -	✓	
SW1	-		✓		✓		1	FUEL TK PIT - SIDEWALL	✓	
SW2	-		✓		✓		1	- - -	✓	

Relinquished by: (Signature) <u>K.M. Bredish</u>	Date/Time <u>12/15/89 11:30</u>	Received by: (Signature) <u>Tom McPain</u>	The following MUST BE completed by the laboratory accepting samples for analysis: 1. Have all samples received for analysis been stored in ice? <u>YES</u> 2. Will samples remain refrigerated until analyzed? <u>YES</u> 3. Did any samples received for analysis have head space? <u>NO</u> 4. Were samples in appropriate containers and properly packaged? <u>YES</u>
Relinquished by: (Signature) <u>Tom McPain</u>	Date/Time	Received by: (Signature)	
Relinquished by: (Signature)	Date/Time	Received by: (Signature)	
Relinquished by: (Signature)	Date/Time <u>12-15-89 1:10pm</u>	Received by: (Signature) <u>Randy [Signature]</u>	

Signature: [Signature] Title: SK Date: 12-15-89

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SEQUOIA ANALYTICAL

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

Kaprealian Engineering, Inc.
P.O. Box 996
Berkeley, CA 94510
Attention: Mardo Kaprealian, P.E.

Client Project ID: Uppool #5781, Okwood, 3500 Pleasant
Sample Descript: Sol, WD1
Lab Number: 912-2063

Sampled: Dec 14, 1989
Received: Dec 15, 1989
Extracted: Dec 18, 1989
Analyzed: Dec 18, 1989
Reported: Dec 19, 1989

LABORATORY ANALYSIS

Analyte	Detection Limit mg/kg	Sample Results mg/kg
Cadmium	0.5	N.D.
Chromium	0.5	6.3
Lead	2.5	340
Zinc	0.5	70

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

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Project Manager



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Kaprealian Engineering, Inc.	Client Project ID:	Unocal #5771, Oakland 3535 Paving	Sampled:	Dec 14, 1989
P.O. Box 996	Sample Descript.:	Soil, WO1	Received:	Dec 15, 1989
Benicia, CA 94510	Analysis Method:	EPA 5030/8015/8020	Analyzed:	Dec 18, 1989
Attention: Mardo Kaprealian, P.E.	Lab Number:	912-2063	Reported:	Dec 19, 1989

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	670
Benzene	0.05	5.4
Toluene	0.1	15
Ethyl Benzene	0.1	2.3
Xylenes	0.1	17

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.

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Kaprealian Engineering, Inc. P.O. Box 996 Bericia, CA 94510 Attention: Mardo Kaprealian, P.E.	Client Project ID: Matrix Descript: Analysis Method: First Sample #:	Unocal #5791, Oakland, 3535 Pierson Soil EPA 3550/8015 912-2063	Sampled: Dec 14, 1989 Received: Dec 15, 1989 Extracted: Dec 15, 1989 Analyzed: Dec 15, 1989 Reported: Dec 19, 1989
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TOTAL PETROLEUM FUEL HYDROCARBONS (EPA 8015)

Sample Number	Sample Description	High B.P. Hydrocarbons mg/kg (ppm)
912-2063	WOT	8,300

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.

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Project Manager

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Kaprealian Engineering, Inc. P.O. Box 996 Benicia, CA 94510 Attention: Mardo Kaprealian, P.E.	Client Project ID: Matrix Descript: Analysis Method: First Sample #:	Unocal #5781, Oakland, 3535 Person Soil EPA 418.1 (I.R. with clean-up) 912-2063	Sampled: Received: Extracted: Analyzed: Reported:	Dec 14, 1989 Dec 15, 1989 Dec 18, 1989 Dec 18, 1989 Dec 19, 1989
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TOTAL RECOVERABLE PETROLEUM HYDROCARBONS

Sample Number	Sample Description	Petroleum Oil mg/kg (ppm)
912-2063	WD1	48,000

Detection Limits:

1.0

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

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 Belinda C. Vega
 Project Manager

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SEQUOIA ANALYTICAL

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Kaprealian Engineering, Inc.	Client Project ID: Unocal #5761, Oakland, 3535 Platon	Sampled: Dec 14, 1989
P.O. Box 996	Sample Descript: Soil, WO1	Received: Dec 15, 1989
Benicla, CA 94510	Analysis Method: EPA 5030/8010	Analyzed: Dec 18, 1989
Attention: Mardo Kaprealian, P.E.	Lab Number: 812-2063	Reported: Dec 19, 1989

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	25.0	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	10.0	10
1,3-Dichlorobenzene	10.0	N.D.
1,4-Dichlorobenzene	10.0	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	10.0	N.D.
1,1,2,2-Tetrachloroethane	5.0	N.D.
Tetrachloroethene	5.0	77
1,1,1-Trichloroethane	5.0	15
1,1,2-Trichloroethane	5.0	N.D.
Trichloroethene	5.0	N.D.
Trichlorofluoromethane	5.0	N.D.
Vinyl chloride	10.0	N.D.

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

SEQUOIA ANALYTICAL

Belinda C. Vega

Belinda C. Vega
Project Manager



KAPREALIAN ENGINEERING, INC.
CHAIN OF CUSTODY

12/29/89

11:43

707 746 5581

KAPREALIAN ENG.

010

SAMPLER <i>L.M. Bradish</i>		SITE NAME & ADDRESS Unocal SS # 5781 3535 Pierson (Pierson & MacArthur) Oakland					ANALYSES REQUESTED TPH-G + BTKL TPH-D TOC (SOBDF) BOD METALS - Cd, Cr, Pb, Zn			TURN AROUND TIME: 24HR					
WITNESSING AGENCY ACHA										REMARKS					
SAMPLE ID NO.	DATE	TIME	SOIL	WATER	GRAB	COMP	CONT.	NO. OF	SAMPLING LOCATION	TPH-G + BTKL	TPH-D	TOC (SOBDF)	BOD	METALS - Cd, Cr, Pb, Zn	
W101	12/14/89		✓	✓				1	W.D. Tie Pit - BTM	✓	✓	✓	✓	✓	
Relinquished by: (Signature) <i>L.M. Bradish</i>		Date/Time 12/15/89		Received by: (Signature) <i>Tom McPain</i>		The following MUST BE completed by the laboratory accepting samples for analysis:									
Relinquished by: (Signature) <i>Tom McPain</i>		Date/Time		Received by: (Signature)		1. Have all samples received for analysis been stored in ice? YES									
Relinquished by: (Signature)		Date/Time		Received by: (Signature)		2. Will samples remain refrigerated until analyzed? YES									
Relinquished by: (Signature)		Date/Time		Received by: (Signature)		3. Did any samples received for analysis have head space? NO									
Relinquished by: (Signature)		Date/Time 12-15-89		Received by: (Signature)		4. Were samples in appropriate containers and properly packaged? YES									
						Signature <i>[Signature]</i>		Title <i>[Signature]</i>		Date 12-15-89					