

RECEIVED

2:28 pm, Apr 21, 2009

Alameda County
Environmental Health



KAPREALIAN ENGINEERING
INCORPORATED

RECEIVED

JUL 29 1992

KEI-J89-0805.R8
July 24, 1992

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

Attention: Mr. Keith Bullock

RE: Drill Cutting Stockpiled Soil Sampling
Unocal Service Station #0746
3943 Broadway
Oakland, California

FILE #	0746	SS	X	BP	
DPT	8	QM		TRANSMITTAL	
1	2	3	4	5	6

Dear Mr. Bullock:

This letter report summarizes the analytical results of the composite sample that was collected from the stockpiled soil at the referenced site. The soil analyses were conducted to comply with the County's requirements for proper disposal of potentially contaminated soil.

On June 26, 1992, a soil sample from approximately 2.5 cubic yards of stockpiled soil (that had been excavated during recovery well drilling activities) was collected to determine proper disposal of the soil. One composite soil sample (designated as Comp RW1) was taken. The composite sample consisted of four individual grab samples taken at various locations and at depths of approximately 2 feet into the stockpile. The samples were collected in two-inch diameter, clean brass tubes, which were then sealed with aluminum foil, plastic caps and tape, and placed in a cooled ice chest for subsequent delivery to a certified laboratory for analysis. The sample was analyzed at Sequoia Analytical Laboratory in Concord, California, and was accompanied by properly executed Chain of Custody documentation.

The soil sample was analyzed to determine concentrations of total petroleum hydrocarbons (TPH) as gasoline by EPA method 5030 in conjunction with modified 8015, and benzene, toluene, xylenes and ethylbenzene (BTX&E) by the use of EPA method 8020. Analytical results of the soil sample (Comp RW1) indicated a level of TPH as gasoline of 4.6 parts per million (ppm). Copies of the laboratory analyses and the Chain of Custody documentation are attached to this report.

Based on the analytical results of the soil samples, approximately 2.5 cubic yards of stockpiled soil, represented by sample Comp RW1, were disposed of at BFI Waste Systems, in Livermore, California (an approved Class III disposal site) by Dillard Trucking of Byron,



KAPREALIAN ENGINEERING
INCORPORATED

KEI-J89-0805.R8
July 24, 1992

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

Attention: Mr. Keith Bullock

RE: Drill Cutting Stockpiled Soil Sampling
Unocal Service Station #0746
3943 Broadway
Oakland, California

Dear Mr. Bullock:

This letter report summarizes the analytical results of the composite sample that was collected from the stockpiled soil at the referenced site. The soil analyses were conducted to comply with the County's requirements for proper disposal of potentially contaminated soil.

On June 26, 1992, a soil sample from approximately 2.5 cubic yards of stockpiled soil (that had been excavated during recovery well drilling activities) was collected to determine proper disposal of the soil. One composite soil sample (designated as Comp RW1) was taken. The composite sample consisted of four individual grab samples taken at various locations and at depths of approximately 2 feet into the stockpile. The samples were collected in two-inch diameter, clean brass tubes, which were then sealed with aluminum foil, plastic caps and tape, and placed in a cooled ice chest for subsequent delivery to a certified laboratory for analysis. The sample was analyzed at Sequoia Analytical Laboratory in Concord, California, and was accompanied by properly executed Chain of Custody documentation.

The soil sample was analyzed to determine concentrations of total petroleum hydrocarbons (TPH) as gasoline by EPA method 5030 in conjunction with modified 8015, and benzene, toluene, xylenes and ethylbenzene (BTX&E) by the use of EPA method 8020. Analytical results of the soil sample (Comp RW1) indicated a level of TPH as gasoline of 4.6 parts per million (ppm). Copies of the laboratory analyses and the Chain of Custody documentation are attached to this report.

Based on the analytical results of the soil samples, approximately 2.5 cubic yards of stockpiled soil, represented by sample Comp RW1, were disposed of at BFI Waste Systems, in Livermore, California (an approved Class III disposal site) by Dillard Trucking of Byron,

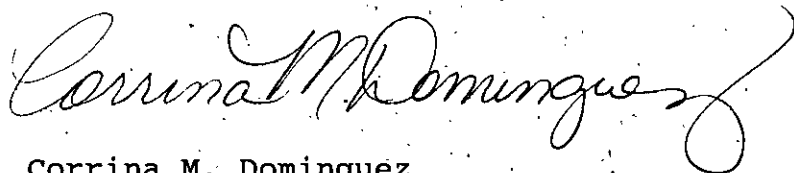
KEI-J89-0805.R8
July 24, 1992
Page 2

California. However, prior to loading and off-hauling of the stockpiled soil, KEI recommended that if obvious isolated areas of contamination were detected within the stockpiled soil, those portions of the soil be separately stockpiled for further treatment and sampling.

Should you have any questions on this report, please do not hesitate to contact me at (510) 602-5100.

Sincerely,

Kaprealian Engineering, Inc.



Corrina M. Dominguez
Technical Assistant

/cmd

Attachments: Laboratory Analyses
Chain of Custody documentation



SEQUOIA ANALYTICAL

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

Kapreallan Engineering, Inc. 2401 Stanwell Drive, Suite 400 Concord, CA 94520 Attention: Mardo Kapreallan, P.E.	Client Project ID: Unocal #0746, 3943 Broadway, Oakland Sample Descript.: Soil, Comp RW1 Analysis Method: EPA 5030/8015/8020 Lab Number: 206-1281	Sampled: Jun 26, 1992 Received: Jun 26, 1992 Analyzed: Jun 29, 1992 Reported: Jul 8, 1992
--	--	--

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

Analyte	Method Detection Limit mg/kg (ppm)	Sample Results mg/kg (ppm)
Low to Medium Boiling Point Hydrocarbons.....	1.0	4.6
Benzene.....	0.0050	N.D.
Toluene.....	0.0050	0.014
Ethyl Benzene.....	0.0050	0.044
Xylenes.....	0.0050	0.034

Low to Medium Boiling Point Hydrocarbons are quantitated against a gasoline standard.

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.
2401 Stanwell Drive, Suite 400
Concord, CA 94520

Client Project ID: Unocal #0746, 3943 Broadway, Oakland

Attention: Mardo Kaprealian, P.E. QC Sample Group: 206-1281

Reported: Jul 8, 1992

QUALITY CONTROL DATA REPORT

ANALYTE	Benzene	Toluene	Ethyl-Benzene	Xylenes
Method:	EPA 8015/8020	EPA 8015/8020	EPA 8015/8020	EPA 8015/8020
Analyst:	A.P.	A.P.	A.P.	A.P.
Reporting Units:	mg/kg	mg/kg	mg/kg	mg/kg
Date Analyzed:	Jun 29, 1992	Jun 29, 1992	Jun 29, 1992	Jun 29, 1992
QC Sample #:	Matrix Blank	Matrix Blank	Matrix Blank	Matrix Blank
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Spike Conc. Added:	0.40	0.40	0.40	1.2
Conc. Matrix Spike:	0.46	0.44	0.43	1.3
Matrix Spike % Recovery:	115	110	107	108
Conc. Matrix Spike Dup.:	0.40	0.45	0.44	1.3
Matrix Spike Duplicate % Recovery:	100	112	110	108
Relative % Difference:	14	2.2	2.2	0.0

Laboratory Blank contained the following analytes: None detected.

SEQUOIA ANALYTICAL

Scott A. Chierfo
Scott A. Chierfo
Project Manager

% Recovery:	$\frac{\text{Conc. of M.S.} - \text{Conc. of Sample}}{\text{Spike Conc. Added}} \times 100$
Relative % Difference:	$\frac{\text{Conc. of M.S.} - \text{Conc. of M.S.D.}}{(\text{Conc. of M.S.} + \text{Conc. of M.S.D.}) / 2} \times 100$

2061281.KEI <2>



SEQUOIA ANALYTICAL

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

Kapreallan Engineering, Inc.

Client Project ID: Unocal #0746, 3943 Broadway, Oakland

P.O. Box 996

Benicia, CA 94510

Attention: Mardo Kapreallan, P.E. QC Sample Group: 206-1281

Reported: Jul 8, 1992

QUALITY CONTROL DATA REPORT

SURROGATE

	EPA	EPA
Method:	8015/8020	8015/8020
Analyst:	A.P.	A.P.
Reporting Units:	mg/kg	mg/kg
Date Analyzed:	Jun 29, 1992	Jun 29, 1992
Sample #:	206-1281	Matrix Blank

Surrogate
% Recovery:

100

100

SEQUOIA ANALYTICAL

Scott A. Chieffo
Project Manager

% Recovery:	$\frac{\text{Conc. of M.S.} - \text{Conc. of Sample}}{\text{Spike Conc. Added}} \times 100$
Relative % Difference:	$\frac{\text{Conc. of M.S.} - \text{Conc. of M.S.D.}}{(\text{Conc. of M.S.} + \text{Conc. of M.S.D.}) / 2} \times 100$

2061281.KEI <3>

CHAIN OF CUSTODY

SAMPLER <i>[Signature]</i>		SITE NAME & ADDRESS UNOCAL #0746/OAKLAND 3943 BROADWAY						ANALYSES REQUESTED						TURN AROUND TIME: REGULAR		
WITNESSING AGENCY								<i>[Handwritten marks]</i>						REMARKS		
SAMPLE ID NO.	DATE	TIME	SOIL	WATER	GRAB	COMP	NO. OF CONT.	SAMPLING LOCATION								
COMP. RUN G-28-92			X			X	4	RIVE DRIN CUTTINGS	X	X						
Relinquished by: (Signature) <i>[Signature]</i>		Date/Time 6/20/92		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? Signature: <i>[Signature]</i> Title: _____ Date: 6/20/92			
Relinquished by: (Signature)		Date/Time		Received by: (Signature)												
Relinquished by: (Signature)		Date/Time		Received by: (Signature)												
Relinquished by: (Signature)		Date/Time		Received by: (Signature)												