



Kaprealian Engineering, Inc.  
2401 Stanwell Dr., Ste. 400  
Concord, CA 94520  
Attention: Avo Avedissian

Client Project ID: Unocal #3135, 845 66th Ave., Oakland  
Matrix: Solid

QC Sample Group: 404-0160

Reported: Apr 7, 1994

**QUALITY CONTROL DATA REPORT**

**RECEIVED**

3:41 pm, May 13, 2009

Alameda County  
Environmental Health

<b>ANALYTE</b>	Lead
<b>Method:</b>	EPA 6010
<b>Analyst:</b>	J. Dinsay

**MS/MSD**

**Batch#:** 4031417

**Date Prepared:** 4/6/94

**Date Analyzed:** 4/6/94

**Instrument I.D.#:** Liberty 100

**Conc. Spiked:** 50 mg/kg

**Matrix Spike**

**% Recovery:** 95

**Matrix Spike**

**Duplicate %  
Recovery:** 89

**Relative %**

**Difference:** 6.5

**LCS Batch#:** BLK040694

**Date Prepared:** 4/6/94

**Date Analyzed:** 4/6/94

**Instrument I.D.#:** Liberty 100

**LCS %**

**Recovery:** 90

**% Recovery  
Control Limits:** 75-125

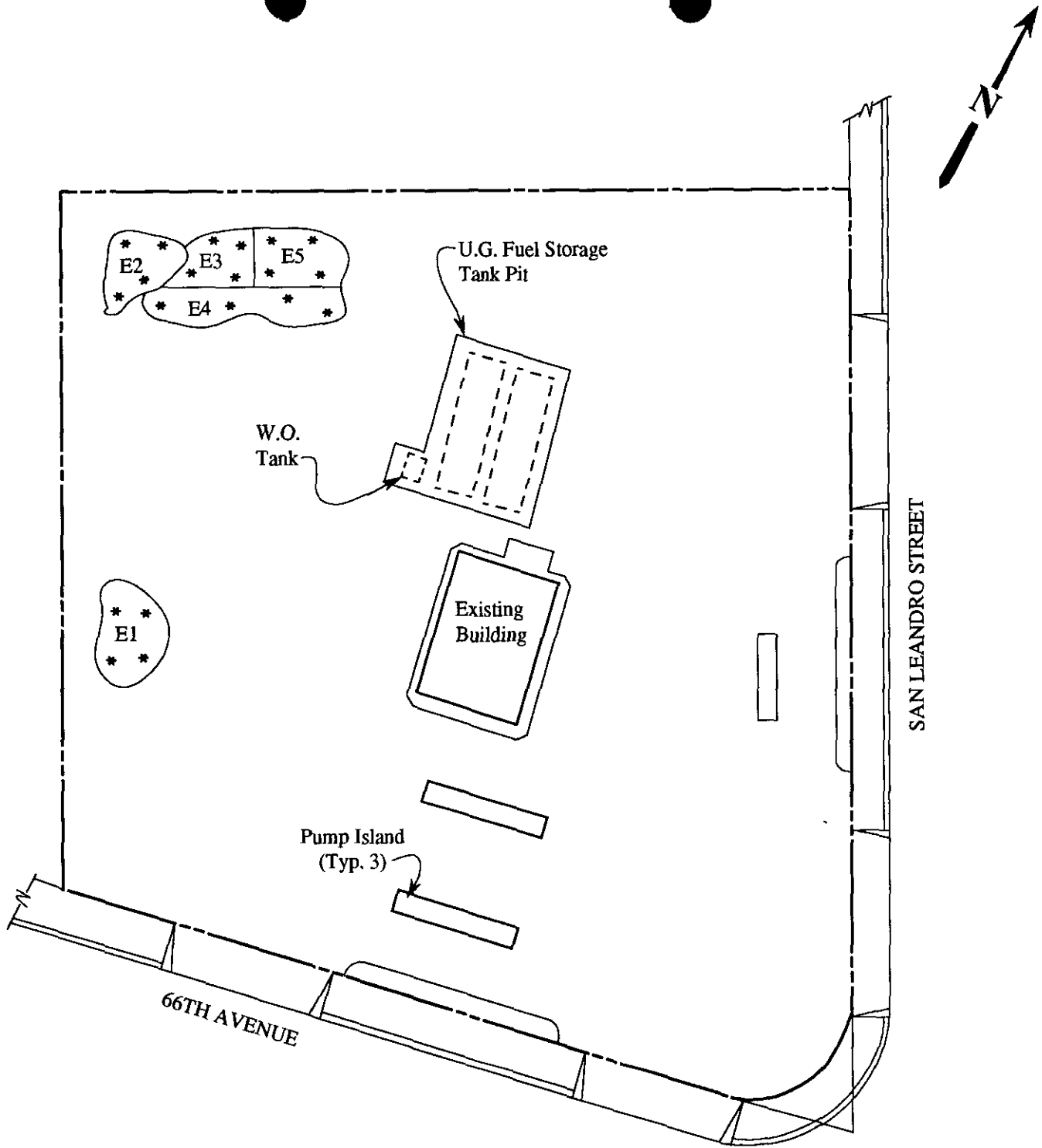
**Please Note:**

The LCS is a control sample of known, interferent free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.


**SEQUOIA ANALYTICAL**

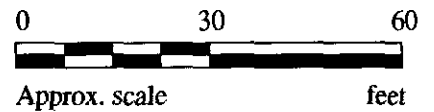
Alan B. Kemp  
Project Manager





**LEGEND**

- \* Sample point location
-  Stockpiled soil (not to scale)



**SAMPLE POINT LOCATIONS MAP**

  
**KAPREALIAN ENGINEERING  
INCORPORATED**

**UNOCAL SERVICE STATION #3135  
845 - 66TH AVENUE  
OAKLAND, CA**

**FIGURE  
1**



**Sequoia  
Analytical**

680 Chesapeake Drive  
1900 Bates Avenue, Suite L  
819 Striker Avenue, Suite 8

Redwood City, CA 94063  
Concord, CA 94520  
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FAX (916) 921-0100

Kaprealian Engineering, Inc.  
2401 Stanwell Dr., Ste. 400  
Concord, CA 94520  
Attention: Avo Avedissian

Client Project ID: Unocal #3135, 845 66th Ave., Oakland  
Sample Matrix: Soil  
Analysis Method: EPA 5030/8015/8020  
First Sample #: 403-1415

Sampled: Mar 30, 1994  
Received: Mar 30, 1994  
Reported: Apr 4, 1994

**TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX DISTINCTION**

Analyte	Reporting Limit mg/kg	Sample I.D. 403-1415 Comp. A	Sample I.D. Method Blank
Purgeable Hydrocarbons	1.0	170	
Benzene	0.005	N.D.	
Toluene	0.005	0.48	
Ethyl Benzene	0.005	0.098	
Total Xylenes	0.005	4.8	

Chromatogram Pattern: Gasoline

**Quality Control Data**

Report Limit Multiplication Factor:	50	1.0
Date Analyzed:	3/30/94	3/30/94
Instrument Identification:	HP-4	HP-4
Surrogate Recovery, %: (QC Limits = 70-130%)	88	106

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

**SEQUOIA ANALYTICAL, #1271**

Alan B. Kemp  
Project Manager





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Kaprealian Engineering, Inc.  
2401 Stanwell Dr., Ste. 400  
Concord, CA 94520  
Attention: Avo Avedissian

Client Project ID: Unocal #3135, 845 66th Ave., Oakland  
Sample Descript: STLC Extract of Soil  
Analysis for: STLC Lead  
First Sample #: 403-1415


Sampled: Mar 30, 1994  
Received: Mar 30, 1994  
Extracted: Apr 1, 1994  
Analyzed: Apr 4, 1994  
Reported: Apr 4, 1994

**LABORATORY ANALYSIS FOR: STLC Lead**

Sample Number	Sample Description	Detection Limit mg/L	Sample Result mg/L
403-1415	Comp. A	0.050	51

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

**SEQUOIA ANALYTICAL, #1271**

  
Alan B. Kemp  
Project Manager

4031415.KEI <2>





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Kaprealian Engineering, Inc. 2401 Stanwell Dr., Ste. 400 Concord, CA 94520 Attention: Avo Avedissian	Client Project ID: Unocal #3135, 845 68th Ave., Oakland Sample Descript: Soil, Comp. A Lab Number: 403-1415	Sampled: Mar 30, 1994 Received: Mar 30, 1994 Analyzed: 3/31 & 4/4/94 Reported: Apr 4, 1994
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**CORROSIVITY AND IGNITABILITY**

Analyte	Detection Limit	Sample Results
Corrosivity: pH.....	N.A. ....	7.7
Ignitability: Flashpoint (Pensky-Martens), °C.....	N.A. ....	> 100 °C

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

**SEQUOIA ANALYTICAL, #1276**

  
Alan B. Kemp  
Project Manager





**Sequoia  
Analytical**

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Kaprealian Engineering, Inc.  
2401 Stanwell Dr., Ste. 400  
Concord, CA 94520  
Attention: Avo Avedissian

Client Project ID: Unocal #3135, 845 66th Ave., Oakland  
Sample Descript: Soil, Comp. A  
Lab Number: 403-1415

Sampled: Mar 30, 1994  
Received: Mar 30, 1994  
Analyzed: Apr 4-5, 1994  
Reported: Apr 5, 1994

### REACTIVITY

Analyte	Detection Limit	Sample Results
Reactivity:		
Sulfide, mg/kg.....	10	N.D.
Cyanide, mg/kg.....	0.50	N.D.
Reaction with water.....	N.A.	Negative

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

**SEQUOIA ANALYTICAL, #1210**

  
Alan B. Kemp  
Project Manager





Kaprealian Engineering, Inc.  
2401 Stanwell Dr., Ste. 400  
Concord, CA 94520  
Attention: Avo Avedissian

Client Project ID: Unocal #3135, 845 66th Ave., Oakland

QC Sample Group: 403-1415

Reported: Apr 7, 1994

**QUALITY CONTROL DATA REPORT**

ANALYTE	Benzene	Toluene	Ethyl Benzene	Xylenes	STLC Lead
<b>Method:</b>	EPA 8020	EPA 8020	EPA 8020	EPA 8020	EPA 7420
<b>Analyst:</b>	J. Fontecha	J. Fontecha	J. Fontecha	J. Fontecha	K.V.S.

<b>MS/MSD Batch#:</b>	BLK033094	BLK033094	BLK033094	BLK033094	4031415
<b>Date Prepared:</b>	3/30/94	3/30/94	3/30/94	3/30/94	4/1/94
<b>Date Analyzed:</b>	3/30/94	3/30/94	3/30/94	3/30/94	4/4/94
<b>Instrument I.D.#:</b>	HP-4	HP-4	HP-4	HP-4	SpectrAA-20
<b>Conc. Spiked:</b>	0.40 mg/kg	0.40 mg/kg	0.40 mg/kg	1.2 mg/kg	40 mg/L
<b>Matrix Spike % Recovery:</b>	100	98	98	98	107
<b>Matrix Spike Duplicate % Recovery:</b>	105	100	100	103	109
<b>Relative % Difference:</b>	4.9	2.0	2.0	4.9	1.9

<b>LCS Batch#:</b>	2LCS033094	2LCS033094	2LCS033094	2LCS033094	BLK040194
<b>Date Prepared:</b>	3/30/94	3/30/94	3/30/94	3/30/94	4/1/94
<b>Date Analyzed:</b>	3/30/94	3/30/94	3/30/94	3/30/94	4/4/94
<b>Instrument I.D.#:</b>	HP-4	HP-4	HP-4	HP-4	SpectrAA-20
<b>LCS % Recovery:</b>	93	94	95	96	87

<b>% Recovery Control Limits:</b>	55-145	47-149	47-155	56-140	75-125
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**SEQUOIA ANALYTICAL, #1271**

Alan B. Kemp  
Project Manager





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Attention: Avo Avedissian

Client Project ID: Unocal #3135, 845 66th Ave., Oakland  
Matrix: Solid

QC Sample Group: 403-1415

Reported: Apr 7, 1994

### QUALITY CONTROL DATA REPORT

<b>ANALYTE</b>	Ignitability	Corrosivity
<b>Method:</b>	EPA 1010	EPA 9045
<b>Analyst:</b>	S. Phillips	M. Nguyen

**Date Analyzed:** 4/4/94 3/31/94

**Sample #:** Xylene; 4031415  
Flashpoint = 29 °C

**Sample Concentration:** 25 7.7

**Sample Duplicate Concentration:** 25 7.6

**% RPD:** 0.0 1.3

**% RPD:**  
**Control Limits:** 0-30 0-30

SEQUOIA ANALYTICAL, #1271

  
Alan B. Kemp  
Project Manager

4031415.KEI <6>







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Matrix: Solid

QC Sample Group: 403-1415

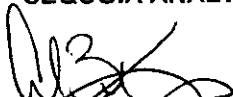
Reported: Apr 7, 1994

### QUALITY CONTROL DATA REPORT

<b>ANALYTE</b>	Reactive Cyanide	Reactive Sulfide
<b>Method:</b>	SW 846	SW 846
<b>Analyst:</b>	Heider/Wang	P. Penner

<b>Date Analyzed:</b>	4/4/94	4/5/94
<b>Sample #:</b>	9404016-1	9404016-1
<b>Sample Concentration:</b>	N.D.	N.D.
<b>Sample Duplicate Concentration:</b>	N.D.	N.D.
<b>% RPD:</b>	0.0	0.0
<b>% RPD Control Limits:</b>	±20	±20

SEQUOIA ANALYTICAL, #1210

  
Alan B. Kemp  
Project Manager

4031415.KEI <7>



# UNOCAL 76

680 Chesapeake Drive • Redwood City, CA 94063 • (415) 364-9600  
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18939 120th Ave., N.E., Suite 101 • Bothell, WA 98011 • (206) 481-9200  
 East 11115 Montgomery, Suite B • Spokane, WA 99206 • (509) 924-9200  
 15055 S.W. Sequoia Pkwy, Suite 110 • Portland, OR 97222 • (503) 624-9800

Company Name: <i>Kaprealian Engineering Inc.</i>		Project Name: <i>845-66th Ave. Oakland, Ca</i>	
Address: <i>2401 Stanwell Dr. #400</i>		UNOCAL Project Manager:	
City: <i>Concord</i>	State: <i>Ca.</i>	Zip Code: <i>94583</i>	Release #:
Telephone: <i>510-602-5100</i>		FAX #: <i>510-687-0602</i>	
Report To: <i>Avo Avedissian</i>		Sampler: <i>Diran Melkoun</i>	
		QC Data: <input checked="" type="checkbox"/> Level A (Standard) <input type="checkbox"/> Level B <input type="checkbox"/> Level C <input type="checkbox"/> Level D	

Turnaround  10 Working Days  2 Working Days  
 Time:  5 Working Days  24 Hours  
 3 Working Days  2 - 8 Hours

Drinking Water  
 Waste Water  
 Other

**Analyses Requested**

Client Sample I.D.	Date/Time Sampled	Matrix Desc.	# of Cont.	Cont. Type	Laboratory Sample #	Analyses Requested								Comments	
						TPH-G	BTXE	STLC Pb	RCI						
1. <i>Comp. A</i>	<i>3/30/94</i>	<i>soil</i>	<i>4</i>	<i>Brass tubes</i>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>						<i>4031415 AD</i>
2.															
3.															
4.															
5.															
6.															
7.															
8.															
9.															
10.															

Relinquished By: <i>DIRAN Melkoun</i>	Date: <i>3-30-94</i>	Time: <i>3:20</i>	Received By: <i>D Phillips</i>	Date: <i>3-30-94</i>	Time: <i>3:20</i>
Relinquished By: _____	Date: _____	Time: _____	Received By: _____	Date: _____	Time: _____
Relinquished By: _____	Date: _____	Time: _____	Received By Lab: _____	Date: _____	Time: _____

Were Samples Received in Good Condition?  Yes  No     
 Samples on Ice?  Yes  No     
 Method of Shipment *SAL*     
 Page \_\_\_ of \_\_\_

To be completed upon receipt of report:

- 1) Were the analyses requested on the Chain of Custody reported?  Yes  No If no, what analyses are still needed? \_\_\_\_\_
- 2) Was the report issued within the requested turnaround time?  Yes  No If no, what was the turnaround time? \_\_\_\_\_

Approved by: \_\_\_\_\_ Signature: \_\_\_\_\_ Company: \_\_\_\_\_ Date: \_\_\_\_\_

Pink - Client

Yellow - Laboratory

White - Laboratory



**Sequoia  
Analytical**

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Kaprealian Engineering, Inc.  
2401 Stanwell Dr., Ste. 400  
Concord, CA 94520  
Attention: Avo Avedissian

Client Project ID: Unocal #3135, 845 66th Ave., Oakland  
Sample Descript: Soil  
Analysis for: Lead  
First Sample #: 404-0160

Sampled: Apr 6, 1994  
Received: Apr 6, 1994  
Extracted: Apr 6, 1994  
Analyzed: Apr 6, 1994  
Reported: Apr 7, 1994

**LABORATORY ANALYSIS FOR: Lead**

Sample Number	Sample Description	Detection Limit mg/kg	Sample Result mg/kg
404-0160	E1	1.0	58
404-0161	E2	1.0	61
404-0162	E3,E4,E5	1.0	79

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

**SEQUOIA ANALYTICAL, #1271**

  
Alan B. Kemp  
Project Manager



KEI-P88-1203.R16  
April 21, 1994

TABLE 2  
SUMMARY OF LABORATORY ANALYSES  
SOIL

<u>Sample</u>	<u>Total Lead</u>
E1	58
E2	61
E3, E4, E5	79

Additional analytical: Composite sample E12345, STLC lead = 3.1.

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

# UNOCAL 76

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 15055 S.W. Sequoia Pkwy, Suite 110 • Portland, OR 97222 • (503) 624-9800

Company Name: <u>Environmental Engineering, Inc.</u>		Project Name: <u>8415 66th Ave. Oakland.</u>	
Address: <u>2401 Struwell Dr. #400</u>		UNOCAL Project Manager:	
City: <u>Concord</u>	State: <u>Ca.</u>	Zip Code: <u>94520</u>	
Telephone: <u>510-607-5100</u>		FAX # <u>510-687-0602</u>	
Report To:		Site #: <u>3135</u>	
Sampler:		QC Data: <input checked="" type="checkbox"/> Level A (Standard) <input type="checkbox"/> Level B <input type="checkbox"/> Level C <input type="checkbox"/> Level D	

Turnaround  10 Working Days  2 Working Days  
 Time:  5 Working Days  24 Hours  
 3 Working Days  2 - 8 Hours

Drinking Water  
 Waste Water  
 Other

**Analyses Requested**

Client Sample I.D.	Date/Time Sampled	Matrix Desc.	# of Cont.	Cont. Type	Laboratory Sample #	[Analyses Requested]										Comments			
1. E1	4/6/94 11:00		2	Soils	4040160AB	✓													COMPOSITE
2. E2	4/6/94 11:15		2	"	↓ 0161 ↓	✓													COMPOSITE
3. E3	4/6/94 11:30		2	"	↓ 0162 AF	✓													COMPOSITE
4. E4	4/6/94 11:45		2	"		✓													
5. ES	4/6/94 12:00		2	"		✓													
6.																			
7.																			
8.																			
9.																			
10.																			

Relinquished By: <u>[Signature]</u>	Date: <u>4/6/94</u>	Time: <u>14:48</u>	Received By:	Date:	Time:
Relinquished By:	Date:	Time:	Received By:	Date:	Time:
Relinquished By:	Date:	Time:	Received By Lab: <u>Melissa Cresser</u>	Date: <u>4/6/94</u>	Time: <u>2:45 pm</u>

Were Samples Received in Good Condition?  Yes  No      Samples on Ice?  Yes  No      Method of Shipment KEI      Page 1 of 1

To be completed upon receipt of report:

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2) Was the report issued within the requested turnaround time?  Yes  No If no, what was the turnaround time? \_\_\_\_\_

Approved by: \_\_\_\_\_ Signature: \_\_\_\_\_ Company: \_\_\_\_\_ Date: \_\_\_\_\_

Pink - Client  
Yellow - Sequoia  
White - Sequoia



**Sequoia  
Analytical**

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2401 Stanwell Dr., Ste. 400  
Concord, CA 94520  
Attention: Avo Avedissian

Client Project ID: Unocal #3135, 845 66th Ave., Oakland  
Sample Descript: STLC Extract of Soil  
Analysis for: Lead  
First Sample #: #4040160

Sampled: Apr 6, 1994  
Relogged: Apr 12, 1994  
Extracted: Apr 12, 1994  
Analyzed: Apr 15, 1994  
Reported: Apr 15, 1994

**LABORATORY ANALYSIS FOR:      Lead**

Sample Number	Sample Description	Detection Limit mg/L	Sample Result mg/L
4040160-162	E(1-5)	0.050	3.1

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

**SEQUOIA ANALYTICAL, #1271**

  
Alan B. Kemp  
Project Manager





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2401 Stanwell Dr., Ste. 400  
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Attention: Avo Avedissian

Client Project ID: Unocal #3135, 845 66th Ave., Oakland  
Matrix: STLC Extract of Soil

QC Sample Group:

Reported: Apr 15, 1994

**QUALITY CONTROL DATA REPORT**

<b>ANALYTE</b>	Lead
<b>Method:</b>	EPA 7470
<b>Analyst:</b>	K.V.S.

**MS/MSD**  
**Batch#:** 4040462  
**Date Prepared:** 4/12/94  
**Date Analyzed:** 4/15/94  
**Instrument I.D.#:** SpectrAA-20  
**Conc. Spiked:** 30 mg/L

**Matrix Spike**  
**% Recovery:** 104

**Matrix Spike Duplicate %**  
**Recovery:** 102

**Relative %**  
**Difference:** 1.9

**LCS Batch#:** BLK041294  
**Date Prepared:** 4/12/94  
**Date Analyzed:** 4/15/94  
**Instrument I.D.#:** SpectrAA-20

**LCS %**  
**Recovery:** 81

<b>% Recovery</b>	
<b>Control Limits:</b>	75-125

**SEQUOIA ANALYTICAL. #1271**

  
 Alan B. Kemp  
 Project Manager

**Please Note:**  
 The LCS is a control sample of known, interferent free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.



SEQUOIA/UNOCAL ANALYTICAL RELOG SHEET

CLIENT: KEI  
 PROJECT ID: UNOCAL #3135  
 PROJ. MANAGER: ABK  
 DATE REC'D: 4-6-94 MATRIX: STLC

DATE RELOG: 4-12-94  
 DATE DUE: 4-15-94  
 DATE SAMP: 4-6-94  
 T.A.T: 72h

**PREVIOUSLY LOGGED SAMPLES**

TAT Change status to: \_\_\_\_\_  
 Change status as of Day: \_\_\_\_\_ Time: \_\_\_\_\_

CHANGE ANALYSES

Add Analyses:

Cancel Analyses

Sample Number

Analyses

4040160

1161

1162

COMPOSITE FOR  
STLC Pb

**SAMPLES ON HOLD**

Add analyses

Sample description

Analyses

\_\_\_\_\_  
 \_\_\_\_\_  
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 \_\_\_\_\_

TAT

Client Authorization (Person/Date/Time)  
 Project Manager

WATRI / 4-12-94 / 10<sup>00</sup> A

(Please submit to sample control with a copy of the COC & log-in sheets)

To be completed upon receipt of report:

- 1) Were the analyses requested on the Chain of Custody reported?  Yes  No If no, what analyses are still needed?
- 2) Was the report issued within the requested turnaround time?  Yes  No If no, what was the turnaround time?

Approved by:

Signature:

Company:





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

18939 120th Ave., N.E., Suite 101 • Bothell, WA 98011 • (206) 481-9200

819 Striker Ave., Suite 8 • Sacramento, CA 95834 • (916) 921-9600

East 11115 Montgomery, Suite B • Spokane, WA 99206 • (509) 924-9200

1900 Bates Ave., Suite LM • Concord, CA 94520 • (510) 686-9600

15055 S.W. Sequoia Pkwy, Suite 110 • Portland, OR 97222 • (503) 624-9800

Company Name: Frederick Engineering, Inc. Project Name: 8415 66th Ave. Oakland  
 Address: 2401 Stowell Dr. #400 UNOCAL Project Manager:  
 City: Concord State: Ca Zip Code: 94520  
 Telephone: 510-607-8100 FAX: 510-607-0602 Site #: 3135  
 Report To: Sampler: QC Data:  Level A (Standard)  Level B  Level C  Level D

Turnaround  10 Working Days  2 Working Days  
 Time:  5 Working Days  24 Hours  
 3 Working Days  2 - 8 Hours

Drinking Water  
 Waste Water  
 Other

Analyses Requested

Client Sample I.D.	Date/Time Sampled	Matrix Desc.	# of Cont.	Cont. Type	Laboratory Sample #	Analyses Requested										Comments			
1. E1	4/6/94 11:00		2	Specs	4010160AB	✓													COMPOSITE
2. E2	4/6/94 11:15		2	"	↓ 0161 ↓	✓													COMPOSITE
3. E3	4/6/94 11:30		2	"	↓ 0162 AF	✓													COMPOSITE
4. E4	4/6/94 11:45		2	"		✓													
5. E5	4/6/94 12:00		2	"		✓													
6.																			
7.																			
8.																			
10.																			

Relinquished By: [Signature] Date: 4/6/94 Time: 14:48 Received By: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_  
 Relinquished By: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_ Received By: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_  
 Relinquished By: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_ Received By: Melissa Cusumano Date: 4/6/94 Time: 2:45 pm

Were Samples Received in Good Condition?  Yes  No Samples on Ice?  Yes  No Method of Shipment FEI Page 1 of 1

To be completed upon receipt of report:  
 1) Were the analyses requested on the Chain of Custody reported?  Yes  No If no, what analyses are still needed?  
 2) Was the report issued within the requested turnaround time?  Yes  No If no, what was the turnaround time?  
 Approved by: \_\_\_\_\_ Signature: \_\_\_\_\_ Company: \_\_\_\_\_ Date: \_\_\_\_\_

Pink - Client  
Sequoia  
Yellow  
White - Sequoia

KAPREALIAN ENGINEERING  
INCORPORATED

KEI-P88-1203.R16  
April 21, 1994

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

Attention: Mr. Tim Howard

RE: Stockpiled Soil Sampling for  
Unocal Service Station #3135  
845 - 66th Avenue  
Oakland, California

FILE #	<u>3135</u>	SS	<input checked="" type="checkbox"/>	BP	<input type="checkbox"/>
RPT	<input checked="" type="checkbox"/>	QM	<input type="checkbox"/>	TRANSMITTAL	<input type="checkbox"/>
1	<input type="checkbox"/>	2	<input type="checkbox"/>	3	<input type="checkbox"/>
4	<input type="checkbox"/>	5	<input type="checkbox"/>	6	<input type="checkbox"/>

Dear Mr. Howard:

This report summarizes the analytical results of the composite soil samples that were collected from the stockpiled soil at the referenced site. The soil analyses were conducted to comply with the local regulatory agency requirements for proper disposal of potentially contaminated soil.

On March 30, 1994, soil samples from approximately 100 cubic yards of stockpiled soil that had been excavated from the pump islands were collected to determine proper disposal of the soil. One composite soil sample (designated as Comp A) 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 individual samples were subsequently composited as one sample by the lab. 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.

On April 6, 1994, Kaprealian Engineering, Inc. (KEI) returned to the site to collect soil samples from approximately 100 cubic yards of stockpiled soil. Five composite samples (designated as E1, E2, E3, E4, and E5) were collected and stored as described above. The composite soil sample E3, E4, and E5 were further composited as one sample by the lab per the landfill requirements. Sample point locations are as shown on the attached Site Plan, Figure 1.

Soil samples were analyzed to determine concentrations of total petroleum hydrocarbons (TPH) as gasoline by EPA method 5030/modified 8015, and benzene, toluene, ethylbenzene, and xylenes by EPA method 8020, reactivity, ignitability, and corrosivity. In

KEI-P88-1203.R16  
April 22, 1994  
Page 2

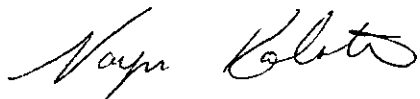
addition, samples E1, E2, and E345 were analyzed for total lead. In addition, E1, E2, and E345 were composited as one sample by the lab and analyzed for lead by the use of soluble threshold limit concentrations (STLC) waste extraction test per the requirements of the landfill for disposal. Results of the soil analyses are summarized in Table 1. Copies of the laboratory analyses and the Chain of Custody documentation are attached to this report.

Based on the analytical results of the soil samples, approximately 100 cubic yards of stockpiled soil were profiled for disposal to Forward Landfill in Stockton, California (an approved Class II/III disposal and treatment facility). On April 13, 1994, Dillard Trucking of Byron, California, relocated 144 cubic yards of soil from the site to Forward Landfill where the soil was stockpiled until further analytical results (STLC lead) were received. The actual transported soil was 44 cubic yards over our original estimation.

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

Sincerely,

Kaprealian Engineering, Inc.



Nayiri Kaloustian  
Technical Assistant

\nk

Attachments: Tables 1 & 2  
Site Plan - Figure 1  
Laboratory Analyses  
Chain of Custody documentation

KEI-P88-1203.R16  
April 21, 1994

TABLE 1

SUMMARY OF LABORATORY ANALYSES  
SOIL

<u>Date</u>	<u>Sample</u>	<u>TPH as Gasoline</u>	<u>Benzene</u>	<u>Toluene</u>	<u>Ethylbenzene</u>	<u>Xylenes</u>
3/30/94	Comp A*	170	ND	0.48	0.098	4.8

\* Additional analytical: Corrosivity = 7.7, Ignitability = >100°C,  
Reactivity = ND.

ND = Non-detectable.

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