



**KAPREALIAN ENGINEERING, INC.**

Consulting Engineers

P. O. BOX 913

BENICIA, CA 94510

(415) 676-9100 (707) 746-6915

KEI-J88-1109.R2  
February 9, 1989

Mr. Chester Clark  
521 Triller Lane  
Grants Pass, Oregon 97527

RE: Stockpiled Soil Sampling for  
Clark's Building Materials  
23040 Clawiter Road  
Hayward, California

3/9/89  
ALAMEDA COUNTY  
DEPT. OF ENVIRONMENTAL HEALTH  
HAZARDOUS MATERIALS

Dear Mr. Clark:

This letter report summarizes the results of the stockpiled soil sampling and laboratory analyses for the referenced site. The soil analyses were conducted to comply with the County Health Department requirements to determine proper disposal of contaminated soil.

On December 16, 1988, a soil sample from approximately 50 cubic yards of stockpiled soil at the referenced site was collected to determine proper disposal of Stockpile #3 (Site Plan). One composite soil sample (designated as Comp 1) was taken. This composite sample consisted of four individual grab samples taken at various locations and depths ranging from one to two feet. The sample was collected in 2" by 4", 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 composited and analyzed at Sequoia Analytical Laboratory of Redwood City, California, and was accompanied by properly executed Chain of Custody documentation. Sample locations are as shown on the attached Site Plan.

On January 18, 1989, an additional soil sample from approximately 35 cubic yards of stockpiled soil at the referenced site was collected to determine proper disposal of Stockpile #1 (Site Plan). This composite sample (designated as Comp 2) also consisted of four individual grab samples taken at various locations and depths ranging from one to two feet. The sample was taken and handled as described above.

Both composite samples were analyzed to determine concentrations of total petroleum hydrocarbon (TPH) as gasoline using EPA method 5030 or 3810 in conjunction with modified 8015, TPH as diesel using EPA method 3550 in conjunction with modified 8015, benzene, toluene, xylenes and ethylbenzene (BTX&E) using EPA methods 5030 and 8020. The results of the soil analyses for Comp 1 showed the

concentration of TPH as gasoline at 120 ppm and the concentration of TPH as diesel at 140 ppm. Comp 2 had 7.2 ppm TPH as diesel with all other constituents non-detectable. The results are summarized below. Copies of the laboratory analyses, and the Chain of Custody forms are attached to this report.

<u>Sample</u>	<u>TPH as Diesel</u>	<u>TPH as Gasoline</u>	<u>Benzene</u>	<u>Toluene</u>	<u>Xylenes</u>	<u>Ethyl-benzene</u>
Comp 1	140	120	0.093	0.13	2.6	0.36
Comp 2	7.2	ND	ND	ND	ND	ND

Stkpl. #3  
Stkpl #1

Based on the analytical results and Regional Water Quality Control Board (RWQCB) guidelines, KEI recommends the following: The soil from Stockpile #2 (as stated in KEI's January 10, 1989 report) needs to be treated or disposed of at a Class I disposal site. The soil from Stockpile #1 (represented by Comp 2) can be disposed of at an approved Class III disposal site. The soil from Stockpile #3 (represented by sample Comp 1) can be treated and resampled for disposal of at a Class III site.

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A copy of this report should be sent to Mr. Thomas F. Peacock of the Alameda County Health Agency, and to the RWQCB, Bay Area Region.

Should you have any questions regarding this report, please do not hesitate to contact me at (707) 746-6915.

Sincerely,

Kaprealian Engineering, Inc.

*Gary S. Johnson*  
Gary S. Johnson  
Registered Geologist

*Alameda*  
*271-4320*

*Mardo Kaprealian*  
Mardo Kaprealian  
President

License No. 4315  
Exp. Date 6/30/90

Attachment: Site Plan  
Laboratory Results  
Chain of Custody documentation



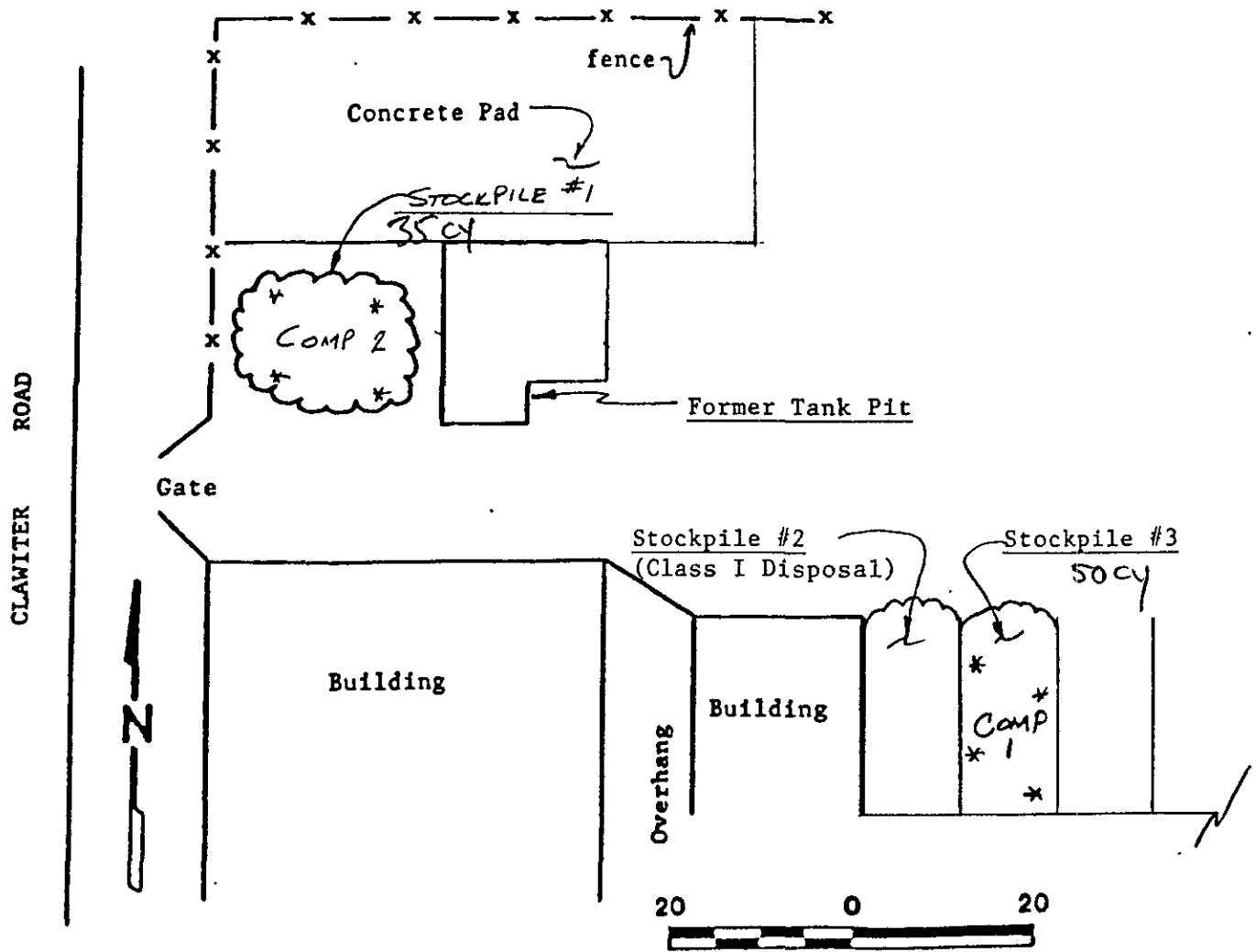
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SITE PLAN

\* Soil Sample Location

Clark's Building Materials  
23040 Clawiter Road  
Hayward, California



# SEQUOIA ANALYTICAL

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

Kapreallan Engineering, Inc.	Client Project ID:	Clark's Building Materials, Hayward	Sampled:	Jan 18, 1989
P.O. Box 913	Matrix Descript:	Soil, Composite #2	Received:	Jan 18, 1989
Benicia, CA 94510	Analysis Method:	EPA 3550/8015	Analyzed:	Jan 31, 1989
Attention: Mardo Kapreallan, P.E.	First Sample #:	901-1797	Reported:	Feb 3, 1989

## TOTAL PETROLEUM FUEL HYDROCARBONS (EPA 8015)

Sample Number	Sample Description	High B.P. Hydrocarbons mg/kg (ppm)
901-1797	Composite #2	7.2

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

Arthur G. Burton  
Laboratory Director



# SEQUOIA ANALYTICAL

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(415) 364-9600 • FAX (415) 364-9233

Kaprealian Engineering, Inc.	Client Project ID: Clark's Building Materials, Hayward	Sampled: Jan 18, 1989
P.O. Box 913	Sample Descript.: Soil, Composite #2	Received: Jan 18, 1989
Benicia, CA 94510	Analysis Method: EPA 5030 or 3810 and 8015/8020	Analyzed: Jan 31, 1989
Attention: Mardo Kaprealian, P.E.	Lab Number: 901-1797	Reported: Feb 3, 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	N.D.
Benzene.....	0.05	N.D.
Toluene.....	0.1	N.D.
Ethyl Benzene.....	0.1	N.D.
Xylenes.....	0.1	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

Arthur G. Burton  
Laboratory Director



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## CHAIN OF CUSTODY

SAMPLER: Ray (KEI) DATE/TIME OF COLLECTION: 1/18/89 TURN AROUND TIME: 15 days Regular  
 (signature)

SAMPLE DESCRIPTION AND PROJECT NUMBER: Clark's Building Materials  
Hayward 30

<u>SAMPLE #</u>	<u>ANALYSES</u>	<u>GRAB OR COMP.</u>	<u>NUMBER OF CONTAINERS</u>	<u>SOIL/WATER</u>
<u>COMP 2"</u>	<u>TRHG &amp; D</u>	<u>COMP</u>	<u>4</u>	<u>5</u>
	<u>BTX</u>			

<u>RELINQUISHED BY*</u>	<u>TIME/DATE</u>	<u>RECEIVED BY*</u>	<u>TIME/DATE</u>
<u>Ray (KEI)</u>	<u>5:20 PM 1/18/89</u>	<u>[Signature]</u>	<u>1/18/89 5:20 PM</u>

\* STATE AFFILIATION NEXT TO SIGNATURE

REMARKS: \_\_\_\_\_

# DIA ANALYTICAL

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

Client Project ID: R.W. Johnston, Clark's Rock, Hayward  
Matrix Descript: Soil  
Analysis Method: EPA 3550/8015  
First Sample #: 812-2309

Sampled: Dec 16, 1988  
Received: Dec 20, 1988  
Analyzed: Jan 9, 1989  
Reported: Jan 10, 1989

Sampled: Dec 16, 1988  
Received: Dec 20, 1988  
Analyzed: Jan 9, 1989  
Reported: Jan 10, 1989

## L PETROLEUM FUEL HYDROCARBONS (EPA 8015)

n High B.P.  
Hydrocarbons  
mg/kg  
(ppm)  
  
120

## (EPA 8015/8020)

Sample Results  
mg/kg (ppm)

140
0.093
0.13
0.36
2.6

1.0

Quantitated against a diesel fuel standard.  
Present above the stated limit of detection.



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## CHAIN OF CUSTODY

SAMPLER: R.M. Bradish (signature)      DATE/TIME OF COLLECTION: 12-16-88      TURN AROUND TIME: Regular

SAMPLE DESCRIPTION AND PROJECT NUMBER: R.W. Johnston - Clark's Rock  
23040 Clawiter - Hayward

<u>SAMPLE #</u>	<u>ANALYSES</u>	<u>GRAB OR COMP.</u>	<u>NUMBER OF CONTAINERS</u>	<u>SOIL/ WATER</u>
<u>Comp 1</u>	<u>TPH-G &amp; BYXE; TPH-D</u>	<u>C</u>	<u>2</u>	<u>S</u>

<u>RELINQUISHED BY*</u>	<u>TIME/DATE</u>	<u>RECEIVED BY*</u>	<u>TIME/DATE</u>
<u>1. R.M. Bradish</u>	<u>9:12 12/20/88</u>	<u>Don Michel</u>	<u>9:10 12/20/88</u>
<u>2.</u>			
<u>3.</u>			
<u>4.</u>			

\* STATE AFFILIATION NEXT TO SIGNATURE

REMARKS: \_\_\_\_\_





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## CHAIN OF CUSTODY

SAMPLER: R.M. Bradish DATE/TIME OF COLLECTION: 12-16-88 TURN AROUND TIME: Regular  
 (signature)

SAMPLE DESCRIPTION AND PROJECT NUMBER: R.W. Johnston - Clark's Rock  
23040 Clawiter - Hayward

<u>SAMPLE #</u>	<u>ANALYSES</u>	<u>GRAB OR COMP.</u>	<u>NUMBER OF CONTAINERS</u>	<u>SOIL/ WATER</u>
<u>Comp 1</u>	<u>TPH-G &amp; BYX; TPH-D</u>	<u>C</u>	<u>2</u>	<u>5</u>

<u>RELINQUISHED BY*</u>	<u>TIME/DATE</u>	<u>RECEIVED BY*</u>	<u>TIME/DATE</u>
<u>R.M. Bradish</u>	<u>1030 9:12 12/20/88</u>	<u>Don Nicks</u>	<u>9:10 12-20-88</u>
<u>Don Nicks</u>	<u>9:20 88</u>	<u>Nicola Markis</u>	<u>10:30 12/20</u>
<u>3.</u>			
<u>4.</u>			

\* STATE AFFILIATION NEXT TO SIGNATURE

REMARKS: \_\_\_\_\_