

KAPREALIAN ENGINEERING
INCORPORATED

KEI-J91-0903.R3
April 13, 1991

A.A. Johnson
1164 - 66th Street
Oakland, California

Attention: Mr. John Twomey

RE: Stockpiled Soil Sampling for
A.A. Johnson
1164 - 66th Street
Oakland, California

Dear Mr. Twomey:

This follow-up letter report summarizes the analytical results of the sampling of the previously sampled, aerated stockpiled soil (see previous stockpiled soil sampling report KEI-P91-0903.R2 dated February 19, 1992) at the referenced site. The soil analyses were conducted to comply with the County Health Department requirements for proper disposal of contaminated soil.

On March 7, 1992, soil samples from approximately 50 cubic yards of aerated stockpiled soil (previously sampled as Comp E) were collected to determine proper disposal of the soil. One composite soil sample (designated as Comp 1) 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 that 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. All samples were analyzed at Sequoia Analytical Laboratory in Concord, California, and were accompanied by properly executed Chain of Custody documentation. Sample point locations are as shown on the attached Site Plan.

The soil sample (Comp 1) was analyzed to determine concentrations of total petroleum hydrocarbons (TPH) as gasoline using EPA method 5030 in conjunction with modified 8015, and benzene, toluene, xylenes and ethylbenzene using EPA method 8020. The analytical result of the soil sample (Comp 1) indicates a non-detectable level of TPH as gasoline. 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 fifty cubic yards of stockpiled soil, represented by sample Comp 1,

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were disposed of at Redwood Landfill in Novato, California (an approved Class III disposal site) by A.A. Johnson. However, prior to loading and off-hauling of the stockpiled soil, KEI recommended that if obvious isolated high contamination was detected within the stockpiled soil, that portion of the soil be separately stockpiled for further treatment and sampling.

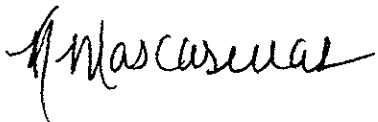
DISTRIBUTION

A copy of this report should be sent to Ms. Susan L. Hugo of the Alameda County Health Agency, and to the Regional Water Quality Control Board, San Francisco Bay Region.

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

Sincerely,

Kaprealian Engineering, Inc.



Kristin Mascarenas

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Attachments: Table 1
Site Plan
Laboratory Analyses
Chain of Custody documentation

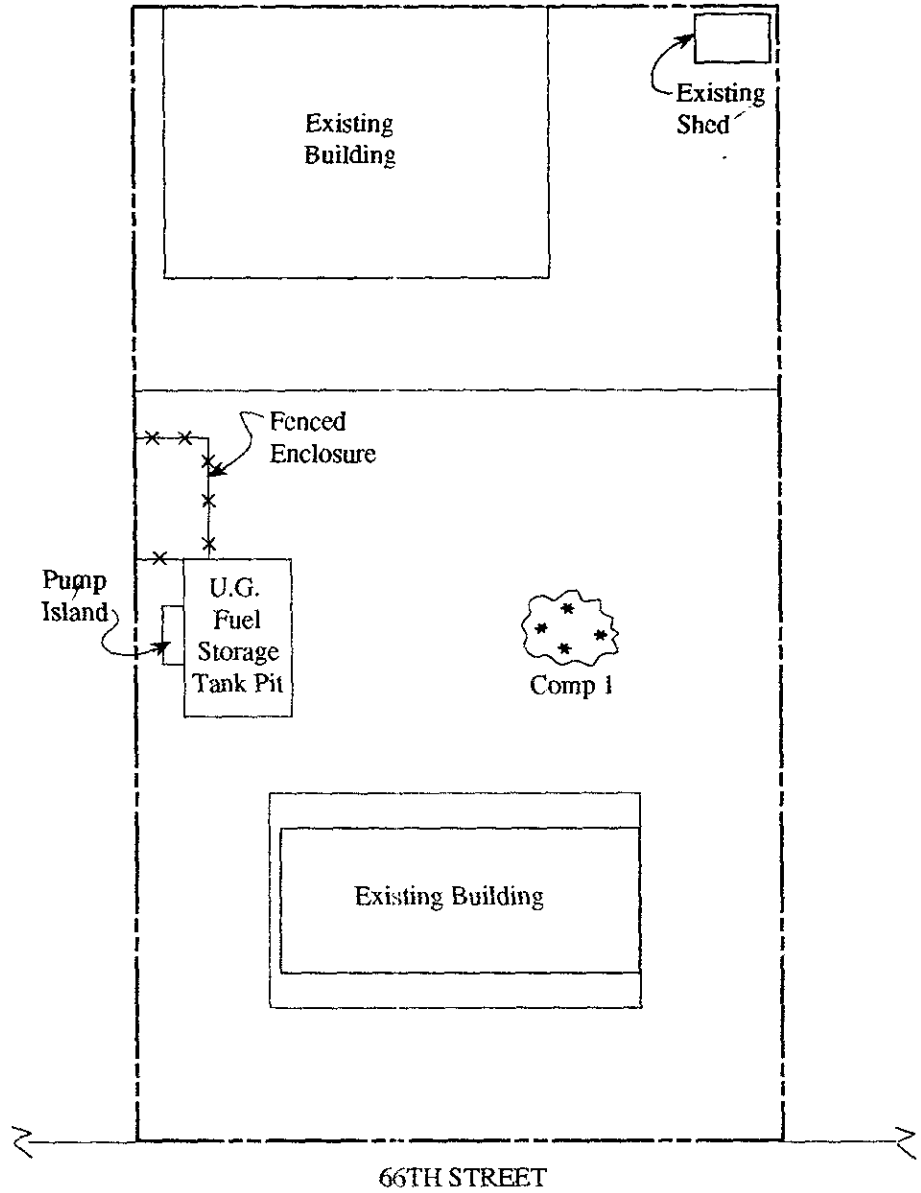
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TABLE 1
SUMMARY OF LABORATORY ANALYSES
(Collected on March 27, 1992)

| <u>Sample</u> | <u>TPH as Gasoline</u> | <u>Benzene</u> | <u>Toluene</u> | <u>Xylenes</u> | <u>Ethyl-benzene</u> |
|------------------|------------------------|----------------|----------------|----------------|----------------------|
| Comp 1 | ND | ND | ND | ND | ND |
| Detection Limits | 1.0 | 0.0050 | 0.0050 | 0.0050 | 0.0050 |

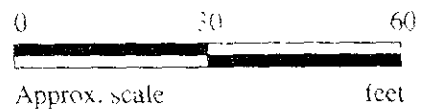
ND = Non-detectable.


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



LEGEND

* Sample Point Location




**KAPREALIAN ENGINEERING
INCORPORATED**

**A. A. JOHNSON
1164 - 66TH STREET
OAKLAND, CA**

**SITE
PLAN**



SEQUOIA ANALYTICAL

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

4/13

| | | |
|-----------------------------------|--|------------------------|
| Kaprealian Engineering, Inc. | Client Project ID: AA Johnson- Oakland, 1164 66Th Street | Sampled: Mar 27, 1992 |
| P.O. Box 996 | Sample Descript.: Soil, Comp-1 | Received: Mar 27, 1992 |
| Benicia, CA 94510 | Analysis Method: EPA 5030/8015/8020 | Analyzed: Mar 30, 1992 |
| Attention: Mañdo Kaprealian, P.E. | Lab Number: 203-1245 | Reported: Apr 9, 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 | N.D. |
| Benzene..... | 0.0050 | N.D. |
| Toluene..... | 0.0050 | N.D. |
| Ethyl Benzene..... | 0.0050 | N.D. |
| Xylenes..... | 0.0050 | N.D. |

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

SEQUOIA ANALYTICAL

FOR Belinda C. Vega
Laboratory Director



SEQUOIA ANALYTICAL

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Kaprealian Engineering, Inc.

Client Project ID: AA Johnson- Oakland, 1164 66Th Street

P.O. Box 996

Benicia, CA 94510

Attention: Mardo Kaprealian, P.E. QC Sample Group: 203-1245

Reported: Apr 9, 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: | K.N. | K.N. | K.N. | K.N. |
| Reporting Units: | mg/Kg | mg/Kg | mg/Kg | mg/Kg |
| Date Analyzed: | Mar 30, 1992 | Mar 30, 1992 | Mar 30, 1992 | Mar 30, 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: | 0.37 | 0.37 | 0.40 | 1.2 |
| Matrix Spike % Recovery: | 93 | 93 | 100 | 100 |
| Conc. Matrix Spike Dup.: | 0.37 | 0.37 | 0.41 | 1.2 |
| Matrix Spike Duplicate % Recovery: | 93 | 93 | 103 | 100 |
| Relative % Difference: | 0.0 | 0.0 | 2.5 | 0.0 |

Laboratory blank contained the following analytes None Detected

SEQUOIA ANALYTICAL

Scott Chiuffo
FOR Belinda C. Vega
Laboratory Director

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



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Reported: Apr 9, 1992

QUALITY CONTROL DATA REPORT

SURROGATE

| | | |
|------------------|--------------|--------------|
| | EPA | EPA |
| Method: | 8015/8020 | 8015/8020 |
| Analyst: | K.N. | K.N. |
| Reporting Units: | mg/Kg | mg/Kg |
| Date Analyzed: | Mar 30, 1992 | Mar 30, 1992 |
| Sample #: | 203-1245 | Blank |

| | | |
|-------------|----|----|
| Surrogate | | |
| % Recovery: | 83 | 92 |

SEQUOIA ANALYTICAL

Scott Chiffa
FOR Belinda C. Vega
Laboratory Director

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



KAPREALIAN ENGINEERING, INC.

CHAIN OF CUSTODY

| SAMPLER <i>Handy</i> | | SITE NAME & ADDRESS <i>AA Johnson - Oakland 1164 - 66th Street</i> | | | | | ANALYSES REQUESTED <i>TPH-G BTXE</i> | | | TURN AROUND TIME: <i>REGULAR</i> | |
|--|----------------|--|-------------------------------------|---|------|---|---|-------------------|-------------------------------------|-------------------------------------|------------------|
| WITNESSING AGENCY | | | | | | | | | | | |
| SAMPLE ID NO. | DATE | TIME | SOIL | WATER | GRAB | COMP | NO. OF CONT. | SAMPLING LOCATION | | REMARKS | |
| <i>Comp-1</i> | <i>3/24/92</i> | | <input checked="" type="checkbox"/> | | | | <i>4</i> | <i>STOCKPILE</i> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <i>2031245AD</i> |
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| | | | | | | | | | | | |
| Relinquished by: (Signature) <i>[Signature]</i> | | Date/Time <i>3/27/92 2:15pm</i> | | Received by: (Signature) <i>Amy Turzon</i> | | The following MUST BE completed by the laboratory accepting samples for analysis: 1. Have all samples received for analysis been stored in ice? <u><i>Yes</i></u> 2. Will samples remain refrigerated until analyzed? <u><i>Yes</i></u> 3. Did any samples received for analysis have head space? <u><i>No</i></u> 4. Were samples in appropriate containers and properly packaged? <u><i>Yes</i></u> <i>Amy Turzon</i> _____ Signature Title Date <i>3/27/92</i> | | | | | |
| Relinquished by: (Signature) | | Date/Time | | Received by: (Signature) | | | | | | | |
| Relinquished by: (Signature) | | Date/Time | | Received by: (Signature) | | | | | | | |
| Relinquished by: (Signature) | | Date/Time | | Received by: (Signature) | | | | | | | |