KAPREALIAN ENGINEERING, INC.
Consulting Engineers
P. O. BOX 913
BENICIA, CA 94510
(415) 676 · 9100 (707) 746 · 6915

KEI-J87-127SD
December 21, 1987

Shell Oil Company
P. O. Box 4023
Concord, CA 94524

Attn: Mr. Ray Newsome

Re: Stockpiled Soil Sampling For
Shell Service Station
Cutting Blvd. and Harbour Way
Richmond, California

Dear Mr. Newsome:

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 for proper disposal of contaminated soil.

On December 17, 1987, approximately 500 cubic yards of stockpiled soil at the referenced site was sampled for proper disposal. The soil was originated from the Shell Service Station located at 230 W. Mac Arthur Blvd., Oakland, California. Five (5) composite soil samples (designated as Comp A, Comp B, Comp C, Comp D and Comp E) were taken. Each composite soil sample consisted of four (4) individual grab samples taken at various locations and depths ranging from 1 to 2 feet. The samples were collected in 2-inch by 4-inch, clean brass tubes which were then sealed with aluminum foil and plastic caps and placed in an ice chest for subsequent delivery to Sequoia Analytical Laboratory in Redwood City for analyses.

The composite samples were analyzed for total petroleum hydrocarbons (TPH), benzene, toluene, and xylene (BTX) concentrations. The results of the soil analyses showed concentrations of TPH ranging from 3.9 parts per million (ppm) for Comp B to 34 ppm for Comp C. The analyses are summarized below. Copies of the laboratory analyses and the chain of custody form are attached to this report.

Composite Sample	Total Petroleum Hydrocarbons (ppm)	Benzene (ppm)	Toluene (ppm)	Xylene (ppm)
Comp A	20	<0.1	<0.1	<0.1
Comp B	3.9	<0.1	<0.1	<0.1
Comp C	34	0.21	0.36	1.1
Comp D	30	<0.1	0.29	0.83
Comp E	4.7	<0.1	<0.1	<0.1

Based on these analyses, the low level contaminants in the soil will not pose any impact to the environment. The TPH levels in the soil are considered to be non-hazardous by the Regional Water Quality Control Board. Therefore, no further sampling is necessary and the soil may be disposed of at any Class III disposal site.

A copy of this report should be sent to the Contra Costa County Department of Environmental Health.

Should you have any questions on this report, please do not hesitate to contact me at (415) 676-9100 or (707) 746-6915.

Sincerely,

Kaprealian Engineering, Inc.

Mardo Kaprealian

Attachment: Laboratory Results
Chain of Custody

SEQUOIA Analytical Laboratory
2549 Middlefield Road
Redwood City, CA 94063 • (415) 364-9222

Kaprealian Engineering, Inc.
P.O. Box 913
Benicia, CA 94510
Attn: Mardo Kaprealian, P.E.
President

Date Sampled: 12/17/87
Date Received: 12/17/87
Date Reported: 12/21/87

Project: Shell Richmond
Cutting/Harbour Way

TOTAL PETROLEUM FUEL HYDROCARBONS WITH BTX DISTINCTION

Sample Number	Sample Description
7121287	Soil, Comp. A

	Detection Limit ppm	Sample Results ppm
Low to Medium Boiling Point Hydrocarbons	1	20
Benzene	0.1	< 0.1
Toluene	0.1	< 0.1
Xylenes	0.1	< 0.1

Method of Analysis: EPA 5020/8015/8020

SEQUOIA ANALYTICAL LABORATORY

Arthur G. Burton
Laboratory Director

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TOTAL PETROLEUM FUEL HYDROCARBONS WITH BTX DISTINCTION

Sample Number	Sample Description
7121288	Soil, Comp. B

	Detection Limit ppm	Sample Results ppm
Low to Medium Boiling Point Hydrocarbons	1	3.9
Benzene	0.1	< 0.1
Toluene	0.1	< 0.1
Xylenes	0.1	< 0.1

Method of Analysis: EPA 5020/8015/8020

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Cutting/Harbour Way

TOTAL PETROLEUM FUEL HYDROCARBONS WITH BTX DISTINCTION

Sample Number	Sample Description
7121289	Soil, Comp C

	Detection Limit ppm	Sample Results ppm
Low to Medium Boiling Point Hydrocarbons	1	34
Benzene	0.1	0.21
Toluene	0.1	0.36
Xylenes	0.1	1.1

Method of Analysis: EPA 5020/8015/8020

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TOTAL PETROLEUM FUEL HYDROCARBONS WITH BTX DISTINCTION

Sample Number	Sample Description
7121290	Soil, Comp. D

	Detection Limit ppm	Sample Results ppm
Low to Medium Boiling Point Hydrocarbons	1	30
Benzene	0.1	< 0.1
Toluene	0.1	0.29
Xylenes	0.1	0.83

Method of Analysis: EPA 5020/8015/8020

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TOTAL PETROLEUM FUEL HYDROCARBONS WITH BTX DISTINCTION

Sample Number	Sample Description
7121291	Soil, Comp E

	Detection Limit ppm	Sample Results ppm
Low to Medium Boiling Point Hydrocarbons	1	4.7
Benzene	0.1	< 0.1
Toluene	0.1	< 0.1
Xylenes	0.1	< 0.1

Method of Analysis: EPA 5020/8015/8020

SEQUOIA ANALYTICAL LABORATORY

Arthur G. Burton
Laboratory Director

WEST CONTRA COSTA SANITARY LANDFILL

WASTE DISPOSAL INFORMATION FORM
NON-HAZARDOUS WASTE
Rev. 10/86

The West Contra Costa Sanitary Landfill (WCCSL) operates a non-hazardous (Class III) waste management and disposal site. To ensure that waste accepted for disposal in the Class III landfill does not include materials regulated as hazardous waste, WCCSL requests that the following information be completed and accompany the first load of waste arriving at the landfill for disposal.

Generator Name: Shell Oil Company **Telephone:** (415) 952-2259

Location of the site: Cutting Blvd. and Harbour Way
Richmond, California

Transporting Company Name: R. W. Johnston

Description of Process Generating Waste: Underground gasoline storage tank excavation.

Waste Composition: Soil (Silty sand and Sandy clay) approximately 500 cu.yd.

Results of Analytical Tests Performed (please attach copies of results):
Comp A (20 ppm), Comp B (3.9 ppm), Comp C (34 ppm), Comp D (30 ppm), Comp E (4.7 ppm) Total Petroleum Hydrocarbons as Gasoline

Rationale for NON-HAZARDOUS Classification: Per RWQCB, Laboratory Analyses less than 100 parts per million (ppm) of Total Petroleum Hydrocarbons are considered non-hazardous.

GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above, and that the contents of the consignment meet neither the U.S. Environmental Protection Agency Resource Conservation and Recovery Act criteria for a hazardous waste as specified in 40 CFR, Part 261 nor the California Department of Health Services criteria for a hazardous waste or extremely hazardous waste as specified in Title 22, California Administrative Code, Chapter 30, Article II.

Print Name: MARDO KAPREALIAN (FOR SHELL) **Title:** PRESIDENT

Signature: Mardo Kapreal **Date:** 12-21-87

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