

November 2, 1988

Mr. Thomas Peacock
Alameda County
Department of Environmental Health
470 27th Street, Room 324
Oakland, California 94612

MOBIL OIL CORPORATION
S/S #10-E6A
100 MacARTHUR BOULEVARD
OAKLAND, CALIFORNIA

Dear Mr. Peacock:

Attached is the Soil Sampling Report for the subject location.

Based on the results from the area of the waste oil tank, Mobil feels no further sampling is required. Mobil proposes to dispose of the soil excavated from the pit at a Class I facility.

If you have any questions, contact Chris Mitchell at (818) 953-2519.

Sincerely,

CTM:ars
attachment
18910

R. J. Edwards
Region Environmental Manager

cc: Ms. Christine Myers
Regional Water Quality Control Board
1111 Broadway Street, Room 6040
Oakland, California 94607

bcc: N. Pufg
S. Pao



KAPREALIAN ENGINEERING, INC.

Consulting Engineers

P. O. BOX 913

BENICIA, CA 94510

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

KEI-J88-0912

October 7, 1988

Mobil Oil Corporation
P. O. Box 913
Richmond, CA 94806

Attention: Mr. Mark Goepfert

Re: Soil Sampling Report
Mobil Service Station #10-E6A
100 MacArthur Blvd.
Oakland, California

Dear Mr. Goepfert:

This report summarizes the soil sampling performed by Kaprealian Engineering, Inc. (KEI) at the referenced site. All work was performed in compliance with the guidelines established by the Regional Water Quality Control Board (RWQCB), and the Alameda County Department of Environmental Health.

The scope of the work performed in our investigation consisted of the following:

Coordination with the regulatory agencies

Collection of samples of native soil beneath the storage tank

Delivery of soil samples with proper chain of custody to a certified analytical laboratory

Technical review of laboratory analyses and preparation of this report

SITE HISTORY AND DESCRIPTION

The subject site is presently used as a gasoline station. Site vicinity and site descriptions are shown on the attached sketches. No leaks or previous subsurface work performed at the site are known to KEI.

KEI's field investigation was conducted on September 19, 1988. One 550 gallon steel underground waste oil storage tank was removed from the site. No apparent holes or cracks were observed. Tank removal and the soil sampling were performed in the presence of Mr. Thomas Peacock of the Alameda County Department of Environmental Health and Ms. Christine Myers of the Oakland Fire Department.

One soil sample, labeled WO, was collected from the native soil beneath the tank ~~at a depth of nine feet~~. The undisturbed sample was collected from bulk material excavated by backhoe. The sample was placed in a clean, two-inch diameter brass tube, sealed with aluminum foil and plastic caps, and stored in a cooled ice chest for delivery to the state certified laboratory.

~~Approximately 15 cubic yards of soil were excavated from the tank pit, and stockpiled on site.~~ One composite soil sample (labeled Comp WO), was collected from the stockpile. The sample consisted of two grab samples collected at different locations in the stockpile, at a depth of approximately one foot. The samples were placed in clean brass tubes, capped and stored as described above.

SUBSURFACE CONDITIONS

The subsurface soils exposed in the excavation consisted primarily of silty clay. ~~No product odors~~ were present in the samples.

ANALYTICAL RESULTS

The samples were analyzed by Sequoia Analytical Laboratory of Redwood City, California and were accompanied by properly executed chain of custody forms. The sample from the waste oil pit was analyzed for total hydrocarbon as diesel (TPH), total oil and grease (TOG) and EPA 8240 compounds. Comp WO was analyzed for TPH and TOG. The analytical results are summarized in Table 1. Copies of the laboratory analyses and the chain of custody forms are attached to this report.

DISCUSSION AND RECOMMENDATIONS

Analytical results of the soil sample (as reported by the certified laboratory) from the waste oil tank pit indicate non-detectable levels of 8240 compounds, 2.0 ppm TPH and ~~24 ppm TOG~~. These levels are within the acceptable limits established by the Regional Water Quality Control Board (RWQCB). Based on the analytical results reflecting acceptable limits of hydrocarbons pursuant to the RWQCB guidelines and visual inspection, ~~KEI recommends no further sampling at this time, unless required by the regulatory agencies.~~

~~The composite sample from the stockpiled soil had 1700 ppm TPH and 65,000 ppm TOG.~~ KEI recommends that this soil be disposed of at a Class I site.

KEI-J88-0912
October 7, 1988
Page 3

A copy of this report should be sent to the Oakland Fire Department, to the Alameda County Department of Environmental Health, and to the RWQCB.

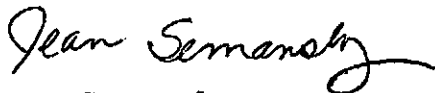
LIMITATIONS

The results of this study are based on the data obtained from the field and laboratory investigations. We have analyzed this data using what we believe to be currently applicable engineering techniques and principles in the Northern California region. We make no warranty, either expressed or implied, except that our services have been performed in accordance with generally accepted professional principles and practices existing for such work.

Should you have any questions regarding this report, please feel free to call me at (415) 676-9100 or (707) 746-6915.

Sincerely,

Kaprealian Engineering, Inc.



Jean Semansky
Geologist



Gary Johnson
Registered Geologist

License #004315
Exp. date 6/30/90

Attachments: Location plan
Laboratory analyses
Chain of custody forms
Table 1

TABLE 1

SUMMARY OF LABORATORY ANALYSES

(all analyses are in parts per million)
(collected September 19, 1988)

<u>Sample #</u>	<u>TPH as Diesel</u>	<u>TOG</u>	<u>EPA 8240</u>
W.O.	2.0	24	<1.0
Comp W.O.	1,700	65,000	--



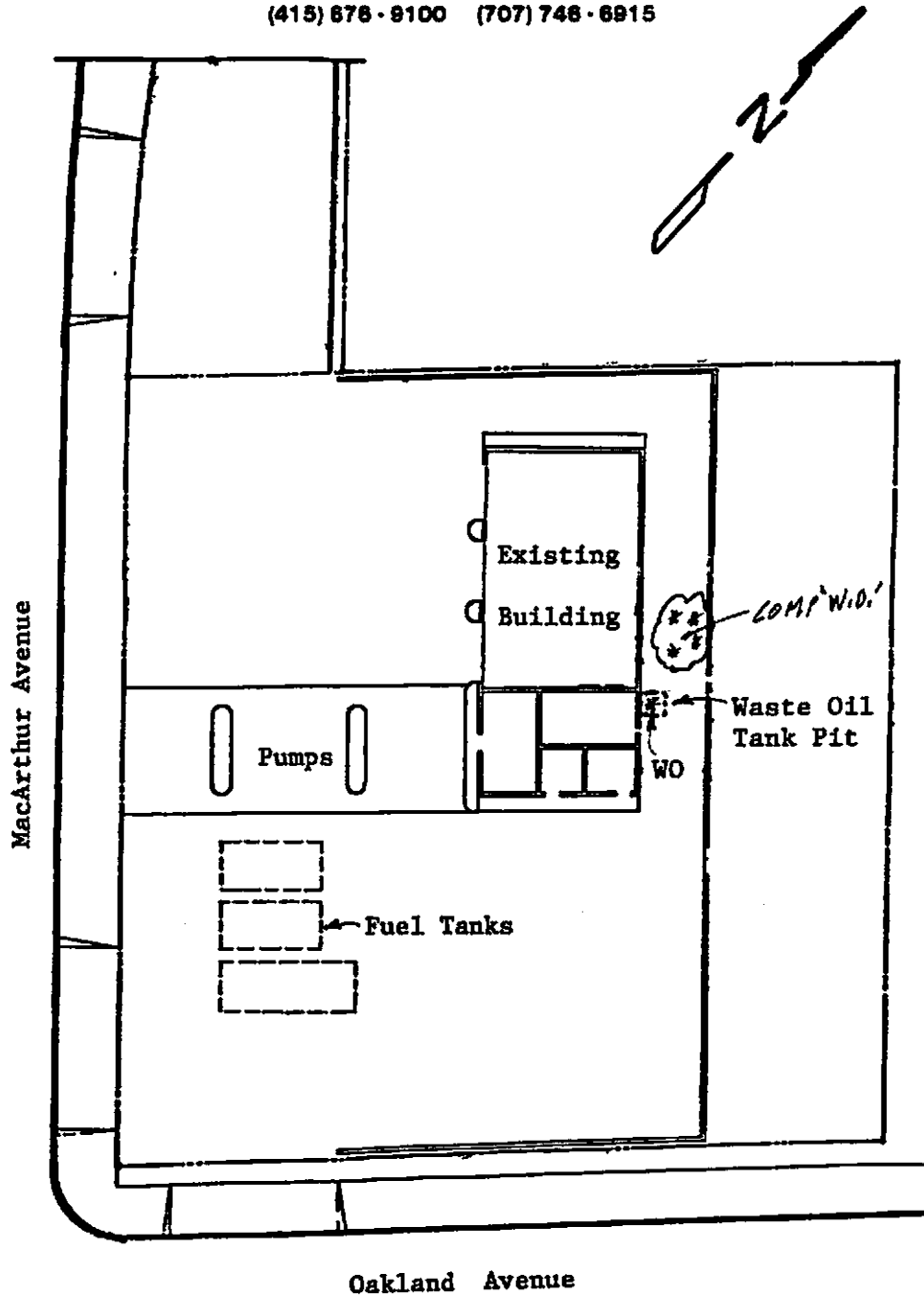
KAPREALIAN ENGINEERING, INC.

Consulting Engineers

P. O. BOX 913

BENICIA, CA 94510

(415) 678-9100 (707) 748-6915



SITE PLAN

* soil sample location

MOBIL SERVICE STATION #10-E6A
100 MacArthur Avenue
Oakland, California



SEQUOIA Analytical Laboratory

2549 Middlefield Road
Redwood City, CA 94063 • (415) 364-9222 • FAX (415) 364-9233

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

Date Sampled: 09/19/88
Date Received: 09/19/88
Date Analyzed: 09/20/88
Date Reported: 09/21/88

Project: Mobil, Oakland,
McArthur/Oakland

TOTAL PETROLEUM HYDROCARBONS

<u>Sample Number</u>	<u>Sample Description</u> Soil	<u>Detection Limit</u> ppm	<u>High Boiling Point Hydrocarbons</u> ppm
8091617	W.O.	1.0	2.0

Method of Analysis: EPA 3550/8015

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

SEQUOIA ANALYTICAL LABORATORY

Arthur G. Burton
Laboratory Director



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Attn: Mardo Kaprealian, P.E.
President

Date Sampled: 09/19/88
Date Received: 09/19/88
Date Extracted: 09/20/88
Date Reported: 09/21/88

Project: Mobil, Oakland,
McArthur/Oakland

TOTAL RECOVERABLE PETROLEUM HYDROCARBONS

<u>Sample Number</u>	<u>Sample Description</u> Soil	<u>Detection Limit</u> mg/kg	<u>Petroleum Oil</u> mg/kg
8091617	W.O.	1.0	24

Method of Analysis: EPA 418.1

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

SEQUOIA ANALYTICAL LABORATORY

Arthur G. Burton
Laboratory Director



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

Sample Number: 8091617

Date Sampled: 09/19/88
Date Received: 09/19/88
Date Analyzed: 09/20/88
Date Reported: 09/21/88
Project: Mobil, Oakland, McArthur/
Oakland

Sample Description: Soil,
W.O.

VOLATILE ORGANICS by MASS SPECTROMETRY

<u>Analyte</u>	<u>Detection Limit, µg/kg</u>	<u>Sample Results, µg/kg</u>
Acetone.....	500	N.D.
Benzene.....	100	N.D.
Bromodichloromethane.....	100	N.D.
Bromoform.....	100	N.D.
Bromomethane.....	100	N.D.
2-Butanone.....	500	N.D.
Carbon disulfide.....	100	N.D.
Carbon tetrachloride.....	100	N.D.
Chlorobenzene.....	100	N.D.
Chlorodibromomethane.....	100	N.D.
Chloroethane.....	100	N.D.
2-Chloroethyl vinyl ether.....	500	N.D.
Chloroform.....	500	N.D.
Chloromethane.....	100	N.D.
1,1-Dichloroethane.....	100	N.D.
1,2-Dichloroethane.....	100	N.D.
1,1-Dichloroethene.....	100	N.D.
Total-1,2-Dichloroethene.....	100	N.D.
1,2-Dichloropropane.....	100	N.D.
cis-1,3-Dichloropropene.....	100	N.D.
trans-1,3-Dichloropropene.....	100	N.D.
Ethylbenzene.....	100	N.D.
2-Hexanone.....	500	N.D.
Methylene chloride.....	500	N.D.
4-Methyl-2-pentanone.....	500	N.D.
Styrene.....	100	N.D.
1,1,2,2-Tetrachloroethane.....	100	N.D.
Tetrachloroethene.....	100	N.D.
Toluene.....	100	N.D.
1,1,1-Trichloroethane.....	100	N.D.
1,1,2-Trichloroethane.....	100	N.D.
Trichloroethene.....	100	N.D.
Trichlorofluoromethane.....	100	N.D.
Vinyl acetate.....	100	N.D.
Vinyl chloride.....	100	N.D.
Total Xylenes.....	100	N.D.

Method of Analysis: EPA 5030/8240

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

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Arthur G. Burton
Laboratory Director



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BENICIA, CA 94510

(415) 876-8100 (707) 746-8915

CHAIN OF CUSTODY

SAMPLER: Ray (KEI) DATE/TIME OF COLLECTION: 9/19/88 TURN AROUND TIME: 24 HRS
(signature)

SAMPLE DESCRIPTION AND PROJECT NUMBER:

MOBIL OAKLAND
Mc Arthur / OAKLAND

SAMPLE #	ANALYSES	GRAB OR COMP.	NUMBER OF CONTAINERS	SOIL/WATER
<u>W.O.</u>	<u>TPH as Diesel</u>	<u>Grab</u>	<u>1</u>	<u>S.</u>
	<u>TOG</u>			
	<u>8240</u>			

RELINQUISHED BY*	TIME/DATE	RECEIVED BY*	TIME/DATE
<u>Ray (KEI)</u>	<u>3:50 PM</u> <u>9/19/88</u>	<u>[Signature]</u>	<u>3:50 PM</u> <u>9/19/88</u>
<u>2.</u>			
<u>3.</u>			
<u>4.</u>			

* STATE AFFILIATION NEXT TO SIGNATURE

REMARKS: _____



SEQUOIA Analytical Laboratory

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

Date Sampled: 09/19/88
Date Received: 09/19/88
Date Analyzed: 09/26/88
Date Reported: 09/26/88

Project: Mobil, Oakland,
McArthur/Oakland

TOTAL PETROLEUM HYDROCARBONS

<u>Sample Number</u>	<u>Sample Description</u> Soil	<u>Detection Limit</u> ppm	<u>High Boiling Point Hydrocarbons</u> ppm
8091681	Composite W.O.	1.0	1700

Method of Analysis: EPA 3550/8015

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

SEQUOIA ANALYTICAL LABORATORY

Arthur G. Burton
Laboratory Director



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President

Date Sampled: 09/19/88
Date Received: 09/19/88
Date Extracted: 09/21/88
Date Reported: 09/26/88

Project: Mobil, Oakland,
McArthur/Oakland

TOTAL RECOVERABLE PETROLEUM HYDROCARBONS

<u>Sample Number</u>	<u>Sample Description</u> Soil	<u>Detection Limit</u> mg/kg	<u>Petroleum Oil</u> mg/kg
8091681	Composite W.O.	1.0	65000

Method of Analysis: EPA 418.1

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

SEQUOIA ANALYTICAL LABORATORY

Arthur G. Burton
Laboratory Director



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BENICIA, CA 94510

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

CHAIN OF CUSTODY

SAMPLER: Ray (KEI) DATE/TIME OF COLLECTION: 9/19/88 TURN AROUND TIME: 1 Week
 (signature)

SAMPLE DESCRIPTION AND PROJECT NUMBER:

MOBIL OAKLAND
Mc ACTHUS / OAKLAND

SAMPLE #	ANALYSES	GRAB OR COMP.	NUMBER OF CONTAINERS	SOIL/WATER
<u>COMP N.0</u>	<u>TOG.</u>	<u>COMP</u>	<u>2</u>	<u>S.</u>
	<u>(TPH as Diesel)</u>			

RELINQUISHED BY* Ray (KEI) TIME/DATE 5:50 PM 9/19/88

RECEIVED BY* [Signature] TIME/DATE 3:50 PM 9/19/88

- 2.
- 3.
- 4.

* STATE AFFILIATION NEXT TO SIGNATURE

REMARKS: _____