RO 346

Mobil Oil Corporation

3800 WEST ALAMEDA AVENUE, SUITE 700
BURBANK, CALIFORNIA 91505-4331

November 22, 1988

Mr. Rafat Shahid
Alameda County
Environmental Health Department
470 27th Street, Room 324
Oakland, California 94612

MOBIL OIL CORPORATION
S/S #10-G6A
3519 CASTRO VALLEY
CASTRO VALLEY, CALIFORNIA

Dear Mr. Shahid:

Attached is the soil sampling report for the subject location.

The results indicate the contamination was contained in the immediate vicinity of the waste oil tank. Mobil feels no further investigation is warranted at this time. This office also proposes to haul the stockpiled soil to a Class III site.

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

Sincerely,

C J Mitchell

for R. J. Edwards
Region Environmental Manager

CTM:ars
attachment
19970

cc: Mr. Peter Johnson
Regional Water Quality Control Board
1111 Jackson Street, Room 6040
Oakland, California 94607

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

KEI-J88-0914
October 17, 1988

Mobil Oil Corporation
P. O. Box 913
Richmond, Ca 94807

Attention: Mr. Mark Goepfert

Re: Soil Sampling Report
Mobil Service Station #10-G6A
3519 Castro Valley Blvd.
Castro Valley, 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 by KEI consisted of the following:

Coordination with the regulatory agencies

Collection of samples of native soil from beneath the waste oil 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 description are shown on the attached site plan. No leaks or previous subsurface work performed at the site are known to KEI.

KEI's field work was conducted on September 20, 1988. One 380 gallon steel underground waste oil storage tank was removed from the site. Tank removal and soil sampling were performed in the presence of Mr. Lawrence Seto of the Alameda County Health Department. Nine holes up to 0.5 inches in diameter were observed in the tank.

Two soil samples, labeled WO1(8.5') and WO1(10.5'), were collected from the native soil beneath the tank at the depths indicated. The undisturbed samples were collected from bulk material excavated by backhoe. The samples were placed in clean, 2" diameter brass tubes, sealed with aluminum foil, plastic caps, and tape, and stored in a cooled ice chest for delivery to the state certified laboratory.

The soil from the tank pit was stockpiled on site. Two composite soil samples labeled Comp A and Comp B were collected from the stockpile to determine a proper means of disposal. Each composite sample consisted of four grab samples collected at various locations in the stockpile, at a depth of one to two feet. The samples were stored, capped, and transported as described above.

SUBSURFACE CONDITIONS

The subsurface soils exposed in the excavations consisted primarily of silty clay.

ANALYTICAL RESULTS

Samples WO(8.5') and Comp A analyzed by Sequoia Analytical Laboratory of Redwood City, California and were accompanied by properly executed chain of custody forms. Comp B was analyzed by Mobile Chem Labs of San Carlos. Sample WO(10.5') was not analyzed. The samples were analyzed for total hydrocarbon as diesel (TPH), and total oil and grease (TOG). Sample WO1(8.5') was also analyzed for EPA 8010/8020 compounds. 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 sample WO1(8.5') (as reported by the certified laboratory) from the waste oil tank pit indicate non-detectable levels of TPH and TOG. All 8010/8020 compounds were non-detectable except for 0.0068 ppm benzene and 0.0095 ppm toluene.

Comp A had non-detectable TPH and 100 ppm TOG. Comp B had non-detectable levels of TPH and TOG.

The levels of TPH and TOG found beneath the waste oil tank are within the acceptable limits established by the Regional Water Quality Control Board (RWQCB). The levels of contamination seen in the three samples analyzed indicate that any leakage from the

tank was confined to the immediate area surrounding the tank. There is no evidence that any petroleum hydrocarbons migrated more than a few feet from the tank. Based on the analytical results reflecting acceptable limits of hydrocarbons pursuant to the RWQCB guidelines, KEI recommends no further sampling at this time, unless required by the regulatory agencies. The stockpiled soil where composite B was collected may be disposed of at any Class III site.

A copy of this report should be sent to the Castro Valley Fire Department, to the Alameda County Department of Environmental Health, and to the Regional Water Quality Control Board.

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: Site plan
Laboratory analyses
Chain of custody forms
Table 1

TABLE 1

SUMMARY OF LABORATORY ANALYSES

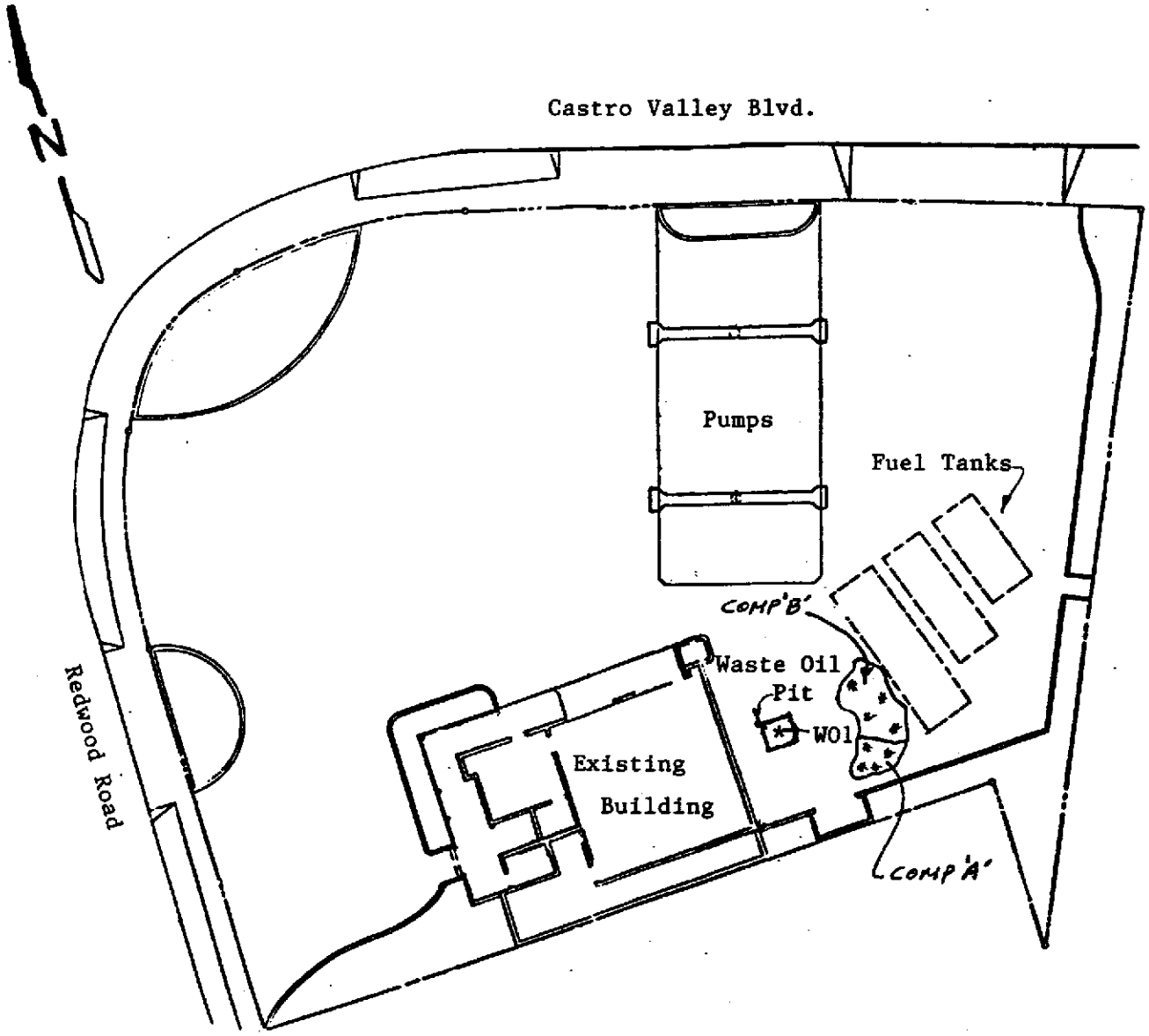
(all analyses are in ppm)
(sampled September 20, 1988)

Sample #	TPH	TOG	EPA 8010/8020
WO1(8.5')	<1.0	<1.0	See Below
Comp A	<1.0	100	----
Comp B*	<1.0	<50	----

Sample WO1(8.5') had 0.0068 ppm benzene and 0.0095 ppm toluene.

* Sampled October 4, 1988

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



SITE PLAN

* soil sample location

0 30'

MOBIL SERVICE STATION #10-G6A
3519 Castro Valley Blvd.
Castro Valley, 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: 09/20/88
Date Received: 09/21/88
Date Analyzed: 09/22/88
Date Reported: 09/23/88

Project: Mobil, Castro Valley

TOTAL PETROLEUM HYDROCARBONS

Sample Number	Sample Description Soil	Detection Limit ppm	High Boiling Point Hydrocarbons ppm
8091923	W.O.-1 (8.5')	1.0	N.D.

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

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Date Received: 09/21/88
Date Extracted: 09/21/88
Date Reported: 09/23/88

Project: Mobil, Castro Valley

TOTAL RECOVERABLE PETROLEUM HYDROCARBONS

Sample Number	Sample Description Soil	Detection Limit mg/kg	Petroleum Oil mg/kg
8091923	W.O.-1 (8.5')	1.0	N.D.

Method of Analysis: EPA 418.1

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

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Date Reported: 09/23/88

Project: Mobil, Castro Valley

HALOGENATED VOLATILE ORGANICS

Sample Number	Sample Description
8091923	Soil, W.O.-1 (8.5')

Analyte	Detection Limit µg/kg	Sample Results µg/kg
Bromodichloromethane	5.0	N.D.
Bromoform	5.0	N.D.
Bromomethane	5.0	N.D.
Carbon tetrachloride	5.0	N.D.
Chlorobenzene	5.0	N.D.
Chloroethane	25	N.D.
2-Chloroethylvinyl ether	5.0	N.D.
Chloroform	5.0	N.D.
Chloromethane	5.0	N.D.
Dibromochloromethane	5.0	N.D.
1,2-Dichlorobenzene	10	N.D.
1,3-Dichlorobenzene	10	N.D.
1,4-Dichlorobenzene	10	N.D.
1,1-Dichloroethane	5.0	N.D.
1,2-Dichloroethane	5.0	N.D.
1,1-Dichloroethene	5.0	N.D.
trans-1,2-Dichloroethene	5.0	N.D.
1,2-Dichloropropane	5.0	N.D.
cis-1,3-Dichloropropene	5.0	N.D.
trans-1,3-Dichloropropene	5.0	N.D.
Methylene chloride	10	N.D.
1,1,2,2-Tetrachloroethane	5.0	N.D.
Tetrachloroethene	5.0	N.D.
1,1,1-Trichloroethane	5.0	N.D.
1,1,2-Trichloroethane	5.0	N.D.
Trichloroethene	5.0	N.D.
Trichlorofluoromethane	5.0	N.D.
Vinyl chloride	10	N.D.

Method of Analysis: EPA 5030/8010
Analytes reported as N.D. were not present above the stated limit of detection.

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Laboratory Director

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Date Sampled: 09/20/88
Date Received: 09/21/88
Date Analyzed: 09/22/88
Date Reported: 09/23/88

Project: Mobil, Castro Valley

AROMATIC VOLATILE ORGANICS

Sample Number	Sample Description
8091923	Soil, W.O.-1 (8.5')

Analyte	Detection Limit µg/kg	Sample Results µg/kg
Benzene	5.0	6.8
Chlorobenzene	5.0	N.D.
1,4-Dichlorobenzene	10	N.D.
1,3-Dichlorobenzene	10	N.D.
1,2-Dichlorobenzene	10	N.D.
Ethyl Benzene	5.0	N.D.
Toluene	5.0	9.5
Xylenes	5.0	N.D.

Method of Analysis: EPA 5030/8020

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

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Laboratory Director

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

Date Sampled: 09/20/88
Date Received: 09/21/88
Date Analyzed: 09/22/88
Date Reported: 09/23/88

Project: Mobil, Castro Valley,

TOTAL PETROLEUM HYDROCARBONS

Sample Number	Sample Description	Detection Limit	High Boiling Point Hydrocarbons
	Soil	ppm	ppm
8091924	Composite A	1.0	N.D.

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

Date Sampled: 09/20/88
Date Received: 09/21/88
Date Extracted: 09/21/88
Date Reported: 09/23/88

Project: Mobil, Castro Valley

TOTAL RECOVERABLE PETROLEUM HYDROCARBONS

Sample Number	Sample Description	Detection Limit	Petroleum Oil
	Soil	mg/kg	mg/kg
8091924	Composite A	1.0	100

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

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

CHAIN OF CUSTODY

SAMPLER: [signature] DATE/TIME OF COLLECTION: 9-20-88 TURN AROUND TIME: 24 Hrs
(signature)

SAMPLE DESCRIPTION AND PROJECT NUMBER: Mobil - Castro Valley

SAMPLE #	ANALYSES	GRAB OR COMP.	NUMBER OF CONTAINERS	SOIL/ WATER
WO-1(8.5')	TPH as Diesel, TOG ~~8010/8020~~	grab	1	Soil
HOLD WO-1(10.5')	TPH as Diesel, TOG, 8010/8020	grab	1	Soil
WHF CompA	TPH as Diesel, TOG	Comp	4	Soil

RELINQUISHED BY*	TIME/DATE	RECEIVED BY*	TIME/DATE
1. [signature] KEI	Sept 20/88 8:56	Ron #13 Kaprealian	8:56 AM 9/21/88
2. Ron #13	9/21/88 12:54	[signature]	12:55 PM 9/21/88
3.			
4.			

* STATE AFFILIATION NEXT TO SIGNATURE

REMARKS:

MOBILE CHEM LABS INC.

733 Dartmouth Avenue
San Carlos, CA 94070 • (415) 591-5820

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

Date Sampled:10-04-88
Date Received:10-04-88
Date Reported:10-04-88

Sample Number	Sample Description	Detection Limit	Total Petroleum Hydrocarbons as Diesel
		ppm	ppm
	Mobil-Castro Valley Castro Valley & Redwood		
108069	Comp. B	10	<10

Note: Analysis was performed using EPA methods 3550 and 8015

MOBILE CHEM LABS

Ronald G. Evans
Lab Director

MOBILE CHEM LABS INC.

733 Dartmouth Avenue
San Carlos, CA 94070 • (415) 591-5820

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

Date Sampled: 10-04-88
Date Received: 10-04-88
Date Reported: 10-04-88

Sample Number	Sample Description	Detection Limit	Gravimetric Waste Oil as Petroleum Oil
		ppm	ppm
	Mobil-Castro Valley Castro Valley & Redwood		
108069	Comp B	50	<50

Note: Analysis was performed using EPA extraction method 3510 with Trichlorotrifluoroethane as solvent, and gravimetric determination by standard methods 503e

MOBILE CHEM LABS

Ronald G. Evans
Lab Director

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

CHAIN OF CUSTODY

SAMPLER: R. M. Bradish (signature) DATE/TIME OF COLLECTION: 10-4-88 TURN AROUND TIME: 24 Hr

SAMPLE DESCRIPTION AND PROJECT NUMBER: Mobil - Castro Valley (Castro Valley & Redwood)

SAMPLE #	ANALYSES	GRAB OR COMP.	NUMBER OF CONTAINERS	SOIL/ WATER
Comp B	TPH-D & TOG	C	2	S

RELINQUISHED BY*	TIME/DATE	RECEIVED BY*	TIME/DATE
1. R. M. Bradish		Debra Marcus	10/4/88 6:20pm
2. Debra Marcus	10/4/88 20:15	J Dishman	10-4-88 20:15
3.			
4.			

* STATE AFFILIATION NEXT TO SIGNATURE

REMARKS: