

Mobil Oil Corporation

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

November 20, 1987

Captain Marvin Helms
Alameda Fire Department
1300 Park Street
Alameda, California 94501

MOBIL OIL CORPORATION
S/S #10-EYD
1541 PARK STREET
ALAMEDA, CALIFORNIA

Dear Captain Helms:

Attached is our consultant's report for the referenced location.

During the tank replacement project, soil samples were obtained from the product and waste oil tank cavities. Laboratory analyses indicated moderate levels of hydrocarbon concentrations in samples B2, C2 and D2, and elevated hydrocarbon concentrations in sample C1.

Based on the laboratory data, three groundwater monitoring wells will be installed to define the extent of contamination. Upon completion of this work, a report will be submitted to your office.

Also attached are the laboratory results for the stockpiled soil that was excavated from the tank cavity. Laboratory analyses indicated low levels of hydrocarbons in the soil. Therefore, the soil was transported to an appropriate disposal facility.

Should you have any questions, contact Jane Keith at (818) 953-2519.

Sincerely,

JMK:ars
attachment
01810

R. J. Edwards
Region Environmental Manager

cc: Mr. Greg Zetner
Regional Water Quality Con. Bd.
1111 Jackson Street, Room 6040
Oakland, Ca. 94607

Mr. T. M. Gerow
Alameda County
Environmental Health Dept.
470 27th Street, Room 324
Oakland, Ca. 94612

bcc: J. B. Bonnema (w/o atch)
H. D. Younger

COPY TO BP

Mobil Oil Corporation

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

November 20, 1987

Captain Marvin Helms
Alameda Fire Department
1300 Park Street
Alameda, California 94501

MOBIL OIL CORPORATION
S/S #10-EYD
1541 PARK STREET
ALAMEDA, CALIFORNIA

Dear Captain Helms:

Attached is our consultant's report for the referenced location.

During the tank replacement project, soil samples were obtained from the product and waste oil tank cavities. Laboratory analyses indicated moderate levels of hydrocarbon concentrations in samples B2, C2 and D2, and elevated hydrocarbon concentrations in sample C1.

Based on the laboratory data, three groundwater monitoring wells will be installed to define the extent of contamination. Upon completion of this work, a report will be submitted to your office.

Also attached are the laboratory results for the stockpiled soil that was excavated from the tank cavity. Laboratory analyses indicated low levels of hydrocarbons in the soil. Therefore, the soil was transported to an appropriate disposal facility.

Should you have any questions, contact Jane Keith at (818) 953-2519.

Sincerely,

JMK:ars
attachment
01810

R. J. Edwards
Region Environmental Manager

cc: Mr. Greg Zetner
Regional Water Quality Con. Bd.
1111 Jackson Street, Room 6040
Oakland, Ca. 94607

Mr. T. M. Gerow
Alameda County
Environmental Health Dept.
470 27th Street, Room 324
Oakland, Ca. 94612

bcc: J. B. Bonnema (w/o atch)
M. D. Younger

COPY TO BP



KAPREALIAN ENGINEERING, INC.

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

KEI-J87-097
October 12, 1987

Mobil Oil Corporation
P.O. Box 127
Richmond, CA 94807

Attention: Mr. Moody Younger

Re: Soil Sampling Investigation
MOBIL S/S #10-EYD
1541 Park Street
Alameda, California

Dear Mr. Younger:

This report summarizes preliminary subsurface investigation performed by Kaprealian Engineering, Inc. (KEI) at the referenced site. All work was performed in compliance with the regulations and guidelines established by the Regional Water Quality Control Board (RWQCB), and in cooperation with the Alameda Fire Department.

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

- Supervision of the removal of the underground tanks
- Coordination with the state and local agencies
- Collection of samples of native soil
- Water sampling
- Delivery of samples with proper chain of custody to a certified analytical laboratory
- Technical review and preparation of this report

FIELD INVESTIGATION

KEI's field investigation was conducted on September 15, 1987, and consisted of supervision of the removal of four (4) underground storage tanks. Captain Marvin Helms of the Alameda Fire Department was present for the tank removal and a portion of the sampling. The tanks consisted of one 5000 gallon super unleaded tank, one 6000 gallon regular fuel tank, one 8000 gallon unleaded fuel tank and one 250 gallon waste oil tank.

COPY TO BP

The 6000 and 8000 gallon tanks were single-walled fiberglass. The 5000 gallon tank and the waste oil tank were steel. All the tanks appeared to be in good condition.

Groundwater was encountered in the fuel tank pit at a depth of approximately 12 feet, prohibiting soil sampling immediately beneath the tanks. Eight (8) samples of native soil, labeled A1, A2, B1, B2, C1, C2, D1, and D2, were taken from the sidewalls of the pit at a depth of about 11.5 feet. The samples were collected from bulk material excavated by backhoe. The samples were placed in clean, two-inch diameter brass tubes, sealed with aluminum foil and plastic caps, and were stored in a cooled ice chest for delivery to the contracted laboratory.

The waste oil tank pit was excavated to a depth of 6 feet. One soil sample was collected from the native soil beneath the tank at a depth of 8 feet. The sample was placed in a brass tube and was sealed and stored as described above.

One water sample, labeled W1, was collected from the pit after soil sampling was completed. The sample was placed in a VOA vial with a Teflon-lined screw cap, and was stored with the soil samples as described above.

SUBSURFACE CONDITIONS

The subsurface soils exposed in the excavation consisted primarily of silty sand. Strong odors of gasoline were present in samples C1 and C2. The excavated soil from the tank pit was stockpiled on the site.

ANALYTICAL RESULTS

All samples were analyzed by HAZCAT Organic Laboratory of San Carlos, California and were accompanied by proper chain of custody forms. The samples from the fuel tank pit were analyzed for total hydrocarbon (THC) as gasoline, benzene, toluene and xylene (BTX) concentrations. The sample from the waste oil pit was analyzed for THC, high boiling fraction, total oil and grease, and EPA 8240 constituents. The water sample was analyzed for THC and BTX. The analytical results are summarized in Table 1. Copies of the laboratory analyses and the chain of custody forms are attached to this report.

COPY TO BP

DISCUSSION AND RECOMMENDATIONS

Analytical results of the soil samples from the fuel tank pit indicate high levels of total hydrocarbon in the samples from eastern portion of the pit. The analytical results of the sample from the waste oil tank pit showed non-detectable levels of 8010 and 8020 constituents and THC as diesel. The TOG level was 150 ppm. The water sample from the fuel tank pit had high THC and BTX concentrations.

According to the guidelines established by the Regional Water Quality Control Board (RWQCB), further investigation is necessary at the site to determine the extent of the subsurface contamination. To comply with the requirements of the RWQCB, KEI recommends the installation of three (3) groundwater monitoring wells at the site to determine the lateral and vertical extent of contamination. Our proposal for this work is attached for your consideration.

A copy of this report should be sent to Captain Marvin Helms of the Alameda Fire Department and to the Regional Water Quality Control Board.

LIMITATIONS

Soil deposits and rock formations may vary in thickness, lithology, saturation, strength and other properties across any site. In addition, environmental changes, either naturally-occurring or artificially-induced, may cause changes in groundwater levels and flow paths, thereby changing the extent and concentration of any contaminants. Our studies assume that the field and laboratory data are reasonably representative of the site as a whole, and assume that subsurface conditions are reasonably conducive to interpolation and extrapolation.

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.

COPY TO BP

KEI-J87-097
October 12, 1987
Page 4

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.



Mardo Kaprealian

License #C29326
Exp. date 3/31/91

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

cc: J. Keith

COPY TO BP

TABLE 1

SUMMARY OF LABORATORY ANALYSES
(all analyses in parts per million)

<u>Sample #</u>	<u>Type</u>	<u>Depth</u>	<u>Total Hydrocarbon</u>	<u>Benzene</u>	<u>Toluene</u>	<u>Xylene</u>
A1	soil	11.5'	<1.0	<0.1	<0.1	<0.1
A2	Soil	11.5'	<1.0	<0.1	<0.1	<0.1
B1	soil	11.5'	<1.0	<0.1	<0.1	<0.1
B2	soil	11.5'	340	<0.1	<0.1	8.6
C1	soil	11.5'	3200	81	42	450
C2	soil	11.5'	490	2.6	13	180
D1	soil	11.5'	<1.0	<0.1	<0.1	<0.1
D2	soil	11.5'	75	0.3	6.1	40
W.O-1*	soil	7.5'	<10	----	----	----
W-1	water	12'	530	6.3	66	200

* TOG = 150 ppm

COPY TO BP



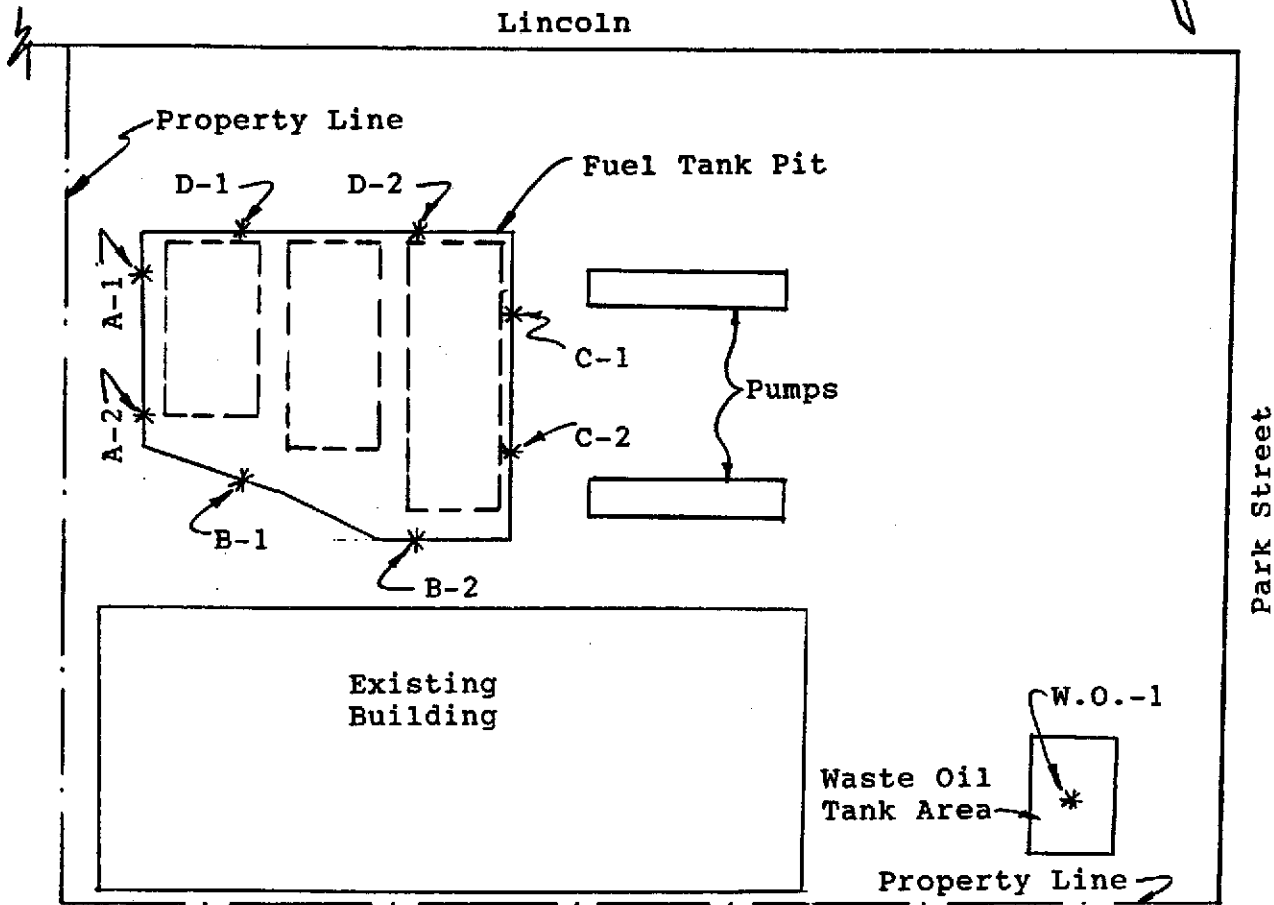
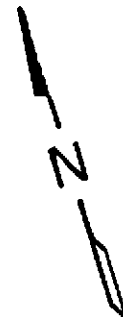
KAPREALIAN ENGINEERING, INC.

Consulting Engineers

P. O. BOX 913

BENICIA, CA 94510

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



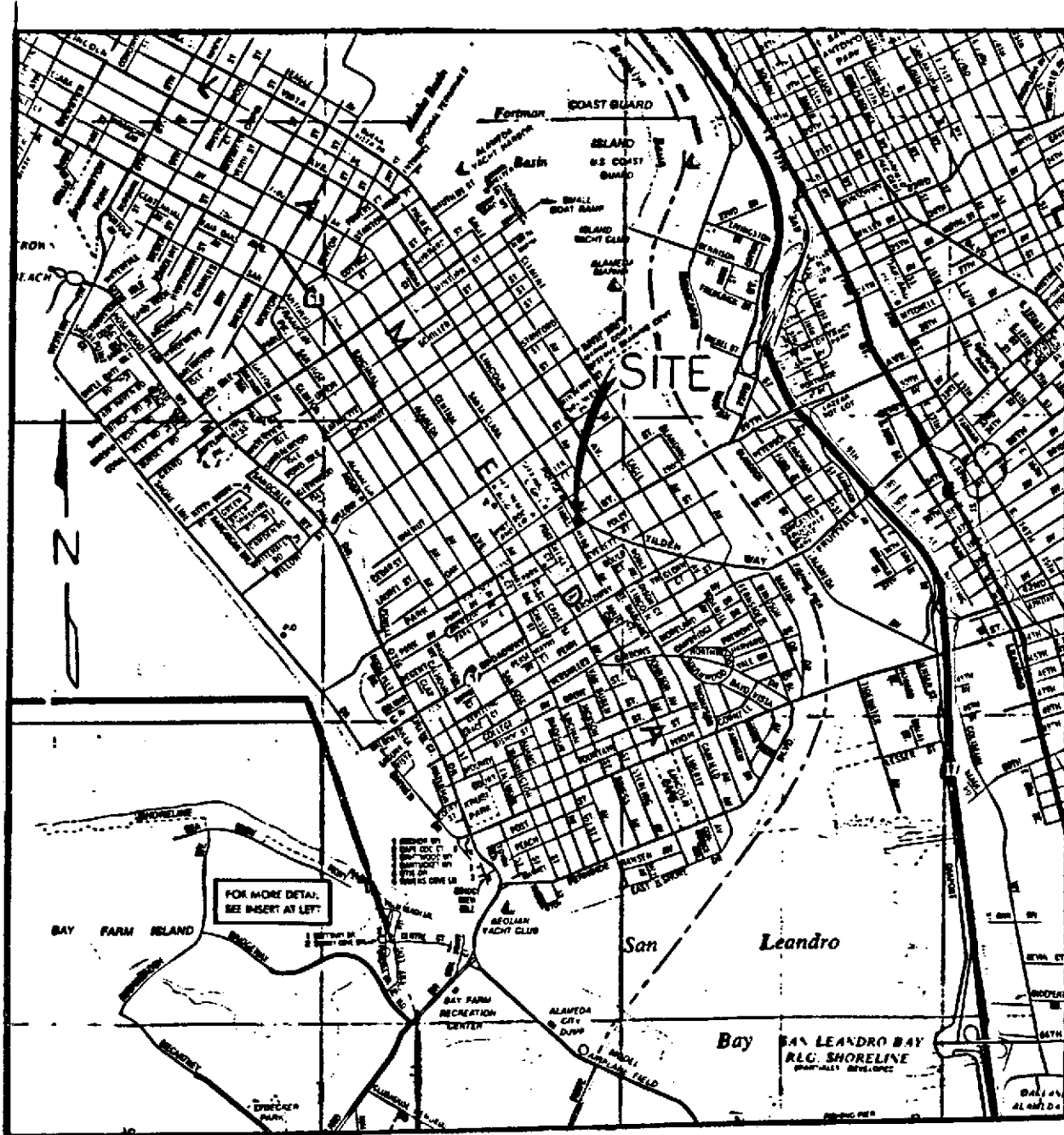
LOCATION PLAN

nts

* Sample Location

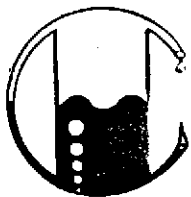
MOBIL Service Station
1541 Park Street
Alameda, California

COPY TO BP



SITE LOCATION PLAN

COPY TO BP



HAZCAT Mobile Organics Lab

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: 9-15-87
Date Received: 9-16-87
Date Reported: 9-17-87

Sample Number

097028

Sample Description

Mobil Alameda Park & Lincoln
B-1

ANALYSIS

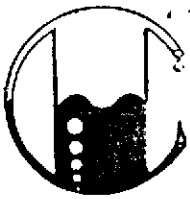
	Detection Limit	Sample Results
	----- ppm	----- ppm
Total Hydrocarbons as Gasoline	1	<1
Benzene	0.1	<.1
Toluene	0.1	<.1
Xylenes	0.1	<.1

Note: Analysis was performed using EPA methods 5020 and 8015 with method 8020 used for BTX distinction.

HAZCAT

Ronald G. Evans
Lab Director

COPY TO BP



HAZCAT Mobile Organics Lab

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: 9-15-87
Date Received: 9-16-87
Date Reported: 9-17-87

Sample Number

097029

Sample Description

Mobil Alameda Park & Lincoln
B-2

ANALYSIS

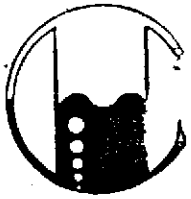
	<u>Detection Limit</u>	<u>Sample Results</u>
	ppm	ppm
Total Hydrocarbons as Gasoline	1	340
Benzene	0.1	<.1
Toluene	0.1	<.1
Xylenes	0.1	8.6

Note: Analysis was performed using EPA methods 5020 and 8015 with method 8020 used for BTX distinction.

HAZCAT

Ronald G. Evans
Lab Director

COPY TO BP



HAZCAT Mobile Organics Lab

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: 9-15-87
Date Received: 9-16-87
Date Reported: 9-17-87

Sample Number

097030

Sample Description

Mobil Alameda Park & Lincoln
C-1

ANALYSIS

	Detection Limit	Sample Results
	----- ppm	----- ppm
Total Hydrocarbons as Gasoline	1	3200
Benzene	0.1	81
Toluene	0.1	42
Xylenes	0.1	450

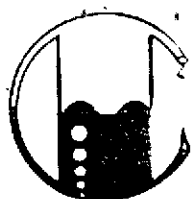
Note: Analysis was performed using EPA methods 5020 and 8015 with method 8020 used for BTX distinction.

HAZCAT

Ronald G. Evans

Ronald G. Evans
Lab Director

COPY TO BP



HAZCAT Mobile Organics Lab

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: 9-15-87
Date Received: 9-16-87
Date Reported: 9-17-87

Sample Number

097031

Sample Description

Mobil Alameda Park & Lincoln
C-2

ANALYSIS

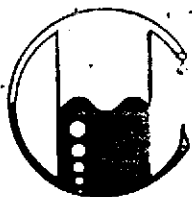
	Detection Limit	Sample Results
	----- ppm	----- ppm
Total Hydrocarbons as Gasoline	1	490
Benzene	0.1	2.6
Toluene	0.1	13
Xylenes	0.1	180

Note: Analysis was performed using EPA methods 5020 and 8015 with method 8020 used for BTX distinction.

HAZCAT

Ronald G. Evans
Lab Director

COPY TO BP



HAZCAT Mobile Organics Lab

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: 9-15-87
Date Received: 9-16-87
Date Reported: 9-17-87

Sample Number

097032

Sample Description

Mobil Alameda Park & Lincoln
D-1

ANALYSIS

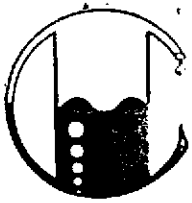
	Detection Limit ----- ppm	Sample Results ----- ppm
Total Hydrocarbons as Gasoline	1	<1
Benzene	0.1	<.1
Toluene	0.1	<.1
Xylenes	0.1	<.1

Note: Analysis was performed using EPA methods 5020 and 8015 with method 8020 used for BTX distinction.

HAZCAT

Ronald G. Evans
Lab Director

COPY TO BP



HAZCAT Mobile Organics Lab

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: 9-15-87
Date Received: 9-16-87
Date Reported: 9-17-87

Sample Number

097033

Sample Description

Mobil Alameda Park & Lincoln
D-2

ANALYSIS

	<u>Detection Limit</u>	<u>Sample Results</u>
	ppm	ppm
Total Hydrocarbons as Gasoline	1	75
Benzene	0.1	0.3
Toluene	0.1	6.1
Xylenes	0.1	40

Note: Analysis was performed using EPA methods 5020 and 8015 with method 8020 used for BTX distinction.

HAZCAT

Ronald G. Evans
Lab Director

COPY TO BP

KAPREALIAN ENGINEERING, INC.

CHAIN OF CUSTODY

SAMPLER: Ambar DATE/TIME OF COLLECTION: 9/15/87 3-4:30 pm TURNAROUND TIME: 24 HRS.
 (signature)

SAMPLE DESCRIPTION AND PROJECT NUMBER: MOBIL - Alameda - Part 8
Lincoln

SAMPLE #	ANALYSIS	GRAB OR COMP.	NUMBER OF CONTAINERS	SOIL/ WATER
A-1	THC - BTEX	GRAB	1	S
A-2	" "	"	1	S
B-1	" "	"	1	S
B-2	" "	"	1	S
C-1	" "	"	1	S
C-2	" "	"	1	S
D-1	" "	"	1	S
D-2	" "	"	1	S

RELINQUISHED BY*	TIME/DATE	RECEIVED BY*	TIME/DATE
1. <u>MS</u> <u>[Signature]</u> <u>KEF</u>	<u>9/16/87</u> <u>10:43a.m.</u>	<u>Bob Fisher</u> <u>Wangcat</u>	<u>10:43 A</u> <u>9/16/87</u>
2. <u>Bob Fisher</u>	<u>12:20</u> <u>9/16</u>	<u>REVERS</u>	<u>12:20</u> <u>9/16</u>
3.			
4.			

* STATE AFFILIATION NEXT TO SIGNATURE

REMARKS: 24 HRS RUSH

COPY TO BP



HAZCAT Mobile Organics Lab

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: 9-15-87
Date Received: 9-16-87
Date Reported: 9-17-87

Sample Number

097025

Sample Description

Mobil Alameda Park & Lincoln
W-1

ANALYSIS

	<u>Detection Limit</u>	<u>Sample Results</u>
	ppb	ppb
Total Hydrocarbons as Gasoline	50	530,000
Benzene	0.5	6,300
Toluene	0.5	66,000
Xylenes	0.5	200,000

Note: Analysis was performed using EPA methods 5020 and 8015 with method 8020 used for BTX distinction.

HAZCAT

Ronald G. Evans

Ronald G. Evans
Lab Director

COPY TO BP

KAPREALIAN ENGINEERING, INC.

CHAIN OF CUSTODY

SAMPLER: (NS) [Signature] KEI DATE/TIME OF COLLECTION: 9/15/87 4:30 P.M. TURNAROUND TIME: 24 HRS.

SAMPLE DESCRIPTION AND PROJECT NUMBER: MOBIL - Alameda - Park & Lincoln

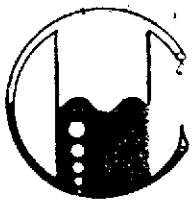
<u>SAMPLE #</u>	<u>ANALYSIS</u>	<u>GRAB OR COMP.</u>	<u>NUMBER OF CONTAINERS</u>	<u>SOIL/WATER</u>
<u>W-1</u>	<u>THC - BTX</u>	<u>Grab</u>	<u>1</u>	<u>Water</u>

<u>RELINQUISHED BY*</u>	<u>TIME/DATE</u>	<u>RECEIVED BY*</u>	<u>TIME/DATE</u>
<u>[Signature] KEI</u>	<u>9/16/87 10:00</u>	<u>Bob Fisher</u>	<u>10:46</u>
<u>Bob Fisher</u>	<u>12:20 9/16</u>	<u>[Signature]</u>	<u>12:20 9/16</u>
<u>3.</u>			
<u>4.</u>			

* STATE AFFILIATION NEXT TO SIGNATURE

REMARKS: _____

COPY TO BP



HAZCAT Mobile Organics Lab

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: 09-15-87
Date Received: 09-16-87
Date Reported: 10-04-87

Sample Number

097036

Sample Description

Mobil Alameda
Park & Lincoln
WO-1

PRIORITY POLLUTANTS

VOLATILE ORGANIC COMPOUNDS

results in ppb

Benzene.....	<50	trans-1,2-Dichloroethane...	<50
Bromomethane.....	<100	1,2-Dichloropropane.....	<50
Bromodichloromethane.....	<50	1,3-Dichloropropene.....	<50
Bromoform.....	<50	Ethylbenzene.....	<50
Carbon tetrachloride.....	<50	Methylene chloride.....	<50
Chlorobenzene.....	<50	1,1,2,2-Tetrachloroethane..	<50
Chloroethane.....	<100	Tetrachloroethane.....	<50
2-Chloroethylvinyl ether.....	<50	1,1,1-Trichloroethane.....	<50
Chloroform.....	<50	1,1,2-Trichloroethane.....	<50
Chloromethane.....	<100	Trichloroethene.....	<50
Dibromochloromethane.....	<50	Toluene.....	<50
1,1-Dichloroethane.....	<50	Vinyl chloride.....	<100
1,2-Dichloroethane.....	<50	1,2-Dichlorobenzene.....	<100
1,1-Dichloroethene.....	<50	1,3-Dichlorobenzene.....	<100
		1,4-Dichlorobenzene.....	<100

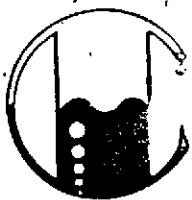
HAZCAT

Ronald G. Evans

Ronald G. Evans
Lab Director

NOTE: Analysis was performed using
methods 8010 and 8020

COPY TO BP



HAZCAT Mobile Organics Lab

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: 9-15-87
Date Received: 9-16-87
Date Reported: 9-19-87

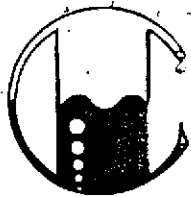
Sample Number	Sample Description	Detection Limit	Gravimetric Waste Oil as Petroleum Oil
-----	-----	-----	-----
		ppm	ppm
097036	WO-1 Mobil Alameda Park & Lincoln	50	150

Note: Analysis was performed using EPA extraction method 3550 with Trichlorotrifluoroethane as solvent, and gravimetric determination by standard methods 503e

HAZCAT

Ronald G. Evans
Ronald G. Evans
Lab Director

COPY TO BP



HAZCAT Mobile Organics Lab

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: 9-15-87
Date Received: 9-16-87
Date Reported: 9-24-87

Sample Number	Sample Description	Detection Limit	Total Hydrocarbons as Diesel
-----	-----	-----	-----
		ppm	ppm
097036	Mobil Alameda Park & Lincoln WO-1	10	<10

Note: Analysis was performed using EPA methods 3550 and 8015

HAZCAT

Ronald G. Evans
Ronald G. Evans
Lab Director

COPY TO BP

KAPREALIAN ENGINEERING, INC.

CHAIN OF CUSTODY

SAMPLER: (NS) [Signature] (CES) DATE/TIME OF COLLECTION: 9/15/87 3:20 pm. TURNAROUND TIME: 10 DAYS

SAMPLE DESCRIPTION AND PROJECT NUMBER: Uob:1 - Alameda - Park & Lincoln

SAMPLE #	ANALYSIS	GRAB OR COMP.	NUMBER OF CONTAINERS	SOIL/WATER
NO-1	THO (4. boring) TOG & 824 8010 8020	Grab	1	S.

RELINQUISHED BY*	TIME/DATE	RECEIVED BY*	TIME/DATE
1. <u>[Signature]</u> (NS)	9/16/87 10:43 am.	<u>Bob Fisher</u>	10:43 A 9/16/87
2. <u>Bob Fisher</u>	12:20 9/16	<u>R Evans</u>	12:20 9/16
3.			
4.			

* STATE AFFILIATION NEXT TO SIGNATURE

REMARKS: _____

COPY TO BP



KAPREALIAN ENGINEERING, INC.

Consulting Engineers

P. O. BOX 913

BENICIA, CA 94510

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

KEI-P87-097A
October 13, 1987

Proposal

To

MOBIL OIL CORPORATION

For

Mobil S/S #10-EYD

At

1541 Park Street

Alameda, California

Submitted By:

Mardo Kaprealian
President

COPY TO BP

KEI-P87-097A

October 13, 1987

Page 2

1.0 INTRODUCTION

Kaprealian Engineering, Inc. (KEI) is pleased to submit this proposal for a preliminary subsurface investigation for the Mobil Service Station located at 1541 Park Street, Alameda, California. The proposed investigation will be conducted in accordance with the California Regional Water Quality Control Board (CRWQCB) Fuel Leak Guidelines.

2.0 SCOPE OF WORK

Per our recommendations described in our report dated September 18, 1987, additional investigation is necessary to comply with the State and Local Regulatory Agencies regulation. Therefore, per the CRWQCB guidelines, KEI proposes to perform the work as outlined below:

- 2.1 Coordination with the Local Agencies
- 2.2 Installation and construction of three (3) monitoring wells as shown on attached sketch.
- 2.3 During the well construction, soil samples will be collected at five foot intervals starting at a depth of ten (10) feet. Soil sampling will continue until the first water table is encountered.
- 2.4 Three monitoring wells (two inch diameter) will be installed. The monitoring wells will be observed for free product, sheen and odor. Water samples will be taken and analyzed for total hydrocarbons, Benzene, Toluene and Xylene per the CRWQCB guidelines.
- 2.5 Results of the samples will be evaluated as to the current and potential impact on the ground water.
- 2.6 A technical report will be submitted within thirty (30) days of completion of the soil and water sampling. The report will document the field work performed, chemical analyses of soil/groundwater, conclusions and recommendations.

3.0 SCHEDULING

KEI is prepared to start the work as soon as this proposal is accepted by the client.

COPY TO BP



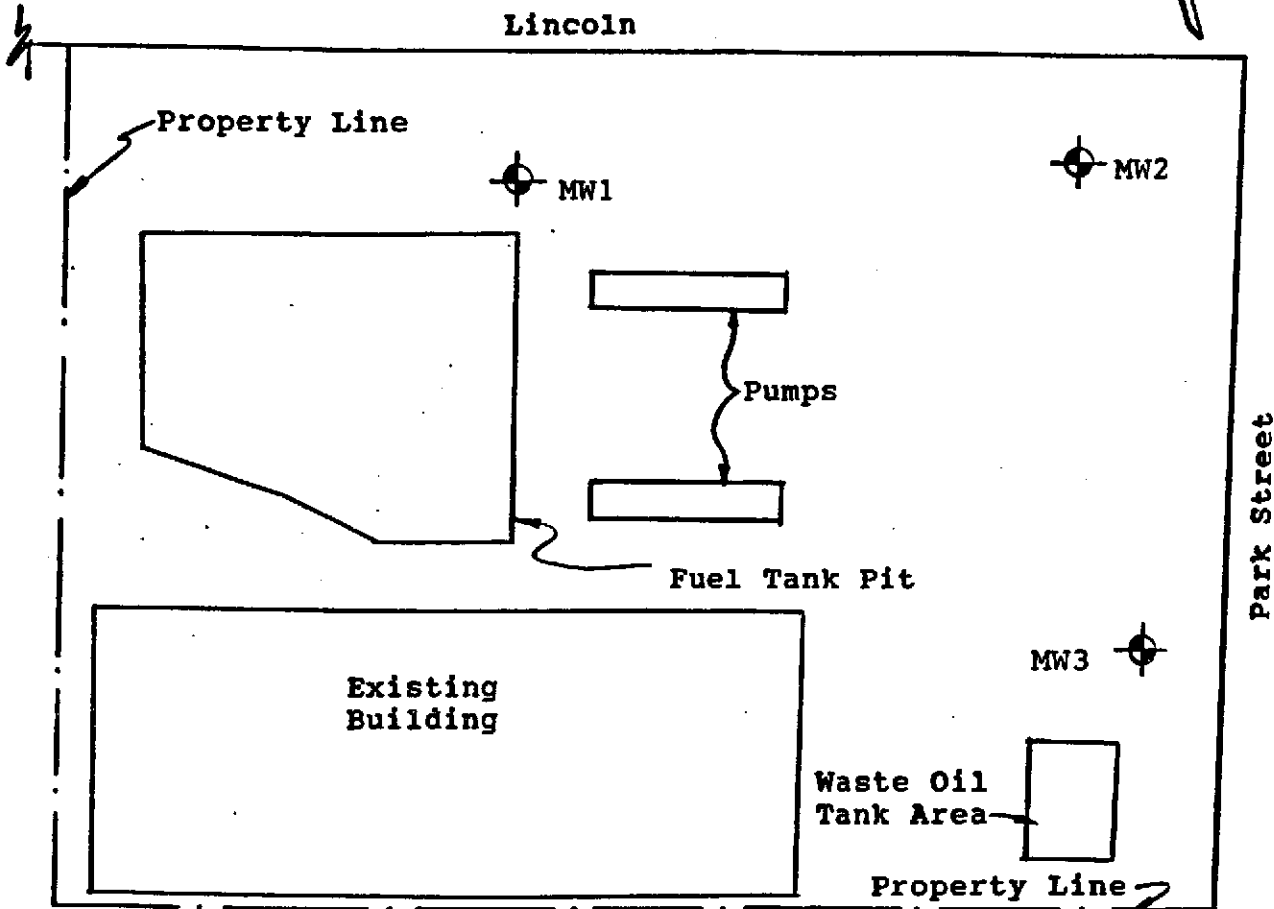
KAPREALIAN ENGINEERING, INC.

Consulting Engineers

P. O. BOX 913

BENICIA, CA 94510

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



LOCATION PLAN
nts

⊕ Monitoring Well

MOBIL Service Station
1541 Park Street
Alameda, California

COPY TO BP



KAPREALIAN ENGINEERING, INC.

Consulting Engineers

P. O. BOX 913

BENICIA, CA 94510

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

KEI-J87-097SD
September 29, 1987

Mobil Oil Corporation
P. O. Box 127
Richmond, CA 94807

Attn: Mr. M. D. Younger

Re: Stockpiled Soil Sampling For
MOBIL Service Station
1541 Park Street
Alameda, California

Dear Mr. Younger:

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 September 21, 1987, approximately 400 cubic yards of stockpiled soil at the referenced site was sampled for proper disposal. Four (4) composite soil samples (designated as Comp A, Comp B, Comp C and Comp D) were taken. Each composite soil sample consisted of four (4) individual grab samples taken at various depths and 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 HAZCAT Organics Lab in San Carlos, California.

The composite samples were analyzed for total hydrocarbons (THC), benzene, toluene, and xylene (BTX) concentrations. The results of the soil analyses showed concentrations of THC ranging from 2.9 to 20 parts per million (ppm). The analyses are summarized below. Copies of the laboratory analyses and the chain of custody form are attached to this report.

COPY TO BP

KEI-J87-097SD
September 29, 1987
Page 2

<u>Composite Sample</u>	<u>Hydrocarbons (ppm)</u>	<u>Benzene (ppm)</u>	<u>Toluene (ppm)</u>	<u>Xylene (ppm)</u>
Comp A	10	<0.1	0.2	7.3
Comp B	2.9	<0.1	0.5	2.3
Comp C	9.4	0.1	0.2	6.5
Comp D	20	0.2	0.3	7.5

Based on these analyses, the low level contaminants in the soil will not pose any impact to the environment. The THC 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.

Also please find enclosed a copy of the Oakland Scavenger Customer warranty signed by our office for the disposal of the soil to Durham Road Landfill in Oakland, California.

A copy of this report should be sent to the Alameda 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.

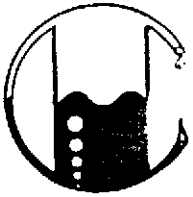


Mardo Kaprealian

Attachment: Laboratory Results
Chain of Custody
Customer Warranty

cc: J. Keith

COPY TO BP



HAZCAT Mobile Organics Lab

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: 9-21-87
Date Received: 9-22-87
Date Reported: 9-23-87

Sample Number

097080

Sample Description

Mobil Alameda
Park & Lincoln
Comp. A

ANALYSIS

	Detection Limit	Sample Results
	----- ppm	----- ppm
Total Hydrocarbons as Gasoline	1	10
Benzene	0.1	<0.1
Toluene	0.1	0.2
Xylenes	0.1	7.3

Note: Analysis was performed using EPA methods 5020 and 8015 with method 8020 used for BTX distinction.

HAZCAT

Ronald G. Evans

Ronald G. Evans
Lab Director

COPY TO BP



HAZCAT Mobile Organics Lab

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: 9-21-87
Date Received: 9-22-87
Date Reported: 9-23-87

Sample Number

097081

Sample Description

Mobil Alameda
Park & Lincoln
Comp. B

ANALYSIS

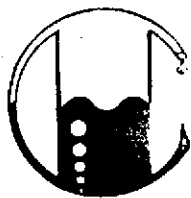
	Detection Limit ----- ppm	Sample Results ----- ppm
Total Hydrocarbons as Gasoline	1	2.9
Benzene	0.1	<0.1
Toluene	0.1	0.5
Xylenes	0.1	2.3

Note: Analysis was performed using EPA methods 5020 and 8015 with method 8020 used for BTX distinction.

HAZCAT

Ronald G. Evans
Lab Director

COPY TO BP



HAZCAT Mobile Organics Lab

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: 9-21-87
Date Received: 9-22-87
Date Reported: 9-23-87

Sample Number

097083

Sample Description

Mobil Alameda
Park & Lincoln
Comp. D

ANALYSIS

	Detection Limit	Sample Results
	----- ppm	----- ppm
Total Hydrocarbons as Gasoline	1	20
Benzene	0.1	0.2
Toluene	0.1	0.3
Xylenes	0.1	7.5

Note: Analysis was performed using EPA methods 5020 and 8015 with method 8020 used for BTX distinction.

HAZCAT

Ronald G. Evans
Lab Director

COPY TO BP

KAPREALIAN ENGINEERING, INC.

CHAIN OF CUSTODY

SAMPLER: (NS) [Signature] CEE DATE/TIME OF COLLECTION: 9/21/87 2:30 PM TURNAROUND TIME: 24 HRS.

SAMPLE DESCRIPTION AND PROJECT NUMBER: Mobil. Alameda - Part A Lincoln.

SAMPLE #	ANALYSIS	GRAB OR COMP.	NUMBER OF CONTAINERS	SOIL/WATER
<u>Comp A</u>	<u>THC. BTX</u>	<u>Grab</u>	<u>2</u>	<u>S</u>
<u>Comp B</u>	<u>THC. BTX</u>	<u>"</u>	<u>2</u>	<u>S</u>
<u>Comp C</u>	<u>THC. BTX</u>	<u>"</u>	<u>2</u>	<u>S</u>
<u>Comp D</u>	<u>THC. BTX</u>	<u>"</u>	<u>2</u>	<u>S</u>

RELINQUISHED BY*	TIME/DATE	RECEIVED BY*	TIME/DATE
<u>[Signature] CEE</u>	<u>9/21/87</u>	<u>[Signature] HAZCAT</u>	<u>12:44pm 9/22/87</u>
<u>[Signature]</u>	<u>2:41pm 9/22/87</u>	<u>[Signature] HAZCAT</u>	<u>9/22/87 2:41 PM</u>

* STATE AFFILIATION NEXT TO SIGNATURE

REMARKS: 2 LHR. RUSH

COPY TO BP

The undersigned shall save Oakland Scavenger Company or its divisions harmless from and against and indemnify Oakland Scavenger Company or its divisions for all liability, loss, costs, expenses, or damages, howsoever caused, by reason of the wrongful placing of hazardous wastes and/or Designated Wastes, whether intentionally or unintentionally, among wastes commonly designated as municipal wastes which are collected and/or disposed of by Oakland Scavenger Company or its divisions.

9/28/87
DATE

Mobil Oil Corp.
COMPANY
Mardo Kaprelian { Kaprelian Engineering, Inc. Agent.
AUTHORIZED SIGNATURE

Mardo Kaprelian
NAME OF SIGNER (TYPE OR PRINT)

President
TITLE

JSS0278

COPY TO BP