Mobil Oil Corporation

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

February 22, 1989

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

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

Dear Mr. Shahid:

Enclosed for your regiew is the latest quarterly monitoring report for the subject location. Note that levels in Monitoring Well #1 have reduced drastically. Further work will be done on-site, as mentioned in the enclosed report. When the next phase of work is completed, the subsequent report will be forwarded to your office.

In the meantime, if you have any questions, contact me at (818) 953-2519.

Sincerely,

David M. Noe

D. M. Noe
Environmental Advisor

DMN:ars
enclosure
22890

cc: Mr. Greg Zetner (w/attch)
Regional Water Quality Con. Bd.
1111 Jackson Street, Room 6000
Oakland, California 94607

Mr. Wyman Hong
Alameda County Flood Control
6997 Parkside Drive
Pleasanton, California 984566

W. LEVI 2/

ALAMEDA COUNTY
ENVIRONMENTAL HEALTH
HAZARDOUS MATERIALS

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

KEI-P87-0907.QR2
January 31, 1989

Mobil Oil Corporation
P.O. Box 127
Richmond, CA 94804

Attention: Mr. Steve Pao

RE: Quarterly Report
Mobil Service Station #10-EYD
1541 Park Street
Alameda, California

Dear Mr. Pao:

This report presents the results of the most recent quarter of monitoring and sampling of the wells at the referenced site by Kaprealian Engineering, Inc. (KEI), per our proposal dated March 10, 1988. The wells are currently monitored monthly and sampled on a quarterly basis. This report covers the work performed by KEI from October through December, 1988.

BACKGROUND

In September, 1987, three underground fuel storage tanks and one waste oil tank were removed from the site. Soil samples collected from beneath the fuel tanks were analyzed for total petroleum hydrocarbon (TPH) as gasoline and benzene, toluene, xylenes and ethylbenzene (BTX&E). The soil sample from beneath the waste oil tank was analyzed for TPH as gasoline and diesel, BTX&E, total oil and grease (TOG) and 8010 constituents. Soil samples from the sidewalls of the fuel tank pit (collected at a depth of 11.5 feet) had TPH as gasoline levels ranging from non-detectable to 3,200 ppm. The sample from the waste oil pit (collected at a depth of 7.5 feet) had 150 ppm TOG, and non-detectable TPH as diesel and EPA 8010/8020 compounds.

Three monitoring wells were installed on February 9, 1988. The water sample from MW-1 had 2,000 ppb of benzene. In MW-3 TPH as diesel, benzene and TOG were non-detectable. KEI proposed a monitoring and sampling program of the existing wells. This report describes the results of the most recent monitoring and sampling. All soil and water samples to date have been analyzed at Sequoia Analytical Laboratory of Redwood City, California.

FIELD ACTIVITIES

The three wells were monitored three times and sampled once during the quarter. During monitoring, the wells were checked for depth to water and visual presence of free product. After monitoring, the wells were purged and allowed to recover. Monitoring data are summarized in Table 1. **No free product or sheen was noted in any of the wells during the quarter.**

Water samples were taken from the wells on December 28, 1988. Prior to sampling, the wells were purged using an acrylic surface bailer. Samples were then collected using a clean Teflon bailer. Samples were decanted into clean VOA vials and/or one liter amber bottles as appropriate which were sealed with Teflon-lined screw caps and stored on ice until delivery to the state certified laboratory.

HYDROLOGY

Based on the water level data gathered during the quarter, the ground water flow direction has remained toward the east.

ANALYTICAL RESULTS

The water samples were analyzed at Sequoia Analytical Laboratory, and were accompanied by properly executed Chain of Custody documentation. The samples were analyzed for TPH as gasoline using EPA methods 5030 or 3810 in conjunction with modified 8015, and BTX&E using EPA methods 5030 and 8020. Water from MW-3 was also checked for dissolved solids. The total dissolved solids were 1200 mg/l.

The analytical results show non-detectable levels of TPH and BTX&E in wells MW-2 and MW-3 (unchanged from the previous sampling in October, 1988). **In well MW-1, benzene levels were 40 ppb.** The results of the analyses are summarized in Table 2. Copies of the analytical results and Chain of Custody documentation are attached to this report.

DISCUSSION AND RECOMMENDATIONS

Based on the analytical results and no evidence of free product or sheen, KEI recommends the continuation of the current monitoring and sampling program for an additional three months. KEI continues to recommend the installation of an additional three monitoring wells in order to define the extent of contamination (see KEI's proposal dated November 28, 1988).

A copy of this report should be sent to the Alameda County Department of Environmental Health, and to the Regional Water Quality Control Board, San Francisco Bay Region.

LIMITATIONS

Environmental changes, either naturally-occurring or artificially-induced, may cause changes in ground water 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.

If you have any questions regarding this report, please do not hesitate to call me at (707) 746-6915.

Sincerely,

Kaprealian Engineering, Inc.

Gary S. Johnson
Registered Geologist

License #4315
Exp. Date 6/30/90

Attachment: Tables 1 and 2
Location Map
Site Plan
Laboratory Analyses
Chain of Custody form

KEI-P87-0907.QR2
January 31, 1989

TABLE 1

SUMMARY OF MONITORING DATA

Date	Well No.	Water Depth (feet)	Product Thickness	Sheen	Water Bailed (gallons)
10/31/88	MW-1	10.73	None	None	15
	MW-2	11.10	None	None	0
	MW-3	11.50	None	None	0
11/17/88	MW-1	10.50	None	None	50
	MW-2	11.00	None	None	0
	MW-3	8.42	None	None	0
12/28/88	MW-1	9.83	None	None	40
	MW-2	10.38	None	None	10
	MW-3	10.79	None	None	10

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TABLE 2

SUMMARY OF LABORATORY ANALYSES

(All results in ppb)

Date	Well #	Depth (feet)	TPH as Gasoline	Benzene	Toluene	Xylenes	Ethyl-benzene
12/28/88	MW-1	9.88	2,800	40	7.1	110	2.3
	MW-2	10.67	<50	<0.5	<0.5	0.6	<0.5
	MW-3*	10.96	<50	<0.5	<0.5	<0.5	<0.5
10/12/88	MW-1	10.58	14,000	180	420	7.50	110
	MW-2	11.00	<50	<0.5	<0.5	<0.5	<0.5
	MW-3	11.40	<50	<0.5	<0.5	<0.5	<0.5
2/17/88	MW-1	9.50	95,000	2,000	5,900	10,000	1,100
	MW-2	10.21	<50	<0.5	<0.5	<0.5	<0.5
	MW-3	10.67	<50	<0.5	<0.5	<0.5	<0.5

*TDS - 1200 mg/l

KAPREALIAN ENGINEERING, INC.
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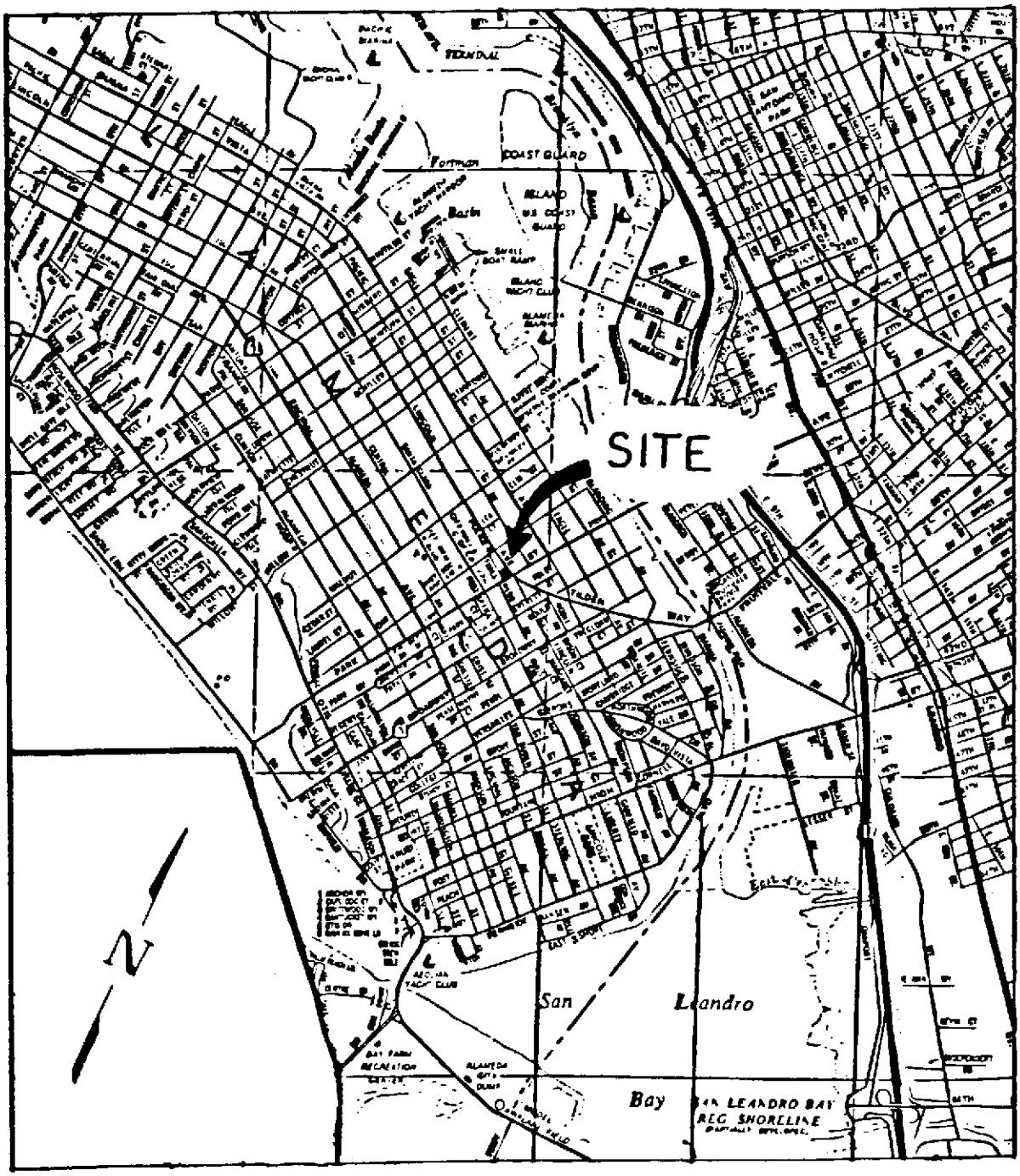

LOCATION MAP

KAPREALIAN ENGINEERING, INC.
Consulting Engineers
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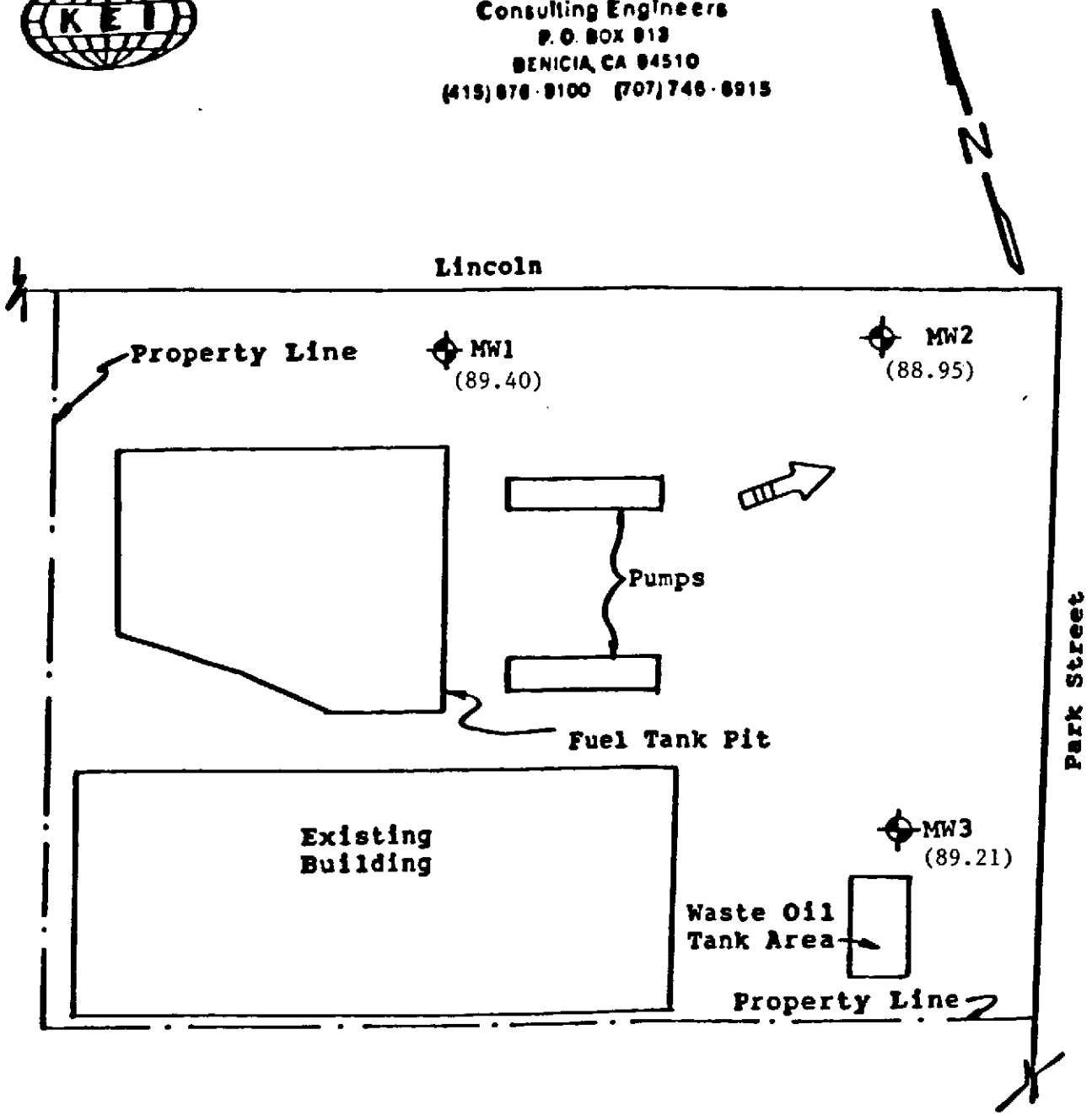

SITE PLAN
nts

Monitoring Well

Direction of groundwater flow 12/28/88

( ) Water Table elevation (feet)

Surface elevation at top of MW3 assumed 100' as datum (MW-1 99.23', MW-2 99.33')

MOBIL Service Station
1541 Park Street
Alameda, California

SEQUOIA ANALYTICAL
680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

Kaprealian Engineering, Inc.	Client Project ID:	Mobil, Alameda, Park/Lincoln	Sampled:	Dec 28, 1988
P.O. Box 913	Matrix Descript:	Water	Received:	Dec 28, 1988
Benicia, CA 94510	Analysis Method:	EPA 5030/8015/8020	Analyzed:	Jan 10, 1989
Attention: Mardo Kaprealian, P.E.	First Sample #:	812-2796	Reported:	Jan 20, 1989

TOTAL PETROLEUM FUEL HYDROCARBONS with BTEX DISTINCTION (EPA 8015/8020)

Sample Number	Sample Description	Low/Medium B.P. Hydrocarbons ug/L (ppb)	Benzene ug/L (ppb)	Toluene ug/L (ppb)	Ethyl Benzene ug/L (ppb)	Xylenes ug/L (ppb)
812-2796	MW1	2,800	40	7.1	2.3	110
812-2797	MW2	N.D.	N.D.	N.D.	N.D.	0.6
812-2798	MW3	N.D.	N.D.	N.D.	N.D.	N.D.
Detection Limits:		**50.0**	**0.5**	**0.5**	**0.5**	**0.5**

Low to Medium Boiling Point Hydrocarbons are quantitated against a gasoline standard.
Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL

Arthur G. Burton
Laboratory Director

8122796.KEI <1>

SEQUOIA ANALYTICAL
680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

Kaprealian Engineering, Inc.	Client Project ID:	Mobil, Alameda	Sampled:	Dec 28, 1988
P.O. Box 913	Sample Descript:	Water, MW3	Received:	Dec 28, 1988
Benicia, CA 94510			Analyzed:	Jan 3, 1989
Attention: Mardo Kaprealian, P.E.	Lab Number:	812-3108	Reported:	Jan 18, 1989

LABORATORY ANALYSIS

Analyte	Detection Limit mg/L	Sample Results mg/L
Total Dissolved Solids	1.0	1,200

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

SEQUOIA ANALYTICAL

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: Ray (KEI) (signature)
DATE/TIME OF COLLECTION: 12/28/88
TURN AROUND TIME: REGULAR

SAMPLE DESCRIPTION AND PROJECT NUMBER: MOBIL ALAMEDA PARK / LINCOLN

SAMPLE #	ANALYSES	GRAB OR COMP.	NUMBER OF CONTAINERS	SOIL/ WATER
MW 1	TPHG. BTXE	Grab	2V	W
MW 2	" "	"	"	"
MW 3	" "	"	"	"

RELINQUISHED BY*	TIME/DATE	RECEIVED BY*	TIME/DATE
1. Ray (KEI)	14:30 12/28/88	[signature]	14:25 12/28/88
2.			
3.			
4.			

* STATE AFFILIATION NEXT TO SIGNATURE

REMARKS:

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

ok'd by phone on 1/3/89 eel.

CHAIN OF CUSTODY

SAMPLER: Ray (KEI) (signature)

DATE/TIME OF COLLECTION: 12/28/88

TURN AROUND TIME: REGULAR

SAMPLE DESCRIPTION AND PROJECT NUMBER: MOBIL ALAMEDA

SAMPLE #	ANALYSES	GRAB OR COMP.	NUMBER OF CONTAINERS	SOIL/ WATER
MW3	TDS	Grab	2V	W

CHECK WITH THE OFFICE

RELINQUISHED BY*	TIME/DATE	RECEIVED BY*	TIME/DATE
1. Ray (KEI)	14:30 12/28/88	J Coan	14:25 12/28/88
2.			
3.			
4.			

* STATE AFFILIATION NEXT TO SIGNATURE

REMARKS: