

# Mobil Oil Corporation

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

June 10, 1987

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MOBIL OIL CORPORATION  
S/S #10-L1X  
15884 HESPERIAN WAY  
SAN LORENZO, CALIFORNIA

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

Dear Mr. Johnson:

Attached is our consultant's quarterly progress report on the above location. Laboratory results indicate that dissolved constituents of petroleum hydrocarbons are still present in well MW-2. Wells MW-1, MW-3 and MW-4, all show non-detectable levels of hydrocarbon and BTX concentrations.

The monitoring program will be continued for an additional six months. Upon completion of sampling, a report will be submitted to your office.

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

Sincerely,

*J. M. Keith*  
*for* R. J. Edwards  
Region Environmental Manager

JMK:ars  
attachment  
91230

cc: Mr. T. M. Gerow  
Alameda County  
Environmental Health Department  
470 27th Street, Room 324  
Oakland, California 94612



## KAPREALIAN ENGINEERING, INC.

Consulting Engineers

535 Main Street

Martinez, Ca. 94553

(415) 372-5444

KEI-P86-0310B-2  
May 15, 1987

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

Attention: Mr. T. Ross

Re: Quarterly Report --  
Mobil Service Station #10-LIX  
15884 Hesperian Way  
San Lorenzo, California

Dear Mr. Ross:

This report presents the results of the second quarter of monitoring and sampling of the existing wells by Kaprealian Engineering, Inc. (KEI) at the subject site. The monitoring and sampling of the wells were conducted in accordance with our proposal dated September 16, 1986. The wells are currently monitored monthly and sampled on a quarterly basis. This report covers the work performed by KEI from February, 1987 through April, 1987.

### FIELD INVESTIGATION

The existing four (4) monitoring wells have been monitored since October, 1986. The most recent quarter of monitoring began in February, 1987. The wells were monitored three times and sampled once during the quarter. During monitoring, the wells were checked for depth to water, odor and visual presence of floating product. After monitoring, the wells were purged and were allowed to recover. Monitoring data are summarized in Table 1.

Water samples were taken from the four wells on April 25, 1987. Prior to sampling, the wells were purged at least five (5) well volumes. Samples were then collected using a clean teflon bailer, which was carefully raised from the well to minimize volatilization. Samples were decanted into clean vials and stored on ice until delivery to Sequoia Analytical Laboratory in Redwood City, California. The samples were accompanied by a chain of custody form.

LABORATORY ANALYSES

The water samples were analyzed for total dissolved hydrocarbons (THC), and benzene, toluene and xylene (BTX) concentrations. The results of the analyses are summarized in Table 2 and copies of the laboratory analytical results are attached.

DISCUSSIONS AND CONCLUSIONS

During monthly monitoring, and sampling, no floating product or sheen was noted in any of the wells. However, faint odor was detected in well MW-2. The laboratory results indicated total dissolved hydrocarbon concentrations of 0.660 parts per million (ppm) for MW-2, and non-detectable levels in wells MW-1, MW-3 and MW-4.

A comparison of the recent results with the laboratory analyses of the previous sampling shows a substantial decrease in the dissolved gasoline constituent level in well MW-2. In addition, well MW-1 now shows non-detectable levels of all constituents, whereas in the previous sampling, THC levels were determined to be 0.077 ppm.

In summary, the levels of dissolved gasoline constituents in the groundwater are decreasing. This is probably a result of natural degradation, soil adsorption and dilution.

KEI recommends that the current monitoring and sampling program be extended for an additional six (6) months. This work will include purging/monitoring on a monthly basis, and sampling on a quarterly basis. The monitoring program should be re-evaluated after the next sampling period, which is scheduled for July/August, 1987.

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

KEI-P86-0310B-2  
May 15, 1987  
Page 3

Please call me if you have any questions.

Sincerely,

Kaprealian Engineering, Inc.



Mardo Kaprealian

License #C29326  
Exp. date 3/31/91

Attachment: Tables 1 and 2  
Laboratory analyses  
Chain of custody form  
Proposal

cc: J. Keith

TABLE 1  
GROUNDWATER MONITORING DATA

<u>Date</u>	<u>Well No.</u>	<u>DTW</u> (ft)	<u>Odor</u>	<u>Sheen</u>
4/25/87	MW-1	13.104	No	No
	MW-2	12.354	Slight	No
	MW-3	13.354	No	No
	MW-4	13.094	No	No
3/17/87	MW-1	12.750	No	No
	MW-2	12.0	Slight	No
	MW-3	12.917	No	No
	MW-4	12.750	No	No
2/11/87	MW-1	13.229	No	No
	MW-2	12.520	No	No
	MW-3	13.50	No	No
	MW-4	13.25	No	No

DTW = Depth to water

TABLE 2  
RESULTS OF GROUNDWATER ANALYSES  
(Concentrations are in Parts Per Million)

<u>Date</u>	<u>Parameter</u>	<u>MW-1</u>	<u>MW-2</u>	<u>MW-3</u>	<u>MW-4</u>
4/25/87	THC	<0.05	0.660	<0.050	<0.050
	Benzene	<0.0005	0.0022	<0.0005	<0.0005
	Toluene	<0.0005	<0.0005	<0.0005	<0.0005
	Xylene	<0.0005	0.0092	<0.0005	<0.0005
12/23/86	THC	0.077	4.10	<0.050	<0.050
	Benzene	0.032	0.97	<0.0005	<0.0005
	Toluene	0.0047	0.096	<0.0005	<0.0005
	Xylene	0.0020	0.75	<0.0005	<0.0005
8/18/86	THC	<0.050	58	<0.050	<0.050
	Benzene	<0.001	4.3	<0.001	<0.001
	Toluene	<0.001	0.39	<0.001	<0.001
	Xylene	<0.001	1.8	<0.001	<0.001



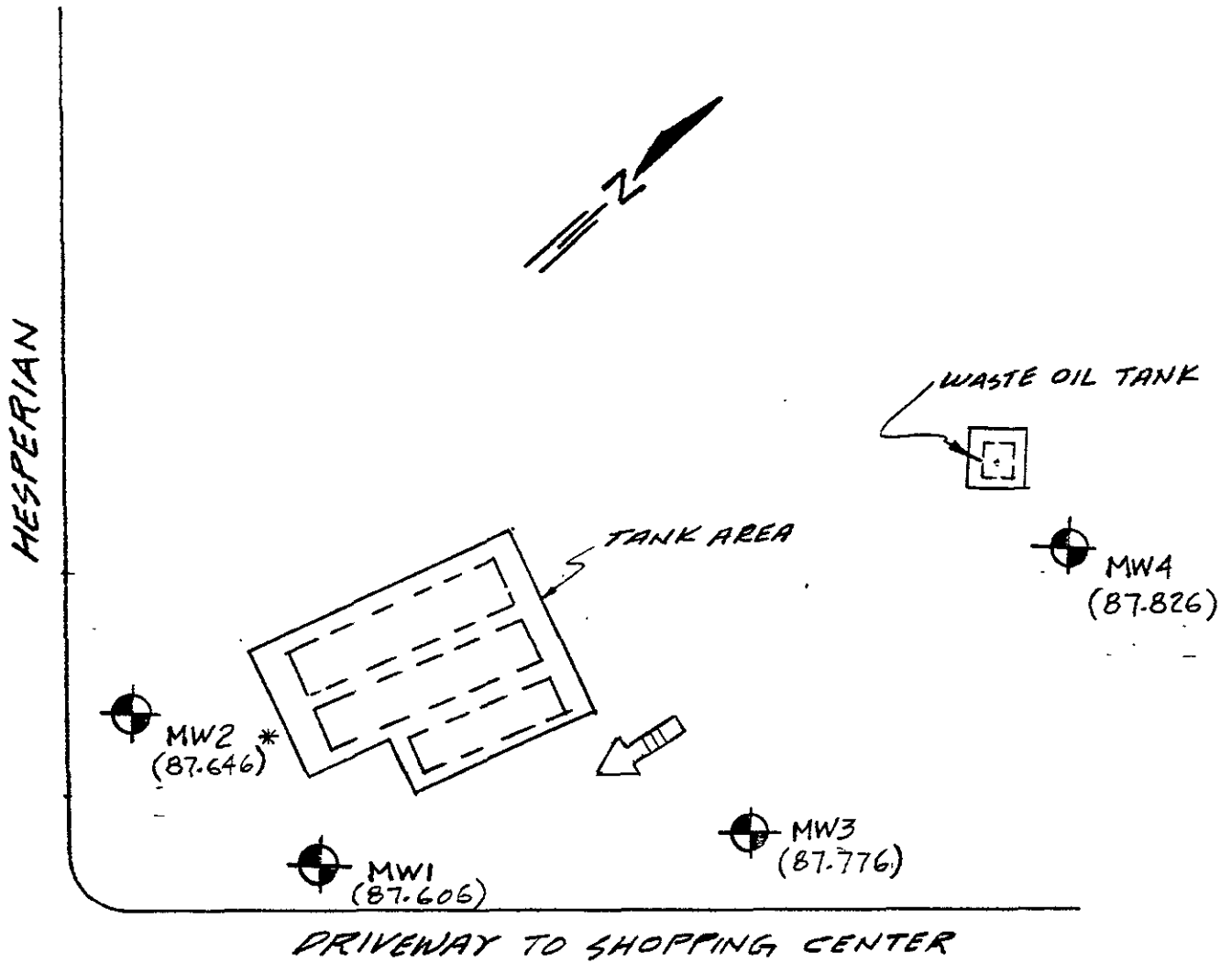
# KAPREALIAN ENGINEERING, INC.

Consulting Engineers

535 Main Street

Martinez, Ca. 94553

(415) 372-5444



## LOCATION PLAN

N.T.S.

 MW (MONITORING WELL)

( ) ELEVATION OF GROUNDWATER (FT.)

\* SURFACE ELEV. OF MW2 ASSUMED 100.00 FT. (DATUM)

 GENERAL DIRECTION OF GROUND-WATER FLOW



# SEQUOIA Analytical Laboratory

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

Kaprealian Engineering, Inc.  
535 Main Street, Suite 309  
Martinez, CA 94553  
Attn: Mardo Kaprealian, P.E.  
President

Date Sampled: 04/25/87  
Date Received: 04/28/87  
Date Reported: 05/12/87

Sample Number

7042242

Sample Description

Mobil at 15884 Hesperian  
Blvd. in San Lorenzo, MWI  
Water Sample

ANALYSIS

	<u>Detection Limit</u> ppb	<u>Sample Results</u> ppb
Total Hydrocarbons as Gasoline	50	< 50
Benzene	0.5	< 0.5
Toluene	0.5	< 0.5
Xylenes	0.5	2.3

NOTE: Analysis was performed using EPA method 602.

SEQUOIA ANALYTICAL LABORATORY

Arthur G. Burton  
Laboratory Director

sls





# SEQUOIA Analytical Laboratory

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

Kaprealian Engineering, Inc.  
535 Main Street, Suite 309  
Martinez, CA 94553  
Attn: Mardo Kaprealian, P.E.  
President

Date Sampled: 04/25/87  
Date Received: 04/28/87  
Date Reported: 05/12/87

Sample Number

7042243

Sample Description

Mobil at 15884 Hesperian  
Blvd. in San Lorenzo, MW2  
Water Sample

ANALYSIS

	<u>Detection Limit</u> ppb	<u>Sample Results</u> ppb
Total Hydrocarbons as Gasoline	50	660
Benzene	0.5	2.2
Toluene	0.5	< 0.5
Xylenes	0.5	9.2

NOTE: Analysis was performed using EPA method 602.

SEQUOIA ANALYTICAL LABORATORY

Arthur G. Burton  
Laboratory Director

sls



# SEQUOIA Analytical Laboratory

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

Kaprealian Engineering, Inc.  
535 Main Street, Suite 309  
Martinez, CA 94553  
Attn: Mardo Kaprealian, P.E.  
President

Date Sampled: 04/25/87  
Date Received: 04/28/87  
Date Reported: 05/12/87

Sample Number

7042244

Sample Description

Mobil at 15884 Hesperian  
Blvd. in San Lorenzo, MW3  
Water Sample

ANALYSIS

	<u>Detection Limit</u> ppb	<u>Sample Results</u> ppb
Total Hydrocarbons as Gasoline	50	< 50
Benzene	0.5	< 0.5
Toluene	0.5	< 0.5
Xylenes	0.5	< 0.5

NOTE: Analysis was performed using EPA method 602.

SEQUOIA ANALYTICAL LABORATORY

Arthur G. Burton  
Laboratory Director

sls



# SEQUOIA Analytical Laboratory

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

Kaprealian Engineering, Inc.  
535 Main Street, Suite 309  
Martinez, CA 94553  
Attn: Mardo Kaprealian, P.E.  
President

Date Sampled: 04/25/87  
Date Received: 04/28/87  
Date Reported: 05/12/87

Sample Number

7042245

Sample Description

Mobil at 15884 Hesperian  
Blvd. in San Lorenzo, MW4  
Water Sample

ANALYSIS

	<u>Detection Limit</u> ppb	<u>Sample Results</u> ppb
Total Hydrocarbons as Gasoline	50	< 50
Benzene	0.5	< 0.5
Toluene	0.5	< 0.5
Xylenes	0.5	< 0.5

NOTE: Analysis was performed using EPA method 602.

SEQUOIA ANALYTICAL LABORATORY

Arthur G. Burton  
Laboratory Director

sls

**KAPREALIAN ENGINEERING, INC.**

**CHAIN OF CUSTODY**

SAMPLER: Patrick H. ... DATE/TIME OF COLLECTION: 25 April 87 TURNAROUND TIME: 10 DAYS  
 (signature) ...

SAMPLE DESCRIPTION AND PROJECT NUMBER: Mobile San Lorenzo  
15324 ...

SAMPLE #	ANALYSIS	GRAB OR COMP.	NUMBER OF CONTAINERS	SOIL/WATER
<u>M111</u>	<u>THC - P1</u>	<u>...</u>	<u>1</u>	<u>...</u>
<u>M112</u>	<u>THC - P1</u>	<u>...</u>	<u>1</u>	<u>...</u>
<u>M113</u>	<u>THC - P1</u>	<u>...</u>	<u>1</u>	<u>...</u>
<u>M114</u>	<u>THC - P1</u>	<u>...</u>	<u>1</u>	<u>...</u>

RELINQUISHED BY*	TIME/DATE	RECEIVED BY*	TIME/DATE
1. <u>Patrick H. ...</u>	<u>25 APR 87</u>	<u>Walter Sautelle</u>	<u>27 APRIL 87</u>
2. <u>Walter Sautelle</u> <u>Armond Petroleum</u>	<u>27 APRIL 87</u> <u>9:45 AM</u>	<u>Armond Petroleum Co</u>	<u>8:30 AM</u>
3. <u>Armond Petroleum</u>	<u>4-28-87</u> <u>12:15 pm</u>	<u>Armond Petroleum Co</u>	<u>4-27-87</u> <u>9:45 am</u>
4. <u>Armond Petroleum</u>	<u>4/28/87</u> <u>1:00 pm</u>	<u>Armond Petroleum Co</u>	<u>4/28/87</u> <u>12:15 pm</u>

\* STATE AFFILIATION NEXT TO SIGNATURE

REMARKS: 3rd MAY 13th Please.