

Mobil Oil Corporation

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

ALAMEDA COUNTY
DEPT. OF ENVIRONMENTAL HEALTH
HAZARDOUS MATERIALS

January 30, 1989 2/3/89

Mr. Craig Mayfield
Alameda County Flood Control Dept.
6997 Parkside Drive
Pleasanton, CA 94566

ALAMEDA COUNTY
DEPT. OF ENVIRONMENTAL HEALTH
HAZARDOUS MATERIALS


RE: MOBIL S/S 10-L1X
15884 HESPERIAN BLVD.
SAN LORENZO, CA

Dear Mr. Mayfield:

Enclosed is the latest quarterly report from our consultant. In Ralph Edwards' October 18, 1988 letter to you, Mobil proposed to monitor the well after three months. Based on these latest monitoring results, we feel the non-detectable levels are sufficient justification to request closure on this site.

If you have any questions, please contact me at (818) 953-2519.

Sincerely,



D. M. Noe, P.E.
Environmental Advisor

DMN:ps
attachments

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

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

S. Pao - Richmond
R. J. Edwards - Burbank
Chris Lecce - KEI



KAPREALIAN ENGINEERING, INC.

Consulting Engineers

P. O. BOX 913

BENICIA, CA 94510

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

KEI-P87-128B-1

December 8, 1988

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

Attention: Mr. Steve Pao

RE: Quarterly Report
Mobil Service Station #10-LIX
15884 Hesperian Blvd.
San Lorenzo, California

Dear Mr. Pao:

This report presents the results of the monitoring and sampling of monitoring well MW-2 at the referenced site by Kaprealian Engineering, Inc. (KEI), per our proposal dated September 13, 1988. The well was monitored and sampled once on November 1, 1988.

BACKGROUND

In March 1986, three underground fuel storage tanks and one waste oil tank were removed from the site. Soil samples collected from beneath the tanks (by Blaine Tech Services) were analyzed for total petroleum hydrocarbon (TPH) as gasoline and benzene, toluene, xylenes and ethylbenzene (BTX&E). The sample from beneath the waste oil tank was analyzed for TPH as diesel, BTX&E, total oil and grease (TOG) and 8010 constituents. Samples from beneath the fuel tanks had TPH as gasoline levels ranging from 37 to 1,100 ppm. The sample from the waste oil pit had 360 TPH as diesel. Four monitoring wells were installed in July, 1986. Water samples from MW-1, MW-3, and MW-4 have been non-detectable for TPH and BTX&E since April, 1987. In MW-2 benzene has ranged from 2.2 to 4,300 ppb since sampling began in August, 1986.

On December 21, 1987 four fiberglass gasoline storage tanks were removed in preparation for abandonment on the site. Approximately 620 cubic yards of contaminated soil was removed and aerated. The soil was excavated from around MW-2 (the only well having contaminated ground water). All obviously contaminated soil was excavated. The excavated soil was aerated to non-detectable levels of contaminants and returned to the excavation. During excavation some contaminated water was also removed with soil. MW-2 was destroyed during the tank removal. Prior to excavation of contaminated soil, ground water contamination in MW-2 was as high as 710 ppm TPH (see Table 2).

Subsequently, after excavation of contaminated soil and reinstallation of MW-2 levels of contamination have dropped steadily to their present non-detectable levels. The well was reinstalled August 8, 1988, and was sampled August 25, 1988. The analytical results were 63 ppb benzene and 2,300 ppb TPH as gasoline. KEI recommended that the well be monitored and sampled once. This report describes the results. Wells MW-1, MW-3 and MW-4 were not resampled because they have had non-detectable TPH as gasoline and BTX&E since April, 1987, but primarily because they are inaccessible due to site reconstruction.

FIELD ACTIVITIES

The well was monitored and sampled November 1, 1988. During monitoring, the well was checked for depth to water, odor, and visual presence of free product. After monitoring, the well was purged and allowed to recover. Monitoring data are summarized in Table 1. No free product, odor, or sheen was noted in the well.

A water sample was taken from the well after monitoring on November 1, 1988. Prior to sampling, the well was purged using an acrylic surface bailer. A sample was then collected using a clean Teflon bailer. The sample was decanted into clean VOA vials which were sealed with Teflon-lined screw caps and stored on ice until delivery to the state certified laboratory.

ANALYTICAL RESULTS

The water sample was analyzed at Sequoia Analytical Laboratory of Redwood City, California and was accompanied by a properly executed Chain of Custody form. The sample was analyzed for TPH as gasoline using EPA method 5030 in conjunction with modified 8015, and benzene, toluene, xylenes and ethylbenzene (BTX&E) using EPA methods 5030 and 8020.

The analytical results show non-detectable levels of TPH and BTX&E. The results of the analyses are summarized in Table 2. Copies of the analytical results and the Chain of Custody form are attached to this report.

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.

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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
Site Plan
Laboratory Analyses
Chain of Custody form

KEI-P87-128B-1
December 8, 1988

TABLE 1

SUMMARY OF MONITORING DATA

<u>Date</u>	<u>Well No.</u>	<u>Water Depth (feet)</u>	<u>Product Thickness</u>	<u>Sheen</u>	<u>Odor</u>	<u>Water Bailed (gallons)</u>
11/1/88	MW-2	15.29	0	0	0	6

TABLE 2

SUMMARY OF LABORATORY ANALYSES

(All results in ppb)

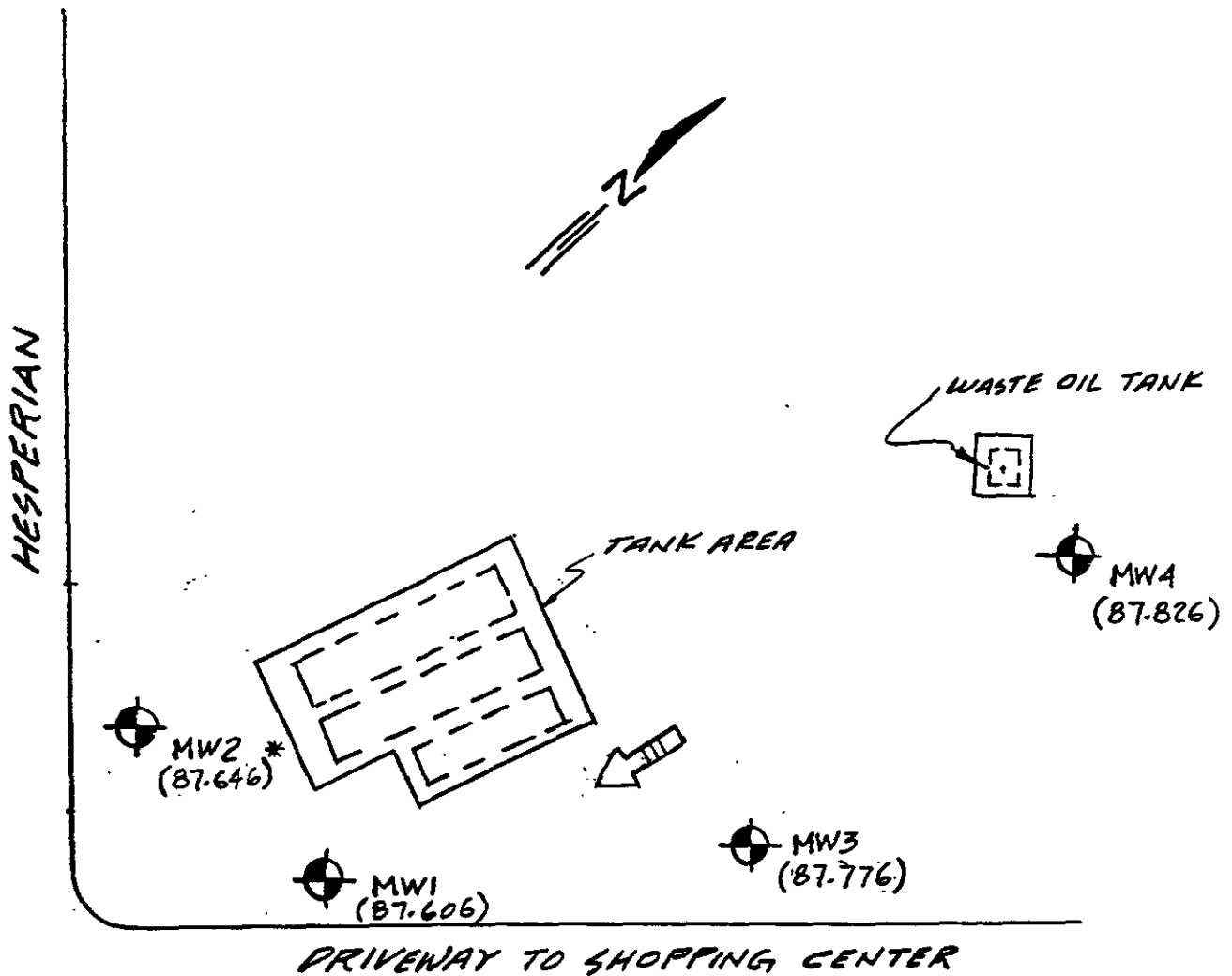
<u>Date</u>	<u>Sample Well #</u>	<u>Depth (feet)</u>	<u>TPH Gasoline</u>	<u>Benzene</u>	<u>Toluene</u>	<u>Xylenes</u>
11/1/88	MW-2	15.25	<50	<0.5	<0.5	<0.5
8/25/88	MW-2	---	2,300	63	3.3	240
9/2/87	MW-2	---	710,000	980	3,000	33,000
4/25/87	MW-2	---	660	2.2	<0.5	9.2
12/23/86	MW-2	---	4,100	970	96	750
8/18/86	MW-2	---	58,000	4,300	390	1,800



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

680 Chesapeake Drive • 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.

Date Sampled: 11/01/88
Date Received: 11/01/88
Date Analyzed: 11/17/88
Date Reported: 11/21/88

Project: Mobil, San Lorenzo,
Hesperian Blvd.

TOTAL PETROLEUM FUEL HYDROCARBONS WITH BTEX DISTINCTION

Sample Number

8110101

Sample Description

Water, MW2

	<u>Detection Limit</u> ppb	<u>Sample Results</u> ppb
Low to Medium Boiling Point Hydrocarbons	50	N.D.
Benzene	0.5	N.D.
Toluene	0.5	N.D.
Ethyl Benzene	0.5	N.D.
Xylenes	0.5	N.D.

Method of Analysis: EPA 5030/8015/8020

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: Ray KEI (signature) DATE/TIME OF COLLECTION: 11/1/88 TURN AROUND TIME: Regular

SAMPLE DESCRIPTION AND PROJECT NUMBER:

MOBIL SAN LORENZO
HESPERIAN BLVD

<u>SAMPLE #</u>	<u>ANALYSES</u>	<u>GRAB OR COMP.</u>	<u>NUMBER OF CONTAINERS</u>	<u>SOIL/WATER</u>
<u>MW2</u>	<u>TPHG. BTXE</u>	<u>Grab</u>	<u>2 V.</u>	<u>W</u>
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
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_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

<u>RELINQUISHED BY*</u>	<u>TIME/DATE</u>	<u>RECEIVED BY*</u>	<u>TIME/DATE</u>
<u>1. Ray (KEI)</u>	<u>15:50</u> <u>11/1/88</u>	<u>Ray KEI</u>	<u>19:50</u> <u>11/1/88</u>
<u>2.</u>			
<u>3.</u>			
<u>4.</u>			

* STATE AFFILIATION NEXT TO SIGNATURE

REMARKS: _____