KAPREALIAN ENGINEERING
INCORPORATED

KEI-P89-0804.R6
July 23, 1993

Unocal Corporation
2000 Crow Canyon Place, Suite 400
P.O. Box 5155
San Ramon, California 94583

Attention: Ms. Penny Silzer

RE: Report on Destruction of Monitoring Wells at
Unocal Service Station #5269
2240 Mountain Boulevard
Oakland, California

Dear Ms. Silzer:

This report documents the destruction of monitoring wells MW1, MW2, and MW4 at the subject site, per Kaprealian Engineering, Inc's. (KEI) work plan/proposal (KEI-P89-0804.P4) dated April 13, 1993. The wells were destroyed based on the Regional Water Quality Control Board's (RWQCB), San Francisco Bay Region, recommendation for case closure (in a letter to Unocal dated April 17, 1993).

Monitoring wells MW1, MW3, and MW4 (the locations of which are shown on the attached Figure 1) were destroyed on June 14, 1993, by fully drilling out the existing well seals, all filter pack sand materials, and the PVC well casings. The boreholes were each overdrilled approximately 1 foot. Permits were obtained from the Alameda County Health Care Services (ACHCS) Agency prior to beginning work.

The former wells were fully sealed with a neat cement grout, in accordance with the grout mixing guidelines presented in the California Well Standards, Bulletin 74-90 (dated June 1991). The grout was placed by the use of a tremie pipe from the bottom of the borings up to the surface in one continuous pour. A hardening agent was placed in the upper 1 to 2 feet of grout to reduce curing time.

All soil materials and rinsate water generated during the well destruction operations were stored on-site on either visqueen (soil) or in DOT-approved, properly labeled, 55-gallon drums (pending further analysis and disposal).

DISTRIBUTION

A copy of this report should be sent to the ACHCS, and to the RWQCB, San Francisco Bay Region.

2401 Stanwell Drive, Suite 400
Concord, California 94520
Tel: 510.602.5100 Fax: 510.687.0602

If you have any questions regarding this report, please do not hesitate to call us at (510) 602-5100.

Sincerely,

Kaprealian Engineering, Inc.

Joel G. Greger, C.E.G.
Senior Engineering Geologist

License No. EG 1633
Exp. Date 6/30/94

Timothy R. Ross
Project Manager

\bp

Attachments: Location Map
Figure 1

KAPREALIAN ENGINEERING
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US

April 28, 1993

site is closed
as LOP

Tom

Alameda County Health Care Services
80 Swan Way, Room 200
Oakland, CA 94621

STID
1150

Attention: Mr. Tom Peacock

RE: Unocal Service Station #5269
2240 Mountain Boulevard
Oakland, California

Dear Mr. Peacock:

Per the request of Ms. Penny Silzer of Unocal Corporation, enclosed please find our work plan/proposal dated April 13, 1993, for the above referenced site.

If you should have any questions, please feel free to call our office at (510) 602-5100.

Sincerely,

Kaprealian Engineering, Inc.

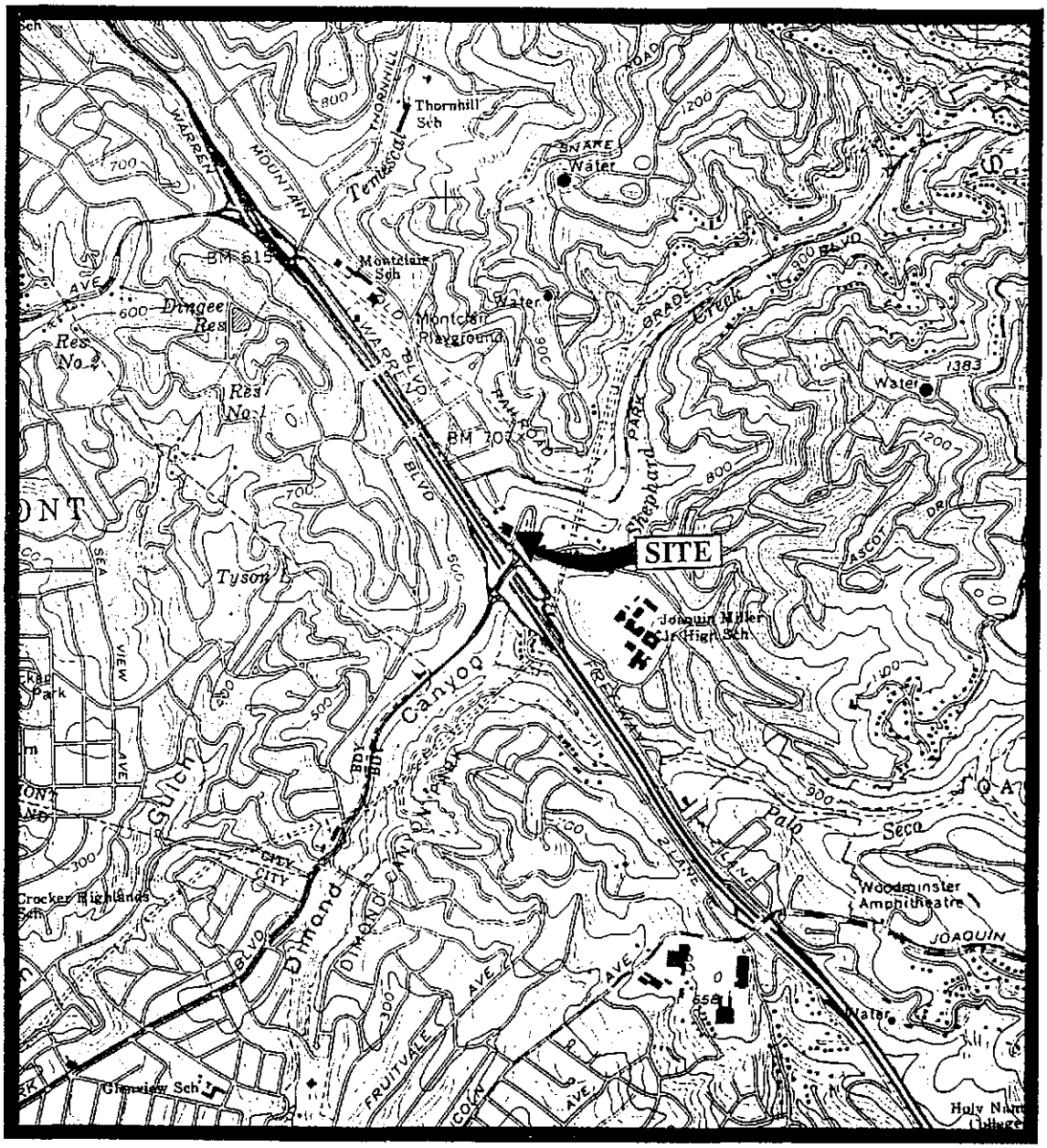
Judy A. Dewey

jad\82

Enclosure

cc: Penny Silzer, Unocal Corporation

2401 Stanwell Drive, Suite 400
Concord, California 94520
Tel: 510.602.5100 Fax: 510.687.0602

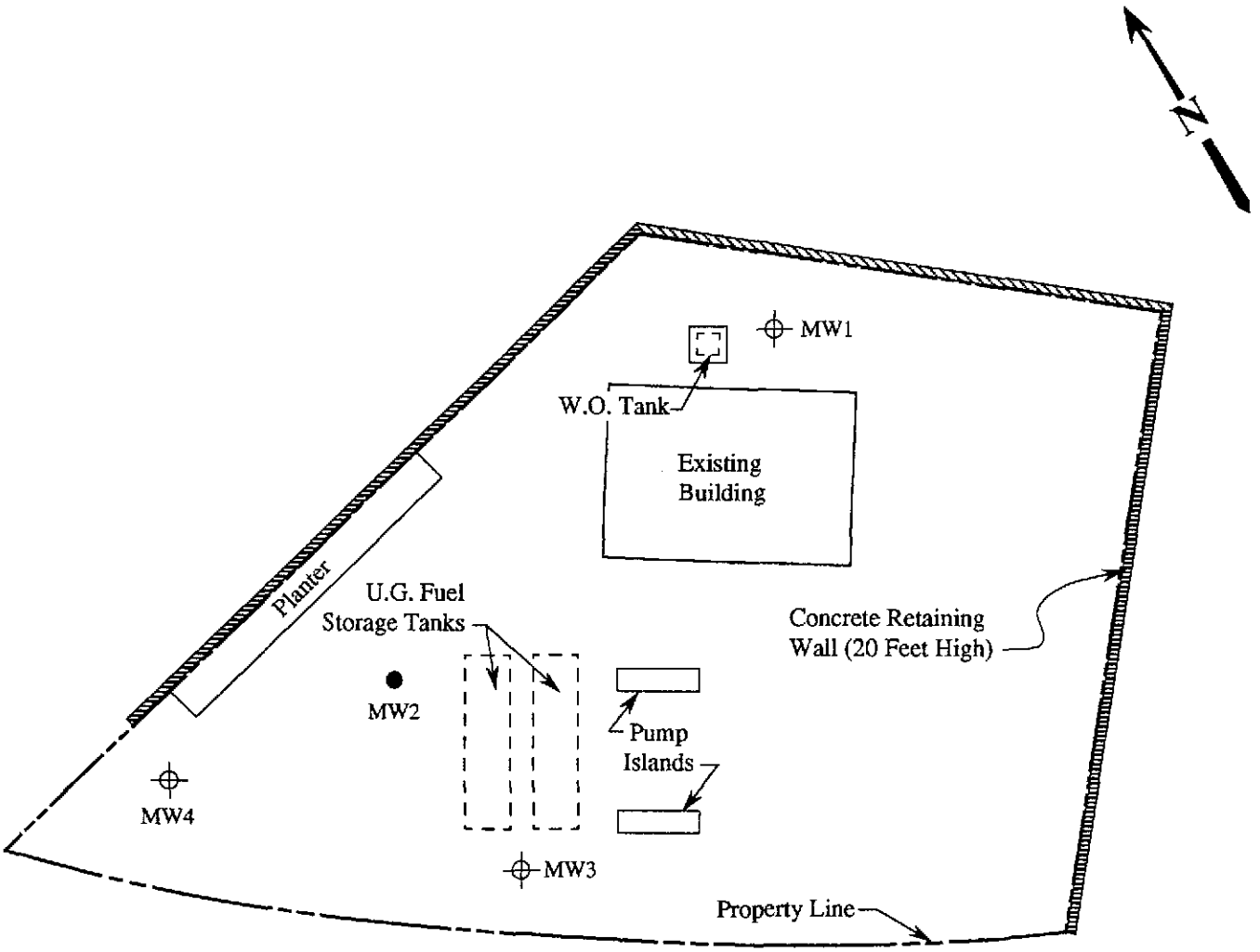


Base modified from 7.5 minute U.S.G.S. Oakland East Quadrangle (photorevised 1980)

KAPREALIAN ENGINEERING INCORPORATED

UNOCAL SERVICE STATION #5269
2240 MOUNTAIN BLVD.
OAKLAND, CALIFORNIA

LOCATION MAP



LEGEND

- Monitoring well (destroyed)
- Exploratory boring (backfilled with cement)

0 30 60

Approx. scale feet

MONITORING WELL AND EXPLORATORY BORING LOCATION MAP

KAPREALIAN ENGINEERING
INCORPORATED

UNOCAL SERVICE STATION #5269
2240 MOUNTAIN BLVD.
OAKLAND, CALIFORNIA

FIGURE
1

STATE OF CALIFORNIA PETE WILSON, Governor

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION
2101 WEBSTER STREET, SUITE 500
OAKLAND 94612

Phone: (510) 286-1255
Fax: (510) 286-1380

Ms. Penny Silzer
Unocal Refining and Marketing Division
Unocal Corporation
2000 Crow Canyon Place, Suite 400
P.O. Box 5155
San Ramon, CA 94583

April 7, 1993
File: 01-1582(UST)

STID 1150

RE: Case closure for Underground Storage Tank Site, Montclair Union Service (Unocal Station No. 5269), 2240 Mountain Blvd., Oakland, Alameda County

Dear Ms. Silzer,

The Alameda County Department of Environmental Health (ACHD) has submitted a letter which recommends closure for your site involving the removal of two 10,000 gallon petroleum fuel tanks and one 280 gallon waste oil tank. Regional Board staff have reviewed the file for your site and have the following comments:

Groundwater pollution as total petroleum hydrocarbons as diesel remains on your site as evidenced by long term monitoring of on-site wells, However, the concentrations reported are below that requiring further investigation, cleanup or monitoring. Therefore based on the available information for the above site Regional Board staff concur with the County's recommendation for closure. Further work could be required if conditions change or beneficial uses of groundwater are adversely impacted at this site.

Please contact Richard Hiett from my staff at (510) 286-4359 if you have any questions regarding the contents of this letter.

Sincerely,

Steven R. Ritchie
Executive Officer

cc: ACHD, 80 Swan Way, Suite 200, Oakland, CA 94621
Attn: Ms. Susan Hugo

Unocal Corporation
2000 Crow Canyon Place, Suite 380
P.O. Box 5155
San Ramon, California 94583
Telephone (510) 867-0760
Facsimile (510) 277-2309

ST ID 1150

UNOCAL 76

December 11, 1992

Mr. Thomas Peacock
Department of Environmental Health
UST Local Oversight Program
80 Swan Way, Rm 200
Oakland, CA 94621

Northern Region
Corporate Environmental
Remediation & Technology

Request for Case Closure
Unocal Service Station #5269
2240 Mountain Blvd.
Oakland, CA 94611

Dear Mr. Peacock:

In accordance with our conversation of October 1, 1992 concerning our request for case closure at the subject site, one groundwater sample was collected from well MW1 on October 29, 1992. As we agreed, this water sample was analyzed for total petroleum hydrocarbons as diesel. Laboratory analysis indicated non-detectable levels of TPHd in the groundwater sample collected from MW1.

Attached please find a letter report from our consultant describing the sampling of MW1 and the results of the laboratory analysis. Unocal will consider this incident closed unless we receive additional information from your office. If after review of the available information you do not concur, please refer this case to the Regional Water Quality Control Board. If you have any questions, please call me, (510) 277-2320.

Sincerely,

Penny Silzer, R. G.
Sr. Environmental Geologist
Unocal Corporation

cc: R. E. Bock (w/o)
Rich Hiett, RWQCB
T. R. Ross, KEI (w/o)

KAPREALIAN ENGINEERING
INCORPORATED

December 4, 1992

Unocal Corporation
2000 Crow Canyon Place, Suite 400
P.O. Box 5155
San Ramon, California 94583

Attention: Ms. Penny Silzer

RE: Unocal Service Station #5269
2240 Mountain Boulevard
Oakland, California

Dear Ms. Silzer:

Per your request, Kaprealian Engineering Inc. (KEI) recently monitored, purged, and collected a ground water sample from monitoring well MW1 at the referenced site. It is KEI's understanding that a ground water sample was collected from well MW1 per a request from Mr. Thomas Peacock of the Alameda County Health Care Services Agency (ACHCS), UST Local Oversight Program.

Monitoring well MW1 was re-developed on October 22, 1992, since the well had not been monitored or sampled since May 3, 1991. During development, approximately 13.5 gallons of ground water were purged from well MW1. The well de-watered after 12.5 gallons had been purged from the well. A ground water sample was collected from well MW1 on October 29, 1992. Prior to sampling, the well was checked for depth to water (measured at 28.70 feet below grade) and the presence of free product and sheen. No free product or sheen was noted in the well. After recording the monitoring data, monitoring well MW1 was purged of 7 gallons of water by the use of a surface pump. The sample was collected by the use of a clean Teflon bailer. The sample was decanted into clean one-liter amber bottles that were then sealed with Teflon-lined screw caps and stored in a cooler, on ice, until delivery to a state-certified laboratory.

The ground water sample collected from well MW1 was analyzed at Sequoia Analytical Laboratory and was accompanied by properly executed Chain of Custody documentation. The sample was analyzed for total petroleum hydrocarbons (TPH) as diesel by EPA method 3510/3520/modified 8015. The ground water sample collected from well MW1 on October 29, 1992, showed a non-detectable concentration of TPH as diesel. Copies of the laboratory analytical results and the Chain of Custody documentation are attached to this letter.

Based on the analytical results of all of the soil and ground water samples collected and evaluated to date, KEI recommends no further sampling at the site at this time, unless required by the regu-

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Concord, California 94520
Tel: 510.602.5100 Fax: 510.687.0602

latory agencies. KEI will submit a work plan to destroy the existing wells at the site after approval is granted by the regulatory agencies.

A copy of this letter should be sent to Mr. Tom Peacock of the ACHCS, and to the Regional Water Quality Control Board, San Francisco Bay Region.

If you have any questions regarding this letter, please do not hesitate to call at (510) 602-5100.

Sincerely,

Kaprealian Engineering, Inc.

Thomas J. Berkins
Senior Environmental Engineer

Joel G. Greger, C.E.G.
Senior Engineering Geologist

License No. 1633
Exp. Date 6/30/94

Timothy R. Ross
Project Manager

/bp

Attachments: Laboratory Analyses
Chain of Custody documentation

WORK PLAN REQUIREMENTS FOR AN INITIAL SUBSURFACE INVESTIGATION

This outline should be followed by professional engineering or geologic consultants in preparing work plans to be submitted to the RWQCB and local agencies. Work plans must be signed by a California-registered engineer or geologist.

This outline should be referred to in context with the "Regional Board Staff Recommendations for Initial Evaluation and Investigation of Underground Tanks" (June 2, 1988).

PROPOSAL FORMAT

I. Introduction

A. State the scope of work

B. Provide information on site location, background, and history

1. Describe the type of business and associated activities that take place at the site, including the number and capacity of operating tanks.

2. Describe previous businesses at the site.

3. Provide other tank information:

- number of underground tanks, their uses, and construction material;

- filing status and copy of unauthorized release form, if not previously submitted;

- previous tank testing results and dates, including discussion of inventory reconciliation methods and results for the last three years.

4. Other spill, leak, and accident history at the site, including any previously removed tanks.

II. Site Description

A. Describe the hydrogeologic setting of the site vicinity

B. Prepare a vicinity map (including wells located on-site or on adjoining lots, as well as any nearby streams

C. Prepare a site map

D. Summarize known soil contamination and results of excavation

1. Provide results in tabular form and show location of all soil samples (and water samples, if appropriate).

Sample dates, the identity of the sampler, and signed laboratory data sheets need to be included, if not already in possession of the County.

2. Describe any unusual problems encountered.

3. Describe methods that were used to store and dispose of contaminated soil.

III. Plan for Characterizing Groundwater Contamination

Construction and placement of wells should adhere to the requirements of the "Regional Board Staff Recommendations for Initial Evaluation and Investigation of Underground Tanks."

A. Explain the proposed locations of monitoring wells (including construction diagrams), and prepare a map to scale

B. Describe the method of monitoring well construction and associated decontamination procedures

1. Expected depth and diameter of monitoring wells.

2. Date of expected drilling.

3. Locations of soil borings and sample collection method.

4. Casing type, diameter, screen interval, and pack and slot sizing technique.

5. Depth and type of seal.

6. Development method and criteria for determining adequate development.

7. Plans for disposal of cuttings and development water.

8. Surveying plans for wells (requirements include surveying to established benchmark to 0.01 foot).

C. Groundwater sampling plans

1. Water level measurement procedure.

2. Well purging procedures and disposal protocol.

3. Sample collection and analysis procedures.

4. Quality assurance plan.

5. Chain-of-custody procedures.

IV. Prepare a Site Safety Plan