


KAPREALIAN ENGINEERING
INCORPORATED

ALCO
HAZMAT

94 FEB 25 AM 10:58

February 23, 1994

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

RE: Former Unocal Service Station #5847
2701 East Avenue
Hayward, California

Gentlemen:

Per the request of Ms. Penny Silzer of Unocal Corporation, enclosed please find our work plan/proposal dated January 3, 1994, 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: Ms. Penny Silzer, Unocal Corporation


KAPREALIAN ENGINEERING
INCORPORATED

KEI-P91-1101.P2
January 3, 1994

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

Attention: Ms. Penny Silzer

RE: Work Plan/Proposal
Proposed Destruction of Monitoring
Wells MW1 through MW9
Former Unocal Service Station #5847
2701 East Avenue
Hayward, California

Dear Ms. Silzer:

Per your request, this work plan/proposal for the destruction of on-site monitoring wells MW1B, MW2B, and MW3 through MW9 is presented for your review and consideration. Site background information and a summary of our most recent field activities are included in Kaprealian Engineering, Inc's. (KEI) reports (KEI-P91-1101.R2 and KEI-P91-1101.QR2) dated February 25, 1993, and November 5, 1993.

PROPOSED WELL DESTRUCTION

1. KEI proposes to destroy the nine on-site monitoring wells by fully drilling out the existing well seals, all filter pack sand materials, and the PVC well casings. The monitoring wells extend to between 35 and 41 feet below grade. Each borehole will be overdrilled approximately 1 foot. Permits will be obtained from the Alameda County Flood Control and Water Conservation District (ACWD), as necessary, prior to beginning work.
2. The former wells will be fully sealed by the use of either neat cement grout or 11-sack cement/sand slurry, in accordance with the grout mixing guidelines presented in the California Well Standards, Bulletin 74-90, dated June 1991. All grout will be placed through the use of a tremie pipe. Grout will be placed from the bottom of the borings up to the surface in one continuous pour. The upper 1 to 2 feet of grout may contain a hardening agent to allow for reduced curing time.


KEI-P91-1101.P2
January 3, 1994
Page 2

3. All soil materials generated during the well destruction operations will be stored on-site and covered with visqueen pending further analysis and disposal.
4. The results of the well destruction activities will be documented in a technical report. A copy of the report will be submitted to the ACWD, and to the Regional Water Quality Control Board, San Francisco Bay Region.

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

Sincerely,

Kaprealian Engineering, Inc.



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

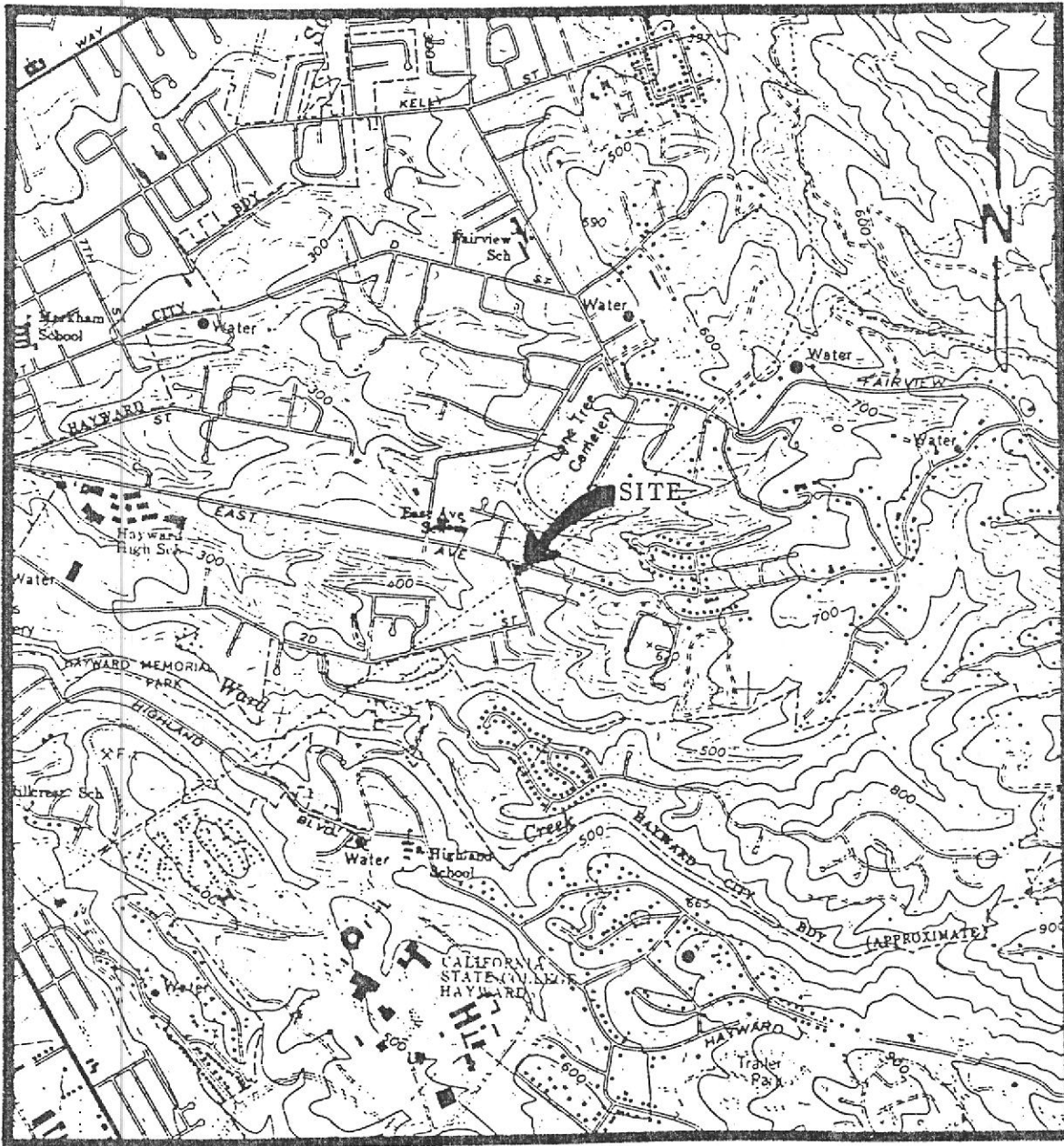
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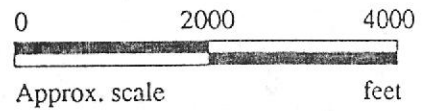
Timothy R. Ross
General Manager


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Attachments: Location Map
Boring and Well Location Map - Figure 1



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

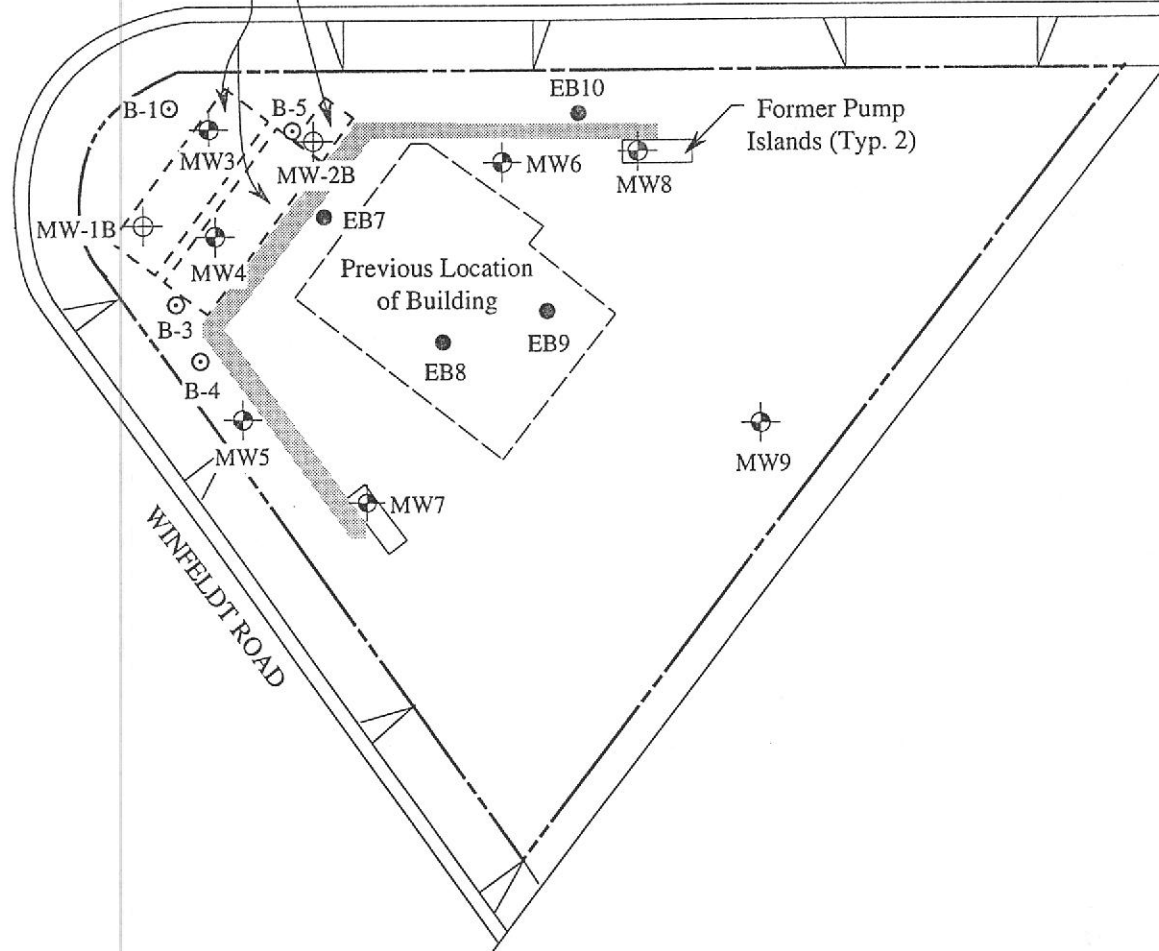


 <p>KAPREALIAN ENGINEERING INCORPORATED</p>	<p>FORMER UNOCAL S/S #5847 2701 EAST AVENUE HAYWARD, CA</p>	<p>LOCATION MAP</p>
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Former location of
U.G. Fuel Storage Tanks

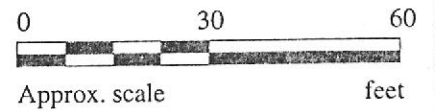
Former location
of W.O. Tank

EAST AVENUE



LEGEND

- ⊕ Monitoring well (by KEI) to be destroyed
- ⊙ Monitoring well (by AGS 1986) to be destroyed
- Exploratory boring (by KEI)
- ⊙ Exploratory boring (by AGS, 1986)



EXPLORATORY BORING AND MONITORING WELL LOCATION MAP



UNOCAL SERVICE STATION # 5847
2701 EAST AVENUE
HAYWARD, CALIFORNIA

FIGURE
1