

ACTON •  
MICKELSON •  
van DAM, INC.

ALCO  
HAZMAT

Consulting Scientists, Engineers, and Geologists

94 JUN 15 PM 2:46

June 14, 1994

Ms. Eva Chu  
Department of Environmental Health  
Alameda County Health Care Services Agency  
80 Swan Way, Room 200  
Oakland, California 94621

19024.06

Subject: Acquisition of Ground Water Samples Using Hydropunch® Assembly  
Beacon Station #604--1619 First Street, Livermore, California

Dear Ms. Chu:

Acton • Mickelson • van Dam, Inc. (AMV), has been authorized by Ultramar Inc. (Ultramar) to continue an ongoing hydrogeologic investigation at the above-referenced site (Figure 1). A total of seven monitoring wells and three vadose wells have been installed on and adjacent to the site. Collection of the additional ground water samples is intended to provide a preliminary assessment of the horizontal distribution of petroleum hydrocarbon constituents in ground water beneath property located northwest and downgradient of the subject site (Figure 2). Future monitoring well installation activities will be based on the results of the proposed Hydropunch® investigation.

### Scope of Work

Approximately 8 to 10 soil borings will be advanced to approximately 40 feet below grade using hollow-stem auger drilling techniques. The drilling will be done by a California-licensed drilling contractor. AMV intends to collect soil samples at 15, 25, and 35 feet below grade during drilling. Soil samples as well as drill cuttings will be screened in the field for the presence of petroleum hydrocarbon vapors using a photoionization detector (PID). If the sample obtained at 15 feet below grade of a boring or any drill cuttings from the respective boring have a field PID reading of 5 parts per million or greater, then soil samples will also be collected at 20 and 30 feet below grade from the boring. Selected soil samples will be submitted to a California-certified laboratory for analysis of benzene, toluene, ethylbenzene, total xylenes (BTEX), and total petroleum hydrocarbons as gasoline (TPHg).

After each boring reaches a depth of 35 feet below grade, a Hydropunch® ground water sampling assembly will be lowered to the bottom of the boring. Using a downhole hammer

LTR297.MJ

4511 Golden Foothill Parkway, Suite 1  
El Dorado Hills, California 95762

(916) 939-7550  
Fax (916) 939-7570

No. of soil w/ assembly in 15, 20, 25, 30, 35 ft

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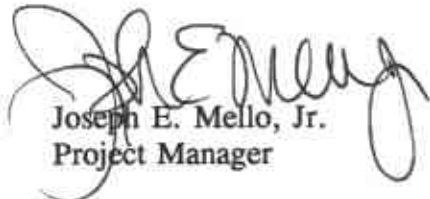
mounted on the drill rig, the Hydropunch® will be driven below the water table (approximately 37 feet below grade) and a ground water sample will be collected. This process will be repeated for each boring. Ground water samples will be submitted under appropriate chain-of-custody to a California-certified laboratory for analysis of BTEX and TPHg. *Should also analyze for MTE*

Fieldwork to collect the necessary ground water samples is anticipated to be conducted during the week of June 20, 1994. A report describing all field activities and results will be submitted within 45 days of the completion of fieldwork.

If you have any questions regarding this project, please call either of the undersigned at (916) 939-7550.

Sincerely,

**ACTON • MICKELSON • van DAM, INC.**

  
Joseph E. Mello, Jr.  
Project Manager

SAL:JEM:DAvD:mjd  
Enclosures

cc/enc: Mr. Terrence A. Fox, Ultramar Inc.



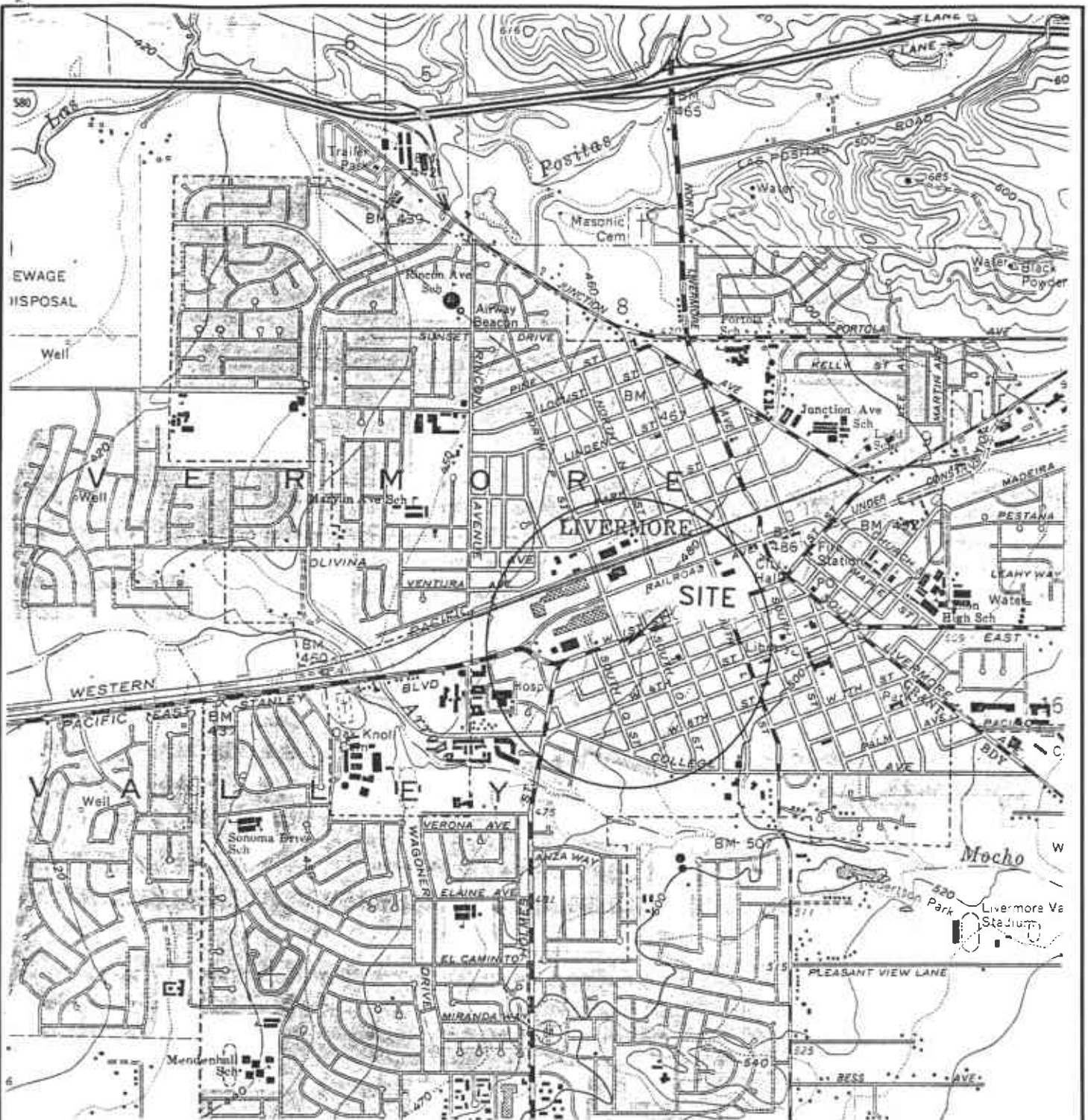
Dale A. van Dam, R.G.  
California Registered Geologist #4632



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General Notes

Base Map from U.S.G.S.  
Livermore, California  
7.5 Minute Topographic  
Photorevised 1980



0 2,000

Approximate Scale  
(in feet)

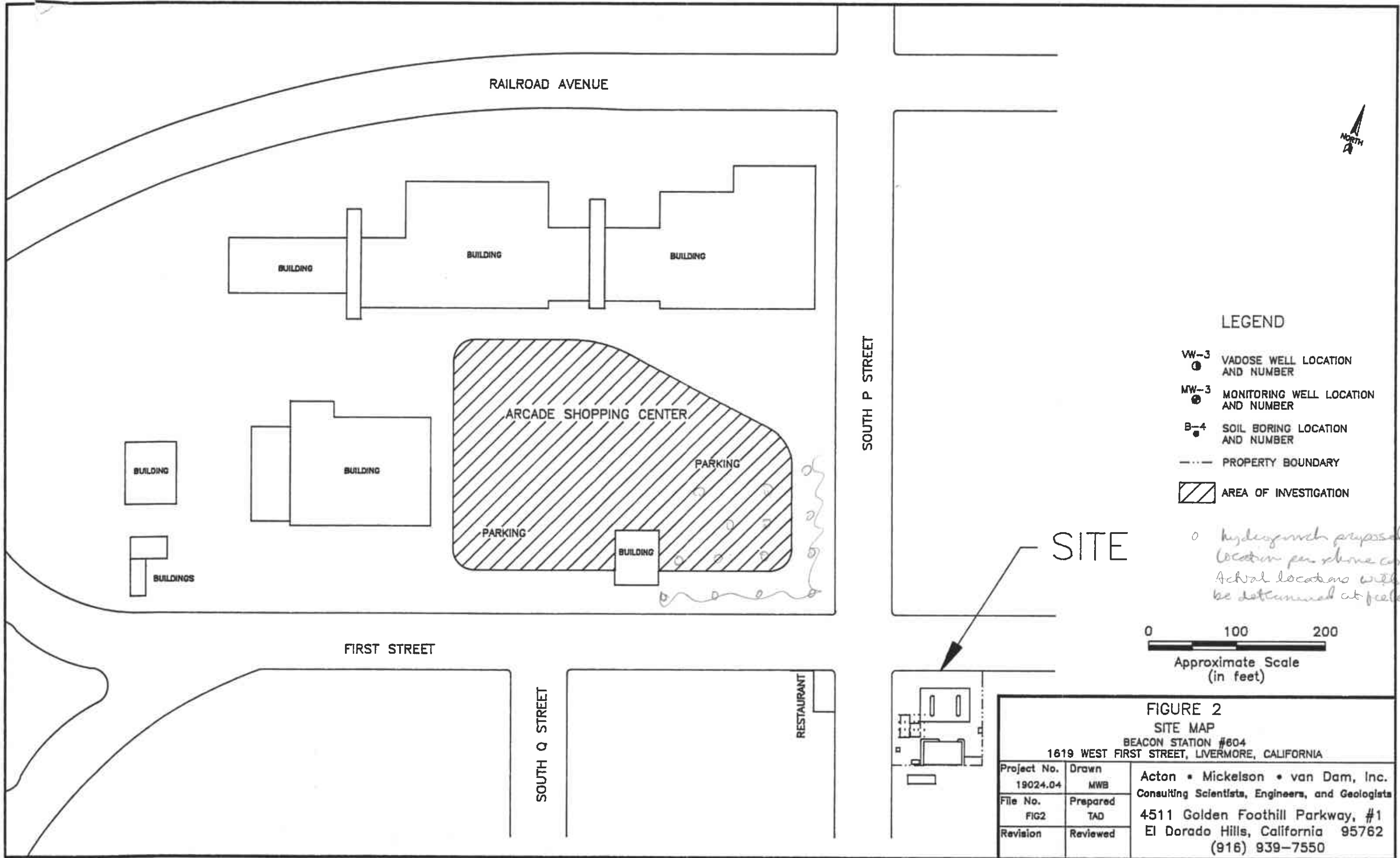


QUADRANGLE LOCATION

FIGURE 1

SITE LOCATION MAP  
BEACON STATION #604  
1619 WEST FIRST STREET  
LIVERMORE, CALIFORNIA

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File No. FIG1	Prepared SAL	
Revision	Reviewed	



**LEGEND**

- VW-3 VADOSE WELL LOCATION AND NUMBER
- MW-3 MONITORING WELL LOCATION AND NUMBER
- B-4 SOIL BORING LOCATION AND NUMBER
- PROPERTY BOUNDARY
- [Hatched Box] AREA OF INVESTIGATION

*hydrograph proposed location per phone convs. Actual locations will be determined at field.*

0 100 200  
Approximate Scale (in feet)

**FIGURE 2**  
**SITE MAP**  
 BEACON STATION #604  
 1619 WEST FIRST STREET, LIVERMORE, CALIFORNIA

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File No. FIG2	Prepared TAD	
Revision	Reviewed	