



**Applied GeoSystems**

43255 Mission Boulevard, Fremont, CA 94539 (415) 651-1906

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**LETTER TRANSMITTAL**

JOB NUMBER: 87091-2

SEND TO: Mr Joe Ferreira

DATE: May 23, 88

OF: San Leandro Fire Dept  
875 East 16<sup>th</sup> St.  
San Leandro, CA 94577

**ENCLOSURES**

**NO. OF COPIES**

Letter Report 87091-2 regarding  
Nigerian ground-water Analyses  
at UNORP Station No 5367  
500 Bancroft Ave San Leandro

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**COMMENTS:**

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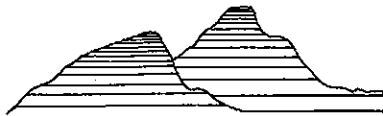
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May 16, 1988  
0516tros  
87091-2

Mr. Tim Ross  
UNOCAL Corporation  
2175 North California Boulevard, Suite 650  
Walnut Creek, California 94596

Subject: Letter Report No. 87091-2 regarding subjective ground-water analyses at UNOCAL Station No. 5367, 500 Bancroft Avenue, San Leandro, California.

Mr. Ross:

This letter report summarizes the results of ground-water monitoring by Applied GeoSystems at the above-referenced site. The site is located on the southeast corner of the intersection of Dowling Boulevard and Bancroft Avenue in San Leandro, as shown on the Site Vicinity Map, Plate P-1. UNOCAL requested that Applied GeoSystems monitor ground water at the site after floating product was detected in the well. The monitoring well was constructed in September 1987 (Applied GeoSystems Report, dated December 13, 1987).

A geologist from Applied GeoSystems arrived at the site on April 27, 1988, to collect a water sample and subjectively analyze the water from monitoring well MW-1. The location of the well is shown on the Generalized Site Plan, Plate P-2. A water sample was collected from the well to check for visual evidence of hydrocarbon contamination. The total depth of the well is 35.04 feet, and the depth to the water table is 32.40 feet below the top of the well casing. The sample was collected by gently lowering a portion of a cleaned Teflon bailer past the air/water interface and collecting a sample from the surface of the water in the well. Subjective analysis of the water sample showed approximately 0.01-foot of floating product in the well. Cumulative results of this and previous monitoring events are presented in Table 1.

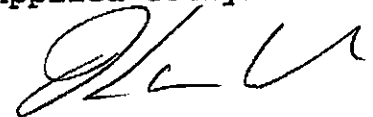
May 16, 1988  
UNOCAL Station No. 3765, San Leandro, California

AGS 87091-2

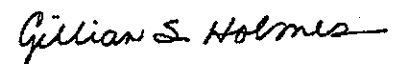
We recommend that 1) a soil vapor survey be conducted in the vicinity of the contamination and 2) that three or more boreholes be drilled and ground-water monitoring wells installed in the boreholes. The locations of the wells should be selected based on the results of the soil vapor survey. These wells are necessary to characterize the vertical and lateral extent of the soil and ground-water contamination, establish the lateral extent of hydrocarbon contamination, and evaluate a local ground-water gradient. Ground water in the existing well should be sampled fortnightly to monitor the thickness of the floating product. We also recommend that local ground-water use be studied and neighboring wells be identified and located.

Copies of this report should be forwarded to Mr. Joe Ferreira at the San Leandro Fire Department, 835 East 14th Street, San Leandro, California 94577, and to Mr. Greg Zentner at the California Regional Water Quality Control Board, San Francisco Bay Region, 1111 Jackson Street, Room 6040, Oakland, California 94607. Please do not hesitate to contact us if you have any questions regarding the contents of this letter.

Sincerely,  
Applied GeoSystems

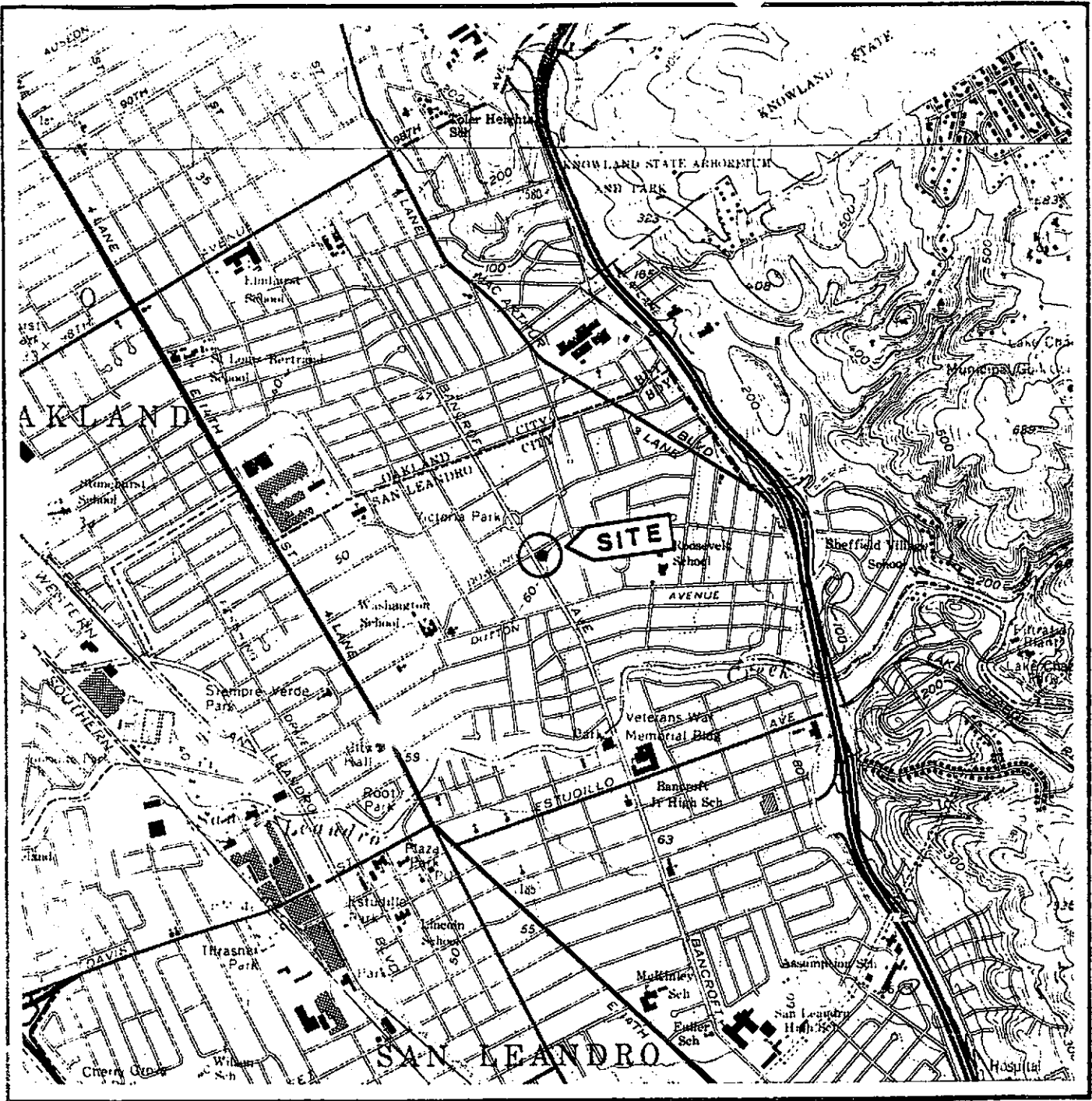


John T. Lambert  
Project Geologist



Gillian S. Holmes  
G.E. 2023

Enclosures: Site Vicinity Map, Plate P-1  
Generalized Site Plan, Plate P-2  
Cumulative Results of Ground-Water Monitoring,  
Table 1



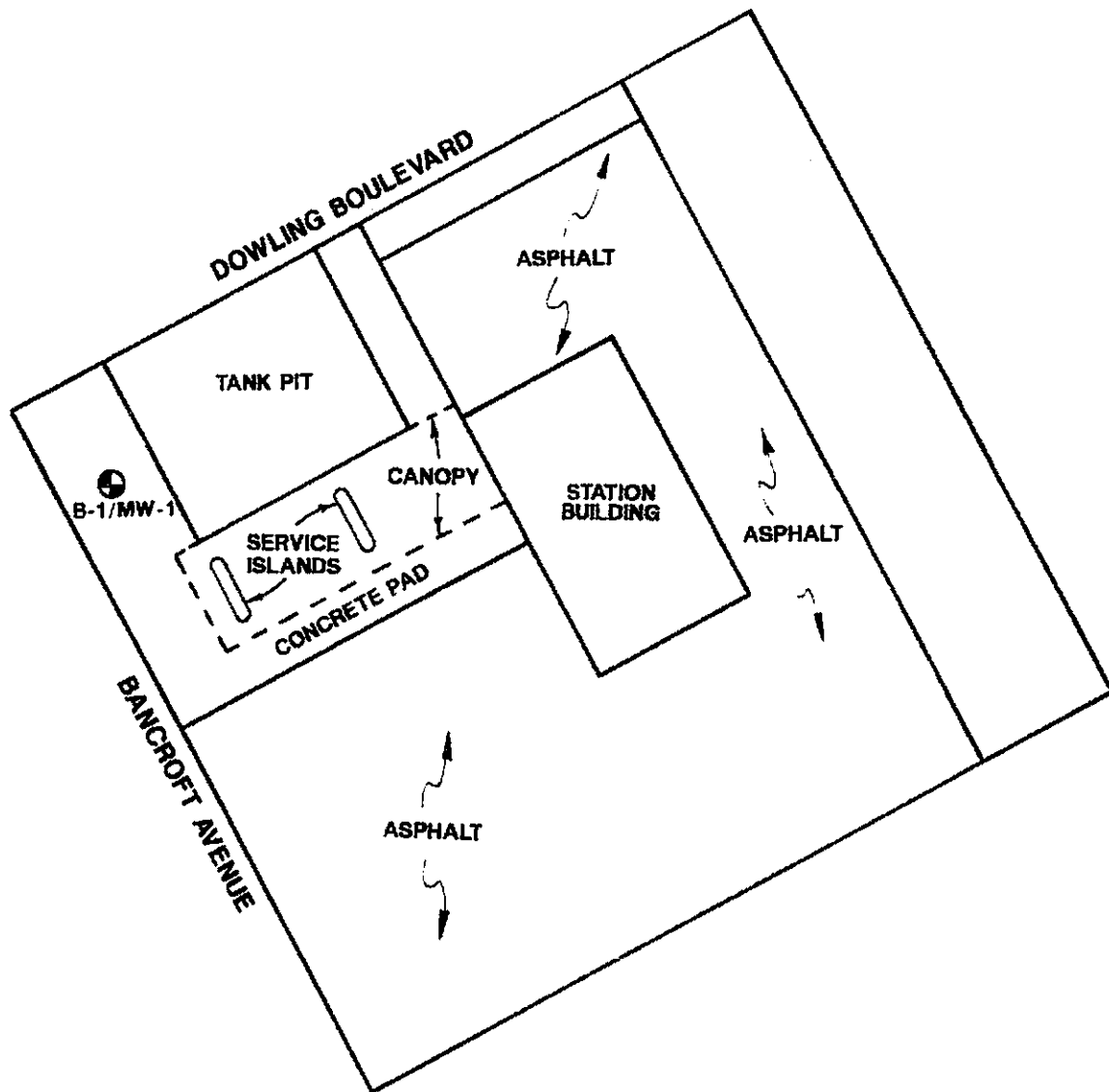
Source: U.S. Geological Survey  
 7.5-Minute Quadrangle  
 San Leandro, California  
 Oakland West, California  
 Photorevised 1980



**SITE VICINITY MAP**  
**UNOCAL Station No. 5367**  
**500 Bancroft Avenue**  
**San Leandro, California**

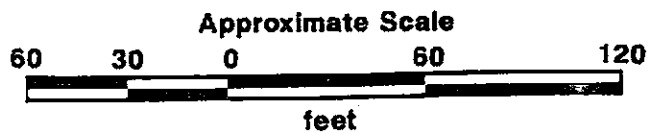
**PLATE**  
**P - 1**

**PROJECT NO. 87091-2**



⊕ = Monitoring well location

Source: Measured by tape and compass



PROJECT NO. 87091-2

**GENERALIZED SITE PLAN**  
**UNOCAL Station No. 5367**  
**500 Bancroft Avenue**  
**San Leandro, California**

PLATE  
**P - 2**

TABLE 1  
CUMULATIVE RESULTS OF GROUND-WATER MONITORING  
UNOCAL Station No. 5367  
500 Bancroft Avenue  
San Leandro, California

Date	Product Thickness
9/23/87	0.02
9/25/87	0.01
10/6/87	0.01
11/5/87	0.31
11/13/87	0.38
11/19/87	0.06
4/27/88	0.01

Product thickness is reported in feet.