WEISS ASSOCIATES
Geologic and Environmental Services
Fax: 415-547-5043 Phone: 415-547-5420
5500 Shellmound Street, Emeryville, CA 94608

TRANSMITTAL LETTER

FROM: Mariette Shin **DATE**: September 23, 1991

TO: Mr. Scott O. Seery
Alameda County Health Care Services
Department of Environmental Health
80 Swan Way, Room 200
Oakland, CA 94621

VIA:
__X__ First Class Mail
_____ Fax _____ pages
_____ UPS (Surface)
_____ Federal Express
_____ Courier

SUBJECT: Shell Service Station WIC #204-6852-1404 **JOB**: 81-422-01
[redacted]
San Leandro, CA 94578

AS:
_____ We discussed on the telephone on _____
__X__ You requested by letter on August 22, 1991
_____ We believe you may be interested
_____ Is required

WE ARE SENDING:
__X__ Enclosed
_____ Under Separate Cover Via _____

1. A workplan outlining proposed additional work for the above-referenced site

FOR:
_____ Your information
__X__ Your use
__X__ Your review & comments
_____ Return to you

PLEASE:
__X__ Keep this material
_____ Return by _____
_____ Acknowledge receipt

MESSAGE: Please call if you have any questions.

A:\TRANS

Reviewed 12/11/91 SOS

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Geologic and Environmental Services
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5500 Shellmound Street, Emeryville, CA 94608

September 23, 1991

Mr. Scott O. Seery
Alameda County Health Care Services
Department of Environmental Health
80 Swan Way, Room 200
Oakland, CA 94621

Re: Shell Service Station
WIC #204-6852-1404
1784 150th Avenue
San Leandro, CA 94578
WA Job #81-422-01

Dear Mr. Seery:

As you requested in your August 22, 1991 letter to Jack Brastad of Shell Oil, outlined below is Weiss Associates' (WA) proposed Scope of Work (SOW) for a subsurface investigation at the subject Shell Service Station (Figure 1). WA is submitting this SOW on behalf of Shell Oil. The objective of the work is to determine the sources and horizontal extent of hydrocarbons and other compounds detected in soil and ground water, and to determine the ground water gradient and flow direction. Presented below is a an outline of our proposed SOW.

PROPOSED SCOPE OF WORK

Our proposed SOW for the investigation is to:

1) Prepare a site safety plan based upon the site history, previous work and analytic results for soil and ground water samples collected at the site. The safety plan will identify potential site hazards and specify procedures to protect site workers and the public,

2) Obtain well construction permits from Alameda County Flood Control and Water Conservation District (Zone 7) to drill two on-site soil borings. Based on the documented regional ground water flow direction toward the west,[1] the location

[1] Alameda County Flood Control and Water Conservation District, 1988, Geohydrology and Groundwater - Quality Overview, East Bay Plain Area, Alameda County, California, 205(J) Report, 83 pp. and 6 appendices.

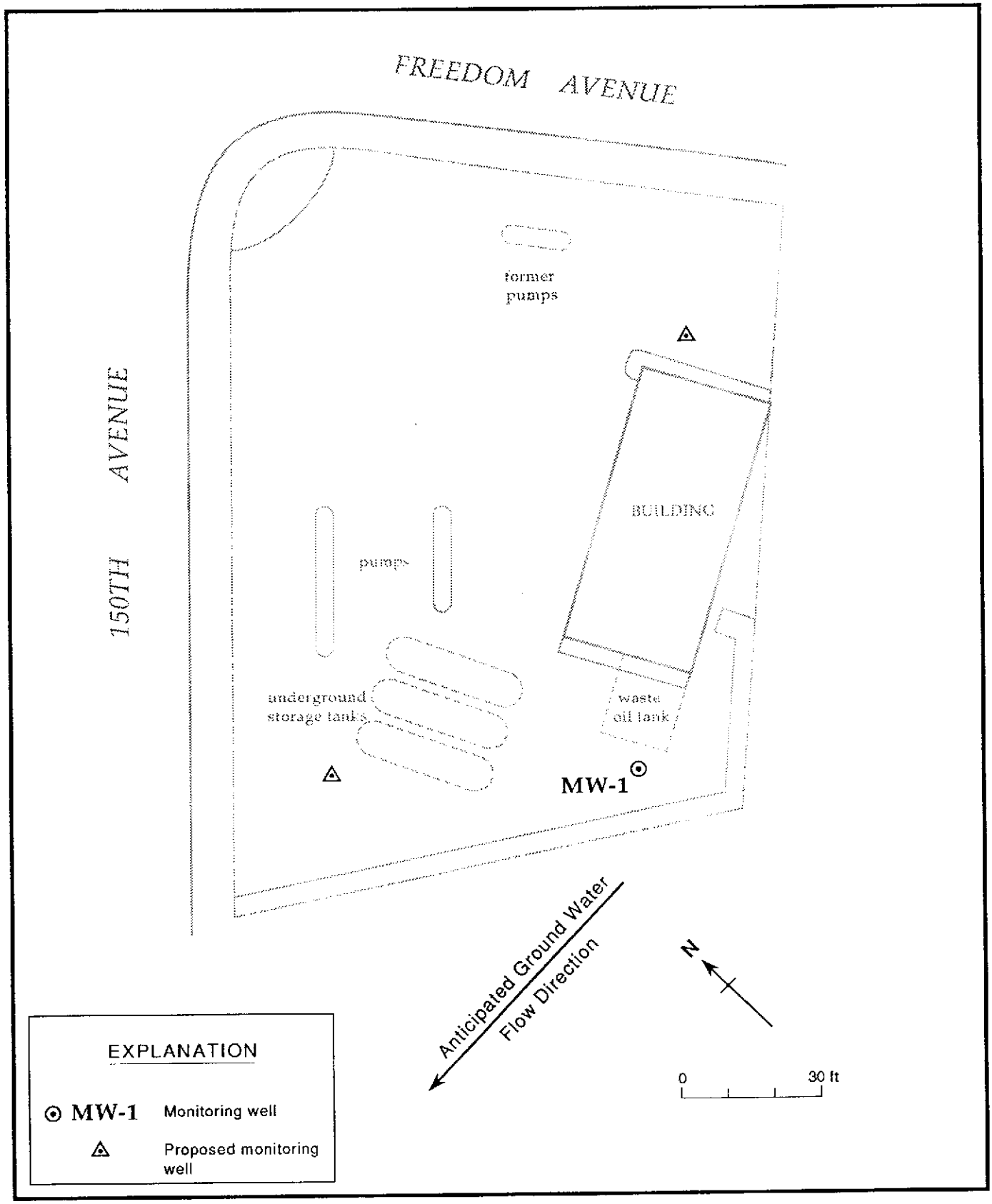

Figure 1. Proposed Monitoring Well Location - Shell Service Station WIC #204-6852-1404, 1784 150th Avenue, San Leandro, California

9/23/91

of site structures and the location of the former waste oil tank excavation, we will drill one soil boring down-gradient and a second boring up-gradient of the former underground storage tanks (USTs) and pumps at the proposed locations shown on Figure 1. Soil samples for subsurface hydrogeologic description will be collected and submitted to a Shell-approved state-certified laboratory under chain-of-custody for analysis of:

- Total petroleum hydrocarbons as gasoline (TPH-G) by modified EPA Method 8015,
- Aromatic hydrocarbons including benzene, ethylbenzene, toluene and xylenes (BETX) by EPA Method 8020,
- Halogenated volatile organic compounds (HVOCs) by EPA Method 8010, and

The soil sample just above the water table in each boring will also be analyzed for:

- TPH as Diesel (TPH-D) by modified EPA Method 8015.

Based on the results of these analyses, we may analyze the samples for additional compounds as per California Regional Water Quality Control Board (WQCB) guidelines.[2]

3) Complete the borings as 4-inch-diameter ground water monitoring wells,

4) Develop the wells, collect water samples, and analyze the samples for:

- TPH-G and D by modified EPA Method 8015,
- BETX by EPA Method 8020, and
- HVOCs by EPA Method 8010.

The results of the above analyses will determine whether analysis for additional compounds is necessary for future samplings.

5) Survey the top-of-casing elevations of all the wells relative to mean sea level and verify the ground water gradient beneath the site. Water table elevation data will then be tabulated and a ground water elevation contour map will be prepared,

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[2] North Coast, San Francisco Bay and Central Valley Regional Water Quality Control boards, June 2, 1988 (revised November 9, 1989), Regional Board Staff Recommendations for Initial Evaluation and Investigation of Underground Tanks, 18 pp.

6) Arrange for disposal of the drill cuttings and well purge water. Drill cuttings will be stockpiled onsite on and covered by plastic sheeting pending analytic results for the composite samples. Based on the analytic results, the soil will be transported to an appropriate facility for disposal by a licensed waste hauler, and will be properly tracked and documented. Ground water removed from the well will be temporarily stored onsite in 55-gallon drums pending analytic results,

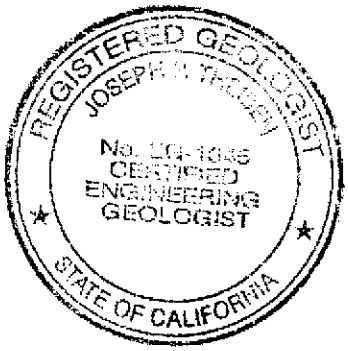
7) Report the analytic results and construction details for all wells in a subsurface investigation report once the extent of dissolved hydrocarbons in soil and ground water is adequately defined. The report will include historic ground water elevation and quality data as well as boring logs for all site wells.

SCHEDULE

We expect to begin drilling at this site by the end of October 1991. Well development and initial water sampling will be scheduled for the week following drilling. A report presenting the results of the investigation will be submitted within 45 days after completion of the field activities.

Please call Kurt Miller of Shell Oil (415-685-3853) or Joe Theisen if you have questions about our proposed SOW. We trust that this work plan meets your needs.

Sincerely,
Weiss Associates



Mariette Shin
Staff Geologist

Joseph P. Theisen
Senior Project Hydrogeologist

MMS/JPT:fcr

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cc: Mr. Kurt Miller, Shell Oil, P.O. Box 5278, Concord, CA 94524

Lester Feldman, California Regional Water Quality Control Board - San Francisco Bay Region, 1800 Harrison Street, Oakland, California 94612