



WEISS ASSOCIATES

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Consulting in Geology & Geohydrology

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September 25, 1989

Diane Lundquist
Shell Oil Company
P.O. Box 4023
Concord, CA 94524

Re: Shell Service Station
WIC #204-6001-0109
29 Wildwood Avenue
Piedmont, California
WA Job# 81-401-02

Dear Ms. Lundquist:

This letter presents Weiss Associates' (WA) recommendations for additional work at the Shell service station located at 29 Wildwood Avenue in Piedmont, California.

To more accurately define the ground water flow direction, the extent of hydrocarbons in ground water and to determine whether site remediation may be needed, WA recommends that Shell Oil:

- Prepare a site safety plan for additional subsurface investigation,
- Secure Alameda County Environmental Health Department well permits, City of Piedmont (and City of Oakland) encroachment permits to install wells in Grand and Wildwood Avenues,
- Drill three soil borings in Grand and Wildwood Avenues at the locations shown on Figure 1, and collect soil samples for possible chemical analysis,
- Submit the samples to a Shell-approved state-certified laboratory for analysis by Modified EPA Method 8015, GC/FID, for TPPH, and by EPA Method 8020, GC/PID, for BETX. Analyze one composite sample from each boring for flashpoint and for total, soluble and organic lead,
- Install four-inch-diameter ground water monitoring wells in the borings,
- Survey the top-of-casing elevations of the wells

Ms. Diane Lundquist
September 25, 1989

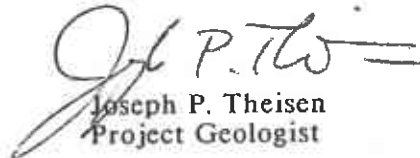
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- Develop the wells, collect ground water samples from the new wells and the existing wells,
- Analyze the water samples at a Shell-approved state-certified laboratory by EPA Method 8015 for TPPH, and by EPA Method 8020 for BETX,
- Prepare a report containing tabulated ground water elevation and chemical data, maps showing the extent of dissolved hydrocarbons in ground water and the ground water flow direction, and geologic cross sections.

A budget summary presenting our approximate anticipated costs for this work is included as Attachment A. This estimated budget does not include analytic soil and water disposal or potential lane closure costs. Pending issuance of easement and Alameda County Environmental Health Department well permits, we can begin this work by October 10, 1989.

We are pleased to provide hydrogeologic consulting services to Shell Oil. Please call if you have any questions of if we can help in any way.

Sincerely,
Weiss Associates



Joseph P. Theisen
Project Geologist



Richard B. Weiss
Certified Engineering Geologist
No. EG1112



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Encl.: Attachment A - Budget Summary

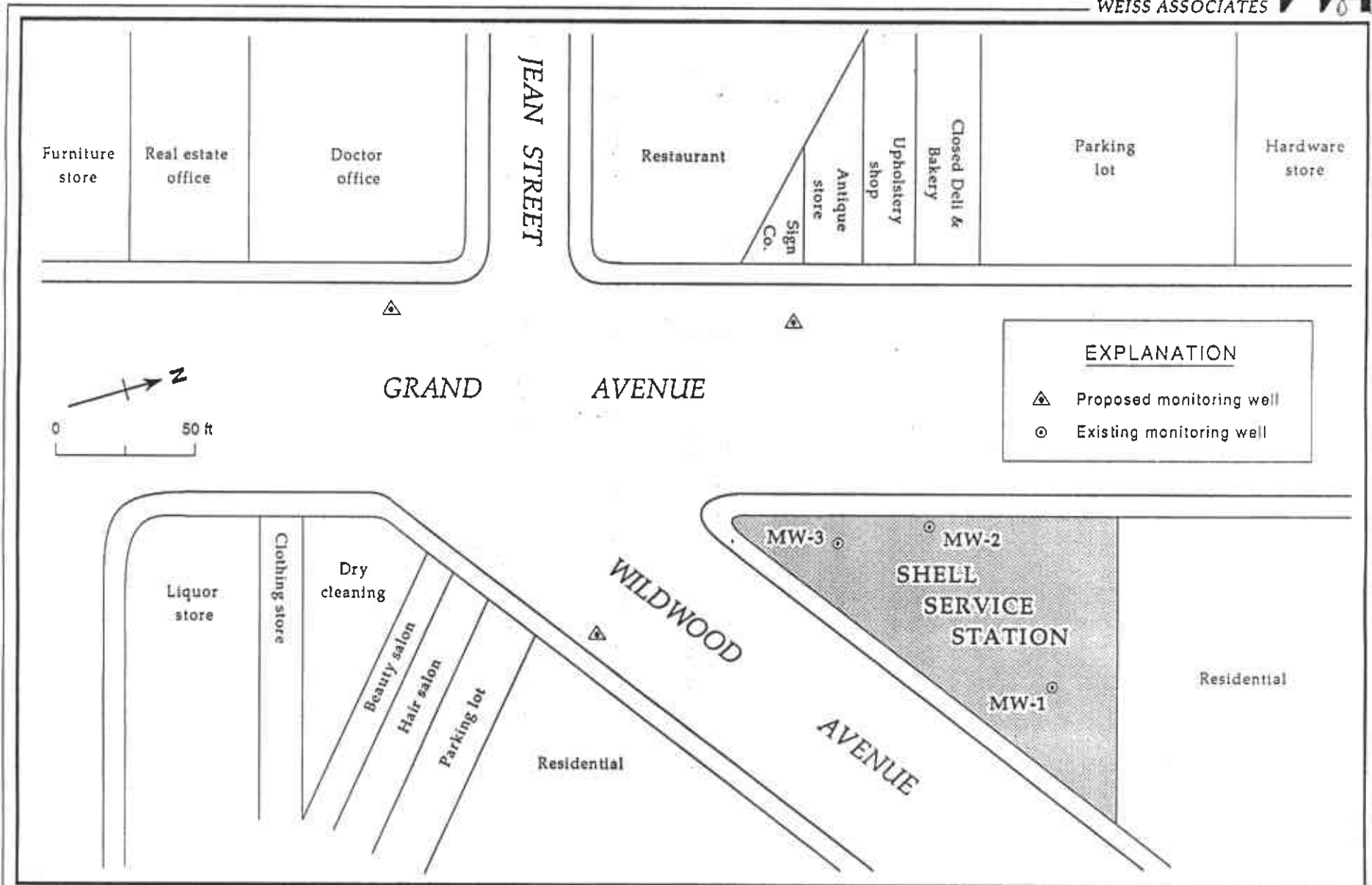


Figure 1. Proposed Additional Well Locations - Shell Service Station, 29 Wildwood Avenue, Piedmont, California