



Geologic and Environmental Services

Fax: 415-547-5043

Phone: 415-547-5420

5500 Shellmound Street, Emeryville, CA 94608

SEP 13 91 T.L.H.

September 13, 1991

Ms. Nancy Vukelich
Chevron USA
2410 Camino Real
P.O. Box 5004
San Ramon, California 94583-0804

RE: Well Yield Test
Chevron Service Station #9-0076
Oakland, California
WA Job #4-417-08

Dear Ms. Vukelich:

As you requested, Weiss Associates (WA) is providing ground water remediation services for the Chevron station referenced above. Ground water monitoring well C-2 has contained up to 0.17 ft of floating hydrocarbons. WA has been bailing this product on a monthly basis. Ground water sampling data indicates that well C-2 recharges very slow. The boring logs indicate that the well penetrates primarily low permeable clayey silts.

In February 1991, WA conducted a well yield test to estimate the ground water recharge rates that may be expected during ground water extraction from this well. Ground water in the 3-inch diameter monitoring well was measured at 29.29 ft below the top of casing (TOC). The well's total depth was measured at 32.63 ft below TOC.

As much ground water as possible was then bailed from the well and the depths to water were recorded over the next two hours. A graph showing the ground water level rising over time is attached. Assuming a 3-inch diameter well inside an 8-inch diameter borehole, surrounded by a sand pack with 30% porosity, about 1.3 gallons of water recharged to the well within the first twenty minutes. This represents less than 0.07 gallon per minute of recharge to well C-2. At these very low recharge rates, we are unsure what the radius of influence around well C-2 may be. However, we feel that because of the location of the well, we expect to contain hydrocarbons from migrating offsite.

4.2 gph
100 gpd

We are pleased to provide hydrogeologic consulting services to Chevron and trust that this letter meets your needs. Please call me if you have any questions regarding this letter or our work to date.

Sincerely,
Weiss Associates

James W. Carmody, C.E.G.
Senior Project Manager

JWC/dm
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Attachment

Recharge Rates at Well C-2 Chevron SS#9-0076, Oakland, California

