gettler — ryan inc.
general contractors

September 26, 1989

Mr. Rick Mueller
City of Pleasanton
Pleasanton Fire Department
Post Office Box 520
Pleasanton, California 94566-0802

Reference: Shell Service Station
3790 Hopyard Road
Pleasanton, California

Gentlemen:

Enclosed is a copy of the Work Plan Addendum issued by GeoStrategies Inc. on September 19, 1989 for the above referenced location. The original work plan dated July 18, 1989 had proposed the installation of one large diameter recovery well. Based on data obtained from the recovery well pilot boring, three four-inch diameter recovery wells are proposed in lieu of the one large diameter recovery well.

Please do not hesitate to call should you have any questions or comments.

Sincerely,

John P. Werfal
Project Manager

enclosure

cc: Ms. Diane Lundquist, Shell Oil Company
Mr. Tom Callaghan, Regional Water Quality Control Board

GeoStrategies Inc.
2140 WEST WINTON AVENUE
HAYWARD, CALIFORNIA 94545
(415) 352-4800

September 19, 1989

Gettler-Ryan Inc.
1992 National Avenue
Hayward, California 94545

Attn: Mr. John Werfal

Re: ADDENDUM TO WORK PLAN
Shell Service Station
3970 Hopyard Road
Pleasanton, California

Gentlemen:

This addendum to the work plan has been prepared for the above referenced site. The original work plan dated July 18, 1989, had proposed an interim recovery system consisting of one large diameter well. However, analysis of site data indicates that the approach to interim remediation should be revised.

Site Geology and Design Data

Exploratory borehole data revealed that the site is underlain by low permeability sediment (silt and clay), which infers that the aquifer will have low hydraulic conductivities. A gradation analysis of samples of aquifer material was done to analyze recovery well casing screen size and to size the sand pack envelope around the screen. The sand pack size would be 0.0002 inches in diameter using the design criteria. Clearly, this sand pack is much to fine grained to permit water entry to be meaningful for use of a water withdrawal well.

The aquifer material is so fine grained that the design criteria fails for this site. The aquifer will be of low yield to any well installed on-site (purging of monitoring wells have demonstrated this). In our opinion, a recovery well design utilizing 0.020 inch screen and 2/12 sand pack envelope should be used since this will allow water entry into the well and is the smallest practical slot size available to allow adequate water withdrawal.

Interim Recovery System

We recommend that the recovery system be designed to allow for the low yield of this aquifer. Three four-inch diameter wells, designed to the specifications described above, should be placed at the locations shown on the attached Plate 1. This will allow recovery to occur at two locations, which should provide more recovery per volume pumped given the sedimentology of the aquifer. The wells and the start-up procedure for the recovery wells will be done in accordance with the procedures attached to the work plan dated July 18, 1989.

If you have any further questions, please call.

GeoStrategies Inc. by,

Randall Young for Dave Ferriera

David Ferriera
Staff Geologist

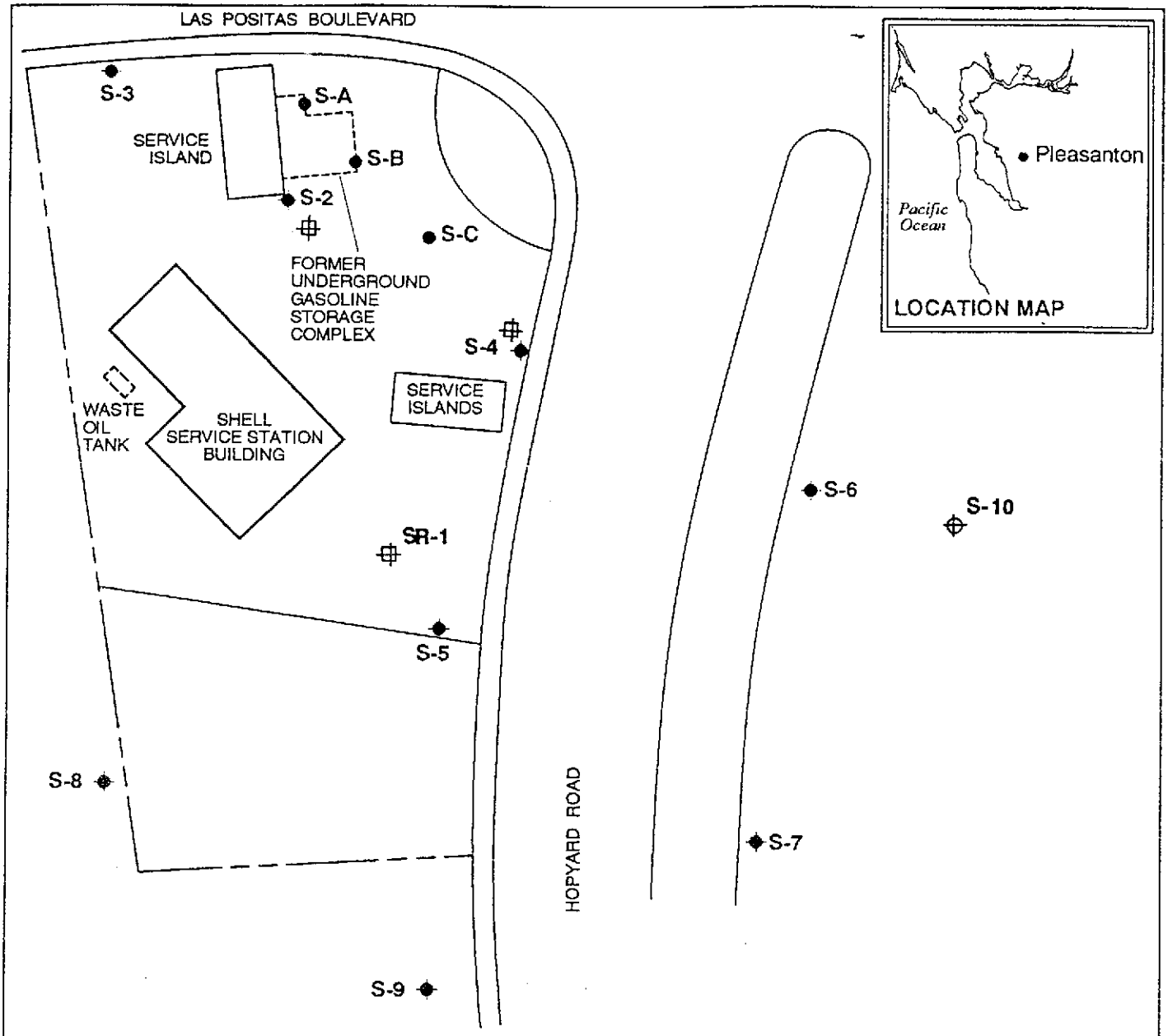
Christopher M. Palmer

REGISTERED GEOLOGIST
CHRISTOPHER M. PALMER
№ 1262
CERTIFIED
ENGINEERING
GEOLOGIST
STATE OF CALIFORNIA

Christopher M. Palmer
Senior Geologist
C.E.G. 1262, R.E.A. 285

CMP/DF/mg

Attachments: Plate 1. Site Map



GeoStrategies Inc.

Proposed Well Location Map
Shell Service Station
3790 Hopyard Road
Pleasanton, California

PLATE
1

JOB NUMBER	REVIEWED BY RG/CEG	DATE	REVISED DATE	REVISED DATE
7632	CWP CEG 12/6/	7/89		