GeoStrategies Inc.

INTERIM REMEDIATION

Chevron Service Station No. 0504
15900 Hesperian Boulevard
San Lorenzo, California

Report No. 7259-6

November 15, 1990

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

November 15, 1990

Gettler-Ryan Inc.
2150 West Winton Avenue
Hayward, California 94545

Re: INTERIM REMEDIATION
Chevron Service Station No. 0504
15900 Hesperian Boulevard
San Lorenzo, California

Gentlemen:

This letter describes the current interim remediation being conducted at the above referenced location.

SITE BACKGROUND

In December 1983, Gettler-Ryan Inc. (G-R) installed five ground-water monitoring wells at the site designated C-1 through C-5. G-R issued a letter report dated January 9, 1984, documenting the well installation (Plates 1 and 2).

In June 1989, G-R conducted ground-water sampling at the site. The results are presented in a G-R Ground-water Sampling Report dated June 27, 1989.

In November 1989, GeoStrategies Inc. (GSI) installed three ground-water monitoring wells designated C-6, C-7 and C-8 and in August 1990, GSI installed three additional ground-water monitoring wells designated C-9, C-10 and C-11 at the site. Results of these two investigations were presented in a GSI report dated October 19, 1990.

not received

SUBSURFACE CONDITIONS SUMMARY

Lithology beneath the site consists of clay and silty clay to the total explored depth of 25.5 feet. Local sands and gravel lenses are contained in the clay and silt. Groundwater was first encountered at depths of approximately 14 to 16 feet below ground surface and was observed to stabilize at approximately 15 feet below ground surface. Potentiometric data indicate an approximate hydraulic gradient of 0.004, which flows toward the southwest beneath the site. Aquifer sediments are estimated to possess relatively low transmissivity. Groundwater occurrence appears to be unconfined.

DISCUSSION

Historical monitoring data collected prior to groundwater sampling in December 1989, indicated that Wells C-1 and C-2 contained 0.01 and 0.15 feet in measured thickness of separate-phase hydrocarbons, respectively. In September 1990, monitoring wells C-1 and C-2 contained 0.03 and 0.10 feet in measured thickness of separate-phase hydrocarbons, respectively. Monitoring wells C-1 and C-2 are located directly down-gradient of the underground storage tanks. TPH-Gasoline and benzene, toluene, ethylbenzene and xylenes (BTEX) have been observed in wells C-3, C-6, C-7 and C-8. Monitoring wells C-4, C-5 C-9, C-10, and C-11 have been reported as none detected for TPH-Gasoline and BTEX. A quarterly groundwater sampling program has been implemented at the site.

Currently, the monitoring wells are inspected for separate-phase hydrocarbons and depth to groundwater on a weekly schedule using an electronic oil-water interface probe. A clean clear acrylic bailer is used to confirm interface probe results. Separate-phase product is bailed from the monitoring wells (C-1 and C-2) by Gettler-Ryan (G-R) during their weekly inspection.

Given the relatively flat gradient and the low permeable aquifer material, it is our opinion that the plume is currently positioned in the vicinity of the subsurface tanks, and off-site immediately downgradient. The separate phase hydrocarbons are located onsite in the vicinity of the subsurface tank excavation.

CONCLUSIONS

The contaminant plume is located onsite and offsite immediately downgradient of the property. In our opinion, plume migration is surmised to be slow given the flow gradient and fine grained aquifer. Current weekly well monitoring and quarterly chemical analysis of the wells is adequate at this time. As site monitoring continues and the site database grows, well bailing and frequency of monitoring will be re-evaluated. Data will be used to determine type and necessity for active remediation, and design of that remedial approach.

If you have any questions, please call.

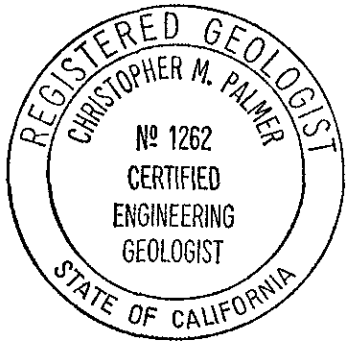
GeoStrategies Inc. by,

Kevin D. McGraw

Kevin McGraw
Geologist

Christopher M. Palmer

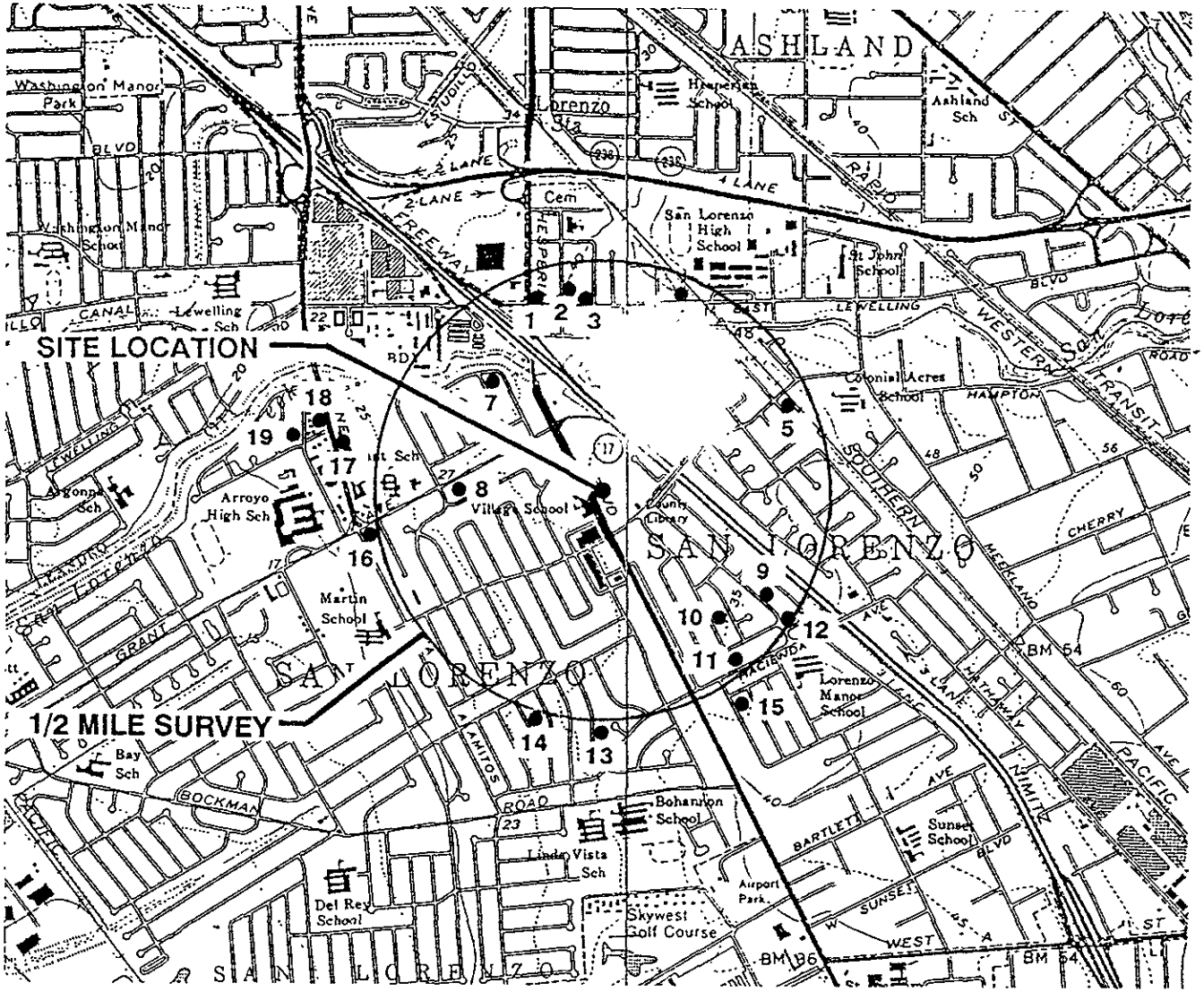
Christopher M. Palmer
Senior Geologist
C.E.G. 1262, R.E.A. 285



CMP/mlg

Attachments

Plate 1. Vicinity Map with Half-Mile-Radius Well Survey
Plate 2. Site Plan



EXPLANATION

● 1 Well location

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Scale in Feet

Base Map: USGS Topographic Map

GeoStrategies Inc.

Vicinity Map with Half-Mile Well Survey
Chevron Service Station #0504
15900 Hesperain Blvd.
San Lorenzo, California

PLATE
1

JOB NUMBER	REVIEWED BY RG/CEG	DATE	REVISED DATE
7259	RMP CEG 12/92	10/90	