RO-008

Geo Plexus, Inc.

Health & Safety Training • Geo/Environmental Personnel • Engineering Geology Consultants • Environmental Management Consultants

December 18, 1998

Ms. Jo Ann Stewart
General Manager
Good Chevrolet
1630 Park Street
Alameda, California 94501

Subject: Preliminary Remedial Risk Assessment for Good Chevrolet, 1630 Park Street, Alameda, CA

Dear Ms. Stewart:

Geo Plexus, Incorporated is pleased to present this Preliminary Remedial Risk Assessment for the subject property which included advancing three (3) soil gas collection probes at the site to obtain soil gas measurements within and exterior to the existing building, collection of ground water samples form the existing monitoring wells, and performing a Tier-II ASTM Risk-Based Corrective Action (RBCA) assessment for the project site.

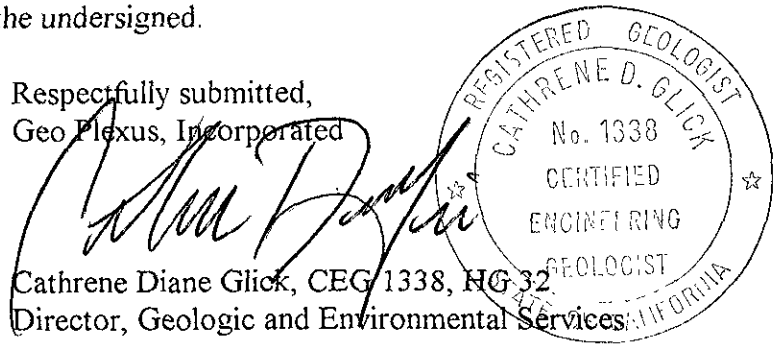
It is our opinion that the project site should be considered for closure as a "low risk" site without further investigation or remediation.

One copy of this Report should be forwarded to:

Ms. Eva Chu
Alameda County Health Care Services
Department of Environmental Health
1131 Harbor Bay Parkway, 2nd Floor
Alameda, CA 94502

It has been a pleasure to be of service to you on this project. Questions or comments regarding the attached Report should be addressed to the undersigned.

Respectfully submitted,
Geo Plexus, Incorporated



Cathrene Diane Glick, CEG 1338, HG 32
Director, Geologic and Environmental Services

1900 Wyatt Drive, Suite 1 • Santa Clara, California 95054 • Phone 408/987-0210 • FAX 408/988-0815

GOOD CHEVROLET
1630 Park Street • Phone 510/522-9221
ALAMEDA, CA 94501

January 13, 1999

Ms. Eva Chu
Alameda County Health Care Services
Department of Environmental Health
1131 Harbor Bay Parkway, 2nd Floor
Alameda, CA 94501

Dear Ms. Chu:

Enclosed is a Preliminary Remedial Risk Assessment prepared by Geo Plexus for the property at 1630 Park Street, Alameda.

Please contact me or Cathrene Glick if you have any questions.

Thank you,

JoAnn Stewart

JKS:js

Enclosure

Risk Assessment performed assuming a 10^{-4} risk. Did not pass for soil leach to GW and ~~GW~~ soil to indoor air. For latter exposure pathway, OK w/ SV results.

Good Chevrolet
1630 Park Street
Alameda, CA 94501

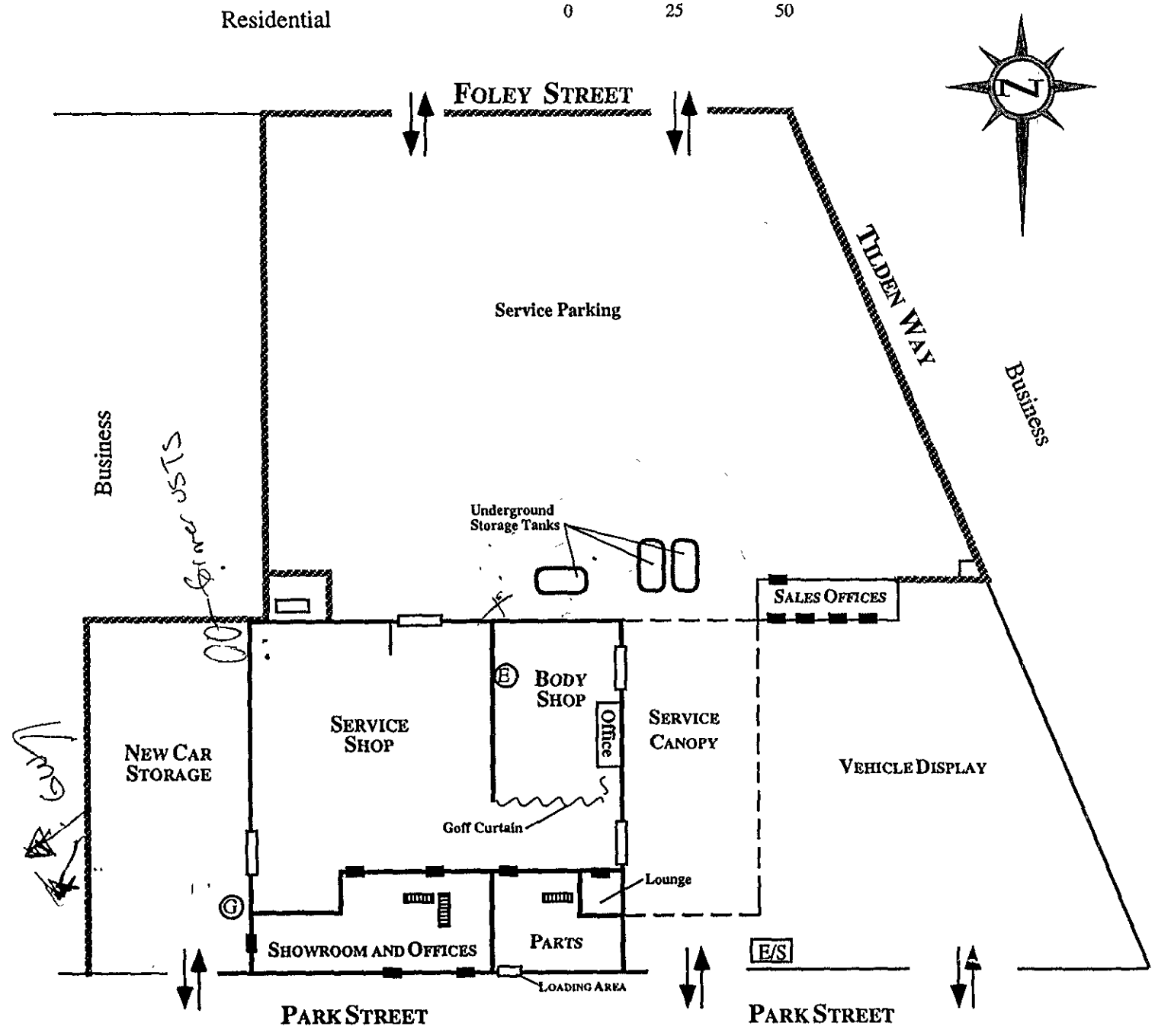
Site /Storage Map
Confidential

Map Legend

- ▲ - Fire Extinguisher
- ▬ - Stairway
- \+ - First Aid Kit
- ■ - Doorway
- ▭ - Rollup Door
- ⇄ - Vehicle Entrance
- (G) - Gas Shutoff
- (E) - Electrical Shutoff
- ▬▬ - Fence
- E/S - Evac. Assembly Pt.

Revised: November, 1996

Scale in feet (Prox.)
0 25 50



ANALYTICAL TESTING

The soil and ground water samples were submitted to and tested by McCampbell Analytical, Inc., a State of California certified laboratory. Analytical testing was scheduled and performed in accordance with the State of California, Regional Water Quality Control Board and Alameda County Department of Environmental Health Guidelines. The samples were tested for Total Petroleum Hydrocarbons as gasoline by Method GCFID 5030/8015 and Volatile Aromatic Compounds (BTEX and MTBE) by EPA Method 8020/5030. The Chain-of-Custody Form and analytical test data are attached in Appendix B.

The analytical test data for the geo-probe soil and ground water samples are summarized on Tables 1 and 2, respectfully. Table 3 summarizes the current analytical test results for the monitoring well samples, along with the results of the previous analytical testing.

TABLE 1
GEO-PROBE SOIL ANALYTICAL TEST DATA

Sample	Total Petroleum Hydrocarbons	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE
EB8-S2, 9.5-10'	2,000	8.4	83	44	210	ND
EB8-S3, 13.5-14'	18	3.2	1.2	0.47	1.7	0.10
EB9-S1, 6.5-7'	1.8	0.071	0.052	0.026	0.074	ND
EB9-S2, 9.5-10'	1,300	7.1	54	29	130	ND
EB10-S1, 8.5-9'	2,300	9.1	100	50	190	9.3
EB11-S1, 9.5-10'	3,800	8.8	190	97	510	ND
EB11-S2, 12-12.5'	13	1.1	1.6	0.47	1.4	ND
EB12-S1, 9.5-10'	300	0.95	0.59	3.5	18	ND
EB12-S2, 12-12.5'	1,300	9.4	23	35	130	6.2

Notes: Concentrations reported as Parts Per Million (mg/kg).
ND indicates that concentrations below detection limit.

TABLE 2
GEO-PROBE GROUND WATER ANALYTICAL TEST DATA

Sample	Total Petroleum Hydrocarbons	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE
EB8-WS1	25,000	2,600	3,200	780	3,600	ND<80
EB10-WS1	81,000	13,000	12,000	3,300	8,000	ND<370
EB11-WS1	49,000	6,900	6,000	2,100	4,600	ND<180
EB12-WS1	38,000	1,400	1,400	1,800	7,400	110
P1-WS1	74,000	1,100	5,800	3,800	18,000	ND<78
P2-WS1	6,800	2,200	290	310	560	ND<10
P3-WS1	220	1.9	17	10	49	ND

Notes: Concentrations reported as Parts Per Billion (ug/l).
ND indicates that concentrations below detection limit.

monitoring wells, a review of regional hydrogeologic conditions and collection and laboratory analysis of soil and groundwater samples.

BACKGROUND

Subsurface hydrocarbon contamination was initially detected at this site during removal of two underground storage tanks by Petroleum Engineering, Inc. in October 1986. One 300 gallon waste oil tank and one 500 gallon gasoline tank were removed after on-site storage was discontinued. On October 22, 1986, Blaine Technical Services collected three soil samples from the two adjacent tank pits. The gasoline tank pit was initially sampled at ten feet below surface, then excavated to a depth of 14 feet, and re-sampled. These samples were analyzed for total hydrocarbons as gasoline, and found to contain 2509 parts per million (ppm) and 1441 ppm, respectively. The waste oil tank pit was sampled at a depth of eight feet below grade, and was analyzed for total hydrocarbons as waste oil. The hydrocarbons concentration from this sample measured 57 ppm. Excavated soils were placed on site for aeration under the supervision of GTI.

SCOPE OF WORK

The purpose of this investigation was to provide a general assessment of potential hydrocarbon contamination and hydrogeologic conditions at the site. Specifically, our scope of services was as follows:

- Explore the subsurface by drilling five soil borings in the vicinity of the tank pit area; three to 20 feet below surface and two to 10 feet below surface.

- Collect soil samples at 5 foot intervals while drilling. Select soil samples for analyses of

No gasoline vapors were detected within the first 8 feet of the borings advanced across the project area; however, moderate to strong gasoline vapors were encountered in the soil borings at depths ranging from 8.5 - 12 feet below the ground surface and appeared to be confined to a medium- to coarse-grained sand lens. The analytical test data indicates that low to moderate concentrations of Total Petroleum Hydrocarbons as gasoline and Volatile Aromatic Compounds exist in the soil samples obtained from the borings as summarized on Table 2 below:

TABLE 2

SUMMARY OF SOIL BORING ANALYTICAL TEST DATA

Sample	Total Petroleum Hydrocarbons	Benzene	Toluene	Ethyl-Benzene	Total Xylenes
EB1-S2, 8.5-9'	510	0.89	10	5.8	41
EB1-S3, 11-11.5'	2,300	22	190	57	280
EB2-S2, 10-10.5'	15,000	84	710	260	1400
EB2-S3, 11.5-12'	200	4.3	15	3.9	20
EB3-S2, 10-10.5'	2,200	9.4	71	42	200
EB3-S3, 12.5-13'	610	1.2	3.2	4.5	2.9
EB4-S2, 8-8.5'	4,900	32	230	84	440
EB4-S3, 10.5-11'	7,600	60	390	130	630
EB5-S2, 9-9.5'	1,800	N.D.	22	27	140
EB5-S3, 11.5-12'	14	0.021	1.5	0.49	2.5
EB6-S2, 8.5-9'	6,800	20	230	100	590
EB7-S2, 6.5-7'	N.D.	N.D.	N.D.	N.D.	N.D.
EB7-S3, 8.5-9'	1,000	3.8	45	21	110

Notes: Concentrations reported as Parts Per Million (mg/kg).
N.D. indicates that concentrations below detection limit.

The highest concentrations of gasoline were obtained at a depth of 10-10.5 feet in Boring EB-2 located between the former tank and the former dispenser pump (see Figure 4). The remaining samples indicate that the soil contamination extends in a radial pattern (cross- and down-gradient) from the former tank area with concentrations of 1,000 parts per million in the soil in Boring EB-5 (located adjacent to the down-gradient property boundary). The large extent of the contamination appears to be a direct result of dispersion of the gasoline products with fluctuations in ground water levels of the project area. The analytical test data suggests that the soil contamination extends off-site to the adjacent property (Winner Ford) and beneath Park Street.