

GOOD CHEVROLET

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

ENVIRONMENTAL
PROTECTION
95 MAY 18 PM 12:23

cleanup

May 17, 1995

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

Re: 1630 Park Street, Alameda, CA

Dear Ms. Chu:

Enclosed please find a copy of our Quarterly Gound Water Monitoring Report and a letter from David Glick outlining our proposed workplan.

Should you have any questions, please call or write Mr. David Glick at Geo Plexus, Inc.

Thank you,

GOOD CHEVROLET

JoAnn Stewart
JoAnn Stewart

JKS:js

Enclosures



April 30, 1995

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

Subject: April, 1995 Quarterly Ground Water Report for
Good Chevrolet, 1630 Park Street, Alameda, CA.

Dear Ms. Stewart:

The attached Quarterly Ground Water Monitoring Report has been prepared to document the monitoring well sampling efforts performed at the subject site and presents the recorded ground water elevations along with the ground water sampling protocols and the results of the analytical testing performed on ground water samples collected on April 13, 1995. The report also summarizes the findings recorded throughout the past years of monitoring and presents conclusions and recommendations based on these findings.

In summary, the water samples obtained from all five monitoring wells continue to contain detectable concentrations of Total Petroleum Hydrocarbons as gasoline ranging from 82-10,000 ppb. Volatile Aromatic Compounds (Benzene, Toluene, Ethyl Benzene, and Xylenes) were also detected in the ground water samples. Monitoring Wells MW-2 and MW-5 continue to exhibit the highest concentrations of Total Petroleum Hydrocarbons and Volatile Aromatic Compounds.

Concentrations of Total Petroleum Hydrocarbons as gasoline and Volatile Aromatic Compounds recorded during the past year indicate that the existing ground water plume is "centered" down-gradient of the former underground tanks and continues to suggest that the existing source of the contamination is located on the adjacent Winner Ford Property or along the boundary between the two properties. Previous subsurface investigations identified the extent of soil contamination remaining in-place around the former tank area which correlates with the low to moderate concentrations of gasoline compounds present in the ground water in this area. This soil and ground water data is not supportive of and contradicts the suggestion that the project site is responsible for high concentrations of gasoline compounds present within the observed plume.

City of Alameda Fire Department interviews and review of historic aerial photographs did not reveal conclusive evidence for the existence of additional underground storage tanks located on the subject or adjacent property.

The next quarterly sampling event is scheduled to be performed in July, 1995. It has been a pleasure to be of service to you on this project.

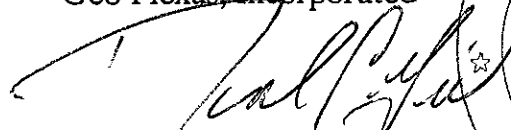
One Copy of this report should be forwarded to:

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

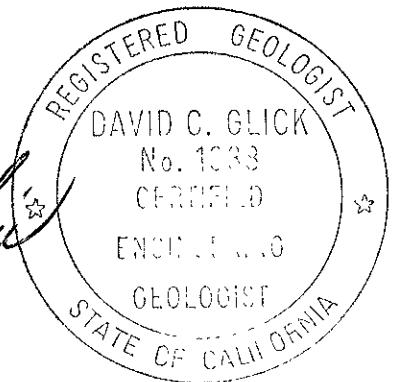
It has been a pleasure to be of service to you on this project. Questions or comments regarding the attached report should be addressed to the undersigned.

Respectfully submitted,

Geo Plexus, Incorporated



David C. Glick, CEG 1338
Director, Geological and
Environmental Services



APRIL, 1995 QUARTERLY
GROUND WATER MONITORING REPORT
for
GOOD CHEVROLET
1630 PARK STREET
ALAMEDA, CALIFORNIA

April 30, 1995

Project C92020

APRIL, 1995 QUARTERLY
GROUND WATER MONITORING REPORT
for
GOOD CHEVROLET
1630 PARK STREET
ALAMEDA, CALIFORNIA

INTRODUCTION

The project site is located at 1630 Park Street in the City of Alameda, in Alameda County, California as indicated on Figure 1. The site is the location of an automobile dealership and service center.

A 300 gallon waste oil storage tank and a 500 gallon underground gasoline storage tank were reportedly removed from the property by Petroleum Engineering, Inc. in October, 1986. A subsurface investigation including installation of three ground water monitoring wells (see Figure 2) was performed by Groundwater Technology, Inc. in January, 1987 (Groundwater Technology, Inc. Report Dated April 29, 1987).

The three monitoring wells have been monitored to evaluate the ground water conditions and to establish the direction(s) of ground water flow at the project site. The monitoring determined that the direction of flow beneath the site varies from a northwesterly direction to a northeasterly direction throughout the year. The quarterly sampling has also detected Total Petroleum Hydrocarbons as gasoline and Volatile Aromatic Compounds at various concentrations throughout the year.

A supplemental investigation was performed which included advancing 7 soil borings across the parking area of the property. This investigation identified high concentrations of Total Petroleum Hydrocarbons as gasoline and Volatile Aromatic Compounds (Benzene, Toluene, Ethyl Benzene, and Xylene) in the immediate vicinity of the former underground storage tanks at depths of 5-12 feet below the ground surface. The borings identified concentrations of Total Petroleum Hydrocarbons as gasoline as high as 15,000 parts per million (ppm) decreasing to 1,000 ppm within 30-feet from the former tanks (lateral direction) and decreasing to 1,800 ppm at the down-gradient property boundary.

Two additional ground water monitoring wells were installed in April, 1994 to further characterize the down-gradient water conditions. The findings of the initial ground water samples indicated a significant increase in concentrations of Total Petroleum Hydrocarbons as gasoline and Volatile Aromatic Compounds down-gradient of the property suggesting that additional sources of contamination exists. The ground water monitoring suggests the existence of an off-site and down-gradient source of the gasoline constituents.

GRADIENT SURVEY

The elevation of the top of the casing of the monitoring wells at the site were established during previous investigations with reported vertical control of 0.01 foot. Ground water elevations were measured in each well to the nearest 0.01 foot with an electronic water level meter (prior to purging) to monitor the variations in the direction and gradient of ground water flow beneath the site.

Ground water elevations recorded suggest that the ground water flow is to the north as indicated on Figure 2. The ground water gradient was determined to be 0.0286 ft/ft (also see Figure 2). The direction of ground water flow places Monitoring Wells MW-2 and MW-5 in the "down-gradient" direction from the former tanks.

MONITORING WELL SAMPLING

Free product measurements were obtained for each monitoring well at the time of sample acquisition utilizing a teflon bailer lowered into the well to obtain a water sample. The bailer was used to collect a water sample to observe the presence of hydrocarbon odors, visible sheen, or free product. Free product or visible sheens were not observed in the initial bailer water samples or following purging of the wells from Monitoring Wells MW-1 through MW-5; however, the water samples obtained from the wells MW-1, MW-2, and MW-5 exhibited gasoline odors. Monitoring Well MW-5 exhibited significant odors as purging continued.

Prior to sampling the monitoring wells, four to six well volumes were purged from each well through the use of a teflon bailer. Electrical conductivity, temperature, and pH of the ground water were recorded throughout the purging process. The purging activities continued until the electrical conductivity, temperature, and pH of the discharged water stabilized and the water appeared free of suspended solids. The purge logs are included as Appendix A.

Water samples for analytical testing were obtained through the use of a teflon bailer and were collected in sterilized glass vials with Teflon lined screw caps. The samples were immediately sealed in the vials and properly labeled including: the date, time, sample location, project number, and indication of any preservatives (HCl) added to the sample. The samples were placed on ice immediately for transport to the laboratory under chain-of-custody documentation.

The water obtained from the monitoring wells during the purging and sampling activities was contained on-site pending receipt of the laboratory test results.

ANALYTICAL TESTING

The 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 Aromatics by EPA Method 8020/5030. The analytical test data, along with the Chain-of-Custody Form are presented in Appendix B.

The analytical test results for the ground water samples obtained for this sampling event detected reportable quantities of Total Petroleum Hydrocarbons as gasoline and Volatile Aromatics (BTXE) for the samples from all five monitoring wells. Table 1 summarizes the current analytical test results along with the results of the previous analytical testing.

TABLE 1
SUMMARY OF GROUND WATER ANALYTICAL TEST DATA

<u>Date Sampled</u>	<u>Total Petroleum Hydrocarbons</u>	<u>Benzene</u>	<u>Toluene</u>	<u>Ethyl-Benzene</u>	<u>Total Xylenes</u>
<u>Monitoring Well MW-1</u>					
1-21-87 (1)	21,020	1,148	8,627	1,792	6,012
1-11-89 (1)	1,400	74	10	13	5
7-12-89 (1)	1,200	470	49	45	33
4-09-91 (2)	850	260	10	15	12
7-14-92 (3)	13,000	2,300	1,200	1,200	1,200
10-7-92 (3)	3,600	1,600	80	120	120
1-11-93 (3)	1,200	410	16	23	19
4-23-93 (3)	2,200	720	180	82	150
7-08-93 (3)	3,200	1,200	110	97	100
10-15-93 (3)	3,700	1,400	43	94	36
1-25-94 (3)	1,600	680	16	41	35
4-28-94 (3)	6,100	1,900	380	250	340
7-27-94 (3)	6,000	1,800	510	220	450
10-27-94 (3)	3,000	1,100	79	82	87
1-26-95 (3)	1,600	660	100	82	87
4-13-95 (3)	3,800	1,200	270	120	260

TABLE 1 (Continued)
SUMMARY OF GROUND WATER ANALYTICAL TEST DATA

<u>Date Sampled</u>	<u>Total Petroleum Hydrocarbons</u>	<u>Benzene</u>	<u>Toluene</u>	<u>Ethyl-Benzene</u>	<u>Total Xylenes</u>
<u>Monitoring Well MW-2</u>					
1-21-87 (1)	5,018	386	1,981	285	1,432
1-11-89 (1)	10,000	3,000	410	240	190
7-12-89 (1)	7,600	2,700	540	250	320
4-09-91 (2)	4,900	910	210	130	200
7-14-92 (3)	13,000	4,400	1,500	610	1,100
10-7-92 (3)	11,000	5,200	1,500	500	1,200
1-11-93 (3)	17,000	940	1,100	480	930
4-23-93 (3)	52,000	13,000	8,400	1,700	5,300
7-08-93 (3)	6,400	2,500	470	280	530
10-15-93 (3)	17,000	3,900	870	500	940
1-25-94 (3)	16,000	5,400	1,140	640	1,500
4-28-94 (3)	15,000	4,000	910	480	1,200
7-27-94 (3)	18,000	6,000	760	630	1,600
10-27-94 (3)	9,500	2,700	230	320	640
1-26-95 (3)	5,900	1,900	290	230	500
4-13-95 (3)	10,000	3,300	620	360	930
<u>Monitoring Well MW-3</u>					
1-21-87 (1)	10,287	1,428	3,281	610	2,761
1-11-89 (1)	5,300	1,800	340	150	160
7-12-89 (1)	7,800	3,100	900	300	480
4-09-91 (2)	9,400	1,400	730	200	510
7-14-92 (3)	17,000	3,500	390	390	260
10-7-92 (3)	9,200	4,300	470	390	610
1-11-93 (3)	2,000	740	29	58	28
4-23-93 (3)	6,500	2,600	280	260	190
7-08-93 (3)	5,200	2,100	260	250	180
10-15-93 (3)	11,000	3,500	580	430	370
1-25-94 (3)	6,200	2,500	270	160	28
4-28-94 (3)	5,300	1,700	190	210	180
7-27-94 (3)	5,900	2,000	360	260	330
10-27-94 (3)	8,000	2,200	580	260	470
1-26-95 (3)	3,700	1,200	150	150	190
4-13-95 (3)	4,000	1,400	200	180	210

TABLE 1 (Continued)
SUMMARY OF GROUND WATER ANALYTICAL TEST DATA

<u>Date Sampled</u>	<u>Total Petroleum Hydrocarbons</u>	<u>Benzene</u>	<u>Toluene</u>	<u>Ethyl-Benzene</u>	<u>Total Xylenes</u>
<u>Monitoring Well MW-4</u>					
4-28-94 (3)	190	3.8	2.9	2.1	3.1
7-27-94 (3)	180	15	9.2	7.6	28
10-27-94 (3)	130	8.6	6.6	4.5	17
1-26-95 (3)	110	6.5	1.2	1.8	11
4-13-95 (3)	82	3.9	N.D.	N.D.	2.5
<u>Monitoring Well MW-5</u>					
4-28-94 (3)	30,000	4,000	3,000	810	3,500
7-27-94 (3)	9,300	2,000	800	290	940
10-27-94 (3)	15,000	2,700	1,300	420	1,100
1-26-95 (3)	7,900	2,100	680	240	860
4-13-95 (3)	7,900	2,400	580	340	630

Note: (1) Concentrations reported by Groundwater Technology, Inc.
 (2) Concentrations reported by Environmental Science & Engineering, Inc.
 (3) Samples obtained and reported by Geo Plexus, Inc.

SUMMARY OF FINDINGS

Ground water elevations recorded during the sampling suggest that ground water is at a depth of 6-9 feet below the ground surface and flows in a northerly direction at a gradient of 0.0286 ft/ft. This flow direction is consistent with the variable northwest to northeast directions recorded for the site. The flow directions establishes that Monitoring Wells MW-2 and MW-5 are located in the "down-gradient" direction from the location of the former underground storage tanks.

Total Petroleum Hydrocarbons as gasoline concentrations ranged from 82 parts per billion (ppb) in Monitoring Well MW-4 to 10,000 ppb at Monitoring Well MW-2. Figures 3 and 4 illustrate the distribution of Total Petroleum Hydrocarbons as gasoline and Benzene in the ground water based on current analytical test data.

Figure 5 illustrates a correlation between recorded ground water elevations and Total Petroleum Hydrocarbons as gasoline concentrations in the ground water. As indicated, Monitoring Wells MW-1 and MW-3 continue to represent the on-site contribution to the observed ground water plume. Monitoring Wells MW-2 and MW-5 illustrate correlations which suggests that the current source of the plume is located between these two wells.

City of Alameda Fire Department personnel were contacted to interview the inspection records for the adjacent Winner Ford property. This interview identified that the adjacent property does maintain one underground gasoline tank which is located remote from the observed plume and records did not reveal evidence for the existence of additional underground storage tanks located on the subject or adjacent property.

Historic aerial photographs from 1950 through 1994 were obtained from Pacific Aerial Surveys in Oakland, California. The photographs did not reveal conclusive evidence for the existence of additional underground storage tanks located on the subject or adjacent property; however, a storage building (?) existed along the southwest side of the adjacent property (marked by existing concrete slab adjacent to the structure).

Additional investigation including installation of additional monitoring wells located on, and down-gradient of, the Winner Ford property would be required to further define the observed ground water plume and to further define the source(s) of the contamination.

RECOMMENDATIONS

It is recommended that the existing ground water monitoring wells located at the project site continue to be monitored and sampled quarterly in accordance with the established/approved quarterly monitoring program. The next sampling event is scheduled for July, 1995.

LIMITATIONS

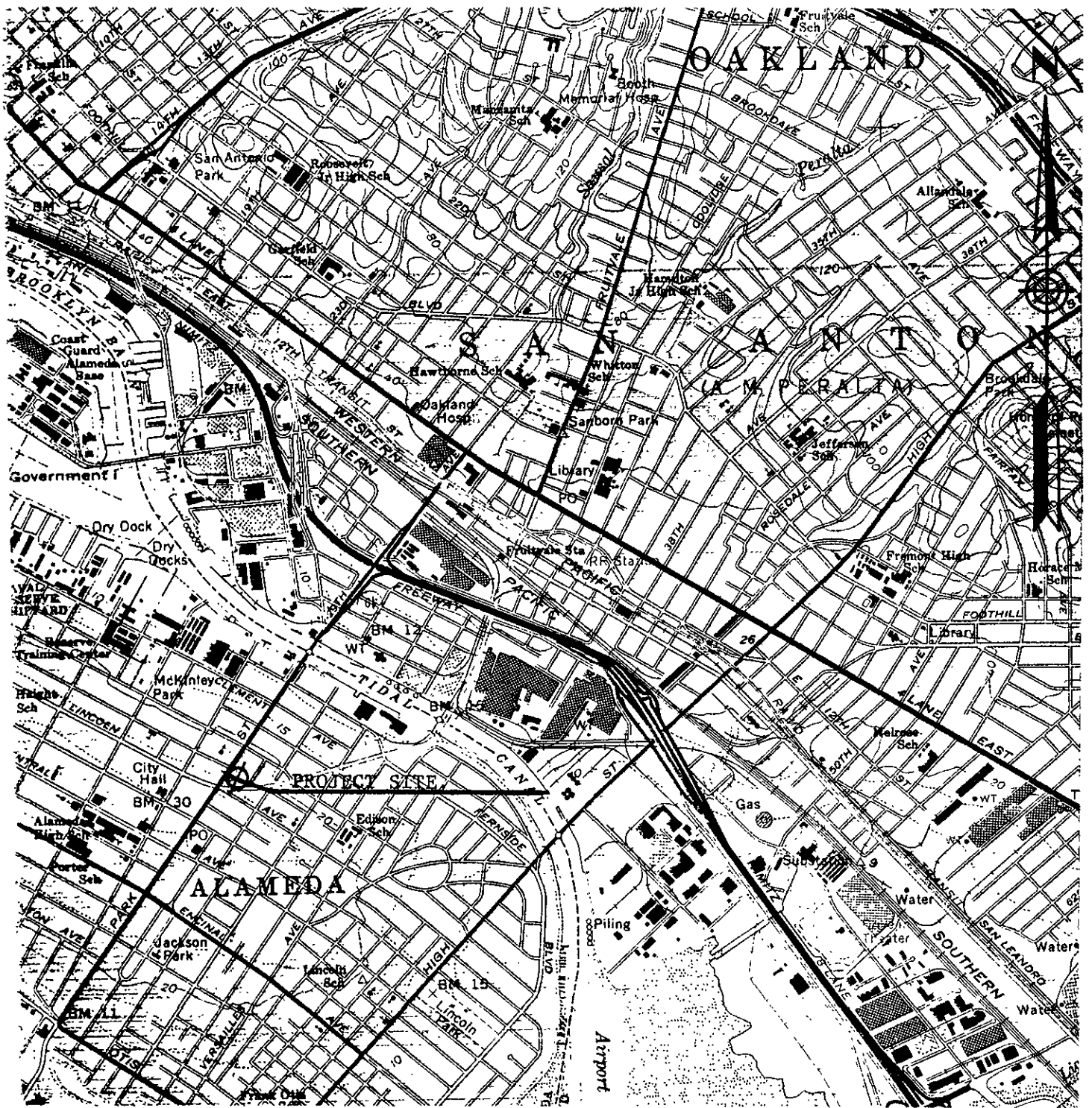
We have only observed a small portion of the pertinent subsurface and ground water conditions present at the site. The conclusions and recommendations made herein are based on the assumption that subsurface and ground water conditions do not deviate appreciably from those described in the reports and observed during the field investigation.

Geo Plexus, Incorporated provides consulting services in the fields of Geology and Engineering Geology performed in accordance with presently accepted professional practices. Professional judgments presented herein are based partly on information obtained from review of published documents, partly on evaluations of the technical information gathered, and partly on general experience in the fields of geology and engineering geology.

No attempt was made to verify the accuracy of the published information prepared by others used in preparation of this assessment report.

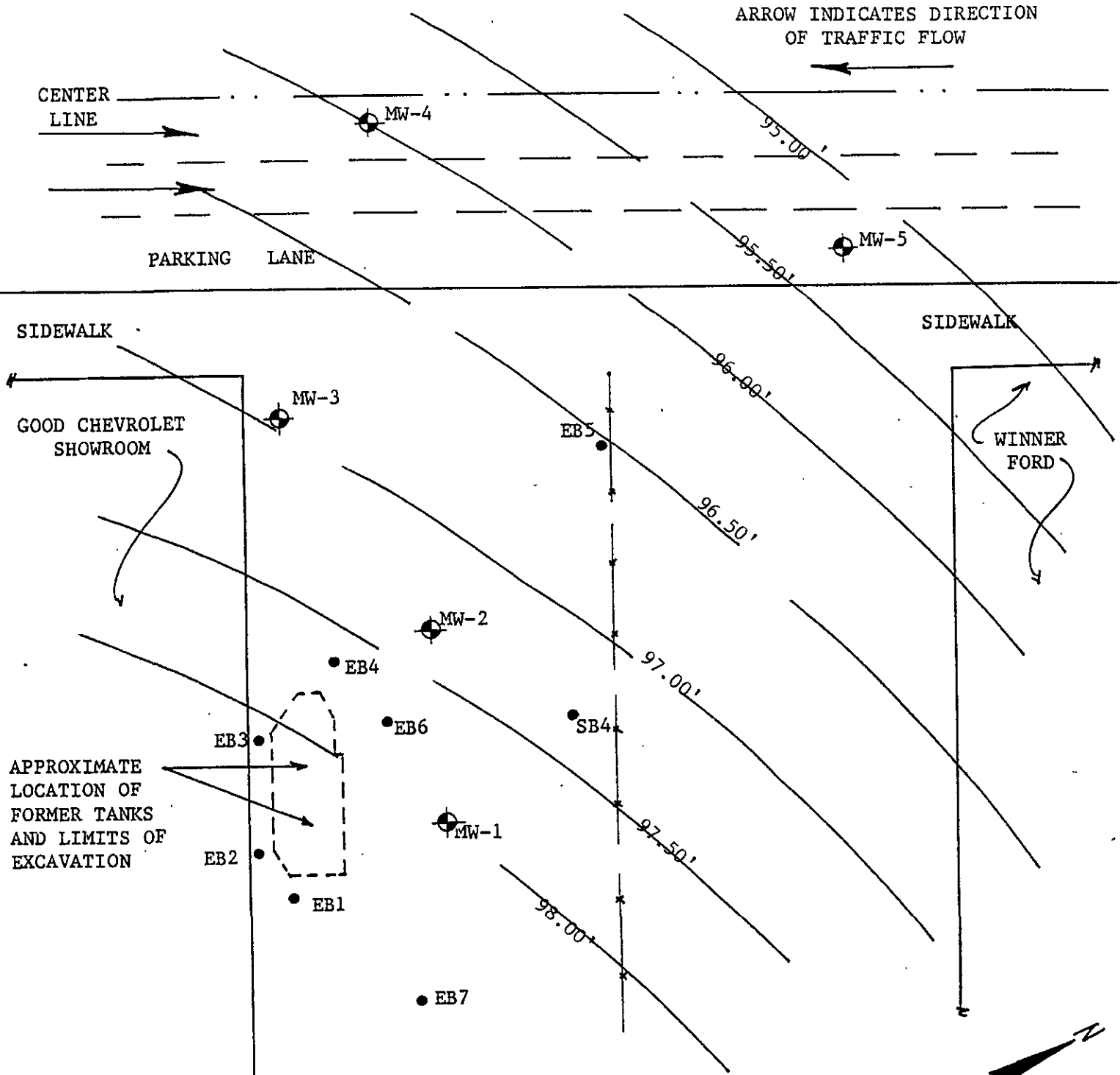
If you have questions regarding the findings, conclusions, or recommendations contained in this report, please contact us. We appreciate the opportunity to serve you.

Geo Plexus, Incorporated



GOOD CHEVROLET		
DATE	SCALE	DRAWN BY
10-9-92	1"=2000'	deg
LOCATION MAP		
		Figure 1

ARROW INDICATES DIRECTION OF TRAFFIC FLOW



APPROXIMATE LOCATION OF FORMER TANKS AND LIMITS OF EXCAVATION

	<u>CASING ELEVATION</u>	<u>DEPTH TO WATER</u>	<u>WATER ELEVATION</u>
--	-------------------------	-----------------------	------------------------

MW-1	104.76	6.76	98.00
MW-2	104.86	7.40	97.46
MW-3	104.52	7.64	96.88
MW-4	104.86	8.80	96.06
MW-5	103.62	8.48	95.14

Note: Casing and ground water elevations based on Temporary Bench Mark (TBM) with an assumed elevation of 100.00 feet.

GOOD CHEVROLET		
DATE 4/13/95	SCALE 1"=20'	DRAWN BY dcg
GROUND WATER GRADIENT MAP		
		Figure 2

ARROW INDICATES DIRECTION OF TRAFFIC FLOW

CENTER LINE

PARKING LANE

SIDEWALK

GOOD CHEVROLET SHOWROOM

APPROXIMATE LOCATION OF FORMER TANKS AND LIMITS OF EXCAVATION

SIDEWALK

WINNER FORD

MW-4
100 ppb

1,000 ppb

2,000 ppb

4,000 ppb

6,000 ppb

8,000 ppb

10,000 ppb ?

MW-3

EB5

MW-2

EB4

EB6

SB4

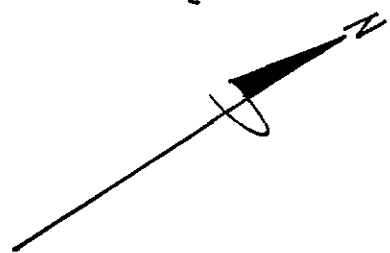
EB3

MW-1

EB2

EB1

EB7



GOOD CHEVROLET		
DATE 4/13/95	SCALE 1"=20'	DRAWN BY dcg
TPHgas CONCENTRATIONS		
		Figure 3

ARROW INDICATES DIRECTION OF TRAFFIC FLOW

CENTER LINE

PARKING LANE

SIDEWALK

SIDEWALK

GOOD CHEVROLET SHOWROOM

WINNER FORD

APPROXIMATE LOCATION OF FORMER TANKS AND LIMITS OF EXCAVATION

100 ppb

1,000 ppb

1,500 ppb

2,000 ppb

2,500 ppb

3,000 ppb

MW-4

MW-3

MW-3

MW-2

MW-1

EB3

EB2

EB1

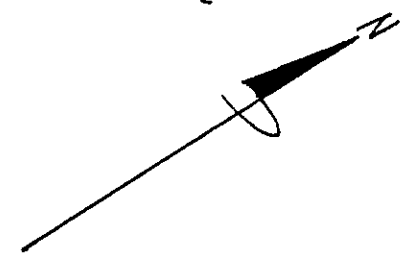
EB4

EB6

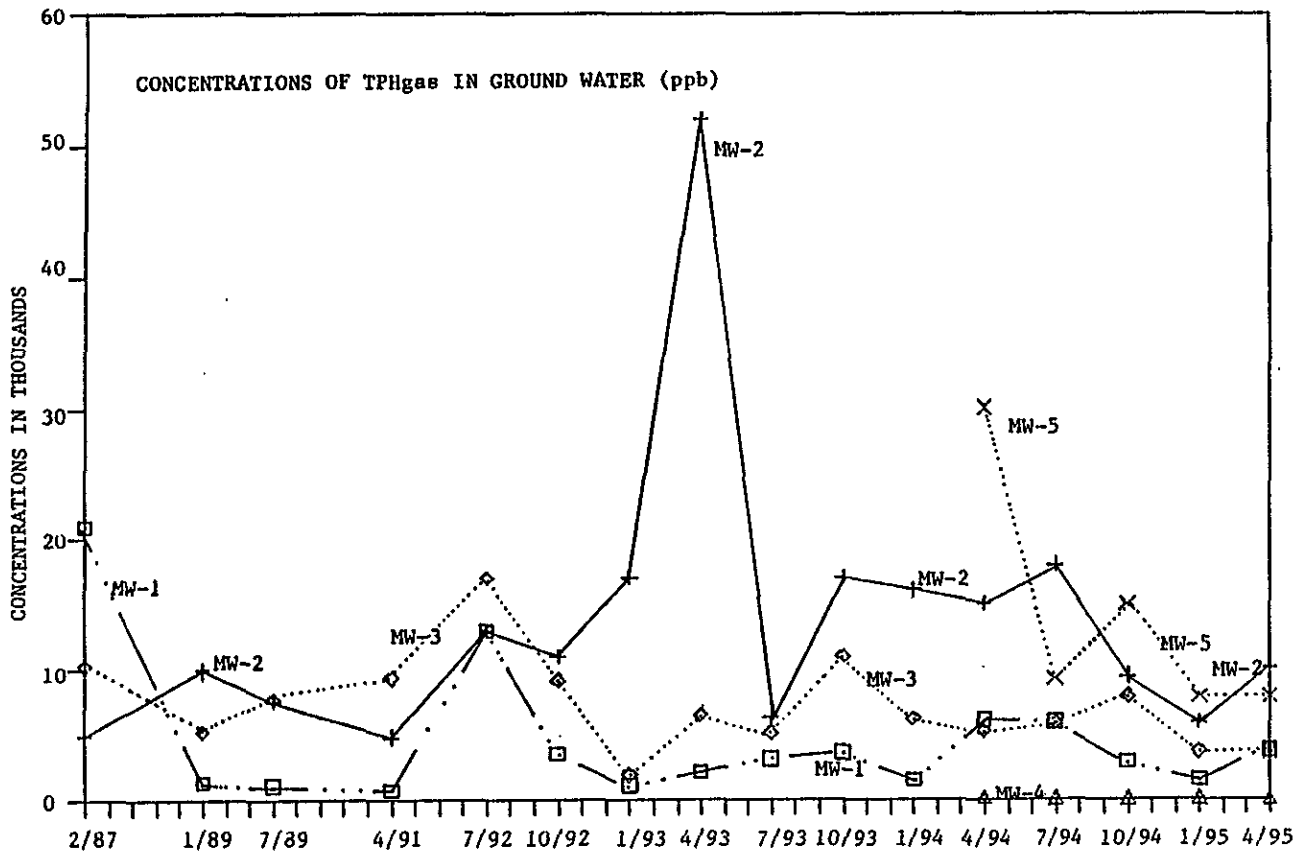
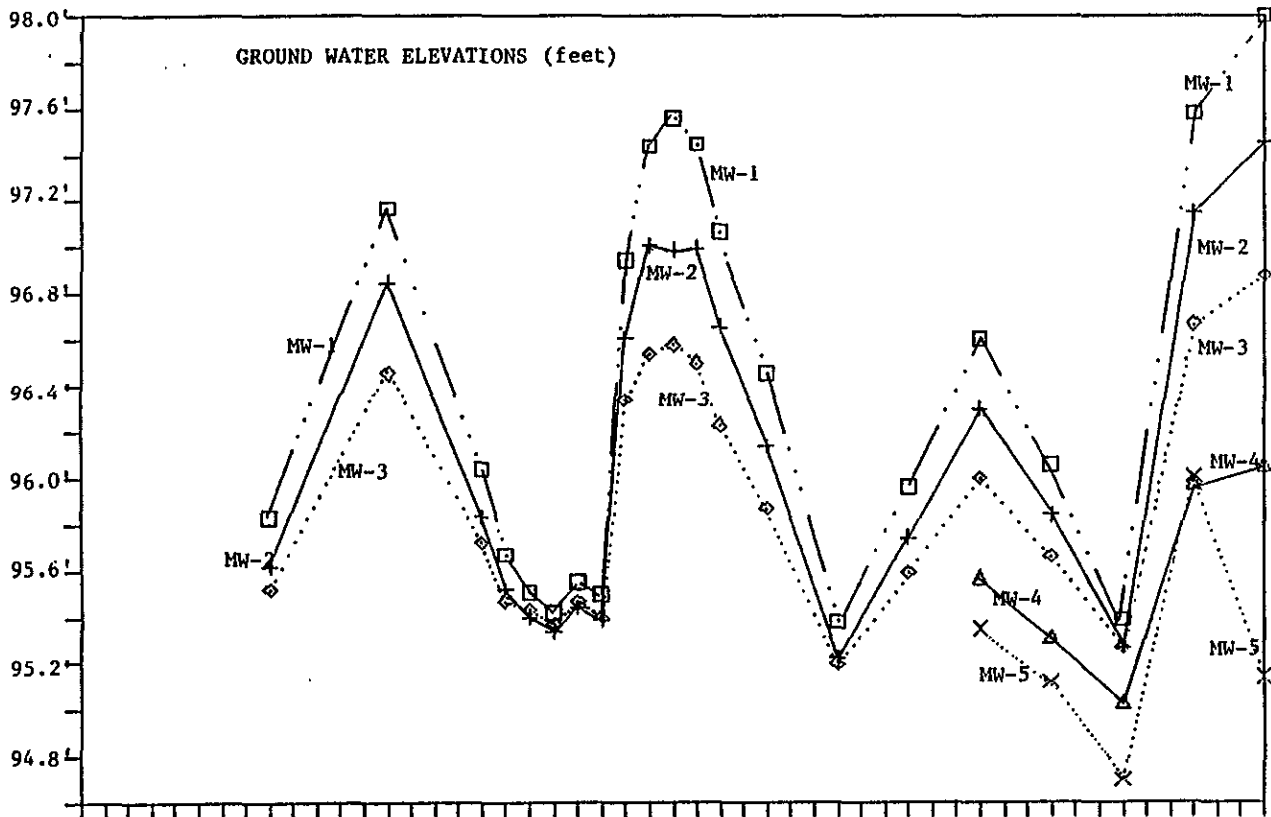
EB7

EB5

SB4



GOOD CHEVROLET		
DATE 4/13/95	SCALE 1"=20'	DRAWN BY dgc
BENZENE CONCENTRATIONS		
		Figure 4



GOOD CHEVROLET		
DATE 4/30/95	SCALE n/a	DRAWN BY dcg
GROUND WATER/CONCENTRATION CHART		
		Figure 5

Quarterly Ground Water Sampling Report
Good Chevrolet
Alameda, California

April 30, 1995

APPENDIX A
WELL PURGE LOGS

Geo Plexus, Incorporated

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

WATER SAMPLE LOG

Sample Number MW1Job Number: C92020 Dated Sampled: 4-13-95Project Name: GOOD CITEURDET

Sample Location: _____

Person Sampling: DAWeather Conditions: Cloudy

Observations/Comments: _____

QUALITY ASSURANCE

Sampling method: Teflon BailerMethod to measure water level: SOLWISTPump lines or bailer ropes were decontaminated: NEWMethod of cleaning Bailer/Pump: ALCONOX BATH DI-WATER RINSEpH Meter No: _____ Calibrated 4/12/95Specific Conductance Meter No: _____ Calibrated 4/12/95

IMMISCIBLE LAYER

Top N/A Bottom _____ Sampling/Detection Method Bailer

SAMPLING MEASUREMENTS

Well Identification MW1 Depth to Water 6.76 Well Depth _____

Groundwater Elevation _____ Ref. Pt. Elev. _____

Ref. Pt. Description _____

Measurement Technique _____

Time	Discharge (Gallons)	pH	Temp. (°C)	x1000 Conductivity	Color	Odor	Turbidity
	1	7.04	63.1	0.38	Clear	NONE	
	2	6.90	62.9	0.50	}	}	
	4	6.87	62.9	0.68			
	6	6.91	62.4	0.78			
	8	6.88	62.3	0.78			

SAMPLING DATA

Begin Purge _____ End Purge _____ Pumping Rate _____ Total Volume Pumped 89mlSampling Equipment/Procedure Teflon BailerContainers Acidified 40 ml vialsSample Storage Method cooler @ 4°C

Constituents and Parameters _____

WATER SAMPLE LOG

Sample Number MW-2

Job Number: C92020 Dated Sampled: 4-13-95
 Project Name: GOOD CITIROLET
 Sample Location: _____
 Person Sampling: DG
 Weather Conditions: CLOUDY
 Observations/Comments: _____

QUALITY ASSURANCE

Sampling method: TEFLON BAILER
 Method to measure water level: SOLWIST

Pump lines or bailer ropes were decontaminated: NEW
 Method of cleaning Bailer/Pump: ALCONOX BATH DI-WATER RINSE
 pH Meter No: _____ Calibrated 4/12/95
 Specific Conductance Meter No: _____ Calibrated 4/12/95

IMMISCIBLE LAYER

Top N/A Bottom _____ Sampling/Detection Method BAILER

SAMPLING MEASUREMENTS

Well Identification MW2 Depth to Water 7.40 Well Depth _____
 Groundwater Elevation _____ Ref. Pt. Elev. _____

Ref. Pt. Description _____
 Measurement Technique _____

Time	Discharge (Gallons)	pH	Temp. (°C)	x1000 Conductivity	Color	Odor	Turbidity
	2	6.94	63.8	0.91	CLEAR	NONE	
	4	6.95	63.3	0.94	↓	↓	
	6	6.89	62.8	0.96	MURKY	↓	
	8	6.89	63.3	0.97	↓	↓	

SAMPLING DATA

Begin Purge _____ End Purge _____ Pumping Rate _____ Total Volume Pumped 89AC
 Sampling Equipment/Procedure TEFLON BAILER
 Containers ACIDIFIED 40 ml VOALS
 Sample Storage Method COOLER @ 3-5°C
 Constituents and Parameters _____

WATER SAMPLE LOG

Sample Number MW-3

Job Number: C92020 Dated Sampled: 4-13-95
 Project Name: GOOD CHEVROLET
 Sample Location: _____
 Person Sampling: DCA
 Weather Conditions: cloudy
 Observations/Comments: _____

QUALITY ASSURANCE

Sampling method: TEFLON BAILER
 Method to measure water level: SOUND

Pump lines or bailer ropes were decontaminated: NEW
 Method of cleaning Bailer/Pump: ALCONOX BATH DI-WATER RINSE
 pH Meter No: _____ Calibrated 4/12/95
 Specific Conductance Meter No: _____ Calibrated 4/12/95

IMMISCIBLE LAYER

Top N/A Bottom _____ Sampling/Detection Method BALER

SAMPLING MEASUREMENTS

Well Identification MW 3 Depth to Water 7.64 Well Depth _____
 Groundwater Elevation _____ Ref. Pt. Elev. _____

Ref. Pt. Description _____
 Measurement Technique _____

Time	Discharge (Gallons)	pH	Temp. (°C)	x1000 Conductivity	Color	Odor	Turbidity
	1	6.30	66.4	0.57	clear	NONE	
	2	6.50	65.0	0.53	↓	↓	
	4	6.70	63.9	0.60	yellow	↓	
	6	6.76	63.7	0.63	↓	↓	
	8	6.86	63.4	0.68	↓	↓	

SAMPLING DATA

Begin Purge _____ End Purge _____ Pumping Rate _____ Total Volume Pumped 8gal
 Sampling Equipment/Procedure TEFLON BAILER
 Containers 40 mL ACIDIFIED VIALS
 Sample Storage Method COOLING @ 3-5°C
 Constituents and Parameters _____

WATER SAMPLE LOG

Sample Number MW-4Job Number: C92020 Dated Sampled: 4-13-95Project Name: GOOD CHEVROLET

Sample Location: _____

Person Sampling: DCAWeather Conditions: Cloudy

Observations/Comments: _____

QUALITY ASSURANCE

Sampling method: TEFLON BAIERMethod to measure water level: SOLINISTPump lines or bailer ropes were decontaminated: NEWMethod of cleaning Bailer/Pump: ALCONOX BATH DI-WATER RINSEpH Meter No: _____ Calibrated 4/12/95Specific Conductance Meter No: _____ Calibrated 4/12/95

IMMISCIBLE LAYER

Top N/A Bottom _____ Sampling/Detection Method BAIER

SAMPLING MEASUREMENTS

Well Identification MW-4 Depth to Water 880 Well Depth _____

Groundwater Elevation _____ Ref. Pt. Elev. _____

Ref. Pt. Description _____

Measurement Technique _____

Time	Discharge (Gallons)	pH	Temp. (°C)	x1000 Conductivity	Color	Odor	Turbidity
	1	6.29	72.3	0.73	CLEAR	NONE	
	2	6.94	70.1	0.69	↓	↓	
	3	7.02	68.9	0.68			
	5	7.01	67.7	0.67	↓	↓	
	6	7.01	67.5	0.66	yellow		
	8	7.01	67.5	0.66	↓	↓	

SAMPLING DATA

Begin Purge _____ End Purge _____ Pumping Rate _____ Total Volume Pumped 89ALSampling Equipment/Procedure TEFLON BAIERContainers ACIDIFIED 40 ml VOASSample Storage Method COOLER @ 3-5°C

Constituents and Parameters _____

WATER SAMPLE LOG

Sample Number MW-5Job Number: C92020 Dated Sampled: 4-13-95Project Name: GOOD CHEVROLET

Sample Location: _____

Person Sampling: DLAWeather Conditions: CLOUDY

Observations/Comments: _____

QUALITY ASSURANCE

Sampling method: Teflon BailerMethod to measure water level: SOLINISTPump lines or bailer ropes were decontaminated: NEWMethod of cleaning Bailer/Pump: ALCOHOL BATH DI-WATER RINSEpH Meter No: _____ Calibrated 4/12/95Specific Conductance Meter No: _____ Calibrated 4/12/95

IMMISCIBLE LAYER

Top N/A Bottom _____ Sampling/Detection Method Bailer

SAMPLING MEASUREMENTS

Well Identification MW-5 Depth to Water 8.48 Well Depth _____

Groundwater Elevation _____ Ref. Pt. Elev. _____

Ref. Pt. Description _____

Measurement Technique _____

Time	Discharge (Gallons)	pH	Temp. (°C)	x1000 Conductivity	Color	Odor	Turbidity
	1	6.84	66.1	0.81	clear		
	2	7.06	66.2	0.81	muddy	STRONG ODS	
	3	7.12	66.1	0.80			
	5	7.05	65.6	0.82			
	8	7.05	66.2	0.82		STRONG (?)	

SAMPLING DATA

Begin Purge _____ End Purge _____ Pumping Rate _____ Total Volume Pumped 89 galSampling Equipment/Procedure Teflon BailerContainers Acidified 40 mL VOA'sSample Storage Method COOLER @ 3-5°C

Constituents and Parameters _____

Quarterly Ground Water Sampling Report
Good Chevrolet
Alameda, California

April 30, 1995

APPENDIX B
CHAIN-OF-CUSTODY FORM
AND
ANALYTICAL TEST DATA

Geo Plexus, Incorporated

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

3254 AGPX 167

PROJECT NUMBER		PROJECT NAME				Number of Cntrs	Type of Containers	Type of Analysis										Condition of Samples	Initial		
C92020		Good Chevrolet																			
Send Report Attention of:			Report Due		Verbal Due																
DAVID GLICK			1 1		1 1																
Sample Number	Date	Time	Comp	Grab	Station Location																
+ MW1-WS1A1B	4/3/95	1300		/	MON WELL 1	2 ea	Acidified 40ml VOA	/													51637
+ MW2-WS1A1B		1330		/	MON WELL 2			/													51638
+ MW3-WS1A1B		1230		/	MON WELL 3			/													51639
+ MW4-WS1A1B		1030		/	MON WELL 4			/													51690
+ MW5-WS1A1B		1135		/	MON WELL 5			/													51691

Relinquished by: (Signature) <i>[Signature]</i>	Date/Time 4/14/95 8:55	Received by: (Signature) <i>[Signature]</i>	Date/Time 4/14 8:55
Relinquished by: (Signature) <i>DALE BETTEL</i>	Date/Time 4/14 12:00	Received by: (Signature) <i>Wade Pavia</i>	Date/Time 4-14-95 12:00
Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time

Remarks: STANDARD TURNAROUND

VOIS D & G / VOIS / OTHER

ICE/F GOOD CONDITION HEAD SPACE ABSENT PRESERVATIVE APPROPRIATE CONTAINERS

Geo Plexus, Inc. 1900 Wyatt Drive, # 1 Santa Clara, Ca. 95054	Client Project ID: # C92020; Good Chevrolet	Date Sampled: 04/13/95
	Client Contact: David Glick	Date Received: 04/14/95
	Client P.O.:	Date Extracted: 04/14-04/15/95
		Date Analyzed: 04/14-04/15/95

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline*, with BTEX*
 EPA methods 5030, modified 8015, and 8020 or 602; California RWQCB (SF Bay Region) method GCFID(5030)

Lab ID	Client ID	Matrix	TPH(g) ⁺	Benzene	Toluene	Ethylbenzene	Xylenes	% Rec. Surrogate
51687	MW1-WS1A	W	3800,a	1200	270	120	260	97
51688	MW2-WS1A	W	10,000,a	3300	620	360	930	103
51689	MW3-WS1A	W	4000,a	1400	200	180	210	109
51690	MW4-WS1A	W	82,f,a	3.9	ND	ND	2.5	97
51691	MW5-WS1A	W	7900,a	2400	500	340	630	98
Reporting Limit unless otherwise stated; ND means not detected above the reporting limit		W	50 ug/L	0.5	0.5	0.5	0.5	
		S	1.0 mg/kg	0.005	0.005	0.005	0.005	

* water and vapor samples are reported in ug/L, soil samples in mg/kg, and all TCLP extracts in mg/L

cluttered chromatogram; sample peak coelutes with surrogate peak

+ The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified gasoline is significant; b) heavier gasoline range compounds are significant(aged gasoline?); c) lighter gasoline range compounds (the most mobile fraction) are significant; d) gasoline range compounds having broad chromatographic peaks are significant; biologically altered gasoline?; e) TPH pattern that does not appear to be derived from gasoline (?); f) one to a few isolated peaks present; g) strongly aged gasoline or diesel range compounds are significant; h) lighter than water immiscible sheen is present; i) liquid sample that contains greater than ~ 5 vol. % sediment; j) no recognizable pattern.

QC REPORT FOR HYDROCARBON ANALYSES

Date: 04/14-04/15/95

Matrix: Water

Analyte	Concentration (ug/L)			Amount Spiked	% Recovery		
	Sample	MS	MSD		MS	MSD	RPD
TPH (gas)	0.0	86.9	88.0	100	86.9	88.0	1.3
Benzene	0	9.1	9.4	10	91.0	94.0	3.2
Toluene	0	9	9.4	10	90.0	94.0	4.3
Ethyl Benzene	0	8.8	9.3	10	88.0	93.0	5.5
Xylenes	0	27.3	28.7	30	91.0	95.7	5.0
TPH (diesel)	0	142	142	150	95	95	0.3
TRPH (oil & grease)	N/A	N/A	N/A	N/A	N/A	N/A	N/A

$$\% \text{ Rec.} = (\text{MS} - \text{Sample}) / \text{amount spiked} \times 100$$

$$\text{RPD} = (\text{MS} - \text{MSD}) / (\text{MS} + \text{MSD}) \times 2 \times 100$$