

November 4, 1992

921107-6 PM 1:40

Alameda County Health Care Services Agency
Dept. of Environmental Health
Hazardous Materials Division
80 Swan Way, Room 200
Oakland, California 94621


RE: 3234 Castro Valley
Blvd., Castro Valley,
California

Dear Scott:

Enclosed please find a copy of the latest Ground Water Report, dated October 26, 1992 from Geo Plexus, Inc.

We are proceeding with the preparation of the final report per your letter dated August 6, 1992.

Sincerely,



Muriel (Mitzi) Stockel
3461 Almosta Rd.
Placerville, CA 95667
916-626-5102

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GeoPlexus, Inc.

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

9207 10 26 1992

October 26, 1992
Project C92017

Mrs. Mitzi Stockel
3461 Almosta Road
Placerville, CA 94667

Subject: October, 1992 Semiannual Ground Water Sampling Report for
Stockel Property
3234 Castro Valley Blvd
Castro Valley, California


Dear Mitzi:

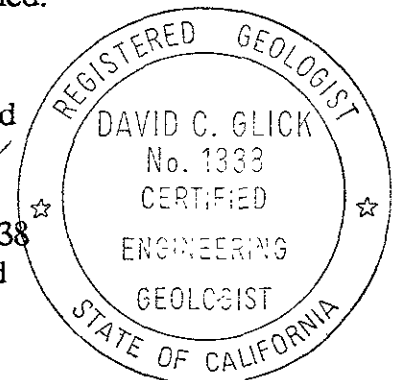
As requested and authorized, the attached Semiannual Ground Water Sampling Report has been prepared to document the monitoring well sampling efforts performed at the subject site. The report presents the sampling protocol, recorded ground water elevations, and results of the analytical testing performed on the ground water samples collected on October 9, 1992. In summary, Monitoring Wells MW-1, MW-3, and MW-4 continue to remain below detectable concentrations of Total Petroleum Hydrocarbons as gasoline and Volatile Aromatic Compounds (Benzene, Toluene, Ethyl Benzene, and Xylenes). Monitoring Well MW-5 continues to remain below detectable concentrations of Volatile Aromatic Compounds; however, low concentrations of some petroleum hydrocarbons not indicative of gasoline continue to be detected in the water samples from Monitoring Well MW-5.

This report is the final semiannual monitoring report performed in accordance with the Alameda County Department of Environmental Health directive dated May 6, 1992. It is our recommendation that the project site be recommended for closure and that existing ground water monitoring wells be abandoned by pressure grout sealing techniques in accordance with Alameda County Monitoring Well Abandonment Requirements.

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,
GeoPlexus, Incorporated


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



OCTOBER, 1992 SEMIANNUAL
GROUND WATER SAMPLING REPORT

for

STOCKEL PROPERTY

3234 CASTRO VALLEY BLVD.

CASTRO VALLEY, CALIFORNIA

Prepared for

Mrs. Mitzi Stockel

3461 Almosta Road

Placerville, CA 94667

October 26, 1992

Project C92017

OCTOBER, 1992 SEMIANNUAL
GROUND WATER SAMPLING REPORT
for
STOCKEL PROPERTY
3234 CASTRO VALLEY BLVD.
CASTRO VALLEY, CALIFORNIA

INTRODUCTION

The project site is located at 3234 Castro Valley Blvd. in the City of Castro Valley, in Alameda County, California. The site is the location of a former automotive repair facility (see Figure 1) and private residence. Five ground water monitoring wells exist surrounding the location of the former gasoline tank; however the traffic box and upper two feet of casing of Monitoring Well MW-2 was destroyed during site demolition and has been covered with concrete.

This report presents the sampling protocol, recorded ground water elevations, and results of the analytical testing performed on the ground water samples collected on October 9, 1992.

MONITORING WELL SAMPLING

Free product measurements were obtained for each monitoring well at the time of each sample acquisition utilizing an acrylic 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. Odors, sheens, or free product were not observed in the initial bailer water samples or following purging of the wells.

Prior to sampling the monitoring wells, a minimum of four 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. 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 added to the sample. A travel blank (identified as MW-A) was obtained from the analytical testing laboratory, transported to the field with the sample vials, and was submitted along with other samples for analysis. The samples were placed on ice immediately for transport to the laboratory under chain-of-custody documentation.

Geo Plexus, Incorporated

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

The water obtained from the monitoring wells during the purging and sampling activities was contained on-site in 55-gallon drums pending receipt of the laboratory test results.

GRADIENT SURVEY

The elevation of the top of the casing of the monitoring wells at the site were established during previous investigations (vertical control of 0.01 foot). Prior to purging the monitoring wells, the depth to ground water in each well was measured to the nearest 0.01 foot with an electronic water level meter.

Ground water elevations recorded suggest that the ground water flow across the site is in a southwesterly direction (see Figure 1) with Monitoring Well MW-5 in a down-gradient direction from the former gasoline tank.

ANALYTICAL TESTING

The ground water samples were submitted to and tested by Anamatrix Laboratories located in San Jose, California. The samples from the four monitoring wells were tested for Total Petroleum Hydrocarbons as gasoline by Method GCFID (5030) and Volatile Aromatics by EPA Method 602. The travel blank was submitted for analysis for Volatile Aromatics by EPA Method 602. The analytical test data, along with the Chain-of-Custody Forms are presented in Appendix A.

SUMMARY OF FINDINGS

Ground water elevations recorded during the sampling suggest that ground water is at a depth of 6 feet below the ground surface and flows across the site in a southwesterly direction at a gradient of 0.027 ft/ft. The southwestern direction of ground water flow places Monitoring Well MW-5 in a "down-gradient" direction from the former underground gasoline storage tank.

The analytical test results for the ground water samples obtained for this sampling event continue to indicate non-detectable quantities of Total Petroleum Hydrocarbons as gasoline and Volatile Aromatics (BTXE) for the samples from Monitoring Wells MW-1, MW-3, or MW-4. Volatile Aromatics (BTEX) were not detected in samples from Monitoring Well MW-5.

Low concentrations of petroleum hydrocarbons not indicative of gasoline continue to be detected in samples from Monitoring Well MW-5. It is noted that the analytical laboratory (Anamatrix, Inc.) repeatedly reports that the particular constituent reported as Total Petroleum Hydrocarbons as gasoline for the sample from Monitoring Well MW-5 is not indicative of gasoline. Table 1 summarizes the analytical test data to date.

TABLE 1
SUMMARY OF GROUND WATER ANALYTICAL TEST DATA

<u>Date Sampled</u>	<u>Total Petroleum Hydrocarbons (ppb)</u>	<u>Benzene (ppb)</u>	<u>Toluene (ppb)</u>	<u>Total Xylenes (ppb)</u>	<u>Ethyl-Benzene (ppb)</u>
<u>MW-1</u>					
6-4-90	ND	ND	ND	ND	ND
3-13-91	ND	ND	ND	ND	ND
4-30-91	ND	ND	ND	ND	ND
5-20-91	ND	ND	ND	ND	ND
6-18-91	ND	ND	ND	ND	ND
7-30-91	ND	ND	ND	ND	ND
8-29-91	ND	ND	ND	ND	ND
9-25-91	ND	ND	ND	ND	ND
6-10-92	ND	ND	ND	ND	ND
10-9-92	ND	ND	ND	ND	ND
<u>MW-2</u>					
6-4-90	ND	ND	ND	ND	ND
3-13-91	Destroyed				
<u>MW-3</u>					
6-4-90	ND	ND	ND	ND	ND
3-13-91	ND	ND	ND	ND	ND
4-30-91	--	--	--	--	--
5-20-91	--	--	--	--	--
6-18-91	ND	ND	ND	ND	ND
7-30-91	--	--	--	--	--
8-29-91	--	--	--	--	--
9-25-91	ND	ND	ND	ND	ND
6-10-92	ND	ND	ND	ND	ND
10-9-92	ND	ND	ND	ND	ND

TABLE 1 (continued)

<u>Date Sampled</u>	<u>Total Petroleum Hydrocarbons</u> (ppb)	<u>Benzene</u> (ppb)	<u>Toluene</u> (ppb)	<u>Total Xylenes</u> (ppb)	<u>Ethyl-Benzene</u> (ppb)
<u>MW-4</u>					
6-4-90	ND	ND	ND	ND	ND
3-13-91	ND	ND	ND	ND	ND
4-30-91	ND	ND	ND	ND	ND
5-20-91	ND	ND	ND	ND	ND
6-18-91	ND	ND	ND	ND	ND
7-30-91	ND	ND	ND	ND	ND
8-29-91	ND	ND	ND	ND	ND
9-25-91	ND	ND	ND	ND	ND
6-10-92	ND	ND	ND	ND	ND
10-9-92	ND	ND	ND	ND	ND
<u>MW-5</u>					
6-4-90	100	ND	ND	ND	ND
3-13-91	87	0.6	ND	ND	ND
4-30-91	120	0.6	ND	ND	ND
5-20-91	110	1.2	ND	ND	ND
6-18-91	74	ND	ND	ND	ND
7-30-91	86	ND	ND	ND	ND
8-29-91	54	ND	ND	ND	ND
9-25-91	ND	ND	ND	ND	ND
6-10-92	78	ND	ND	ND	ND
10-9-92	77	ND	ND	ND	ND

Notes:

Concentrations as reported on analytical testing reports.

ND Indicates constituents not detected.

-- Monitoring Well MW-3 was not sampled on monthly basis.

RECOMMENDATIONS

This report is the final semiannual monitoring report performed in accordance with the Alameda County Department of Environmental Health directive dated May 6, 1992.

Further site characterization, remedial action, or ground water monitoring does not appear warranted at this time and the project site does not represent a threat to ground water resources resulting from the former underground gasoline storage tank. It is our recommendation that the project site be recommended for closure and that existing ground water monitoring wells be abandoned by pressure grout techniques in accordance with Alameda County Monitoring Well Abandonment Requirements.

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.

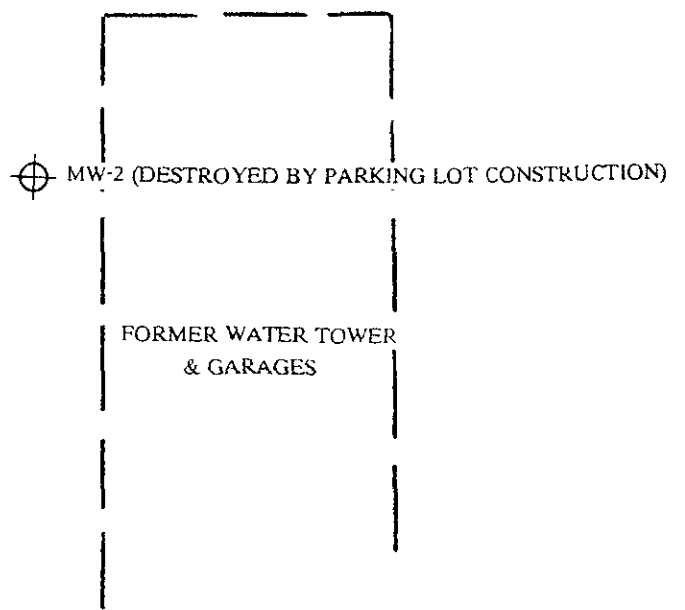
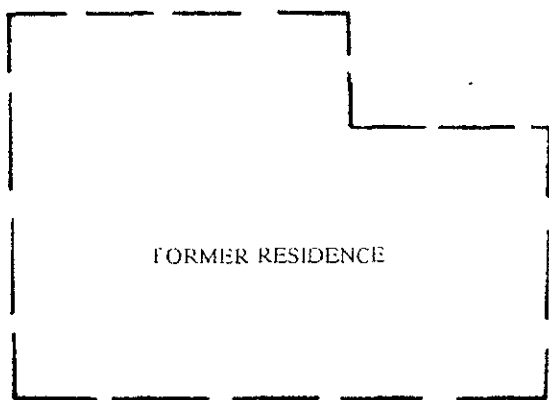
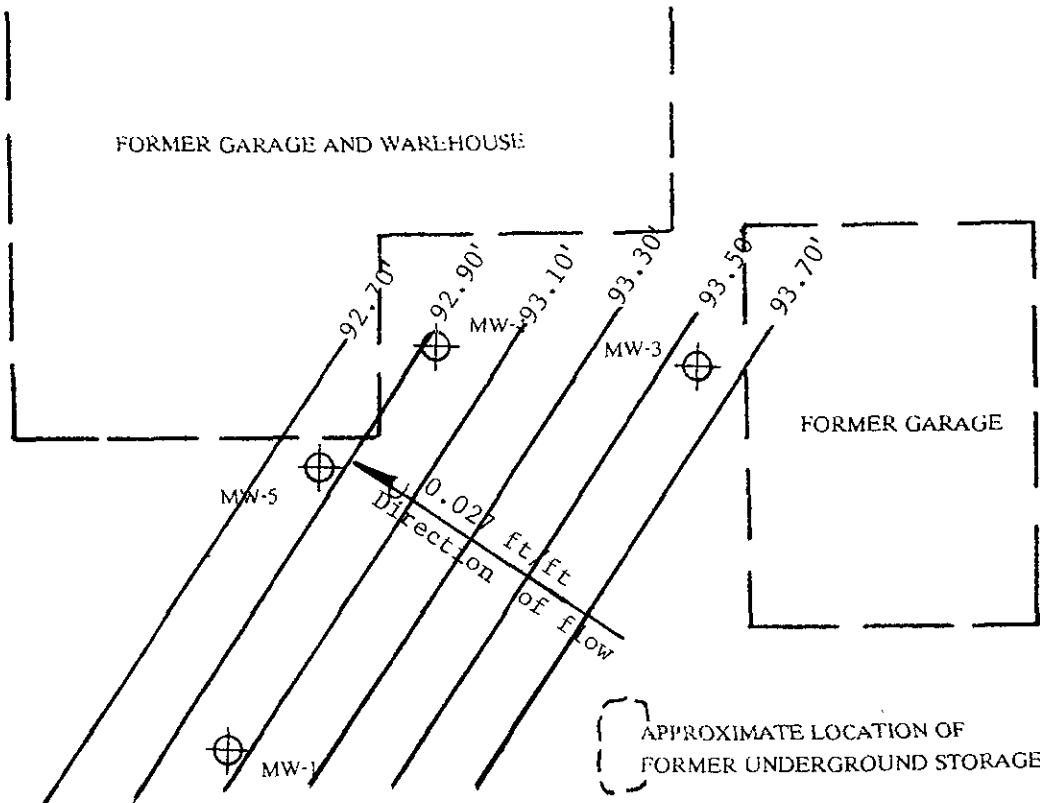
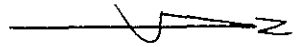
No attempt was made to verify the accuracy of the published information prepared by others used in preparation of this assessment report.

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

Geo Plexus, Incorporated

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



STOCKEL PROPERTY		
DATE 10-9-92	SCALE 1"=20'	DRAWN BY dgc
GROUND WATER GRADIENT PLAN		
STOCKEL	Figure 1	

Semiannual Ground Water Sampling Report
Mitzi Stockel
Castro Valley, California

October 26, 1992

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

PROJECT NUMBER		PROJECT NAME				Number of Cntrns	Type of Containers	Type of Analysis				Condition of Samples	Initial
C92017		Stackel AOP.						TPHG	TPHD	BTEX	Oil&Grease		
Send Report Attention of:			Report Due	Verbal Due									
David Glick			1 1	1 1									
Sample Number	Date	Time	Comp	Grab	Station Location								
MW A - WS 1A,B	10/19/92	0900		✓	Mon Well A	2EA	Acid. fide 40 ml JOA	✓		✓			
MW 2 - WS 1A,B		1303		✓	Mon Well 2			✓		✓			
MW 3 - WS 1A,B		1218		✓	Mon Well 3			✓		✓			
MW 4 - WS 1A,B		1355		✓	Mon Well 4			✓		✓			
MW 5 - WS 1A,B		1345		✓	Mon Well 5			✓		✓			
Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time	Remarks: Purchase Order No.: 72-30054									
<i>[Signature]</i>	10/19/92 15:50	<i>[Signature]</i>	10/19/92 15:50	STANDARD									
Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time	COMPANY: Geo Plexus, Inc.									
				ADDRESS: 1900 Wyatt Drive, Suite 1 Santa Clara, CA 95054									
				PHONE : (408)987-0210 FAX : (408)988-0815									

REPORT SUMMARY
ANAMETRIX, INC. (408)432-8192

MR. DAVID C. GLICK
GEOPLEXUS, INC.
1900 WYATT DRIVE, SUITE #1
SANTA CLARA, CA 95054

Workorder # : 9210151
Date Received : 10/09/92
Project ID : C92017
Purchase Order: 92-30054
Department : GC
Sub-Department: TPH

SAMPLE INFORMATION:

ANAMETRIX SAMPLE ID	CLIENT SAMPLE ID	MATRIX	DATE SAMPLED	METHOD
9210151- 1	MWA	WATER	10/09/92	TPHg/BTEX
9210151- 2	MW1	WATER	10/09/92	TPHg/BTEX
9210151- 3	MW3	WATER	10/09/92	TPHg/BTEX
9210151- 4	MW4	WATER	10/09/92	TPHg/BTEX
9210151- 5	MW5	WATER	10/09/92	TPHg/BTEX

REPORT SUMMARY
ANAMETRIX, INC. (408)432-8192

MR. DAVID C. GLICK
GEOPLEXUS, INC.
1900 WYATT DRIVE, SUITE #1
SANTA CLARA, CA 95054

Workorder # : 9210151
Date Received : 10/09/92
Project ID : C92017
Purchase Order: 92-30054
Department : GC
Sub-Department: TPH

QA/QC SUMMARY :

- The surrogate recovery for the BTEX matrix spike duplicate is outside of quality control limits due to an individual purge and trap vessel leak.
- The concentration reported as TPHg for sample MW5 is primarily due to the presence of discrete hydrocarbon peaks not indicative of gasoline.

Cheryl Baermer 10/23/92
Department Supervisor Date

Christian Burch 10.23.92
Chemist Date

ANALYSIS DATA SHEET - TOTAL PETROLEUM HYDROCARBONS
(GASOLINE WITH BTEX)
ANAMETRIX, INC. - (408) 432-8192

Anametrix W.O.: 9210151
Matrix : WATER
Date Sampled : 10/09/92

Project Number : C92017
Date Released : 10/23/92

COMPOUNDS	Reporting Limit (ug/L)	Sample I.D.# MWA	Sample I.D.# MW1	Sample I.D.# MW3	Sample I.D.# MW4	Sample I.D.# MW5
Benzene	0.5	ND	ND	ND	ND	ND
Toluene	0.5	ND	ND	ND	ND	ND
Ethylbenzene	0.5	ND	ND	ND	ND	ND
Total Xylenes	0.5	ND	ND	ND	ND	ND
TPH as Gasoline	50	ND	ND	ND	ND	77
% Surrogate Recovery		92%	83%	124%	118%	125%
Instrument I.D.		HP21	HP21	HP21	HP21	HP21
Date Analyzed		10/14/92	10/14/92	10/16/92	10/16/92	10/16/92
RLMF		1	1	1	1	1

- ND - Not detected at or above the practical quantitation limit for the method.
- TPHg - Total Petroleum Hydrocarbons as gasoline is determined by GCFID using modified EPA Method 8015 following sample purge and trap by EPA Method 5030.
- BTEX - Benzene, Toluene, Ethylbenzene, and Total Xylenes are determined by modified EPA Method 8020 following sample purge and trap by EPA Method 5030.
- RLMF - Reporting Limit Multiplication Factor.

Anametrix control limits for surrogate p-Bromofluorobenzene recovery are 53-147%.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

Reggie Davison 10/23/92
Analyst Date

Cheryl Balmer 10/23/92
Supervisor Date

ANALYSIS DATA SHEET - TOTAL PETROLEUM HYDROCARBONS
(GASOLINE WITH BTEX)
ANAMETRIX, INC. - (408) 432-8192

Anamatrix W.O.: 9210151
Matrix : WATER
Date Sampled : N/A

Project Number : C92017
Date Released : 10/23/92

COMPOUNDS	Reporting Limit (ug/L)	Sample I.D.# B01301E3 BLANK	Sample I.D.# B01601E3 BLANK
Benzene	0.5	ND	ND
Toluene	0.5	ND	ND
Ethylbenzene	0.5	ND	ND
Total Xylenes	0.5	ND	ND
TPH as Gasoline	50	ND	ND
% Surrogate Recovery		88%	108%
Instrument I.D.		HP21	HP21
Date Analyzed		10/13/92	10/16/92
RLMF		1	1

- ND - Not detected at or above the practical quantitation limit for the method.
- TPHg - Total Petroleum Hydrocarbons as gasoline is determined by GCFID using modified EPA Method 8015 following sample purge and trap by EPA Method 5030.
- BTEX - Benzene, Toluene, Ethylbenzene, and Total Xylenes are determined by modified EPA Method 8020 following sample purge and trap by EPA Method 5030.
- RLMF - Reporting Limit Multiplication Factor.

Anamatrix control limits for surrogate p-Bromofluorobenzene recovery are 53-147%.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

Reggie Dawson 10/23/92
Analyst Date

Cheryl Bulmer 10/23/92
Supervisor Date

TOTAL VOLATILE HYDROCARBON MATRIX SPIKE REPORT
 EPA METHOD 5030 WITH GC/FID
 ANAMETRIX, INC. (408) 432-8192

Sample I.D. : C92017 MW5	Anamatrix I.D. : 9210151-05
Matrix : WATER	Analyst : <i>ED</i>
Date Sampled : 10/09/92	Supervisor : <i>CB</i>
Date Analyzed : 10/14/92	Date Released : 10/23/92
	Instrument I.D.: HP21

COMPOUND	SPIKE AMT (ug/L)	SAMPLE CONC (ug/L)	REC MS	%REC MS	REC MD (ug/L)	%REC MD	RPD	%REC LIMITS
BENZENE	10.0	0.000	6.9	69%	8.2	82%	17%	49-159
TOLUENE	10.0	0.000	7.3	73%	9.1	91%	22%	53-156
ETHYLBENZENE	10.0	0.000	7.4	74%	9.4	94%	24%	54-151
TOTAL XYLENES	10.0	0.000	7.9	79%	10.2	102%	25%	56-157
p-BFB				99%		29%		53-147

* Quality control established by Anamatrix, Inc.

