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

> Your letter dated May 6, RE:

1992: 3234 Castro Valley Blv.; Castro Valley, CA

Dear Scott:

Enclosed please find a copy of the latest Ground Water Sampling Report, dated June 30, 1992 from Geo Plexus, Inc. The next sampling to be taken in October 1992 in accordance with your above referenced letter.

> Sincerely, mitzi Stackel

Muriel (Mitzi) Stockel

3461 Almosta Road Placerville, CA 95667 916-626-5102

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Geo Plexus, Inc.

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GEOLOG

DAVID C. GLICK No. 1338

CERTIFIED

ENGINEERING GEOLOGIST

OF CALLY

☆

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

June 30, 1992 Project C92017

Mrs. Mitzi Stockel 3461 361 Almosta Road Placerville, CA 94667

Subject: June 1992 Ground Water Sampling Report for

Stockel Property

3234 Castro Valley Blvd Castro Valley, California

Dear Mitzi:

As requested and authorized, the attached 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 June 10, 1992.

In summary, Monitoring Wells MW-1, MW-3, and MW-4 remain at non-detectable concentrations of Total Petroleum Hydrocarbons as gasoline and Volatile Aromatic Compounds (Benzene, Toluene, Ethyl Benzene, and Xylenes). Monitoring Well MW-5 remains at non-detectable concentrations of Volatile Aromatic Compounds; however, low concentrations of Total Petroleum Hydrocarbons were detected.

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** 

Enclosure:

Ground Water Sampling Report



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

# GROUND WATER SAMPLING REPORT

for

STOCKEL PROPERTY

3234 CASTRO VALLEY BLVD.

CASTRO VALLEY, CALIFORNIA

Prepared for

Mrs. Mitzi Stockel

346/ 361-Almosta Road

Placerville, CA 94667

June 30, 1992

Project C92017

# 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 June 10, 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.

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 Anametrix Laboratories located in San Jose, California. The samples from the four gasoline tank 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 5-6 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 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 although low concentrations of petroleum hydrocarbons (not gasoline) were detected. It is noted that the analytical laboratory (Anametrix, 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

Date <u>Sampled</u>	Total Petroleum <u>Hydrocarbons</u> (ppb)	<u>Benzene</u> (ppb)	<u>Toluene</u> (ppb)	Total <u>Xylenes</u> (ppb)	Ethyl- <u>Benzene</u> (ppb)
6-4-90 MW-1 MW-2 MW-3 MW-4 MW-5	ND ND ND ND ND	ND ND ND ND ND	ND ND ND ND ND ND	ND ND ND ND ND ND	(ppo) ND ND ND ND
3-13-91 MW-1 MW-2 MW-3 MW-4 MW-5	ND Destroyed ND ND ND 87	ND ND ND 0.6	ND ND ND ND	ND ND ND ND	ND ND ND ND
4-30-91 MW-1 MW-2 MW-3 MW-4 MW-5	ND Destroyed  ND 120	ND  ND 0.6	ND  ND ND	ND  ND ND	ND  ND ND
5-20-91 MW-1 MW-2 MW-3 MW-4 MW-5	ND Destroyed  ND 110	ND  ND 1.2	ND  ND ND	ND  ND ND	ND  ND ND
6-18-91 MW-1 MW-2 MW-3 MW-4 MW-5	ND Destroyed ND ND 74	ND ND ND ND	ND ND ND ND	ND ND ND ND	ND ND ND ND
7-30-91 MW-1 MW-2 MW-3 MW-4 MW-5	ND Destroyed  ND 86	ND  ND ND	ND  ND ND	ND  ND ND	ND  ND ND

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# TABLE 1 (continued)

Date <u>Sampled</u>	Total Petroleum <u>Hydrocarbons</u> (ppb)	Benzene (ppb)	Toluene (ppb)	Total <u>Xylenes</u> (ppb)	Ethyl- <u>Benzene</u> (ppb)
8-29-91					
MW-1 MW-2	ND Destroyed	ND	ND	ND	ND
MW-3	Destroyed				
MW-4	ND	ND	ND	ND	ND
MW-5	54	ND	ND	ND	ND
9-25-91					
MW-1	ND	ND	ND	ND	ND
MW-2 MW-3	Destroyed ND	ND	ND	ND	ND
MW-4	ND ND	ND ND	ND	ND ND	ND ND
MW-5	ND	ND	ND	ND	ND
6-10-92					
MW-1	ND	ND	ND	ND	ND
MW-2	Destroyed	3.75	3 77**	3.175	NID
MW-3 MW-4	ND ND	ND ND	ND ND	ND ND	ND ND
MW-5	78	ND ND	ND ND	ND ND	ND

Note: Concentrations as reported on analytical testing report.

- Indicates Well was not sampled on monthly basis.

ND Indicates constituents not detected.

#### **RECOMMENDATIONS**

Further site characterization and/or remedial action does not appear warranted at this time.

The ground water monitoring wells located at the project site are scheduled to be sampled again in October, 1992 in accordance with the direction for semiannual monitoring from the Alameda County Health Care Services, Department of Environmental Health.

Quarterly Ground Water Sampling Report Mitzi Stockel Property Castro Valley, California

#### **LIMITATIONS**

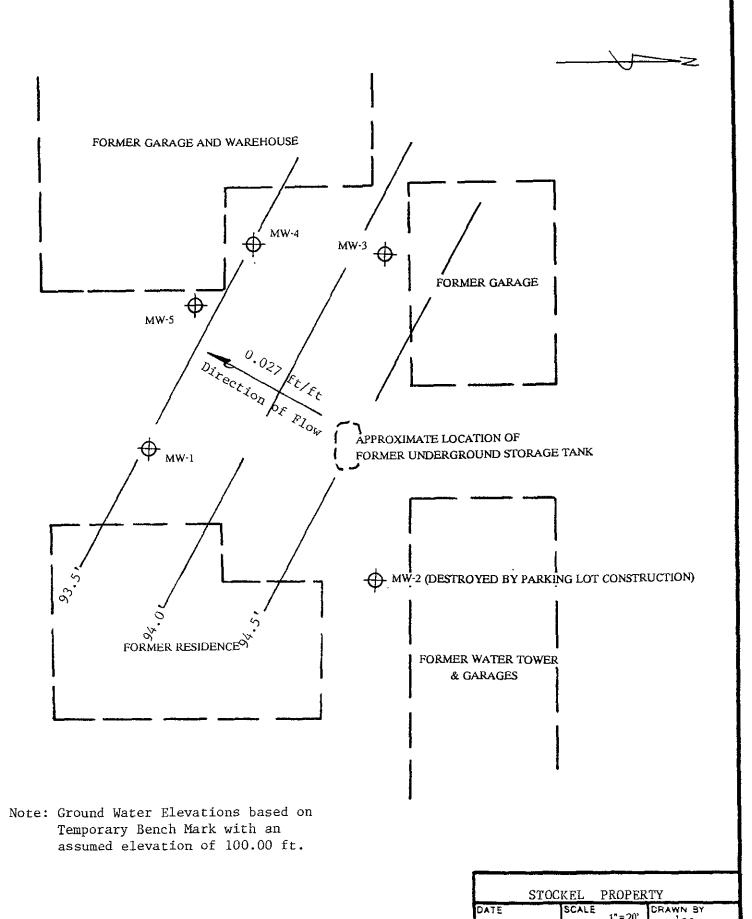
We have only observed a small portion of the pertinent subsurface and ground water conditions present at the site. The conclusions and recommendations made herein are based on the assumption that subsurface and ground water conditions do not deviate appreciably from those described in the reports and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

GROUND WATER GRADIENT PLAN

STOCKEL Figure 1

### APPENDIX A

CHAIN-OF-CUSTODY FORM AND ANALYTICAL TEST DATA ENPREXUS, INC. 9204204 EHAIN-OF-CUSTODY

2922 Scott Blvd., Santa Clara, California 95054 Phone 408/287-8588 Fax 408/988-0815

PROJECT NUMBER (92017 PROJECT NAME STOCKEL						Type of Analysis														
Send Report Attention of: Report Due Verbal Due Mr. David Glick / / / /		Number	Type of	(mpHq)		(TPHg)		8020	625	8270	x or case	Grais		Condition		Initial				
Sample Number	Date	Time	Comp	Grab	Station Locat	ion	BTE 601 801 624 0i1 EPA				Samples	Samples								
MW A - WSIA,B	4/10/92	1100		/	MON. WIST	A .	Zea	ACIDIFIED HD MIL VOA		~	V							3		
MW 3 - WSI 4,B,C	)	1520		/	MON. WEll	3	3eA			1	V		_	į	<u> </u>	<u> </u>			)	,
MW4- WSI ABIC		1419		/	MON. WEll	4				1	V			<u> </u>	   	   <del> -</del>			1.550	1
MW5- WSIA,B,C		1445		/	MON WEll	5			_	1					-	-			y = y <sup>2</sup> co y = 4 <sup>2</sup>	3
MW 1- WS IAB,C	4	1605		/	mon well	/	4	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \		V	10		<u>-</u>	-				<u> </u>		
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Relinquished by:		[	/		: (Signature)	COMPANY: Geo Plexus, Inc.						206								

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

MR. DAVID C. GLICK GEOPLEXUS, INC. 753 N. 9TH ST. #131 SAN JOSE, CA 95112

Workorder # : 9206204
Date Received : 06/12/92
Project ID : C92017
Purchase Order: 92.30022
Department : GC

Sub-Department: TPH

#### SAMPLE INFORMATION:

ANAMETRIX SAMPLE ID	CLIENT SAMPLE ID	MATRIX	DATE SAMPLED	METHOD
9206204- 1	MWA	WATER	06/10/92	TPHg/BTEX
9206204- 2	MW3	WATER	06/10/92	TPHg/BTEX
9206204- 3	MW4	WATER	06/10/92	TPHg/BTEX
9206204- 4	MW5	WATER	06/10/92	TPHg/BTEX
9206204- 5	MW1	WATER	06/10/92	TPHg/BTEX

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

MR. DAVID C. GLICK GEOPLEXUS, INC. 753 N. 9TH ST. #131 SAN JOSE, CA 95112 Workorder # : 9206204 Date Received: 06/12/92 Project ID: C92017 Purchase Order: 92.30022 Department : GC

Sub-Department: TPH

#### QA/QC SUMMARY :

- The concentration reported as gasoline for sample MW5 is primarily due to the presence of discrete hydrocarbon peaks not indicative of gasoline.

Date Department Supervisor

Date

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

Anametrix W.O.: 9206204 Project Number: C92017
Matrix: WATER Date Released: 06/24/92

Date Sampled: 06/10/92

	Reporting Limit	Sample I.D.# MWA	Sample I.D.# MW3	Sample I.D.# MW4	Sample I.D.# MW5	Sample I.D.# MW1
COMPOUNDS	(ug/L)	-01	-02	-03	-04	-05 
Benzene Toluene Ethylbenzene Total Xylenes TPH as Gasoline	0.5 0.5 0.5 0.5 50	ND ND ND ND ND	ND ND ND ND ND	ND ND ND ND ND	ND ND ND ND 78	ND ND ND ND ND
<pre>% Surrogate Reco Instrument I.I Date Analyzed RLMF</pre>		HP4 06/21/92	HP4	HP4 06/21/92	HP4	HP4

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 6/24/92 Analyst Date Cheul Bene 4/24/5.
Supervisor Date