GOOD CHEVROLET

1630 Park Street • Phone 415/522-9221
ALAMEDA, CA 94501

August 10, 1992

Ms. Juliet Shin
Alameda County Health Care Services
Department of Environmental Health
80 Swan Way, Room 200
Oakland, CA 94621

Mr. Greg Zentner
Regional Water Quality Control Board
San Francisco Bay Region
2101 Webster Street, Soom 500
Oakland, CA 94612

Re: 1630 Park Street, Alameda, California

Dear Ms. Shin and Mr. Zentner:

Enclosed please find Ground Water Sampling Report on the above premises, prepared by Geo Plexus.

Sincerely,

JoAnn Stewart

JKS:js

Enclosure

GeoPlexus, Inc.

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

92 AUG 12 PM 1:33

July 31, 1992
Project C92020

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

Subject: July 1992 Ground Water Sampling Report for
Good Chevrolet, Alameda, California 94501

Dear Ms. Stewart:

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 July 14, 1992.

In summary, the water samples obtained from Monitoring Wells MW-1, MW-2, and MW-3 contained detectable concentrations of Total Petroleum Hydrocarbons as gasoline (13,000-17,000 ppb) and Volatile Aromatic Compounds (Benzene, Toluene, Ethyl Benzene, and Xylenes).

It has been a pleasure to be of service to you on this project. The next scheduled sampling event will occur in October, 1992. Questions or comments regarding the attached report should be addressed to the undersigned.

Copies of this report should be forwarded to:

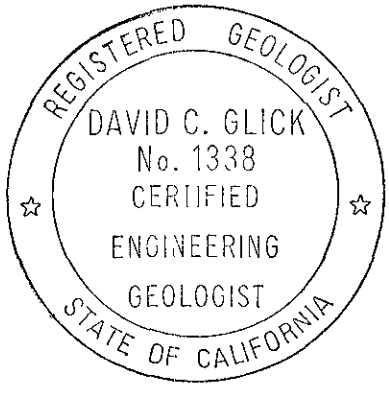
Ms. Juliet Shin
Alameda County Health Care Services
Department of Environmental Health
80 Swan Way, Room 200
Oakland, CA 94621

Mr. Greg Zentner
Regional Water Quality Control Board
San Francisco Bay Region
2101 Webster Street, Room 500
Oakland, CA 94612

Respectfully submitted,

Geo Plexus, Incorporated

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



Enclosure:
Ground Water Sampling Report

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

GeoPlexus, Inc.

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

GROUND WATER SAMPLING REPORT

for

GOOD CHEVROLET

1630 PARK AVENUE

ALAMEDA, CALIFORNIA

July 31, 1992

Project C92020

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

GROUND WATER SAMPLING REPORT
for
GOOD CHEVROLET
1630 PARK AVENUE
ALAMEDA, CALIFORNIA

INTRODUCTION

The project site is located at 1630 Park Avenue in the City of Alameda, in Alameda County, California (see Figure 1). The site is the location of an automobile dealership and service center. A 300 gallon waste oils 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 ground water monitoring wells were reportedly sampled by Groundwater Technology, Inc. in January, 1989 (Groundwater Technology, Inc. letter report dated March 29, 1989) and again in July, 1989 (Groundwater Technology, Inc. letter report dated August 22, 1989). The wells were also reportedly sampled by Environmental Science Engineering, Inc. in April, 1991 (Environmental Science Engineering, Inc. report dated May 8, 1991).

This report is the first scheduled quarterly monitoring report and presents the sampling protocol, recorded ground water elevations, and results of the analytical testing performed on the ground water samples collected on July 14, 1992.

MONITORING WELL SAMPLING

Free product measurements were obtained for each monitoring well at the time of each 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; however, the water samples obtained from the three wells exhibited gasoline odors.

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.

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. 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 (Environmental Science & Engineering, Inc.) with reported 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 northwest direction (see Figure 2) at a gradient of 0.0031 ft/ft with Monitoring Well MW-3 in a down-gradient direction from the former tanks.

ANALYTICAL TESTING

The ground water samples were submitted to and tested by Anametrix Laboratories located in San Jose, California. The samples were tested for Total Petroleum Hydrocarbons as gasoline by Method GCFID 5030/8015 and Volatile Aromatics by EPA Method 8020/5030. The travel blank was submitted for analysis for Volatile Aromatics by EPA Method 8020. 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 8-9 feet below the ground surface and flows across the site in a northwest direction at a gradient of 0.0031 ft/ft. The northwest flow direction places Monitoring Well MW-3 in a "down-gradient" direction from the former underground storage tanks.

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 Monitoring Wells MW-1, MW-2, and MW-3. Total Petroleum Hydrocarbons as gasoline concentrations ranged from 13,000 to 17,000 ppb and Benzene concentrations ranged from 2,300 to 4,400 ppb. Table 1 summarizes the current analytical test results along with the previous analytical testing results (by others).

RECOMMENDATIONS

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 quarterly monitoring from the Alameda County Health Care Services, Department of Environmental Health.

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.

TABLE 1 (ug/L)

SUMMARY OF GROUND WATER ANALYTICAL TEST DATA

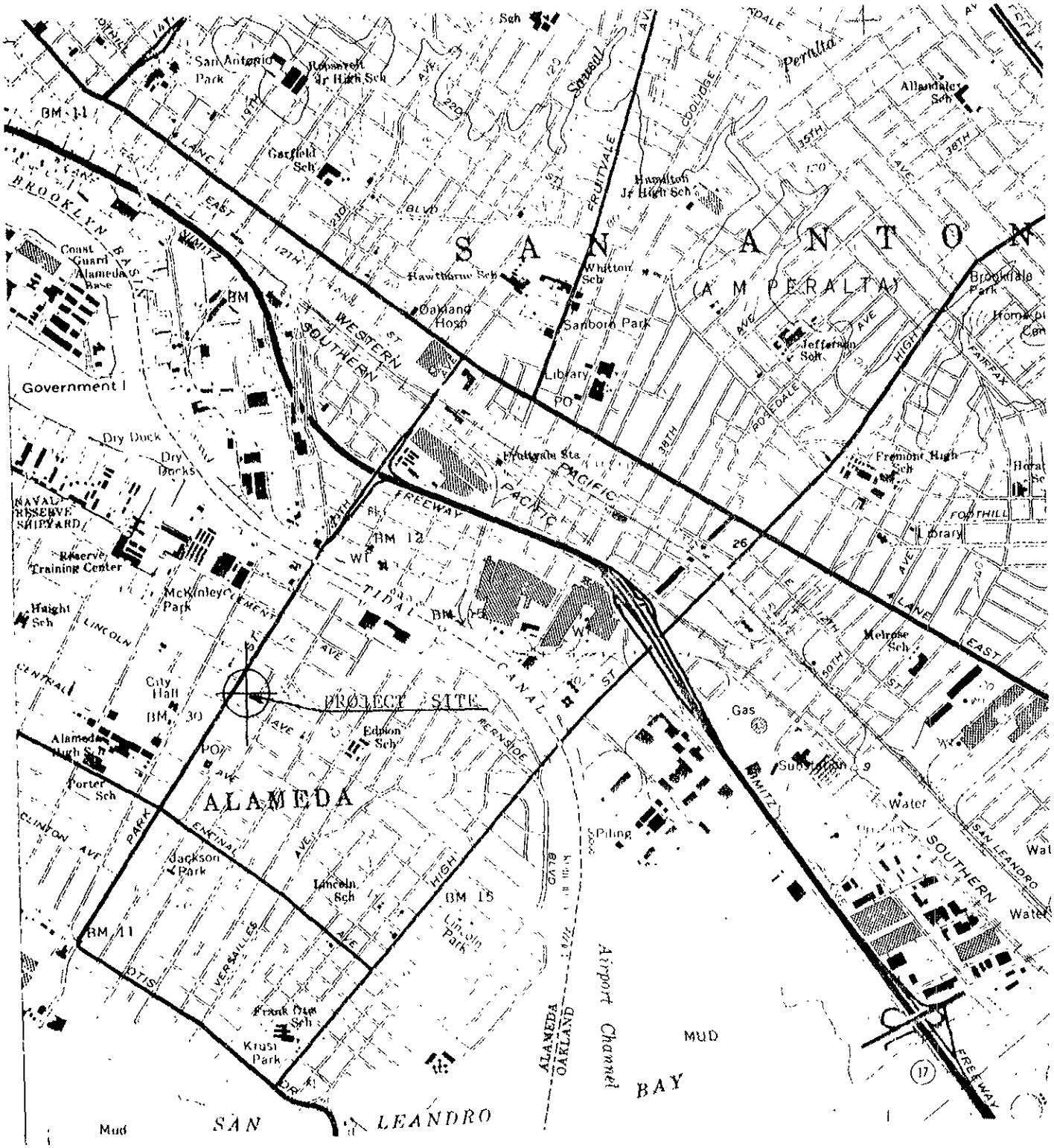
Date Sampled	Total Petroleum Hydrocarbons	Benzene	Toluene	Ethyl-Benzene	Total Xylenes
Monitoring Well MW-1					
1-21-87 (1)	21,020	1,148	8,627	1,792	6,012
1-11-89 (1)	1,400	74	10	13	5
7-12-89 (1)	1,200	470	49	45	33
4-09-91 (2)	850	260	10	15	12
7-14-92 (3)	13,000	2,300	1,200	1,200	1,200
Monitoring Well MW-2					
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
Monitoring Well MW-3					
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

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

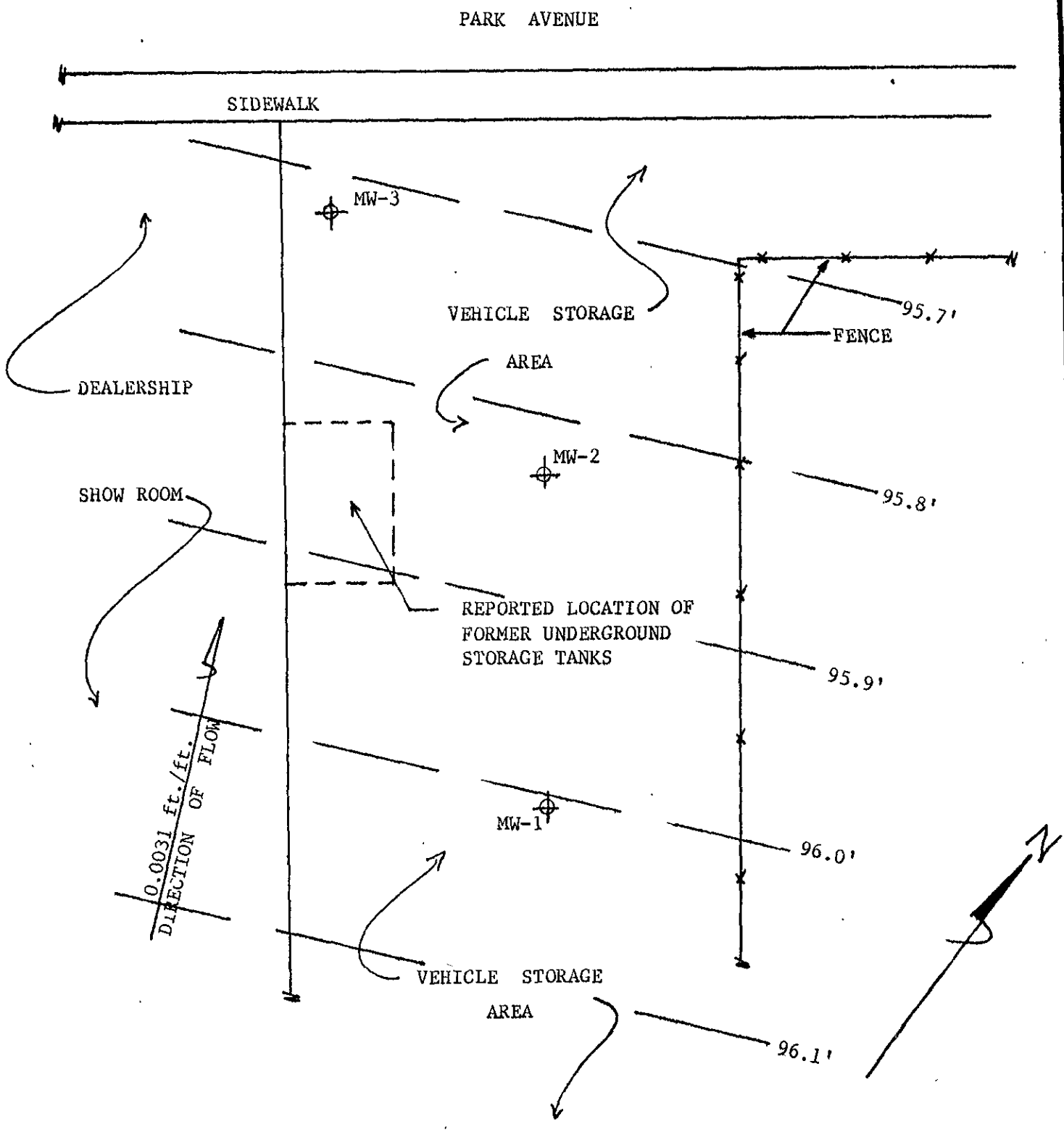
No attempt was made to verify the accuracy of the published information prepared by others used in preparation of this assessment report.

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 7/30/92	SCALE 1"=2000'	DRAWN BY dcg
LOCATION MAP		
	Figure 1	



NOTE: (1) SITE PLAN FROM ENVIRONMENTAL SCIENCE & ENGINEERING, Inc. REPORT, dated 5/8/91

(2) WELL CASING ELEVATIONS BASED ON ENVIRONMENTAL SCIENCE & ENGINEERING, Inc. REPORT, dated 5/8/91

GOOD CHEVROLET		
DATE 7/14/92	SCALE 1"=24'	DRAWN BY dcg
GRADIENT PLAN		
	Figure 2	

GeoPlexus, Inc.

APPENDIX A

CHAIN-OF-CUSTODY FORM
AND
ANALYTICAL TEST DATA

15:40 9207156 (18)

GeoPlexus, Inc. CHAIN-OF-CUSTODY

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

PROJECT NUMBER: C92020

PROJECT NAME: GOOD CHEVROLET

Send Report Attention of: Mr. David Glick

Report Due: / /

Verbal Due: / /

Type of Analysis: TPHg as per David Glick / BTEX

Sample Number	Date	Time	Comp	Grab	Station Location	Number of Cntnrs	Type of Containers	TPHd	TPHg / BTEX	601 / 602	8010 / 8020	624 / 625	8240 / 8270	Oil & Grease	EPA Metals		Condition of Samples	Initial
MWA-WS1A,B,C	7/14/92	1230		1	MON WELL A	3 ea	ACIDIFIED 40 ML VOA	✓	✓									
MW1-WS1A,B,C	↓	1315		1	MON WELL 1	↓	↓	✓	✓									
MW2-WS1A,B,C	↓	1335		1	MON WELL 2	↓	↓	✓	✓									
MW3-WS1A,B,C	↓	1400		1	MON WELL 3	↓	↓	✓	✓									

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time
[signature]	7/14/92 1530	Maria Saveiros [signature]	7/14/92 15:30

Remarks: Purchase Order No.: 92.30026

STANDARD TURNAROUND

LAB # 586

COMPANY: Geo Plexus, Inc.
ADDRESS: 2922 Scott Blvd., Santa Clara, CA 95054
PHONE: (408) 287-8588 FAX: (408) 988-0815

2066

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

MR. DAVID C. GLICK
GEOPLEXUS, INC.
2922 SCOTT BLVD.
SANTA CLARA, CA 95054

Workorder # : 9207156
Date Received : 07/14/92
Project ID : C92020
Purchase Order: 92.30026
Department : GC
Sub-Department: TPH

SAMPLE INFORMATION:

ANAMETRIX SAMPLE ID	CLIENT SAMPLE ID	MATRIX	DATE SAMPLED	METHOD
9207156- 1	MWA	WATER	07/14/92	TPHg/BTEX
9207156- 2	MW1	WATER	07/14/92	TPHg/BTEX
9207156- 3	MW2	WATER	07/14/92	TPHg/BTEX
9207156- 4	MW3	WATER	07/14/92	TPHg/BTEX

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

MR. DAVID C. GLICK
GEOPLEXUS, INC.
2922 SCOTT BLVD.
SANTA CLARA, CA 95054

Workorder # : 9207156
Date Received : 07/14/92
Project ID : C92020
Purchase Order: 92.30026
Department : GC
Sub-Department: TPH

QA/QC SUMMARY :

- No QA/QC problems encountered for these samples.

Department Supervisor Date

Chemist 29 July 92
Date

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

Anametrix W.O.: 9207156
Matrix : WATER
Date Sampled : 07/14/92

Project Number : C92020
Date Released : 07/29/92

	Reporting Limit	Sample I.D.# MWA	Sample I.D.# MW1	Sample I.D.# MW2	Sample I.D.# MW3	Sample I.D.# BL2501E2
COMPOUNDS	(ug/L)	-01	-02	-03	-04	BLANK
Benzene	0.5	ND	2300	4400	3500	ND
Toluene	0.5	ND	1200	1500	390	ND
Ethylbenzene	0.5	ND	1200	610	390	ND
Total Xylenes	0.5	ND	1200	1100	260	ND
TPH as Gasoline	50	ND	13000	13000	17000	ND
% Surrogate Recovery		105%	101%	98%	85%	103%
Instrument I.D.		HP4	HP4	HP4	HP4	HP4
Date Analyzed		07/25/92	07/27/92	07/25/92	07/25/92	07/25/92
RLMF		1	25	50	50	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.

29 Jul 92
Analyst Date

Supervisor Date

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

Anametrix W.O.: 9207156
Matrix : WATER
Date Sampled : N/A

Project Number : C92020
Date Released : 07/29/92

COMPOUNDS	Reporting Limit (ug/L)	Sample I.D.# BL2701E2 BLANK
Benzene	0.5	ND
Toluene	0.5	ND
Ethylbenzene	0.5	ND
Total Xylenes	0.5	ND
TPH as Gasoline	50	ND
% Surrogate Recovery		107%
Instrument I.D.		HP4
Date Analyzed		07/27/92
RLMF		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.
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Analyst 29 July 92 Date

Supervisor Date