

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

Alameda County

FEB 03 2003

Environmental Health

**Subject: November, 2002 Ground Water Monitoring Report for
Good Chevrolet, 1630 Park Street, Alameda, CA**

Dear Ms. Stewart:

Geo Plexus, Incorporated is pleased to present this November, 2002 Ground Water Monitoring Report to further support site closure.

The monitoring wells continue to exhibit low to moderate concentrations of Total Petroleum Hydrocarbons as gasoline and Volatile Aromatic Compounds (Benzene, Toluene, Ethyl Benzene, and Xylene) suggesting that the source of these compounds is the former underground storage tanks. However, the concentrations reduce significantly with distance from the source area and there is no detectable presence of MTBE in the ground water.

In accordance with the request from Ms. JoAnn Stewart (Good Chevrolet) and in response from a reported request from Alameda County Department of Environmental Health, we have prepared a Work Plan for further evaluate/investigate the extent of soil and ground water contamination on the adjacent down-gradient property and to evaluate the stability of the existing residual ground water contaminant plume in support of site closure.

It is noted that Alameda County Department of Environmental Health also requested a soil-gas survey to be performed to evaluate the potential for vapor migration into the existing buildings; however, the soil gas survey performed in November, 1998 did not indicate the presence of significant volatile organic vapors within the upper 3-feet of soil at the "source area". This confirmed that, although some soil and ground water contaminants remains, the extent of off-gassing through the upper soils is very low and does not represent a significant health risk. As such, an additional soil gas survey has not been incorporated into the proposed scope of work.

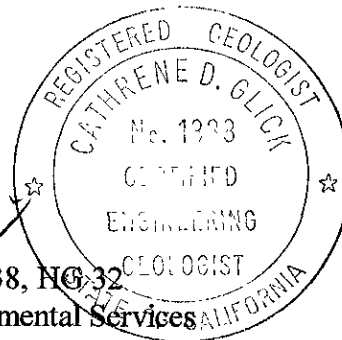
One copy of this Report should be forwarded to:

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, NG-32
Director, Geologic and Environmental Services



NOVEMBER, 2002 GROUND WATER MONITORING REPORT

FOR

GOOD CHEVROLET

1630 PARK STREET, ALAMEDA, CA

Prepared for:

Good Chevrolet
1630 Park Street
Alameda, California 94501

December 27, 2002

**NOVEMBER, 2002 GROUND WATER MONITORING REPORT
FOR
GOOD CHEVROLET
1630 PARK STREET, ALAMEDA, CA**

1.0 SITE DATA REVIEW

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

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 were 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 by Geo Plexus which included advancing 7 soil borings across the parking area of the property (see Figure 2). 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 by Geo Plexus 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. The ground water levels recorded to date reflect fluctuations ranging from 3 to 13 feet below the ground surface and indicate that ground water generally flows in a northwest direction.

A Remedial Investigation was performed by Geo Plexus in April, 1997 which included advancing eight (8) subsurface exploratory geo-probes at locations which were immediately "up-", "down", and "cross-gradient" from the former underground storage tanks (see Figure 3). Grab ground water samples were also obtained from the probes for analytical testing.

The findings of the investigation indicated that gasoline contaminated soil remain in-place at the project site and is confined to depths ranging from 7- to 11-feet below the ground surface and is of limited extent.

The concentrations of Benzene in the soil exceed the ASTM RBCA Tier-1 RBSL's for contaminant leaching to ground water and gas migration to indoor air. Similarly, the concentrations of Benzene in the ground water exceed the Tier-1 RBSL's for ground water ingestion and gas migration to indoor air; however, the concentrations are below the Tier-1 RBSL's for gas migration to outdoor air. It was concluded that the site conditions did not warrant active ground water remediation.

2.0 RISK ASSESSMENT INVESTIGATION

A Risk Assessment Investigation was performed in November, 1998 which included: advancing three (3) gas collection probes at the site to obtain soil gas measurements within and exterior to the existing building; collection of summa canister gas samples from each probe from depths of 3-feet; performing analytical testing of the air bag samples for gasoline, volatile aromatic, and volatile organic compounds; collection of ground water samples from the existing monitoring wells for analytical testing; performing analytical testing of the ground water samples for gasoline, volatile aromatic, and volatile organic compounds; and performing a Tier-II ASTM Risk-Based Corrective Action (RBCA) assessment for the project site.

Three (3) gas collection probes were advanced at the locations indicated on Figure 4 by Precision Sampling, a licensed C-57 drilling contractor. The probes were advanced using a portable pneumatic drive assembly. Drilling and sampling equipment used for advancing the exploratory probes was thoroughly steam cleaned before and between each boring to prevent the introduction of off-site contamination and cross contamination between borings. Soil gas samples were obtained at depths of 3-feet below the ground surface through the use of summa canisters.

Analytical testing of the soil gas probe samples did not indicate the presence of significant volatile organic vapors within the upper 3-feet of soil at the "source area". This confirmed that, although some soil and ground water contaminants remains, the extent of off-gassing through the upper soils is very low and does not represent a significant health risk.

3.0 CURRENT GROUND WATER MONITORING

3.1 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 (see Table 1) suggest that the ground water flow is to the northwest as indicated on Figure 5. The ground water gradient was determined to be 0.010 ft/ft (see Figure 5). The direction of ground water is consistent with previously observed flow directions.

3.2 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 traffic/well box for MW-4 has been depressed into the pavement of Park Street and could not be accessed without jeopardizing the existing integrity of the well box. As such, the monitoring well was not sampled during this event. 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 water samples.

To evaluate the stabilized ground water conditions across the property established by the vapor extraction system, it was determined to comply with recent Regional Water Quality Control Board "No-Purge" guidelines, the wells were not purged and the ground water grab samples were collected from each well through the use of a dedicated teflon bailer. Water samples for analytical testing were obtained through the use of dedicated teflon bailers 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.

3.3 GROUND WATER ANALYTICAL TESTING

The ground water samples were submitted to and tested by McCampbell Analytical, a State of California, Department of Health Services certified testing 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 the following:

- Total Petroleum Hydrocarbons as gasoline by RWQCB Method GCFID 5030/8015;
- Volatile Aromatics (BTEX) by EPA Method 8020/602;
- Fuel Oxygenates by EPA Method 8260; and
- EDB and EDC by EPA Method 8260.

The Chain-of-Custody Form and analytical test data are attached in Appendix A. Table 2 summarizes the current analytical test results for the monitoring well samples, along with the results of the previous analytical testing.

TABLE 1
SUMMARY OF DEPTH TO GROUND WATER DATA

	Jul-89	Apr-91	Jul-92	Aug-92	Sep-92	Oct-92	Nov-92	Dec-92	Jan-93	Feb-93	Mar-93	Apr-93	May-93	Jul-93
DEPTH														
MW-1	-8.93	-7.59	-8.72	-9.09	-9.25	-9.34	-9.21	-9.26	-7.81	-7.32	-7.20	-7.31	-8.29	-8.30
MW-2	-9.24	-8.01	-9.03	-9.34	-9.46	-9.52	-9.42	-9.47	-8.25	-7.85	-7.77	-7.86	-8.20	-8.72
MW-3	-9.00	-8.06	-8.82	-9.05	-9.09	-9.15	-9.05	-9.12	-8.18	-7.98	-7.94	-8.02	-7.69	-8.65
MW-4														
MW-5														
ELEVATION														
MW-1	95.83	97.17	96.04	95.67	95.51	95.42	95.55	95.50	96.95	97.44	97.56	97.45	97.07	96.46
MW-2	95.62	96.85	95.83	95.52	95.40	95.34	95.44	95.39	96.61	97.01	96.99	97.00	96.66	96.14
MW-3	95.52	96.46	95.72	95.47	95.43	95.37	95.47	95.40	96.34	96.54	96.58	96.50	96.23	95.87
MW-4														
MW-5														
	Oct-93	Jan-94	Apr-94	Jul-94	Oct-94	Jan-95	Apr-95	Jan-97	Nov-98	Jan-01	Jun-02	Nov-02		
DEPTH														
MW-1	-9.38	-8.80	-8.15	-8.70	-9.37	-7.18	-6.76	-7.03	-8.10	-7.70	-7.30	-8.14		
MW-2	-9.64	-9.12	-8.56	-9.02	-9.59	-7.71	-7.40	-7.55	-8.49	-8.08	-7.77	-8.50		
MW-3	-9.32	-8.93	-8.52	-8.86	-9.25	-7.85	-7.64	-7.75	-8.38	-8.00	-7.81	-8.37		
MW-4			-9.29	-9.55	-9.83	-8.88	-8.80	----	----	----	----	----		
MW-5			-8.27	-8.50	-8.92	-7.61	-8.48	-6.79	-8.12	-7.67	-7.61	-8.01		
ELEVATION														
MW-1	95.22	95.74	96.61	96.06	95.39	97.58	98.00	97.73	96.66	97.06	97.46	96.62		
MW-2	95.20	95.59	96.30	95.84	95.27	97.15	97.46	97.31	96.37	96.78	97.09	96.36		
MW-3			96.00	95.66	95.27	96.67	96.88	96.77	96.14	96.52	96.71	96.15		
MW-4			95.57	95.31	95.03	95.98	96.06	----	----	----	----	----		
MW-5			95.35	95.12	94.70	96.01	95.14	96.83	95.50	95.95	96.01	95.61		

TABLE 2
SUMMARY OF GROUND WATER ANALYTICAL TEST DATA

<u>Date Sample</u>	<u>Total Petroleum Hydrocarbons</u>	<u>Benzene</u>	<u>Toluene</u>	<u>Ethyl-Benzene</u>	<u>Total Xylenes</u>	<u>MTBE</u>
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	
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	
7-21-95 ⁽³⁾	5,200	1,500	450	190	400	
10-25-95 ⁽³⁾	5,900	1,800	450	210	400	
1-21-97 ⁽³⁾	3,100	1,100	87	160	180	ND<7.3
11-12-98 ⁽³⁾	1,000	280	3.0	3.3	7.9	ND<30
1-16-01 ⁽³⁾	4,700	1,200	18	150	49	ND<5
6-27-02 ⁽³⁾	5,900	230	7.7	ND<5	1,500	ND<5
11-18-02 ⁽³⁾	3,100	890	12	310	28	ND<2.5
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	
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	

TABLE 2 (cont'd)
SUMMARY OF GROUND WATER ANALYTICAL TEST DATA

<u>Date Sample</u>	<u>Total Petroleum Hydrocarbons</u>	<u>Benzene</u>	<u>Toluene</u>	<u>Ethyl-Benzene</u>	<u>Total Xylenes</u>	<u>MTBE</u>
Monitoring Well MW-2 (cont'd)						
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	
7-21-95 ⁽³⁾	9,900	3,300	320	390	830	
10-25-95 ⁽³⁾	13,000	4,900	400	580	990	
1-21-97 ⁽³⁾	7,600	2,600	310	330	660	ND<20
11-12-98 ⁽³⁾	31,000	11,000	750	1,500	2,300	ND<900
1-16-01 ⁽³⁾	23,000	8,200	260	1,000	820	ND<30
6-27-02 ⁽³⁾	39,000	7,000	1,800	690	4,000	ND<5
11-18-02 ⁽³⁾	15,000	5,700	76	1,000	150	ND<12

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	
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	
7-21-95 ⁽³⁾	5,700	2,000	280	270	280	

TABLE 2 (cont'd)
SUMMARY OF GROUND WATER ANALYTICAL TEST DATA

<u>Date Sample</u>	<u>Total Petroleum Hydrocarbons</u>	<u>Benzene</u>	<u>Toluene</u>	<u>Ethyl-Benzene</u>	<u>Total Xylenes</u>	<u>MTBE</u>
Monitoring Well MW-3(cont'd)						
10-25-95 ⁽³⁾	11,000	3,500	1,100	460	680	
1-21-97 ⁽³⁾	2,200	860	63	71	80	ND
11-12-98 ⁽³⁾	180	44	0.51	ND	0.92	ND<20
1-16-01 ⁽³⁾	64	11	0.77	ND	ND	ND<5
6-27-02 ⁽³⁾	ND	ND	ND	ND	ND	ND<1
11-18-02 ⁽³⁾	110	21	1.0	ND	ND	ND<1
Monitoring Well MW-4						
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	
7-21-95 ⁽³⁾	130	8.8	1.3	4.5	7.6	
10-25-95 ⁽³⁾	95	6.6	1.7	4.3	7.0	
1-21-97 ⁽³⁾	not sampled					
11-12-98 ⁽³⁾	not sampled					
1-16-01 ⁽³⁾	not accessible					
6-27-02 ⁽³⁾	not accessible					
11-18-02 ⁽³⁾	not accessible					
Monitoring Well MW-5						
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	
7-21-95 ⁽³⁾	11,000	3,400	760	610	1,200	
10-25-95 ⁽³⁾	13,000	2,900	830	570	1,100	
1-21-97 ⁽³⁾	2,600	750	65	1860	280	ND
11-12-98 ⁽³⁾	ND	2.2	ND	ND	ND	ND

TABLE 2 (cont'd)
SUMMARY OF GROUND WATER ANALYTICAL TEST DATA

<u>Date Sample</u>	<u>Total Petroleum Hydrocarbons</u>	<u>Benzene</u>	<u>Toluene</u>	<u>Ethyl-Benzene</u>	<u>Total Xylenes</u>	<u>MTBE</u>
Monitoring Well MW-5(cont'd)						
1-16-01 ⁽³⁾	ND	11	ND	ND	0.82	ND<5
6-27-02 ⁽³⁾	ND	ND	ND	ND	ND	ND<1
11-18-02 ⁽³⁾	130	17	3.8	2.1	16	ND<1

- 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.

Figures 6 and 7 indicate the concentration distribution maps for Total Petroleum Hydrocarbons as gasoline and Benzene, respectively.

7.0 SUMMARY OF FINDINGS

The analytical test data from the previous investigation activities indicate that low to moderate concentrations of Total Petroleum Hydrocarbons as gasoline and Volatile Aromatic Compounds (BTEX) remain in the soil in the immediate vicinity of the former tanks; however, the extent of soil contamination is limited. There is no significant presence of MTBE in the soil. The highest concentrations of gasoline were detected in Borings EB-9, 10, and 11 which are located down-gradient of the former tanks and dispenser pump. The remaining samples indicate that the soil contamination extends in a radial pattern (cross- and down-gradient) from the former tank area.

The monitoring wells continue to exhibit low to moderate concentrations of Total Petroleum Hydrocarbons as gasoline and Volatile Aromatic Compounds (Benzene, Toluene, Ethyl Benzene, and Xylene) suggesting that the source of these compounds is the former underground storage tanks. However, the concentrations reduce significantly with distance from the source area and there is no detectable presence of MTBE in the ground water.

RECOMMENDATIONS

In accordance with the request from Ms. JoAnn Stewart (Good Chevrolet) and in response from a reported request from Alameda County Department of Environmental Health, we have prepared a Work Plan for further evaluate/investigate the extent of soil and ground water contamination on the adjacent down-gradient property and to evaluate the stability of the existing residual ground water contaminant plume in support of site closure.

It is noted that Alameda County Department of Environmental Health also requested a soil-gas survey to be performed to evaluate the potential for vapor migration into the existing buildings; however, the soil gas survey performed in November, 1998 did not indicate the presence of significant volatile organic vapors within the upper 3-feet of soil at the "source area". This confirmed that, although some soil and ground water contaminants remains, the extent of off-gassing through the upper soils is very low and does not represent a significant health risk. As such, an additional soil gas survey has not been incorporated into the proposed scope of work.

LIMITATIONS

This report has been prepared for the exclusive use of Good Chevrolet and their authorized representatives. No reliance on this report shall be made by anyone other than the client for whom it was prepared.

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.

This report provides neither certification nor guarantee that the property is free of hazardous substance contamination.

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

683 McCarty Avenue, Mountain View, California 94041 Phone 650/314-0494 Fax 650/314-0493



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

MW-3

GOOD CHEVROLET
SHOW ROOM

EB5

MW-2

EB4

APPROXIMATE
LIMITS OF
PREVIOUS
EXCAVATION

SB4

EB6

EB3

APPROXIMATE
LOCATION OF
FORMER
STORAGE
TANKS

MW-1

EB2

EB1

PROPERTY FENCE LINE

SERVICE CENTER

EB7

GOOD CHEVROLET		
DATE 10/25/93	SCALE 1"=10'	DRAWN BY deg
SITE PLAN		
		Figure 2

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

- ⊕ Monitoring Wells
- Borings Previous Studies
- ⊙ Borings Previous Study 1/97

GeoPlexus, Inc.

GOOD CHEVROLET		
DATE 12/5/98	SCALE 1"=20'	DRAWN BY dcb
BORING LOCATION PLAN		
		Figure 3

ARROW INDICATES DIRECTION OF TRAFFIC FLOW

CENTER LINE

PARKING LANE

SIDEWALK

SIDEWALK

GOOD CHEVROLET SHOWROOM

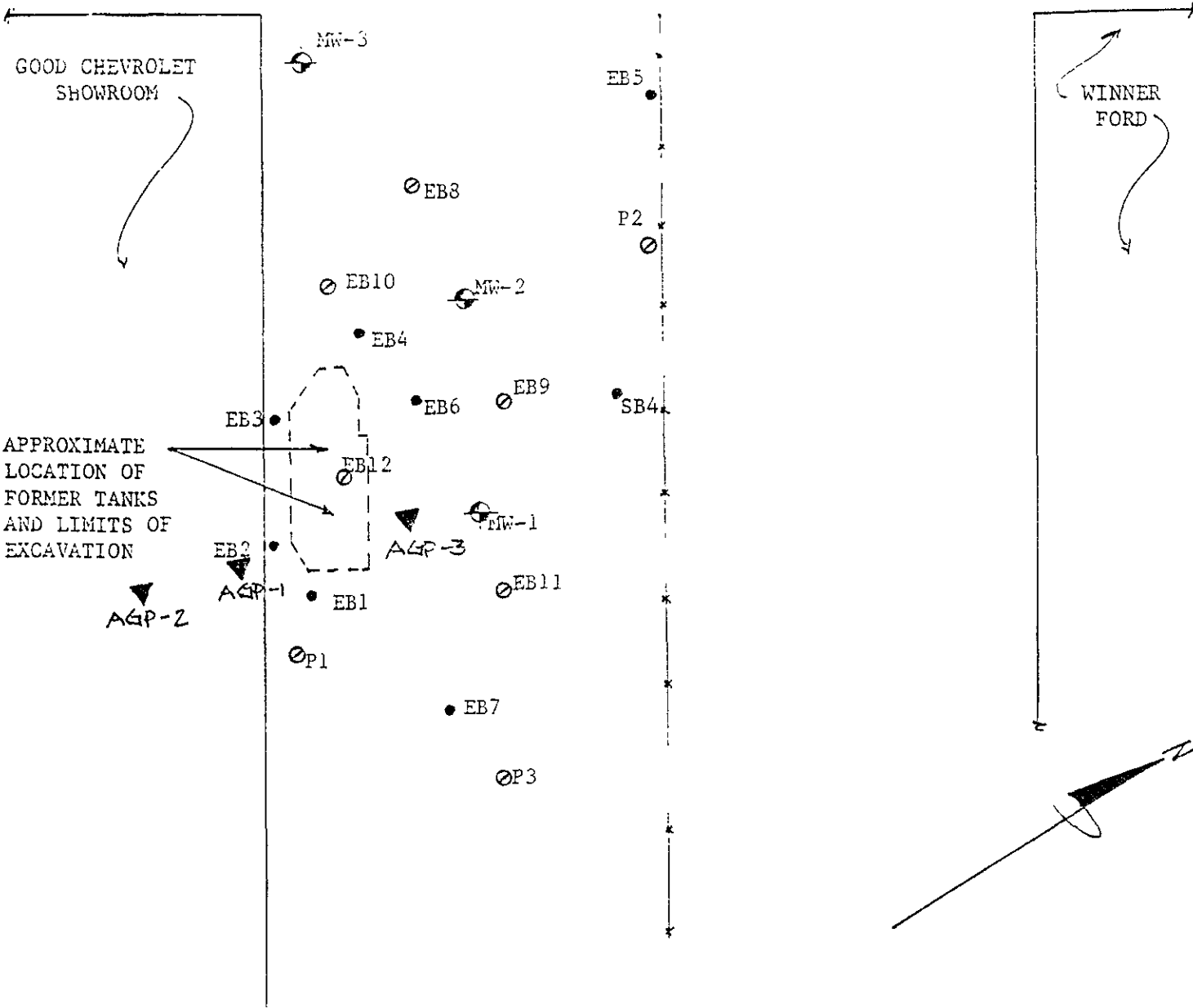
WINNER FORD

APPROXIMATE LOCATION OF FORMER TANKS AND LIMITS OF EXCAVATION

- ⊕ Monitoring Wells
- Borings Previous Studies
- ⊙ Borings Previous Study 1;97

GOOD CHEVROLET		
DATE 12/5/98	SCALE 1"=20'	DRAWN BY dgc
SOIL GAS PROBE LOCATION PLAN		
		Figure 4

GeoPlexus, Inc.



ARROW INDICATES DIRECTION OF TRAFFIC FLOW

CENTER LINE

PARKING LANE

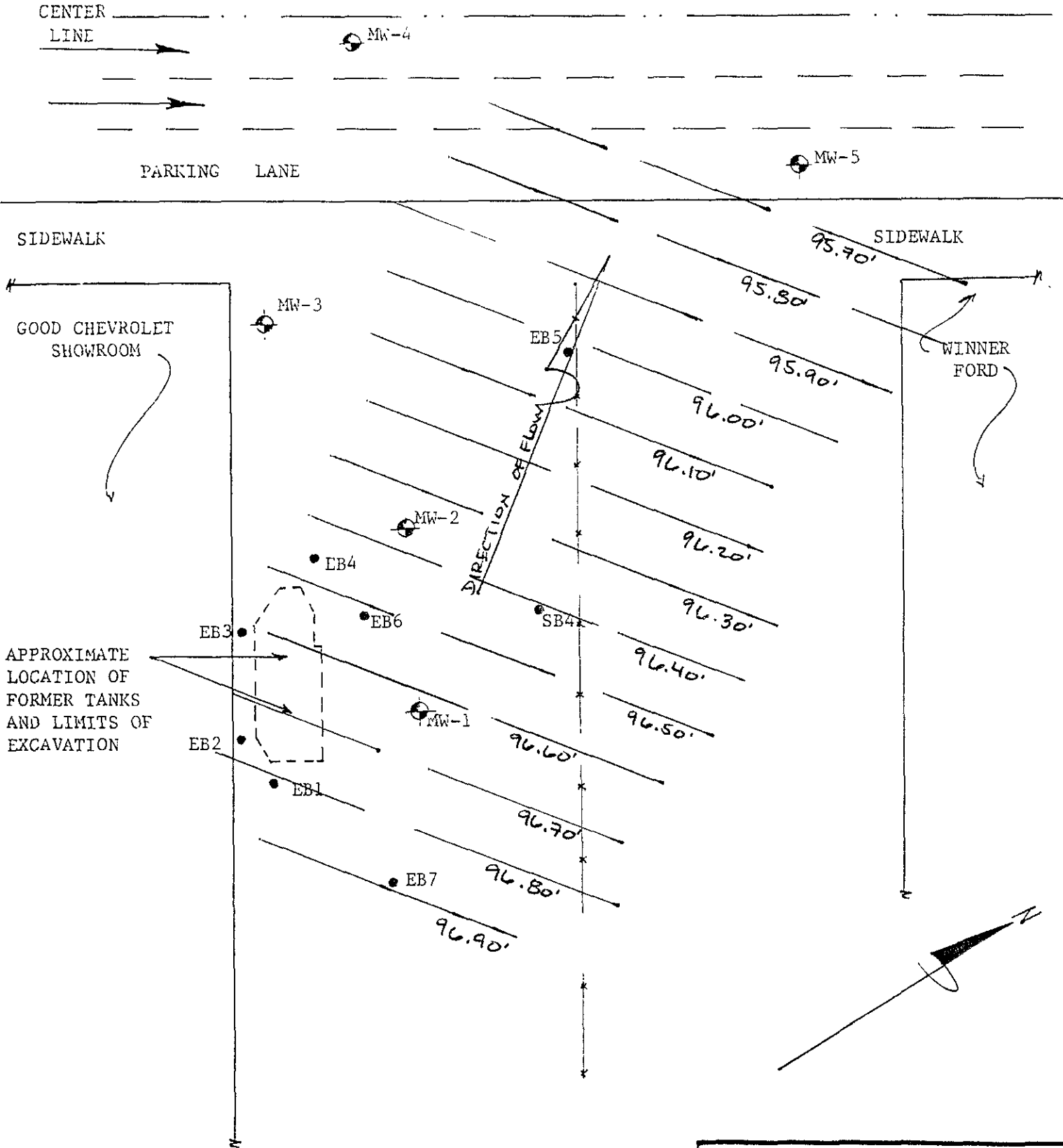
SIDEWALK

SIDEWALK

GOOD CHEVROLET SHOWROOM

WINNER FORD

APPROXIMATE LOCATION OF FORMER TANKS AND LIMITS OF EXCAVATION



GOOD CHEVROLET

DATE 11-18-02

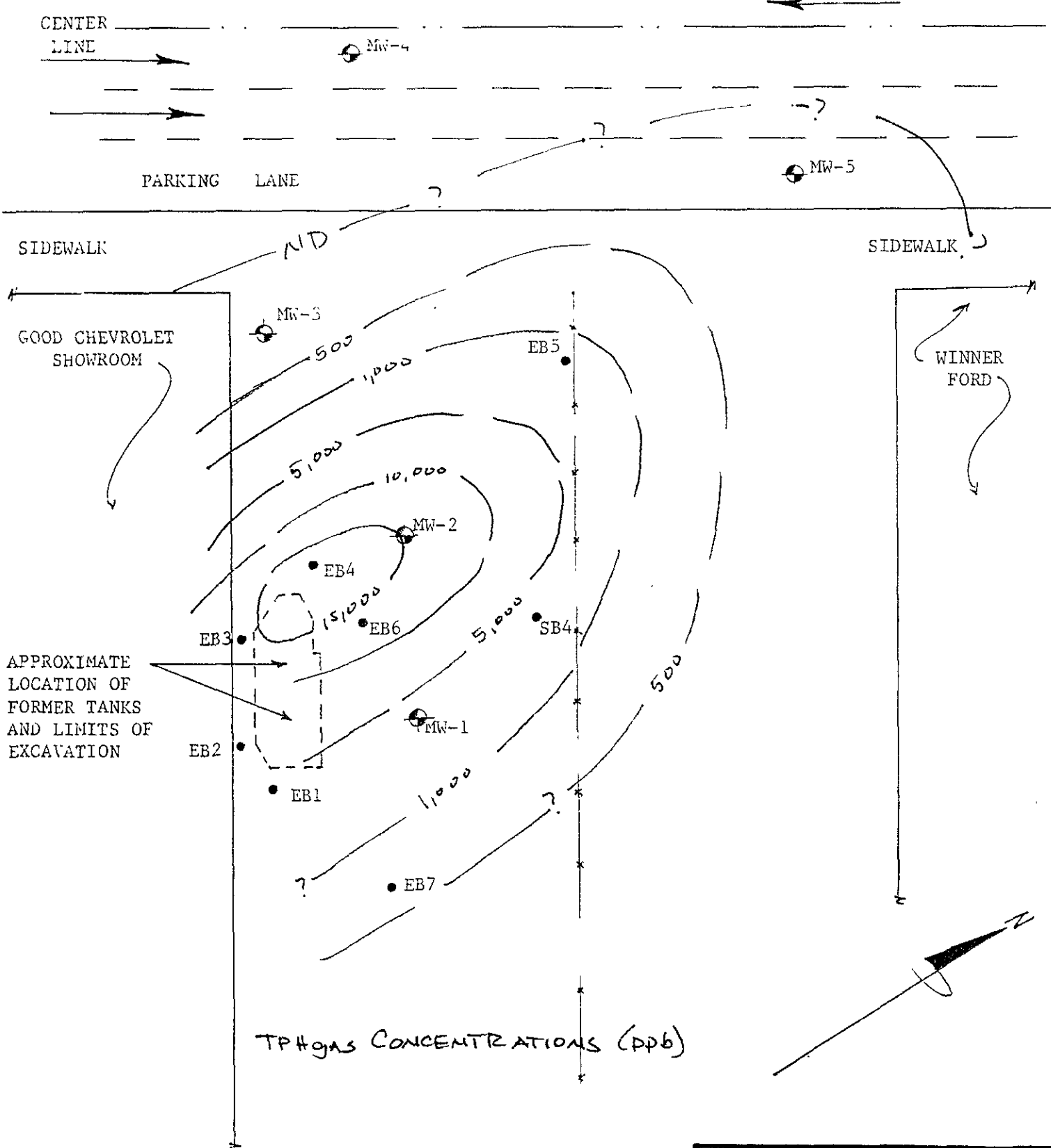
SCALE 1"=20'

DRAWN BY deg

GROUND WATER GRADIENT

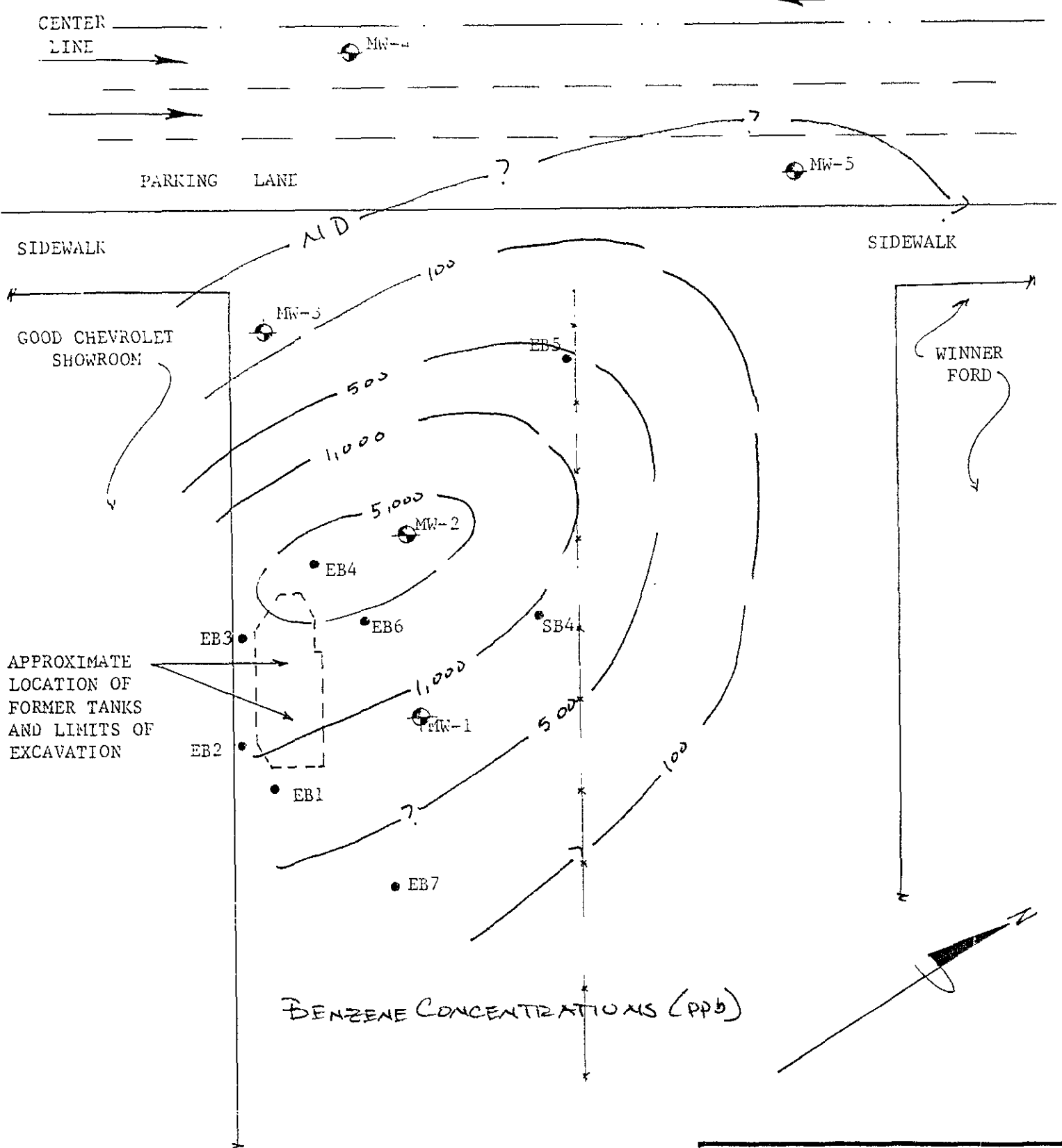
Figure 5

ARROW INDICATES DIRECTION OF TRAFFIC FLOW



GOOD CHEVROLET		
DATE 11-18-02	SCALE 1"=20'	DRAWN BY deg
TPH GAS IN GROUNDWATER		
		Figure 6

ARROW INDICATES DIRECTION OF TRAFFIC FLOW



BENZENE CONCENTRATIONS (PPB)

GOOD CHEVROLET		
DATE 11-18-02	SCALE 1"=20'	DRAWN BY dcb
BENZENE IN GROUNDWATER		
		Figure 7

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

PROJECT NUMBER		PROJECT NAME				Number of Cntrs	Type of Containers	Type of Analysis					Condition of Samples	Initial
Send Report Attention of:		Report Due		Verbal Due				TAM-6	ITEX/ITIC	EDS, 1-200A	HEAVY METALS	RES MET		
Sample Number	Date	Time	Comp	Grab	Sample Type Station-Location									
✓ HW-1	11/14/02	1133			water	3	VDA	X	X	X	X			
✓ 2	↓	1143			↓	↓	↓	X	X	X	X			
✓ 3	↓	1155			↓	↓	↓	X	X	X	X			
X 5	↓	1210			↓	↓	↓	X	X	X	X			
DOCUMENTED IN LAB _____ PRESERVED IN LAB _____														
Relinquished by: (Signature)		Date/Time		Received by: (Signature)		Date/Time		Remarks: Normal TAT						
D. Smith		11/19/02		B. Butto		11-19-02								
B. Butto		11/19		[Signature]		11/19/02								
Relinquished by: (Signature)		Date/Time		Received by: (Signature)		Date/Time								
[Signature]		[Date/Time]		[Signature]		[Date/Time]								
Relinquished by: (Signature)		Date/Time		Received by: (Signature)		Date/Time								
[Signature]		[Date/Time]		[Signature]		[Date/Time]								

McCampbell Analytical Inc.



110 Second Avenue South, #107
Pacheco, CA 94553-5560
(925) 798-1620

CHAIN-OF-CUSTODY RECORD

WorkOrder: 0211322

Client:

GEO Plexus, Inc.
683 McCarty Avenue
Mountain View, CA 94041

TEL (650) 314-0494
FAX (650) 314-0493
ProjectNo: Good Chevreolet, Alameda CA
PO

Date Received 11/19/02
Date Printed 11/19/02

Sample ID	ClientSampID	Matrix	Collection Date	Hold	Requested Tests	
					8021B/8015	SW8260B
0211322-001	MW-1	Water	11/18/02 11:33:00 AM		A	B
0211322-002	MW-2	Water	11/18/02 11:43:00 AM		A	B
0211322-003	MW-3	Water	11/18/02 11:55:00 AM		A	B
0211322-004	MW-5	Water	11/18/02 12:10:00 PM		A	B

Prepared by:

Comments:

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense



GEO Plexus, Inc 683 McCarty Avenue Mountain View, CA 94041	Client Project ID: Good Chevrolet, Alameda CA	Date Sampled: 11/18/02
	Client Contact: Cathrene Glick	Date Received: 11/19/02
	Client P.O.:	Date Analyzed: 11/20/02-11/22/02
		Date Extracted: 11/20/02-11/22/02

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE*

Extraction method SW 5030B

Analytical methods SW8021B/8015Cm

Work Order 0211322

Lab ID	Client ID	Matrix	TPH(g)	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	DF	% SS
001A	MW-1	W	3100.a	ND<50	890	12	310	28	10	104
002A	MW-2	W	15,000.a	ND<500	5700	76	1000	150	100	99.5
003A	MW-3	W	110.a	ND<10	21	1.0	ND	ND	1	---#
004A	MW-5	W	130.a	ND	17	3.8	2.1	16	1	---#

Reporting Limit for DF = 1	W	50	50	0.5	0.5	0.5	0.5	0.5	1	µg/L
ND means not detected at or above the reporting limit	S	NA	NA	NA	NA	NA	NA	NA	1	mg/Kg

*water and vapor samples are reported in µg/L, soil and sludge samples in mg/kg, wipe samples in µg/wipe, and TCLP extracts in µg/L

= cluttered chromatogram, sample peak coelutes with surrogate peak

-The following descriptions of the TPH chromatogram are cursory in nature and McC Campbell 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 (stoddard solvent / mineral spirit?); f) one to a few isolated non-target peaks present; g) strongly aged gasoline or diesel range compounds are significant; h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~2 vol % sediment; j) reporting limit raised due to high MTBE content; k) TPH pattern that does not appear to be derived from gasoline (aviation gas); m) no recognizable pattern



McC Campbell Analytical Inc.

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 Telephone 925-798-1620 Fax: 925-798-1622
 http://www.mccampbell.com E-mail: man@mccampbell.com

GEO Plexus, Inc. 683 McCarty Avenue Mountain View, CA 94041	Client Project ID: Good Chevrolet. Alameda CA	Date Sampled: 11/18/02
	Client Contact: Cathrene Glick	Date Received: 11/19/02
	Client P.O.:	Date Extracted: 11/21/02-11/22/02
		Date Analyzed: 11/21/02-11/22/02

Oxygenated Volatile Organics + EDB and 1,2-DCA by P&T and GC/MS*

Extraction Method SW5030B

Analytical Method SW8260B

Work Order 0211322

Lab ID	0211322-001B	0211322-002B	0211322-003B	0211322-004B	Reporting Limit for DF=1	
Client ID	MW-1	MW-2	MW-3	MW-5		
Matrix	W	W	W	W		
DF	5	25	1	1		

Compound	Concentration				ug/kg	ug/L
Methyl-t-butyl ether (MTBE)	ND<2.5	ND<12	ND	ND	NA	0.5
1,2-Dibromoethane (1,2-DBE)	ND<2.5	ND<12	ND	ND	NA	0.5
1,2-Dichloroethane (1,2-DCA)	ND<2.5	ND<12	ND	ND	NA	0.5

Surrogate Recoveries (%)

%SS	98.0	93.5	92.7	92.7		
Comments	J	J				

* water and vapor samples and all TCLP & SPLP extracts are reported in ug/L, soil/sludge/solid samples in ug/kg, wipe samples in ug/wipe, product oil non-aqueous liquid samples in mg/L

ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis

h) lighter than water immiscible sheen/product is present, i) liquid sample that contains greater than ~2 vol % sediment; j) sample diluted due to high organic content.



QC SUMMARY REPORT FOR SW8021B/8015Cm

Matrix W

WorkOrder 0211322

EPA Method	SW8021B/8015Cm	Extraction	SW5030B	BatchID 4955			Spiked Sample ID			N/A	
Compound	Sample	Spiked	MS*	MSD*	MS-MSD*	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)		
	µg/L	µg/L	% Rec	% Rec.	% RPD	% Rec	% Rec	% RPD	Low	High	
PHHgas	N/A	60	N/A	N/A	N/A	99.7	111	10.8	80	120	
MIBI	N/A	10	N/A	N/A	N/A	80.9	85	4.86	80	120	
Benzene	N/A	10	N/A	N/A	N/A	96.5	105	8.27	80	120	
Toluene	N/A	10	N/A	N/A	N/A	99.7	108	8.45	80	120	
Ethylbenzene	N/A	10	N/A	N/A	N/A	98	107	8.41	80	120	
Xylenes	N/A	30	N/A	N/A	N/A	99.3	110	10.2	80	120	
TSS	N/A	100	N/A	N/A	N/A	90.7	93.4	2.91	80	120	

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions
 NONE

MS = Matrix Spike MSD = Matrix Spike Duplicate, LCS = Laboratory Control Sample, LCSD = Laboratory Control Sample Duplicate, RPD = Relative Percent Deviation

N/A = not enough sample to perform matrix spike and matrix spike duplicate

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content

$$\% \text{ Recovery} = 100 * (\text{MS-Sample}) / (\text{Amount Spiked}); \text{RPD} = 100 * (\text{MS} - \text{MSD}) / (\text{MS} + \text{MSD}) * 2$$

* MS and / or MSD spike recoveries may not be near 100% or the RPDs near 0% if a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) if that specific sample matrix interferes with spike recovery



QC SUMMARY REPORT FOR SW8260B

Matrix W

WorkOrder 0211322

EPA Method	SW8260B	Extraction		SW5030B			BatchID 4954		Spiked Sample ID N/A	
Compound	Sample	Spiked	MS*	MSD*	MS-MSD*	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)	
	µg/L	µg/L	% Rec	% Rec	% RPD	% Rec	% Rec	% RPD	Low	High
tert-Amyl methyl ether (TAMF)	N/A	10	N/A	N/A	N/A	93.8	93.6	0.177	70	130
Methyl-t-butyl ether (MTBE)	N/A	10	N/A	N/A	N/A	114	116	1.27	70	130
Diisopropyl ether (DIPE)	N/A	10	N/A	N/A	N/A	122	121	0.582	70	130
1-thyl tert-butyl ether (1TBE)	N/A	10	N/A	N/A	N/A	104	102	1.42	70	130
%SS1	N/A	100	N/A	N/A	N/A	91.3	92.9	1.71	70	130

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions
 NONE.

MS = Matrix Spike, MSD = Matrix Spike Duplicate, LCS = Laboratory Control Sample, LCSD = Laboratory Control Sample Duplicate, RPD = Relative Percent Deviation

N/A = not enough sample to perform matrix spike and matrix spike duplicate

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content

% Recovery = $100 * (MS - Sample) / (Amount Spiked)$, RPD = $100 * (MS - MSD) / (MS + MSD) * 2$

* MS and / or MSD spike recoveries may not be near 100% or the RPDs near 0% if a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) if that specific sample matrix interferes with spike recovery