

December 28, 1993

Mr. Gerry Wilkinson  
Mr. Tad Tassone  
Wilkinson Equipment Corporation  
P. O. Box 7680  
San Francisco, CA 94120

Subject: Final (4th) Quarterly Ground Water Monitoring Report  
1025 Eastshore Highway, Albany, CA

ALCO  
HAZMAT  
94 JAN 20 PM 1:03

Dear Messrs. Wilkinson and Tassone:

As requested and authorized, the attached December, 1993 Quarterly Ground Water Monitoring Report has been prepared to document the monitoring well sampling efforts performed at the subject site. The report presents the recorded ground water elevations, the ground water sampling protocols, and the results of the analytical testing performed on ground water samples collected on December 13, 1993.

In summary, the analytical testing did not detect Total Petroleum Hydrocarbons as gasoline, Total Petroleum Hydrocarbons as diesel, Volatile Aromatic Compounds (Benzene, Toluene, Ethyl Benzene, or Total Xylenes), or Oil & Grease in the ground water samples. This is the fourth consecutive sample event with non-detectable concentrations.

Based on our review of the project history, we have concluded that the remedial work performed to date including the tank removal, soil excavation, and ground water monitoring has resulted in: (1) removal of any potential source of the contamination; (2) removal of any impacted soil adjacent to and beneath the tanks which could contribute to ground water contamination; and (3) verified through one year of monitoring that ground water contamination does not exist at the project site.

It is also our opinion that the project site does not represent a risk to the local ground water resources. It is our recommendation that the site be considered/recommended for closure without further action and that the existing monitoring well at the site be destroyed in accordance with State of California and Alameda County well destruction guidelines by over-drilling and grouting techniques.

Copies of this report should be forwarded to:

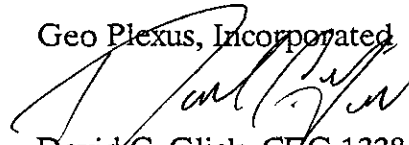
Ms. Juliet Shin  
Alameda County Health Care Services  
Department of Environmental Health  
80 Swan Way, Room 200  
Oakland, CA 94621

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

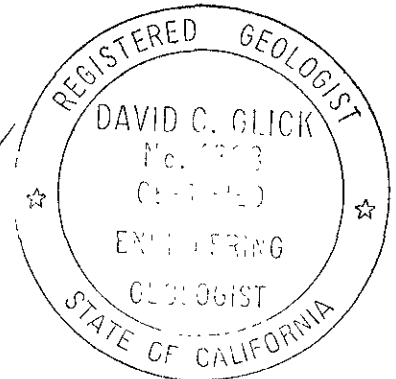
It has been a pleasure to be of service to you on this project. Questions or comments regarding the attached report should be addressed to the undersigned.

Respectfully submitted,

Geo Plexus, Incorporated



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



DECEMBER, 1993 QUARTERLY  
GROUND WATER MONITORING REPORT  
for  
WILKINSON EQUIPMENT CORPORATION  
1025 EASTSHORE HIGHWAY  
ALBANY, CA

Prepared for:  
Wilkinson Equipment Corporation  
P. O. Box 7680  
San Francisco, CA 94120

Project C92054  
December 28, 1993

DECEMBER, 1993 QUARTERLY  
GROUND WATER MONITORING REPORT  
for  
WILKINSON EQUIPMENT CORPORATION  
1025 EASTSHORE HIGHWAY, ALBANY, CA

INTRODUCTION

The project site is located at 1025 Eastshore Highway in the City of Albany, in Alameda County, California as indicated on Figure 1. The site has been, and currently is, occupied by an equipment rental facility. Six underground storage tanks were removed from the site in October, 1992. The tanks included: (1) 8,000 gallon gasoline tank, (1) 4,000 gallon gasoline tank, (1) 8,000 gallon diesel tank, (1) 1,000 gallon waste oil tank, (1) 550 gallon motor oil tank, and (1) 550 gallon hydraulic oil tank and were located as indicated on Figure 2.

Soil samples obtained during the tank removal activities by Blain Tech Services, Inc. were submitted for analytical testing. The soil samples did not contain detectable concentrations of Total Petroleum Hydrocarbons as gasoline, Total Petroleum Hydrocarbons as diesel, Oil and Grease, Volatile Aromatic Compounds, or Volatile Organic Compounds. A ground water sample was also obtained from the tank excavation which contained 1,100 parts per billion (ppb) of Total Petroleum Hydrocarbons as gasoline, 170 ppb Total Petroleum Hydrocarbons as diesel, and 1,300 ppb Oil and Grease. The excavation was subsequently backfilled with clean imported fill material and the excavated soil was hauled off-site for thermal destruction.

Based on information derived by Geo Plexus, Inc. during a Preliminary Site Characterization Investigation, it was determined that the direction of ground water flow in the immediate vicinity of the project site is in a westerly direction as indicated on Figure 3. One ground water monitoring well was installed in the reported/verified "down-gradient" direction within 5 feet of the excavation as indicated on Figure 4. Analytical testing of ground water samples obtained from the monitoring well did not detect Total Petroleum Hydrocarbons as gasoline, Total Petroleum Hydrocarbons as diesel, Volatile Aromatic Compounds (Benzene, Toluene, Ethyl Benzene, or Total Xylenes), or Oil & Grease.

MONITORING WELL SAMPLING

Free product measurements were obtained at the time of sample acquisition utilizing an acrylic bailer lowered into the wells to obtain a surface 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, visible sheen, or odors were not observed in the monitoring well sample.

Prior to sampling, a minimum of four well volumes were purged from the 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 the teflon bailer. The water developed from the monitoring wells was contained on-site pending receipt of the laboratory test results.

The water samples were collected in sterilized glass vials with Teflon lined screw caps. The water samples collected for Volatile Organics were collected in 40 mil. vials acidified with HCL by the analytical laboratory. The water samples collected for Total Petroleum Hydrocarbons as diesel and Oil & Grease were collected in sterilized 1-liter amber jars 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. The samples were placed on ice immediately for transport to the laboratory under chain-of-custody documentation.

#### ANALYTICAL TESTING

The ground water samples were submitted to and tested by McCampbell Analytical, Inc., 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 Guidelines. The analytical test data, along with the Chain-of-Custody Forms are presented in Appendix A.

The water samples were tested for Total Petroleum Hydrocarbons as gasoline by Method GCFID 5030/8015, Total Petroleum Hydrocarbons as diesel by Method GCFID 3550/8015, Oil and Grease by EPA Method 5520, and Volatile Aromatics by EPA Method 8020 as indicated on the Chain-of-Custody Form.

#### SUMMARY OF FINDINGS

Ground water was observed/recorded at a depth of 6.1 feet below the ground surface.

The analytical testing did not detect Total Petroleum Hydrocarbons as gasoline, Total Petroleum Hydrocarbons as diesel, Oil & Grease, or Volatile Aromatic Compounds (Benzene, Toluene, Ethyl Benzene, or Xylenes) in the ground water sample obtained from Monitoring Well MW-1. Tables 1 and 2 summarize 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>
3-04-93	ND	N.D.	N.D.	N.D.	N.D.
6-09-93	ND	N.D.	N.D.	N.D.	N.D.
9-13-93	ND	N.D.	N.D.	N.D.	N.D.
12-13-93	ND	N.D.	N.D.	N.D.	N.D.

Note: Total Petroleum Hydrocarbons reported as gasoline  
N.D. indicates non-detectable concentrations

TABLE 2

SUMMARY OF GROUND WATER ANALYTICAL TEST DATA

<u>Date Sampled</u>	<u>Total Petroleum Hydrocarbons</u>	<u>Oil &amp; Grease</u>
3-04-93	ND	ND
6-09-93	ND	ND
9-13-93	ND	ND
12-13-93	ND	ND

Note: Total Petroleum Hydrocarbons reported as diesel  
N.D. indicates non-detectable concentrations

This is the fourth consecutive sample event with non-detectable concentrations.

Based on our review of the project history, we have concluded that the remedial work performed to date including the tank removal, soil excavation, and ground water monitoring has resulted in removal of any potential source of the contamination and verified that ground water contamination does not exist at the project site.

It is our opinion that the project site does not represent a significant risk to the local ground water resources.

### RECOMMENDATION

It is recommended that the site be considered/recommended for closure without further action. It is also recommended that the existing monitoring well at the site be destroyed in accordance with State of California and Alameda County well destruction guidelines by over-drilling and grouting techniques.

### LIMITATIONS

We have only observed a small portion of the pertinent soil and ground water conditions present at the site. Subsurface conditions across the site have been extrapolated from information obtained from review of existing documents and from the field investigation. The conclusions made herein are based on the assumption that soil 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



**PROJECT  
SITE**

**CITY BOUNDARY**

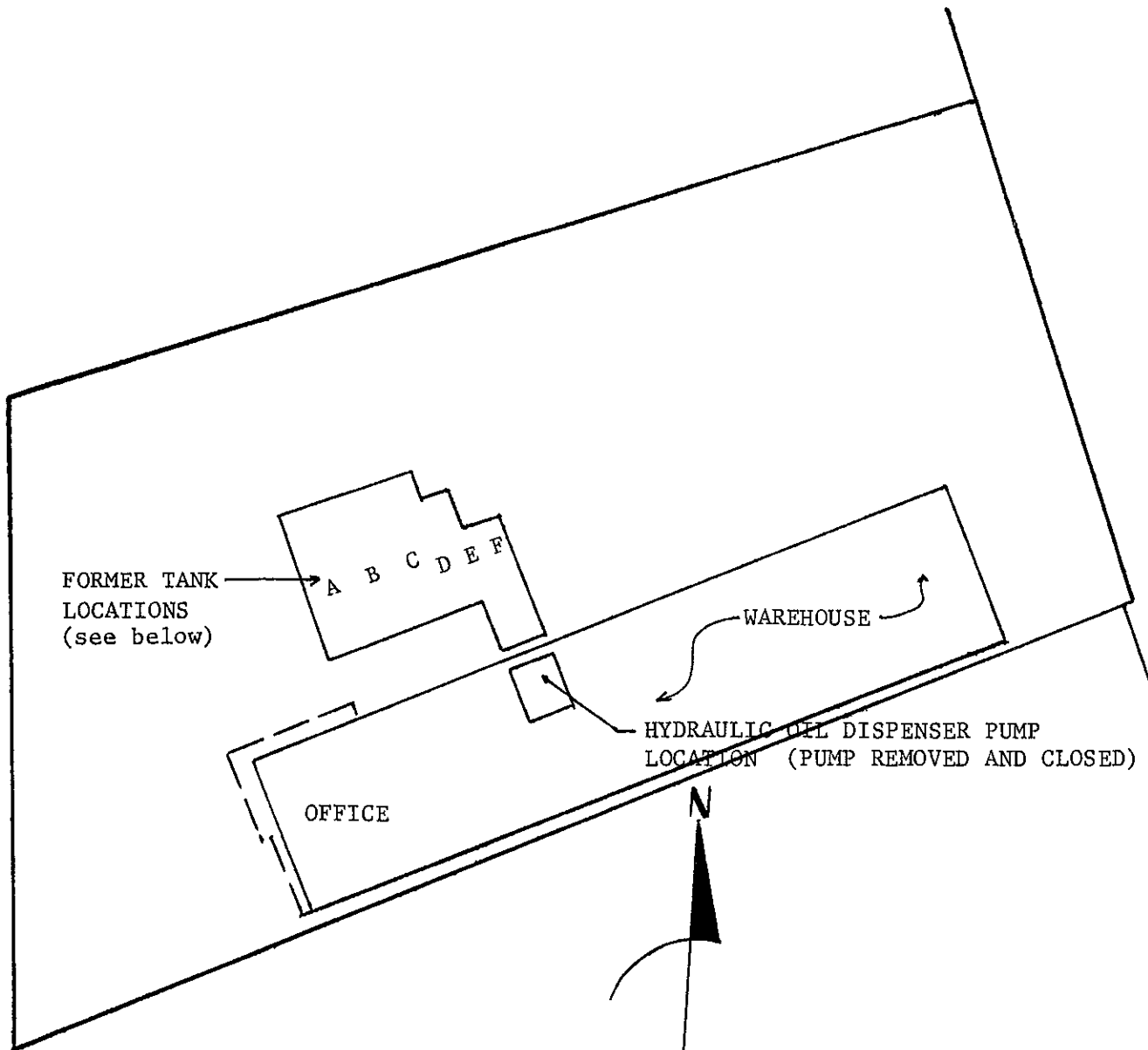
WILKINSON EQUIPMENT		
DATE 1/8/93	SCALE 1"=2000'	DRAWN BY dcg

VICINITY MAP

Figure 1

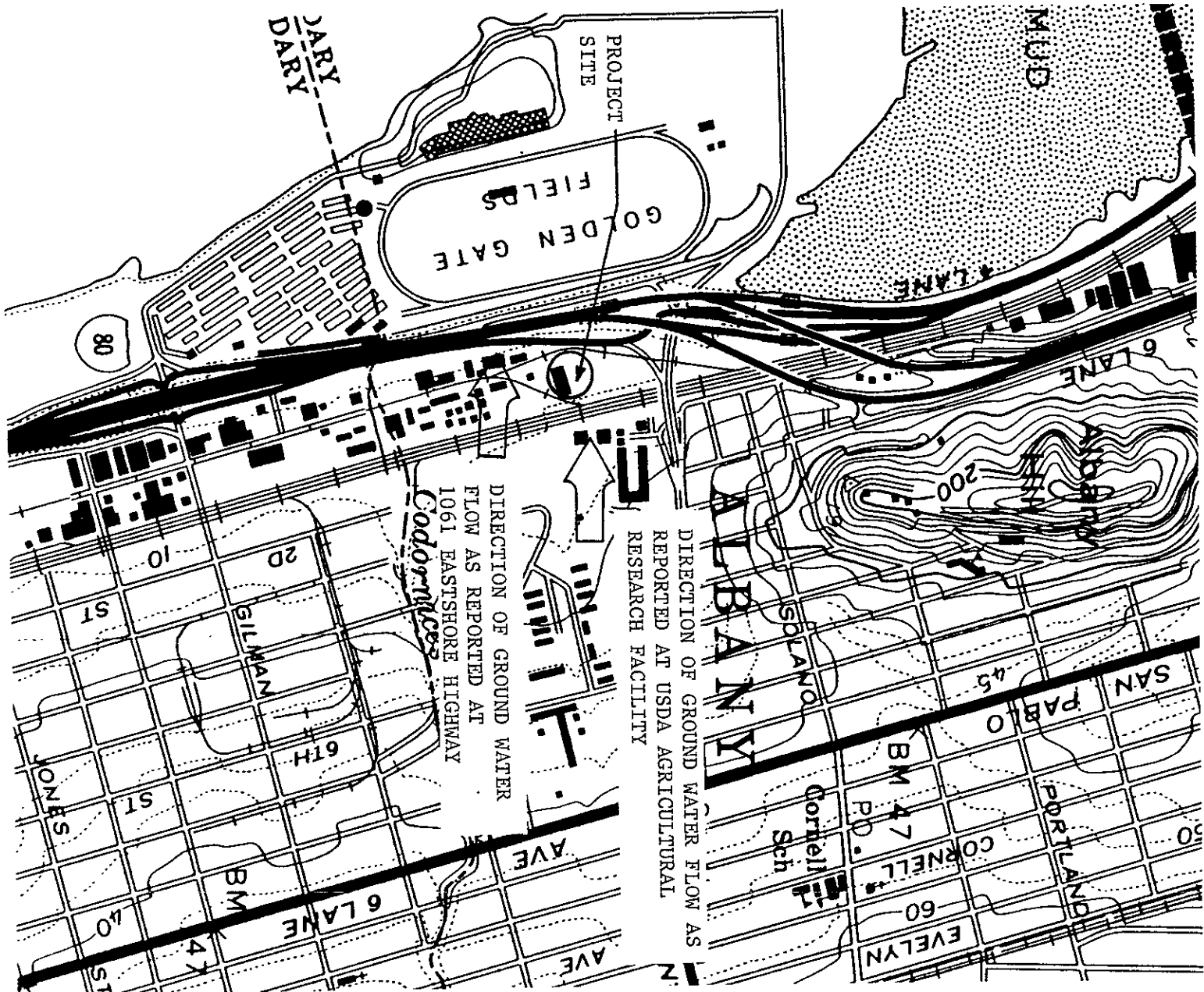


EASTSHORE HIGHWAY



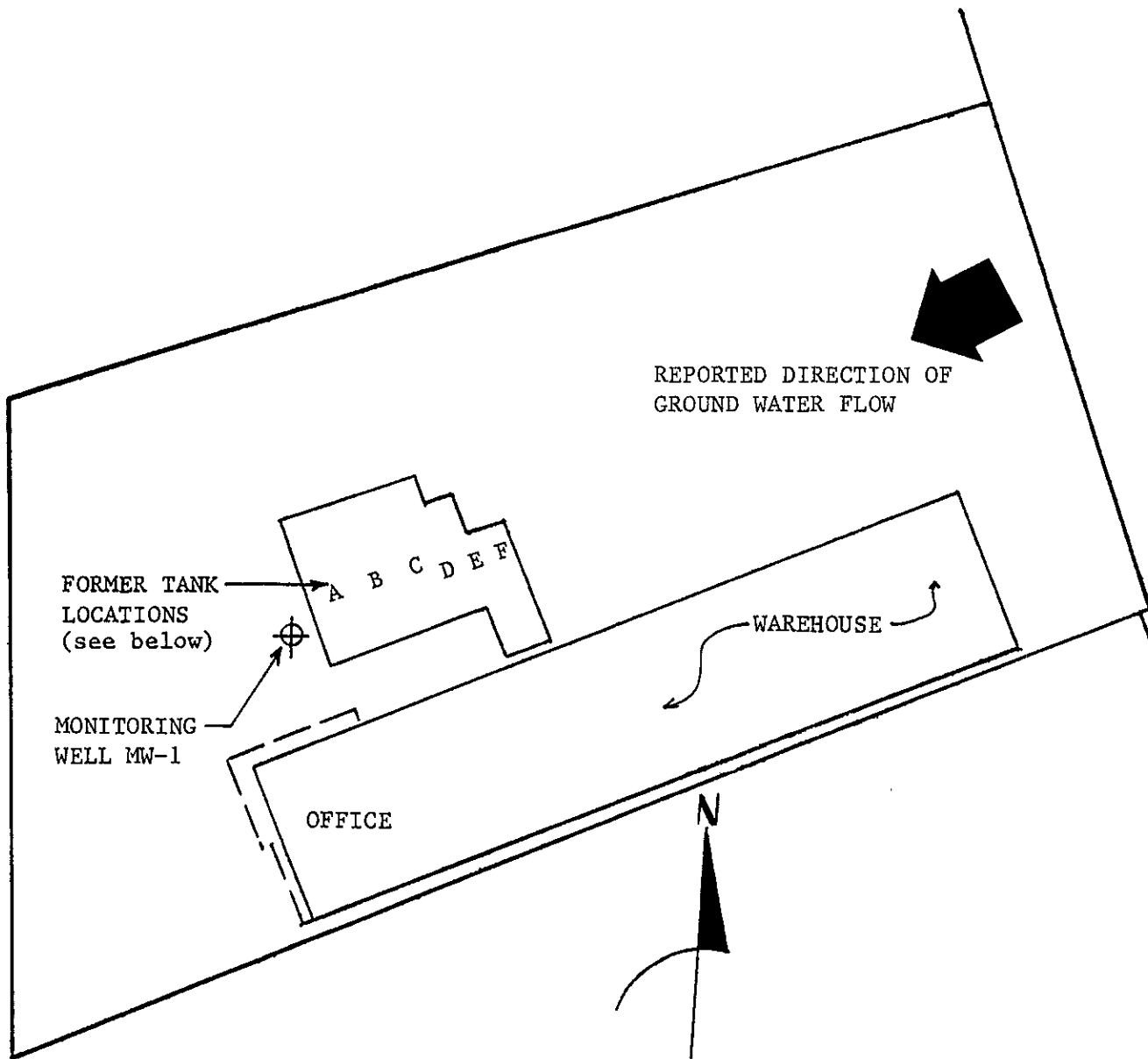
- TANK A 3,000 gal gasoline
- TANK B 8,000 gal diesel
- TANK C 4,000 gal gasoline
- TANK D 1,000 gal waste oil
- TANK E 550 gal new motor oil
- TANK F 550 gal hydraulic oil

WILKINSON EQUIPMENT		
DATE 1-10-93	SCALE 1"=50'	DRAWN BY dcg/tf
SITE PLAN		
		Figure 2



WILKINSON EQUIPMENT		
DATE 1/8/93	SCALE na	DRAWN BY dcg
GROUND WATER DATA		
Figure 3		

EASTSHORE HIGHWAY



- TANK A 8,000 gal gasoline
- TANK B 8,000 gal diesel
- TANK C 4,000 gal gasoline
- TANK D 1,000 gal waste oil
- TANK E 550 gal new motor oil
- TANK F 550 gal hydraulic oil

WILKINSON EQUIPMENT		
DATE 1-10-93	SCALE 1"=50'	DRAWN BY dcg/tf
SITE PLAN		
		Figure 4

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

Inv. # 1700  
AGP57

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				TPHG	TPHD	BTEX	Oil & Grease			
Sample Number	Date	Time	Comp	Grab	Station Location									
C93027	CLEMENTINA / WILKINSON ALBANY													
DAVID Glick		1 1		1 1										
mwi-WS1A,B	12/13/93	1315		1	MON well 1	2CA	ACIDIFIED 40 ml VOA	✓		✓		good	SK	
mwi-WS2 ABC	12/13/93	1315		1	MON well 1	3CA	1 LTR AMBER		✓	✓		"	J	
<div style="border: 1px solid black; padding: 5px; display: inline-block;">33531</div> <div style="border: 1px solid black; padding: 5px; display: inline-block;">33532</div>														
ICE/T ✓		GOOD CONDITION ✓		HEADSPACE ABSENT ✓		PRESERVATIVE APPROPRIATE CONTAINERS ✓		VOAS ✓		O&G METALS ✓		OTHER		
Relinquished by: (Signature)	Date/Time	Received by: (Signature)		Date/Time		Remarks: Purchase Order No.:								
<i>[Signature]</i>	12/14/93 1133	<i>[Signature]</i>		12/14/93 1133		STANDARD TRANSCEND								
Relinquished by: (Signature)	Date/Time	Received by: (Signature)		Date/Time		COMPANY: Geo Plexus, Inc.								
<i>[Signature]</i>	12/14/93 1133	<i>[Signature]</i>		12-14-93		ADDRESS: 1900 Wyatt Drive, Suite 1 Santa Clara, CA 95054								
Relinquished by: (Signature)	Date/Time	Received by: (Signature)		Date/Time		PHONE: (408) 987-0210 FAX: (408) 988-0815								

GEO Plexus, Inc. 1900 Wyatt Drive, # 1 Santa Clara, CA 95054	Client Project ID: # C93027;	Date Sampled: 12/13/93
	Clementina/Wilkinson	Date Received: 12/14/93
	Client Contact: David Glick	Date Extracted: 12/18/93
	Client P.O.:	Date Analyzed: 12/18/93

**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) <sup>+</sup>	Benzene	Toluene	Ethylbenzene	Xylenes	% Rec. Surrogate
33531	MW1-WS1 A	W	ND	ND	ND	ND	ND	111
Detection Limit unless otherwise stated; ND means Not Detected	W	50 ug/L	0.5	0.5	0.5	0.5	0.5	
	S	1.0 mg/kg	0.005	0.005	0.005	0.005	0.005	

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

# cluttered chromatogram; sample peak co-elutes 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 are significant; no recognizable pattern; 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 phase is present.

GEO Plexus, Inc. 1900 Wyatt Drive, # 1 Santa Clara, CA 95054	Client Project ID: # C93027; Clementina/Wilkinson	Date Sampled: 12/13/93
	Client Contact: David Glick	Date Received: 12/14/93
	Client P.O:	Date Extracted: 12/17/93
		Date Analyzed: 12/17-12/20/93

**Diesel Range (C10-C23) Extractable Hydrocarbons as Diesel \***

EPA methods modified 8015, and 3550 or 3510; California RWQCB (SF Bay Region) method GCFID(3550) or GCFID(3510)

Lab ID	Client ID	Matrix	TPH(d) <sup>+</sup>	% Recovery Surrogate
33532	MW1-WS2 A	W	ND	109
Detection Limit unless otherwise stated; ND means Not Detected	W	50 ug/L		
	S	10 mg/kg		

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

# cluttered chromatogram; surrogate and sample peaks co-elute or surrogate peak is on elevated baseline

+ 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 diesel is significant; b) diesel range compounds are significant; no recognizable pattern; c) modified diesel?; light(CL) or heavy(CH) diesel compounds are significant; d) gasoline range compounds are significant; e) medium boiling point pattern that does not match diesel(?); f) one to a few isolated peaks present; g) oil range compounds are significant; h) lighter than water immiscible phase is present.

McCAMPBELL ANALYTICAL INC.

110 2nd Avenue South, #D7, Pacheco, CA 94553  
 Tele: 510-798-1620 Fax: 510-798-1622

GEO Plexis, Inc. 1900 Wyatt Drive, # 1 Santa Clara, CA 95054	Client Project ID: # C93027; Clementina/Wilkinson	Date Sampled: 12/13/93
	Client Contact: David Glick	Date Received: 12/14/93
	Client P.O:	Date Extracted: 12/15/93
		Date Analyzed: 12/15/93

**Petroleum Oil & Grease (with Silica Gel Clean-up) \***

EPA methods 413.1, 9070 or 9071; Standard Methods 5520 B/E&F or 503 D&E for solids and 5520 B&F or 503 A&E for liquids

Lab ID	Client ID	Matrix	Oil & Grease
33532	MW1-WS2 B	W	ND
Detection Limit unless otherwise stated; ND means Not Detected	W	5 mg/L	
	S	50 mg/kg	

\*water samples are reported in mg/L and soils in mg/kg

DHS Certification No. 1644

 Edward Hamilton, Lab Director



## QC REPORT FOR HYDROCARBON ANALYSES

Date: 12/18/93

Matrix: Water

Analyte	Concentration (ug/L)			Amount Spiked	% Recovery		
	Sample	MS	MSD		MS	MSD	RPD
TPH (gas)	0.0	105.5	108.2	100	105.5	108.2	2.6
Benzene	0	9.7	10.1	10	97.0	101.0	4.0
Toluene	0	9.6	10	10	96.0	100.0	4.1
Ethyl Benzene	0	9.7	9.9	10	97.0	99.0	2.0
Xylenes	0	29.5	29.9	30	98.3	99.7	1.3
TPH (diesel)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
TRPH (oil & grease)	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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

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

## QC REPORT FOR HYDROCARBON ANALYSES

Date: 12/17-12/20/93

Matrix: Water

Analyte	Concentration (ug/L)			Amount Spiked	% Recovery		
	Sample	MS	MSD		MS	MSD	RPD
TPH (gas)	0.0	107.7	107.0	100	107.7	107.0	0.7
Benzene	0	10	10	10	100.0	100.0	0.0
Toluene	0	9.9	9.8	10	99.0	98.0	1.0
Ethyl Benzene	0	10.1	10	10	101.0	100.0	1.0
Xylenes	0	30.4	30.1	30	101.3	100.3	1.0
TPH (diesel)	0	165	162	150	110	108	1.7
TRPH (oil & grease)	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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

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

## QC REPORT FOR HYDROCARBON ANALYSES

Date: 12/15-12/16/93

Matrix: Water

Analyte	Concentration (ug/L)			Amount Spiked	% Recovery		
	Sample	MS	MSD		MS	MSD	RPD
TPH (gas)	0.0	108.2	103.1	100	108.2	103.1	4.8
Benzene	0	10	10	10	100.0	100.0	0.0
Toluene	0	9.9	10	10	99.0	100.0	1.0
Ethyl Benzene	0	10	10	10	100.0	100.0	0.0
Xylenes	0	30.3	30.4	30	101.0	101.3	0.3
TPH (diesel)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
TRPH (oil & grease)	0	23700	22900	20000	119	115	3.4

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

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