Clementina

Clementina Ltd.
2177 Jerrold Avenue • San Francisco, CA 94124

(415) 282-7290

STID 1686

February 24, 1994

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

Subject: **5521 Doyle Street, Emeryville**

Dear Ms. Hugo,

We concur with opinion of Geo-Plexus, Inc. that the "site be considered/recommended for closure without further action and that the existing monitoring well at the site be destroyed."

Please proceed with closure proceedings if appropriate.

Thank you for your assistance. Please contact me if you have any questions.

Sincerely,
CLEMENTINA LTD.

Tad Tassone
Tad Tassone
Equipment Manager

xc: Geo-Plexus, Inc.
John Douglas w/report - Clementina
Ron Silberman w/report - Buyer

GeoPlexus, Inc.

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

ALCO
HAZMAT
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February 22, 1994

Mr. Tad Tassone
Clementina Ltd.
2177 Jerrold Avenue
San Francisco, CA 94124

Subject: Quarterly Ground Water Monitoring Report
5521 Doyle Street, Emeryville, California

Dear Mr. Tassone:

As requested and authorized, the attached 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 February 16, 1994.

In summary, the analytical testing did not detect Total Petroleum Hydrocarbons as gasoline, Total Petroleum Hydrocarbons as diesel, or Volatile Aromatic Compounds (Benzene, Toluene, Ethyl Benzene, or Total Xylenes) 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.

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

Copies of this report should be forwarded to:

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

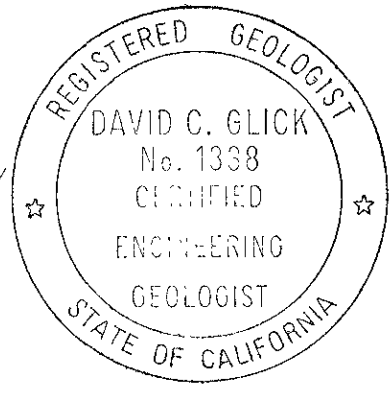
Mr. Richard Hiett
Regional Water Quality Control Board
San Francisco Bay Region
2101 Webster Street, Room 500
Oakland, CA 94612

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



GeoPlexus, Inc.

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

FEBRUARY, 1994 QUARTERLY

GROUND WATER MONITORING REPORT

for

5521 DOYLE STREET

EMERYVILLE, CA

Prepared for:

Clementina Ltd.

2177 Jerrold Avenue

San Francisco, CA

Project C93036

February 22, 1994

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

FEBRUARY, 1994 QUARTERLY
GROUND WATER MONITORING REPORT
for
5521 DOYLE STREET
EMERYVILLE, CA

INTRODUCTION

The project site is located at 5521 Doyle Street, in the city of Emeryville, Alameda County, California as indicated on Figure 1 and was formerly occupied by a Clementina Equipment Rental facility. It is understood that two (2) underground storage tanks were removed from the site in December, 1992. The tanks were reported as a 6,000 gallon gasoline tank and a 6,000 gallon diesel tank and were located as indicated on Figure 2.

Soil samples were reportedly obtained during the tank removal activities and submitted for analytical testing by Superior Analytical. The soil samples did not contain detectable concentrations of Total Petroleum Hydrocarbons as gasoline, Total Petroleum Hydrocarbons as diesel, or Volatile Aromatic Compounds (Benzene, Toluene, Ethyl Benzene, and Xylene). The excavation was subsequently backfilled with the excavated soil materials.

A ground water sample obtained from the tank excavation contained 1,200 parts per billion (ppb) of Total Petroleum Hydrocarbons as diesel; however, Total Petroleum Hydrocarbons as gasoline and Volatile Aromatic Compounds (Benzene, Toluene, Ethyl Benzene, and Xylene) were not detected. The excavation was purged of water prior to backfilling and the purged water was contained on-site in steel tanks pending bacterial remediation of the hydrocarbon products. The purged water (concentrations reduced to below detectable levels) was disposed of under a discharge permit obtained from the State of California Regional Water Quality Control Board.

Based on published reports for the project area, the direction of ground water flow in the immediate vicinity of the project site is in a westerly direction as indicated on Figure 3. A Preliminary Site Characterization Investigation was performed by Geo Plexus, Inc. which included installation of one (1) ground water monitoring well in the reported/verified "down-gradient" direction of the excavation as indicated on Figure 4.

Analytical testing of the initial 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, and Xylenes).

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 Total Petroleum Hydrocarbons as gasoline and Volatile Aromatics were collected in 40 mil. vials acidified with HCL by the analytical laboratory. The water samples collected for Total Petroleum Hydrocarbons as diesel 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, 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 9.1 feet below the ground surface.

The analytical testing did not detect Total Petroleum Hydrocarbons as gasoline, Total Petroleum Hydrocarbons as diesel, 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

Date Sampled	Total Petroleum Hydrocarbons gas	Benzene	Toluene	Ethyl-Benzene	Total Xylenes
5-12-93	ND	N.D.	N.D.	N.D.	N.D.
8-04-93	ND	N.D.	N.D.	N.D.	N.D.
11-03-93	ND	N.D.	N.D.	N.D.	N.D.
2-16-94	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

Date Sampled	Total Petroleum Hydrocarbons diesel	DTW
5-12-93	ND	11.5 ft
8-04-93	ND	10.3 ft
11-03-93	ND	10.3 ft
2-16-94	ND	9.1 ft

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

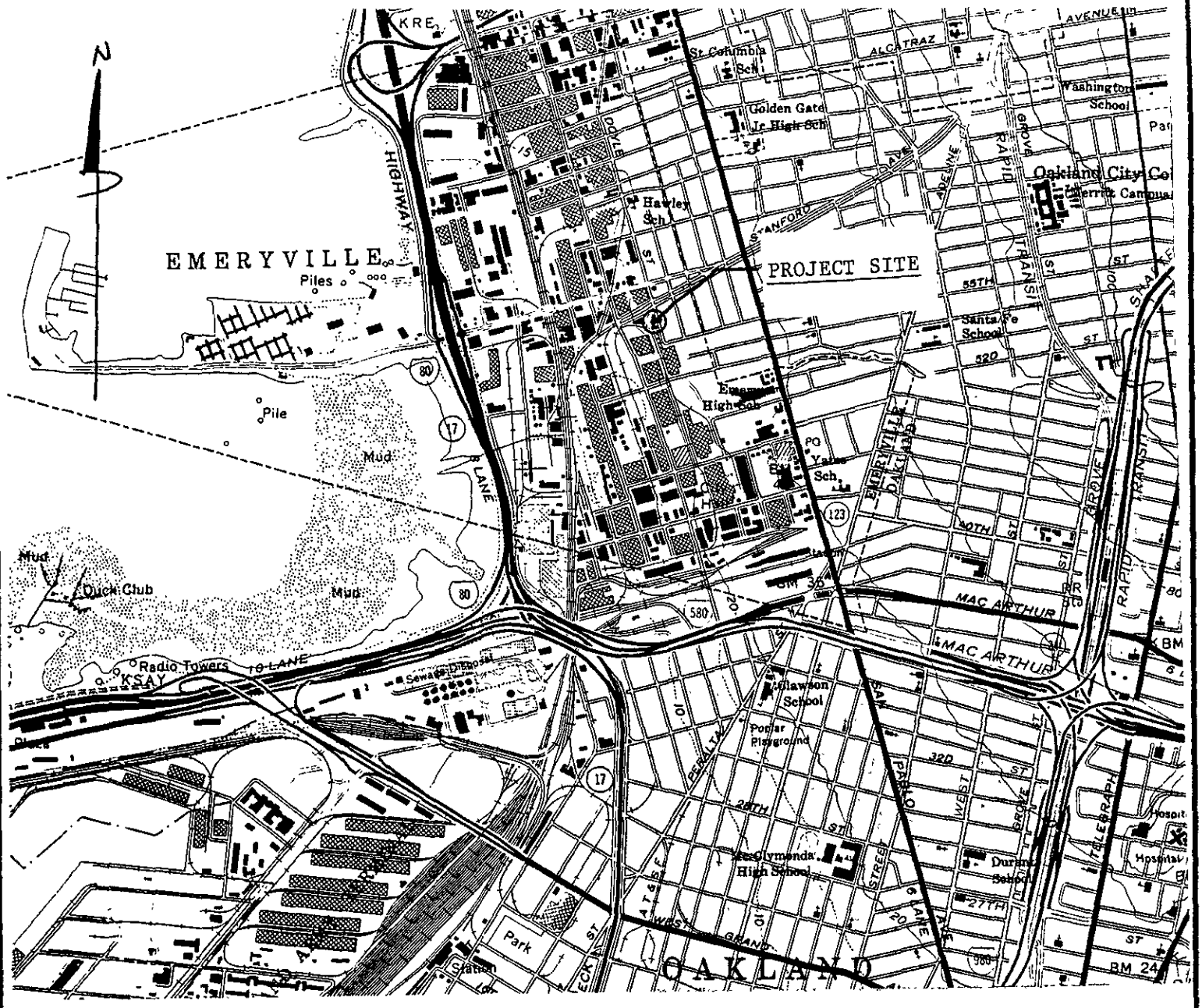
We have only observed a small portion of the pertinent soil and ground water conditions present at the site. Subsurface conditions across the site have been extrapolated from information obtained from review of existing documents and from the field investigation. The conclusions made herein are based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

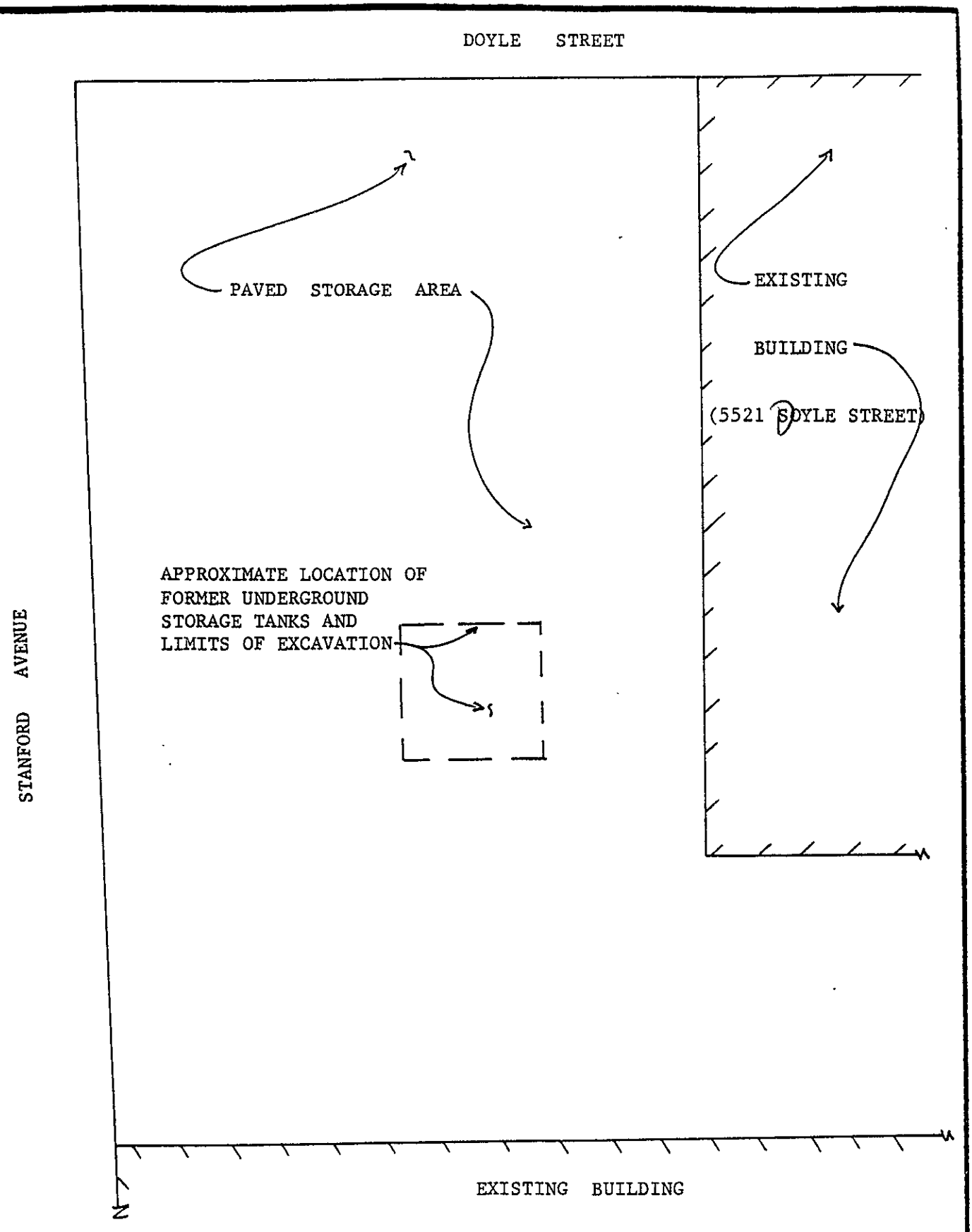
If you have questions regarding the findings, conclusions, or recommendations contained in this report, please contact us. We appreciate the opportunity to serve you.

Geo Plexus, Incorporated



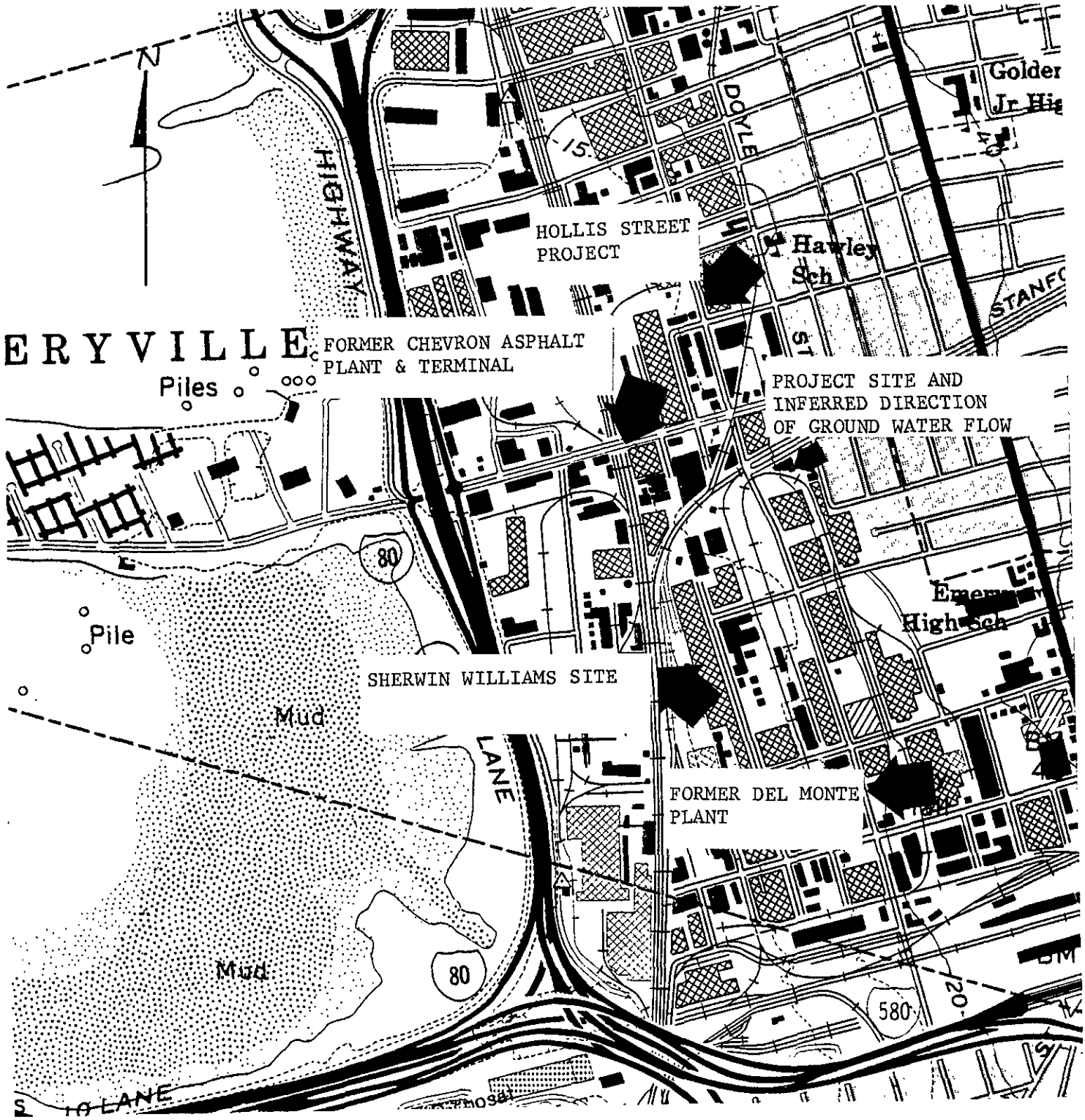
CLEMENTINA EQUIPMENT		
DATE 3/15/93	SCALE 1"=2000'	DRAWN BY dcg
LOCATION PLAN		
	Figure 1	

GeoPlexus, Inc.



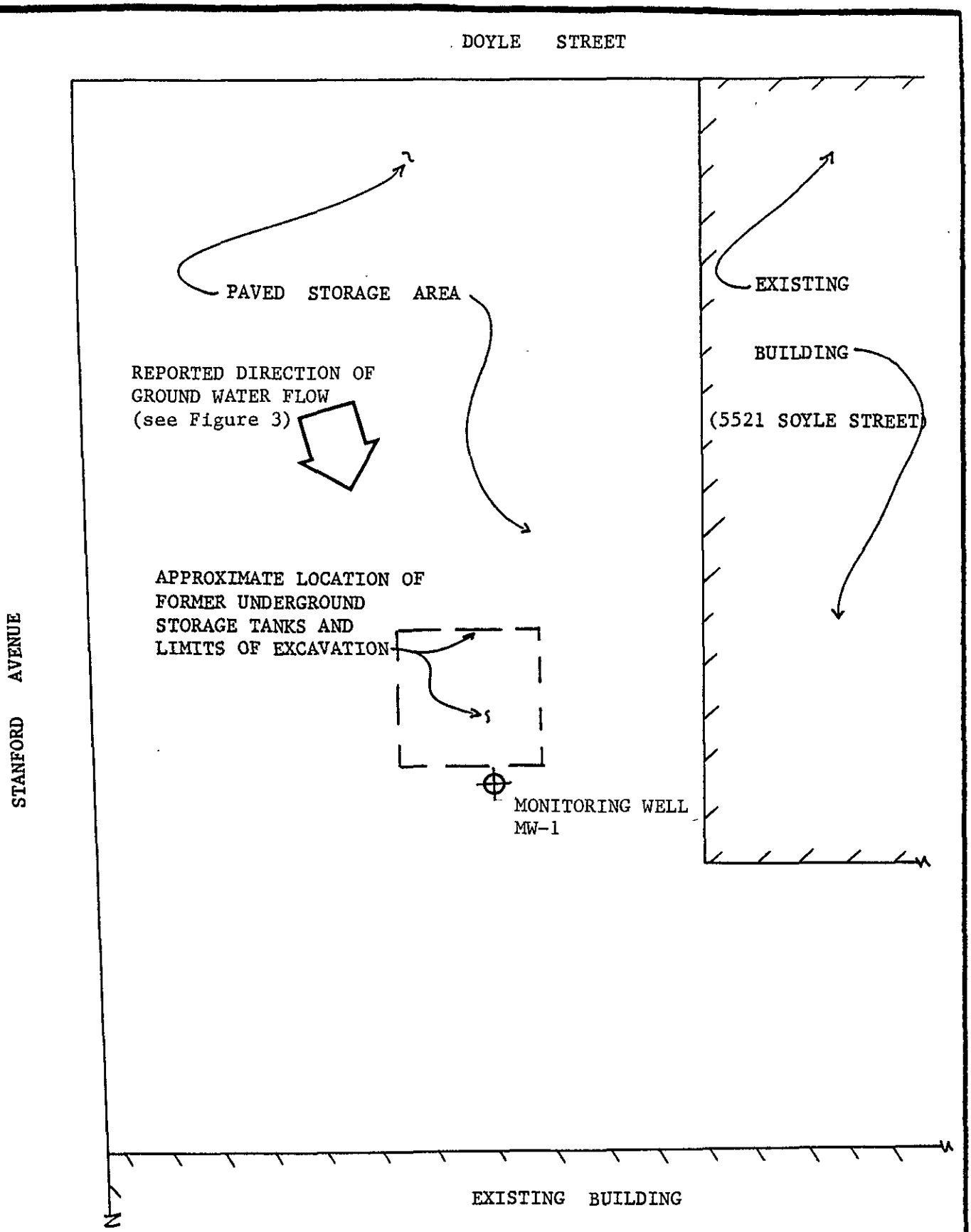
CLEMENTINA PROPERTY		
DATE 5/3/93	SCALE 1"=20'	DRAWN BY dcg
SITE PLAN		
	Figure 2	

GeoPlexus, Inc.



CLEMENTINA EQUIPMENT		
DATE 3/15/93	SCALE 1"=1000'	DRAWN BY dcg
LOCAL GROUND WATER FLOW		
	Figure 3	

GeoPlexus, Inc.



CLEMENTINA PROPERTY		
DATE 5/3/93	SCALE 1"=20'	DRAWN BY dcg
MONITORING WELL LOCATION		
	Figure 4	

GeoPlexus, Inc.

APPENDIX A

CHAIN-OF-CUSTODY FORMS
AND
ANALYTICAL TEST DATA

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

CHAIN-OF-CUSTODY

2089046972

PROJECT NUMBER	PROJECT NAME
C93036	CLEMENTINA

Send Report Attention of:	Report Due	Verbal Due
DAVID GLICK	/ /	/ /

Sample Number	Date	Time	Comp	Grab	Station Location	Number of Cntnrs	Type of Containers	Type of Analysis: TPHg	BTEX	TPHd	Condition of Samples	Initial
MW1-WS1AB	2/16/94	1040		1	MON WELL 1	2EA	ACIDIFIED 40 ml VOA	✓	✓		34333	
MW1-WS2AB	2/16/94	1040		1	MON WELL 1	2EA	1 LTR AMBER			✓	34334	

ICE? ✓ PRESERVATIVE ✓ VOAs O&G METALS OTHER
GOOD CONDITION ✓ APPROPRIATE
HEAD SPACE ABSENT ✓ CONTAINERS ✓

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time
[signature]	2/17/94 1240	[signature]	2/17/94 1240
E R Hamilton	2/17/94 1400	Dede Ricca	2-17-94 1400
Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time

Remarks: STANDARD TURNAROUND

ICE? ✓ PRESERVATIVE ✓ VOAs O&G METALS OTHER
GOOD CONDITION ✓ APPROPRIATE
HEAD SPACE ABSENT ✓ CONTAINERS ✓

TOTAL P.04

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

GEO Plexus, Inc. 1900 Wyatt Drive, # 1 Santa Clara, CA 95054	Client Project ID: # C93036; Clementina	Date Sampled: 02/16/94
		Date Received: 02/17/94
	Client Contact: David Glick	Date Extracted: 02/17-02/18/94
	Client P.O:	Date Analyzed: 02/17-02/18/94

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)+	Benzene	Toluene	Ethylben-zene	Xylenes	% Rec. Surrogate
34333	MW1-WS1A	W	ND	ND	ND	ND	ND	99
Detection Limit unless other-wise stated; ND means Not Detected		W	50 ug/L	0.5	0.5	0.5	0.5	
		S	1.0 mg/kg	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.

DHS Certification No. 1644

Edward Hamilton, Lab Director

McCAMPBELL ANALYTICAL INC. | 110 2nd Avenue South, #D7, Pacheco, CA 94553
Tele: 510-798-1620 Fax: 510-798-1622

GEO Plexus, Inc. 1900 Wyatt Drive, # 1 Santa Clara, CA 95054	Client Project ID: # C93036; Clementina	Date Sampled: 02/16/94
		Date Received: 02/17/94
	Client Contact: David Glick	Date Extracted: 02/17/94
	Client P.O:	Date Analyzed: 02/17/94

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)+	% Recovery Surrogate
34334	MW1-WS2A	W	ND	96
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(c_L) or heavy(c_H) 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.

DHS Certification No. 1644

Edward Hamilton, Lab Director