

GeoPlexus, Inc.

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

December 11, 1992
Project C92033

Mr. Wayne Gathright
DECON Environmental Services, Inc.
23490 Connecticut Street
Hayward, CA 94545

Subject: Quarterly Ground Water Monitoring Report
891 Union Street, Alameda, CA

Dear Mr. Gathright;

As requested and authorized, the attached December, 1992 Quarterly Ground Water Monitoring Report has been prepared to document the monitoring well sampling efforts performed at the subject site. The report presents the ground water sampling protocols and the results of the analytical testing performed on ground water samples collected on December 1, 1992.

In summary, the analytical testing did not detect Total Petroleum Hydrocarbons as diesel, Volatile Aromatic Compounds (Benzene, Toluene, Ethyl Benzene, or Total Xylenes), or Oil & Grease in the water samples obtained from Monitoring Well MW-1. [Based on these results, it is recommended that the site be considered for closure and the existing monitoring well be closed by over-excavation and grout sealing in accordance with Alameda County Well Closure Guidelines.]

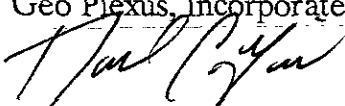
It has been a pleasure to be of service to you on this project. Questions or comments regarding the attached report should be addressed to the undersigned.

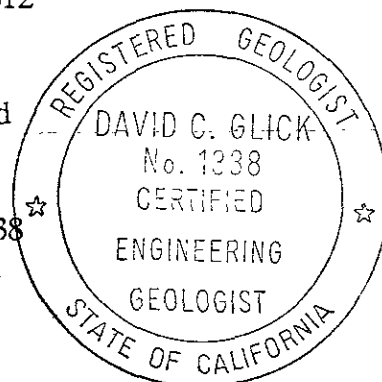
Copies of this report should be forwarded to:

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

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

Respectfully submitted,
GeoPlexus, Incorporated


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



DECEMBER, 1992 QUARTERLY
GROUND WATER MONITORING REPORT
for
891 UNION STREET
ALAMEDA, CALIFORNIA

Prepared for:
DECON Environmental Services, Inc.
23490 Connecticut Street
Hayward, CA 94545

December 11, 1992

Project C92033

DECEMBER, 1992 QUARTERLY
GROUND WATER MONITORING REPORT
for
891 UNION STREET
ALAMEDA, CALIFORNIA

INTRODUCTION

The project site is located at 891 Union Street in the City of Alameda, in Alameda County, California as indicated on Figure 1. The site is occupied by a single family residential structure and it is understood that one underground heating fuel storage tank and one underground diesel fuel storage tank were removed in May, 1992 at the locations indicated on Figure 2).

A Preliminary Site Characterization Investigation was performed at the site in September, 1992 (Geo Plexus, Inc. Report C92033 dated October 9, 1992) which included advancing three exploratory borings and converting the "down-gradient" boring into a ground water monitoring well. Total Petroleum Hydrocarbons as diesel or Volatile Aromatic Compounds (Benzene, Toluene, Ethyl Benzene, or Total Xylenes) were not detected in the soil samples obtained from exploratory borings; however, low concentrations of Oil & Grease (57 parts per million) were detected in the soil samples obtained from exploratory borings EB-1 and EB-3 but were not detected in the soil samples obtained from exploratory boring for MW-1.

Total Petroleum Hydrocarbons as diesel, Oil & Grease, Benzene, Toluene, or Ethyl Benzene were not detected in the water initial (September, 1992) samples obtained from Monitoring Well MW-1; however, low concentrations of Xylenes (0.4 parts per billion) were detected.

This report presents the sampling protocol and results of the analytical testing performed on the ground water samples collected on December 1, 1992 in accordance with the directives from Alameda County Department of Environmental Health.

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MONITORING WELL SAMPLING

Free product measurements were obtained for the monitoring well at the time of 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 well.

Prior to sampling the monitoring well, 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.

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.

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.

ANALYTICAL TESTING

The ground water samples were submitted to and tested by Superior Precision Analytical, Inc., a State of California, Department of Health Services certified testing laboratories. 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 diesel by Method GCFID 3550/8015, Oil and Grease by Method 5520, and Volatile Aromatics by EPA Method 5030/8015 as indicated on the Chain-of-Custody Form.

SUMMARY OF FINDINGS

The analytical testing did not detect Total Petroleum Hydrocarbons as diesel, Volatile Aromatic Compounds (Benzene, Toluene, Ethyl Benzene, or Total Xylenes), or Oil & Grease in the water samples obtained from Monitoring Well MW-1.

RECOMMENDATIONS

Based on these results, it is recommended that the site be considered for closure and the existing monitoring well be closed by over-excavation and grout sealing in accordance with Alameda County Well Closure Guidelines.

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.

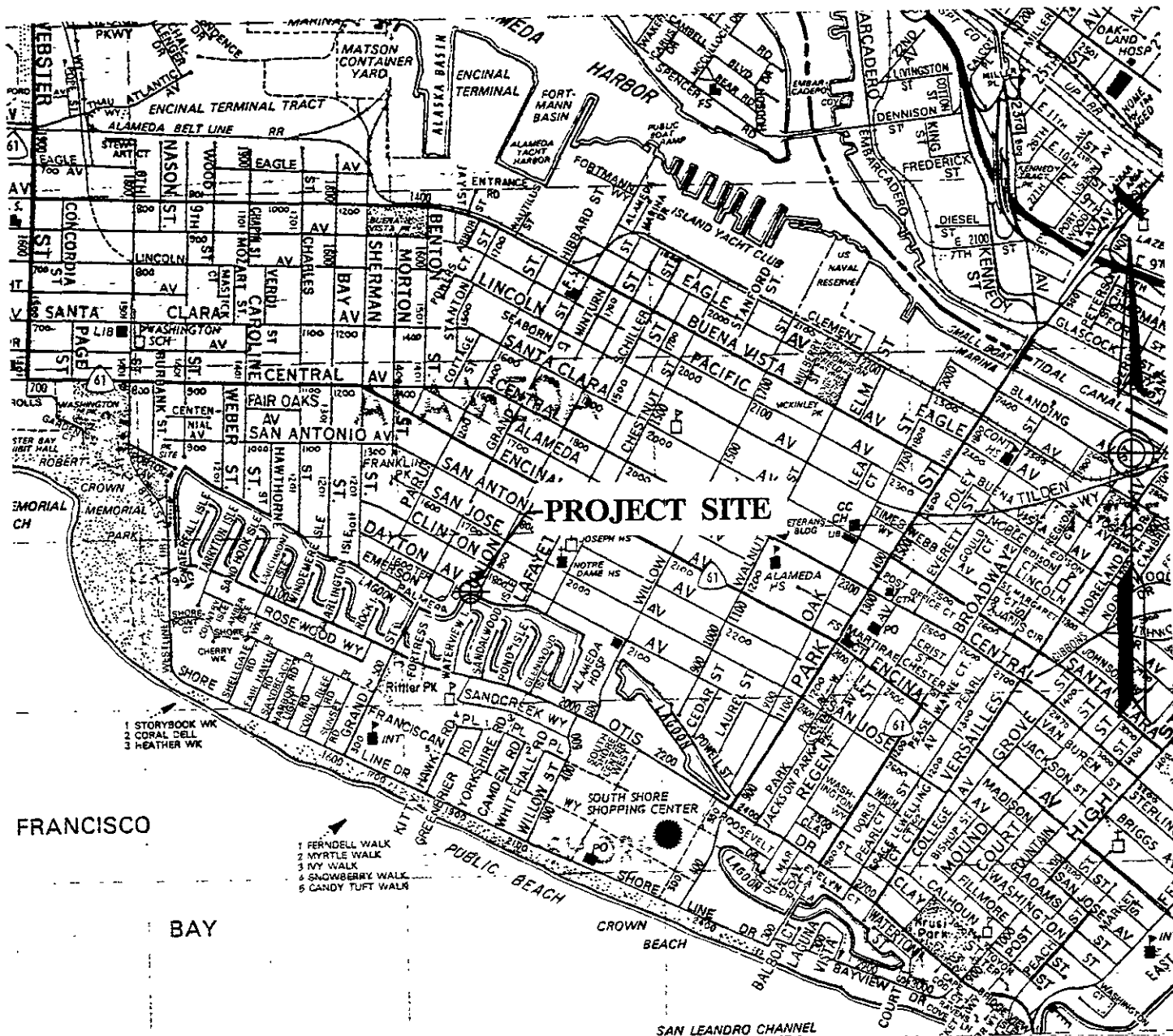
No attempt was made to verify the accuracy of the published information prepared by others used in preparation of this assessment report.

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

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Source: Thomas Brothers

VICINITY MAP		
DATE 10/8/92	SCALE n/a	DRAWN BY dgc
891 UNION STREET, ALAMEDA, CA		
		Figure 1

ALAMEDA LAGOON

ROCK WALL

LAWN

SIDEWALK

SIDEWALK

UNION STREET

PLANTER

LAWN

891 UNION STREET

RESIDENTIAL STRUCTURE

UNION STREET

MW

AREA OF OVEREXCAVATION

EB-1

EB-3

APPROXIMATE LOCATION OF FORMER TANKS

DIRECTION OF GROUND WATER FLOW BASED ON HISTORIC TOPOGRAPHY AND FORMER CHANNEL ALONG UNION STREET.

DRIVEWAY

EB-2 (abandoned)

PROPERTY LINE

BORING/WELL LOCATION MAP

DATE

10/8/92

SCALE

1"=10'

DRAWN BY

dgc

891 UNION STREET, ALAMEDA, CA

Figure 2

Quarterly Ground Water Sampling Report
891 Union Street
Alameda, California

December 11, 1992

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

Geo Plexus, Incorporated

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Superior Precision Analytical, Inc.

1555 Burke, Unit I • San Francisco, California 94124 • (415) 647-2081 / fax (415) 821-7123

C E R T I F I C A T E O F A N A L Y S I S

LABORATORY NO.: 55830
CLIENT: GEO PLEXUS, INC.
CLIENT JOB NO.: C92033

DATE RECEIVED: 12/01/92
DATE REPORTED: 12/08/92

ANALYSIS FOR TOTAL PETROLEUM HYDROCARBONS by Modified EPA SW-846 Method 8015

LAB #	Sample Identification	Concentration (ug/L) Diesel Range
2	MW1WS2-A,B,C	ND<50


ug/L - parts per billion (ppb)

Minimum Detection Limit for Diesel in Water: 50ug/L

QAQC Summary:

Daily Standard run at 200mg/L: %DIFF Diesel = <15%
MS/MSD Average Recovery = 61%: Duplicate RPD = 4%

Richard Srna, Ph.D.


Laboratory Director



Superior Precision Analytical, Inc.

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C E R T I F I C A T E O F A N A L Y S I S

LABORATORY NO.: 55830
CLIENT: GEO PLEXUS, INC.
CLIENT JOB NO.: C92033

DATE RECEIVED: 12/01/92
DATE REPORTED: 12/08/92

ANALYSIS FOR BENZENE, TOLUENE, ETHYL BENZENE & XYLENES
by EPA SW-846 Methods 5030 and 8020

LAB #	Sample Identification	Concentration (ug/L)			
		Benzene	Toluene	Ethyl Benzene	Xylenes
1	WS1MW1-A,B,C	ND<0.3	ND<0.3	ND<0.3	ND<0.3

ug/L - parts per billion (ppb)

Method Detection Limit in Water: 0.3 ug/L

QAQC Summary:

Daily Standard run at 20 ug/L: RPD = <15%
MS/MSD Average Recovery = 98%: Duplicate RPD = 1%

Richard Srna, Ph.D.


Laboratory Manager



Superior Precision Analytical, Inc.

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C E R T I F I C A T E O F A N A L Y S I S

LABORATORY NO.: 55830
CLIENT: GEO PLEXUS, INC.
CLIENT JOB NO.: C92033

DATE RECEIVED: 12/01/92
DATE REPORTED: 12/08/92

ANALYSIS FOR TOTAL PETROLEUM OIL AND GREASE by Method 5520F (formerly 503E)


LAB #	Sample Identification	Concentration (mg/L) Total Petroleum Oil & Grease
2	MW1WS2-A,B,C	ND<5

mg/L - parts per million (ppm)

Minimum Detection Limit for oil & grease in Water: 5mg/L

QAQC Summary:
MS/MSD Average Recovery = 77%
Duplicate RPD = 3%

Richard Srna, Ph.D.


Laboratory Director