FILE OR PER NO. BC.

ENVELOPE No.____ of____

PLAN REVIEW R		By	Date
$ 432.00	Rec'd.	TS	11/13/91
No. 612150	Plans Rec'd.		
Plans Approved			
Layout Made			
Rejected			
Applicant Notified			
Plans Returned			
Permit Issued			

CONSTRUCTION PROGRESS ACCEPTANCE

FOOD		By	Date
Pre-Plaster/drywall			
Pre-Final			
Final			

☐ OWNER Right Away Redy Mix, Inc.
Address 401 Kennedy St.
Oakland 94606 Phone

☐ Contractor KTW
Address 43289 Osgood Rd.
Fremont 94539 Phone

☐ OTHER (Specify)
Address
Phone

☒ CONTACT FOR INVESTIGATION

XR

		By	Date
POOL	Pre-Concrete/Gunite		
	Pre-Plaster		
	Final		
EXCAVATION	Septic Tank		
	Absorption Field		
	Absorption Bed		
FINAL	House Sewer		
	Septic Tank		
	Absorption Field		
	Absorption Bed		
OTHER			

U.G. TANKS	By	Date
Pre-Covering		
Final		

Case closed LOP

REMARKS

Date	By	
10/31/91	BC	Witness initial sampling under dispenser 0.5 hr
11/4/91	BC	Witness resampling 1.0 hr
11/5/91	BC	"Letter" requesting a workplan due to Env Lab's results. Note further excavation & Soil results are TPHd-380 ppm Sidewall composite (Samples 2,3,4+5) = 210 ppm TPHd ~9' depth
11/12/91	BC	Inspected pressurized piping soap test & H_2O level in innovo box +

REMARKS

Date	By	
		Overfill protection box. Everything was OK. 1.0 hr
12/3/91	BC	Review workplan & give written approval pending location of borings/wells. 0.75
12/18/91		Conv w/ D. Glick, okayed the use of 3 piezometers & the development of the 1 into a MW in the downgradient location. 0.25 hr

LOCATION 2974

Vicinity Map

Project # 612150
Fee Paid 432.00
Date 11/13/91

401 Kennedy St.
Oakland, CA 94606
RIGHT AWAY REDY MIX, INC.

StID
2974

Date	By	REMARKS
4/20/92		Reviewed MW/Piezometer installation
		report & noticed error in diagrams
		Contacted D. Glick & he will investigate
		this error 1.5 hr
7/1[illegible]		Letter requesting continuance
		of GW elevations of 3 piezometers
		& analysis of P-3 only 0.5
1-29-93	TP	RC - Dave Glick Geoplexus
		Aiosel standards (408) 987-0210

Date	By	REMARKS

Date	By	REMARKS

CASE CLOSURE SUMMARY
Leaking Underground Fuel Storage Tank Program

I. **AGENCY INFORMATION** **Date:** 4/25/94

Agency name: **Alameda County-HazMat** Address: **80 Swan Wy., Rm 200**
City/State/Zip: **Oakland** Phone: **(510) 271-4320**
Responsible staff person: Thomas Peacock Title: Supervising HMS

II. **CASE INFORMATION**

Site facility name: Right Away Redi Mix, Inc.
Site facility address: 401 Kennedy St., Oakland, CA 94606
RB LUSTIS Case No: **N/A** Local Case No./LOP Case No.: **2974**

URF filing date: 4/13/94 SWEEPS No: **N/A**

Responsible Parties:	Addresses:	Phone Numbers:
Geoff Henrikson	401 Kennedy St. Oakland, CA 94606	536-1900

Tank No:	Size in gal.:	Contents:	Closed in-place or removed?:	Date:
1	12,000	diesel	still in use	NA

III. **RELEASE AND SITE CHARACTERIZATION INFORMATION**

Cause and type of release: leak under the dispenser island

Site characterization complete? YES

Date approved by oversight agency: 11/6/93

Monitoring Wells installed? YES, 1 well & 2 piezometers

Proper screened interval? Yes

Highest GW depth below ground surface: 9.27' Lowest depth: 10.87'

Flow direction: east to NE

Most sensitive current use: NA

Are drinking water wells affected? NO Aquifer name: NA

Report(s) on file? **YES** Where are report filed? **Alameda County**
80 Swan Wy., Rm 200
Oakland CA 94621

Leaking Underground Fuel Storage Tank Program

III. RELEASE AND SITE CHARACTERIZATION INFORMATION (Continued)

Treatment and Disposal of Affected Material:

Material	Amount (include units)	Action (Treatment of Disposal w/destination)	Date
Tank	NA	still exists at operating site	
Piping	NA		
Free Product	NA		
Soil	3 cu yds.	Unknown	unknown
Groundwater	NA		
Barrels	NA		

Maximum Documented Contaminant Concentrations - - Before and After Cleanup

Contaminant	Soil (ppm)		Water (ppm)	
	Before	After	Before	After
TPH (Gas)	NA	NA	NA	NA
TPH (Diesel)	1,645	380	290	ND
Benzene	NA	NA	ND	ND
Toluene	NA	NA	.055	ND
Xylene	NA	NA	ND	ND
Ethylbenzene	NA	NA	ND	ND
Oil & Grease	NA	NA		
Heavy metals	NA	NA		
Other				

Comments (Depth of Remediation, etc.): All apparently affected soil in the immediate vicinity of the dispenser pump was excavated during replacement of the dispenser, as much as possible. Soil sample from 9.5' depth exhibited 380 ppm TPHd. Further soil excavation did not seem warranted as the tank system was to remain.

IV. CLOSURE

Does completed corrective action protect existing beneficial uses per the Regional Board Basin Plan? Undetermined

Does completed corrective action protect potential beneficial uses per the Regional Board Basin Plan? Undetermined

Does corrective action protect public health for current land use? YES
Site management requirements: NA

Should corrective action be reviewed if land use changes? YES

Monitoring wells Decommissioned: NA

Number Decommissioned: N/A Number Retained: NA

List enforcement actions taken: NA

GeoPlexus, Inc.

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

November 16, 1993

Mr. Geoffrey Henrikson
Right Away Redy Mix
401 Kennedy Street
Oakland, CA 94606

Subject: February, 1994 Quarterly Ground Water Sampling Report

Dear Mr. Henrikson:

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 the analytical test data for the ground water samples collected on February 16, 1994.

Ground water measurements recorded during the sampling efforts indicate that the direction of ground water flow is in an easterly direction which places Monitoring Well P-3 in the down-gradient direction from the former/current fuel dispensing island area (location of previous release).

The analytical testing did not detect concentrations of Total Petroleum Hydrocarbons as gasoline, Total Petroleum Hydrocarbons as diesel, Oil & Grease, or Volatile Aromatic Compounds (Benzene, Toluene, Ethyl Benzene, and Xylene) in the water samples from Monitoring Well P-3. This is the fourth consecutive quarter of non-detectable concentrations.

Based on the results of the quarterly ground water data, it is our opinion that the source of the release was abated during the excavation activities and construction of the new dispensing island and that additional site characterization and/or continued monitoring does not appear warranted.

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.

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

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:

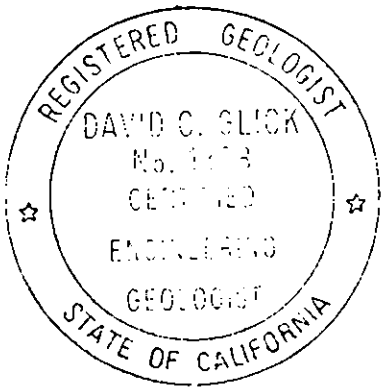
Mr. Thomas Peacock
Alameda County Health Care Services
Department of Environmental Health
80 Swan Way, Room 200
Oakland, CA 94621

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

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

GROUND WATER SAMPLING REPORT

for

RIGHT AWAY REDY MIX

401 KENNEDY STREET

OAKLAND, CALIFORNIA

February 22, 1994

Project C92032

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

GROUND WATER SAMPLING REPORT
for
RIGHT AWAY REDY MIX
401 KENNEDY STREET
OAKLAND, CALIFORNIA

INTRODUCTION

The project site is located at 401 Kennedy Street in the City of Oakland, in Alameda County, California as indicated on Figure 1 and is currently occupied by Right Away Redy Mix as indicated on Figure 2.

Three open-standpipe piezometers were installed around the existing underground diesel fuel storage tank and dispensing island (see Figure 3) in December, 1991 by Geo Plexus, Incorporated to obtain soil samples for analytical testing and to establish site-specific ground water flow information. The focus of the investigation was to acquire ground water samples from the "down-gradient" direction of the former/existing dispenser pump area. The top of the piezometer casings were surveyed to establish relative elevations and it was determined that piezometer P-3 was located down gradient of the dispensing pump area (location of previous release). Piezometer P-3 was subsequently developed as a ground water monitoring well (identified as Monitoring Well P-3) and was sampled.

Low concentrations of Total Petroleum Hydrocarbons as diesel (290 ppb) were detected in the ground water in January, 1992. These concentrations reduced to 78 ppb in August, 1992. Low concentrations (210-220 ppb) of non-discreet petroleum hydrocarbons were detected in the ground water in November, 1992 and February, 1993. The quality control report accompanying the November and February data indicated that the constituents detected were non-discreet petroleum hydrocarbons which did not correlate with the chromatographic pattern of the diesel standard used by the analytical testing laboratory. The analytical testing schedule was expanded during the last two quarters to further characterize the non-discreet petroleum hydrocarbons previously detected and reported as Total Petroleum Hydrocarbons as diesel.

This report presents the recorded ground water elevations, the sampling protocol, and results of the analytical testing performed on the ground water samples collected from Monitoring Well P-3 on February 16, 1994.

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, visible sheens, or odors were not observed in the initial bailer water samples or following purging of the well.

Prior to sampling Monitoring Well P-3, five 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. 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 (HCl) 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 well 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 well and other piezometers at the site were established during previous investigations with vertical control of 0.01 foot. Prior to purging the monitoring well, 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 an easterly direction (see Figure 3) at a gradient of 0.0050 ft/ft with Monitoring Well P-3 in the down-gradient direction from the former/existing dispensing island (focus of investigation).

ANALYTICAL TESTING

The ground water samples were submitted to and tested by McCampbell Analytical, a State of California Certified Testing Laboratory. The samples were tested for Total Petroleum Hydrocarbons as gasoline, Total Petroleum Hydrocarbons as diesel by Method GCFID 3550/8015, Volatile Aromatics by EPA Method 8020/5030, and Oil & Grease by Method 5520. 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 10-11 feet below the ground surface and flows across the site in an easterly direction at a gradient of 0.0050 ft/ft. The flow direction places Monitoring Well P-3 in a down-gradient direction from the dispenser island.

The analytical testing did not detect reportable quantities of Total Petroleum Hydrocarbons as diesel, Volatile Aromatic Compounds (Benzene, Toluene, Ethyl Benzene, and Xylene), or Oil & Grease. Tables 1 and 2 summarize the current analytical test results along with the previous analytical testing results.

The diesel constituents detected in the ground water in January and August, 1992 could be attributed to the diesel contaminated fuel which was encountered, excavated, and removed from the former fuel dispenser island area. However, the constituents reported as Total Petroleum Hydrocarbons as diesel in November, 1992 and February, 1993 (which were reported to be discrete hydrocarbon peaks not indicative of diesel fuel) could be attributed to residual levels of degraded diesel fuel resulting from the site remedial work (excavation and removal of the source).

The expanded testing, which was implemented to further characterize the non-discrete hydrocarbon products, has not identified the presence of these discrete peaks, Total Petroleum Hydrocarbons as gasoline, Total Petroleum Hydrocarbons as diesel, Oil & Grease, or Volatile Aromatic Compounds (Benzene, Toluene, Ethyl Benzene, and Xylene) in the ground water.

TABLE 1

SUMMARY OF GROUND WATER ANALYTICAL TEST DATA

Date Sampled	Total Petroleum Hydrocarbons	Benzene	Toluene	Ethyl-Benzene	Total Xylenes
1-8-92	290	N.D.	N.D.	N.D.	N.D.
8-17-92	74	N.D.	N.D.	N.D.	N.D.
11-2-92	210*	N.D.	N.D.	N.D.	N.D.
2-5-93	220*	N.D.	N.D.	N.D.	55
5-25-93	ND	N.D.	N.D.	N.D.	N.D.
8-20-93	ND	N.D.	N.D.	N.D.	N.D.
11-10-93	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 as diesel.
* Compounds reported as Total Petroleum Hydrocarbons as diesel reported to be discrete hydrocarbon peaks which did not correlate with diesel standard used by the analytical testing laboratory and not indicative of diesel fuel.
N.D. indicates compounds not detected.

TABLE 2

SUMMARY OF GROUND WATER ANALYTICAL TEST DATA

Date Sampled	Total Petroleum Hydrocarbons	Oil & Grease
5-25-93	ND	ND
8-20-93	--	ND
11-10-93	--	ND
2-16-94	ND	ND

Note: Total Petroleum Hydrocarbons reported as gasoline
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 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 dispenser pump which could contribute to ground water contamination; and (3) verified through 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.

RECOMMENDATION

It is recommended that the site be considered/recommended for closure without further action. It is also recommended that the existing monitoring wells 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 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.

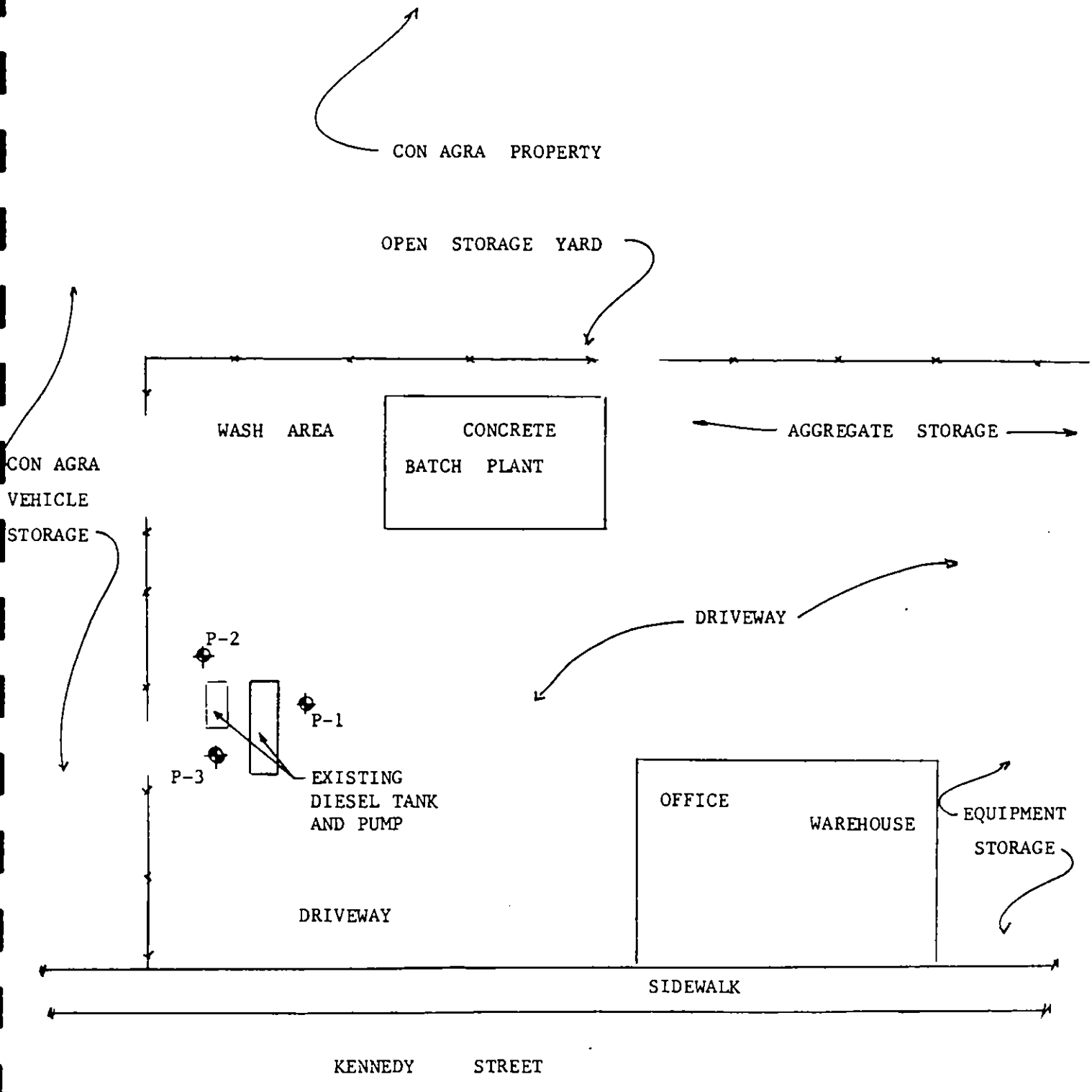
No attempt was made to verify the accuracy of the published information prepared by others used in preparation of this assessment report.

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

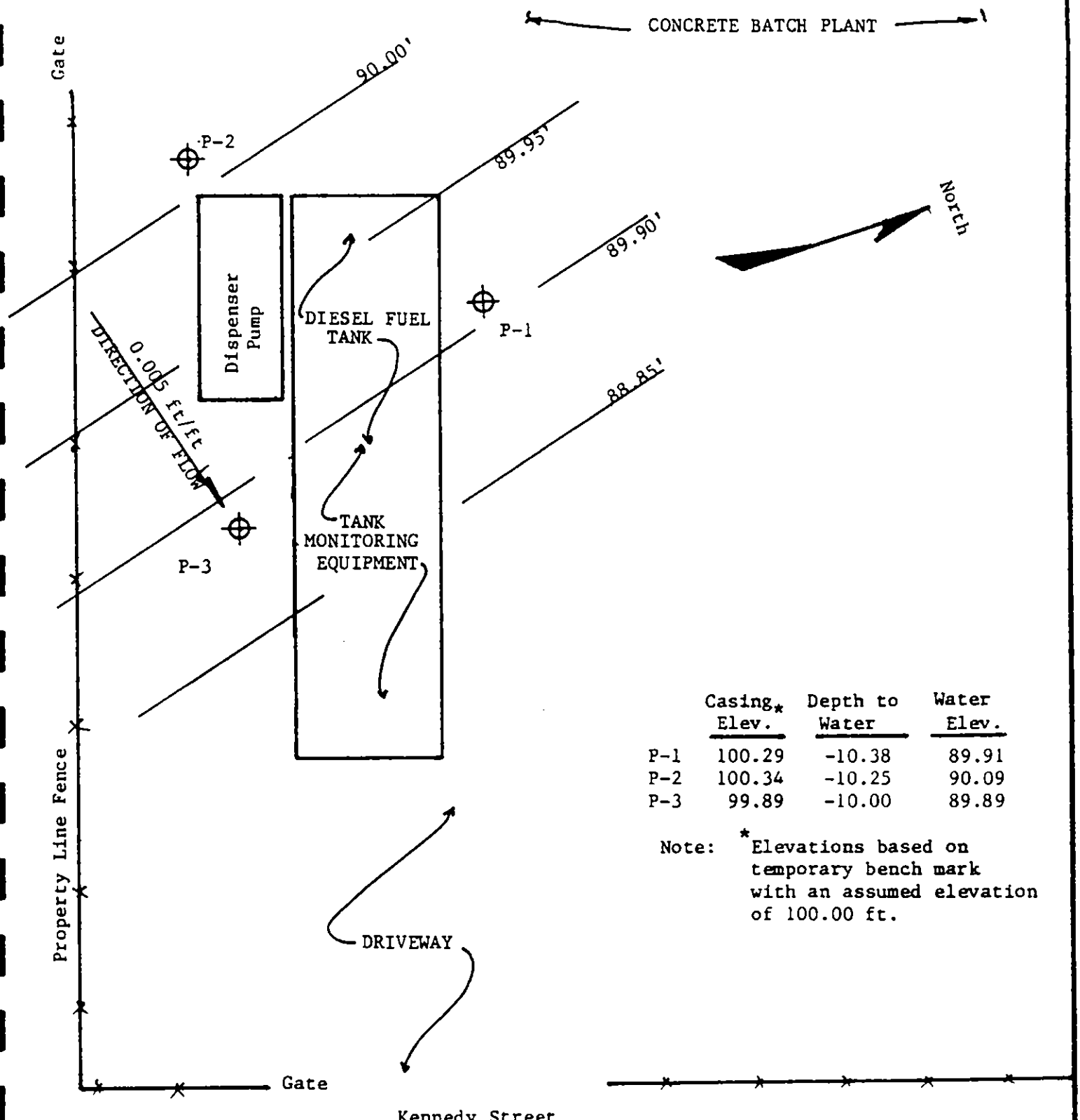
RIGHT AWAY REDY MIX		
DATE	SCALE	DRAWN BY
1/92	NA	JCM
VICINITY MAP		
P91024	Figure 1	

GeoPlexus, Inc.



RIGHT AWAY REDY MIX		
DATE 8/31/93	SCALE n/a	DRAWN BY dcg
SITE PLAN		
	Figure 2	

GeoPlexus, Inc.



	Casing* Elev.	Depth to Water	Water Elev.
P-1	100.29	-10.38	89.91
P-2	100.34	-10.25	90.09
P-3	99.89	-10.00	89.89

Note: *Elevations based on temporary bench mark with an assumed elevation of 100.00 ft.

P-1 indicates approximate location of piezometers.

RIGHT AWAY REDY MIX

DATE	SCALE	DRAWN BY
2/16/94	1"=10'	DCG/JCM

GRADIENT MAP

Figure 3

GeoPlexus, Inc.

APPENDIX A

CHAIN-OF-CUSTODY FORM
AND
ANALYTICAL TEST DATA

GeoPlexus, Inc.

CHAIN-OF-CUSTODY

2037 AGP 70

1900 Wyatt Drive, Suite 1, Santa Clara, California 95054
Phone 408/987-9210 Fax 408/988-0815

PROJECT NUMBER	PROJECT NAME
C92032	Right Away

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: TPH-g	BTEX	TPH-d	5520 Oil & Grease	Condition of Samples	Initial
MW P3-WS1 A,B	2/16/94	1200		1	MON well P3	2EA	Acidified 40 mlVOA	✓	✓			34329	
MW P3-WS2 A,B	2/16/94	1200		1	MON well P3	2EA	1 LTR AMBER			✓	✓	34330	

VOAs O&G METALS OTHER

PRESERVATIVE APPROPRIATE CONTAINERS ✓

ICE/T GOOD CONDITION ✓ HEAD SPACE ABSENT ✓

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time
	2/17/94 1240	J R Hamilton	2/17/94 1240
J R Hamilton	2/17/94	Linda Ricca	2-17-94 1400
Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time

Remarks: STANDARD TURN AROUND

VOAs O&G METALS OTHER

PRESERVATIVE APPROPRIATE CONTAINERS ✓

ICE/T GOOD CONDITION ✓ HEAD SPACE ABSENT ✓

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: # C92032; Right Away	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

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

E.P.A 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	Ethylbenzene	Xylenes	% Rec. Surrogate
34329	MW P3-WS1	W	ND	ND	ND	ND	ND	115
Detection Limit unless otherwise 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.	Client Project ID: # C92032; Right Away	Date Sampled: 02/16/94
1900 Wyatt Drive, # 1		Date Received: 02/17/94
Santa Clara, CA 95054	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
34330	MW P3-WS2	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

[c] 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

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

GEO Plexus, Inc.	Client Project ID: # C92032; Right Away	Date Sampled: 02/16/94
1900 Wyatt Drive, # 1		Date Received: 02/17/94
Santa Clara, CA 95054	Client Contact: David Glick	Date Extracted: 02/18/94
	Client P.O:	Date Analyzed: 02/18/94

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
34330	MW P3-WS2	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

John W. Sutfin

KJW & ASSOCIATES

Environmental Services

43289 Osgood Road
Fremont, CA 94539
(510) 623-0480 FAX (510) 623-0482
Cont Lic. #572427

Village Square Offices, Suite 34
53 Pennington-Hopewell Road
Pennington, N.J. 08534
(609) 466-4118

ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY
DAVID J. KEARS, Agency Director

RAFAT A. SHAHID, ASST. AGENCY DIRECTOR

DEPARTMENT OF ENVIRONMENTAL HEALTH
State Water Resources Control Board
Division of Clean Water Programs
UST Local Oversight Program
80 Swan Way, Rm 200
Oakland, CA 94621
(510) 271-4530

June 29, 1994
STID 2974

REMEDIAL ACTION COMPLETION CERTIFICATION

Geoff Henrikson
Right Away Redi Mix, Inc.
401 Kennedy St.,
Oakland CA 94606

RE: Right Away Redi Mix, Inc., 401 Kennedy St., Oakland, CA 94606

Dear Mr. Geoff Henrikson:

This letter confirms the completion of site investigation and remedial action for the 12,000 gallon underground storage tank at the above described location.

Based upon the available information and with the provision that the information provided to this agency was accurate and representative of site conditions, no further action related to the underground tank release is required.

This notice is issued pursuant to a regulation contained in Title 23, Division 3, Chapter 16, Section 2721(e) of the California Code of Regulations.

Please contact Thomas Peacock at (510) 271-4330 if you have any questions regarding this matter.

Sincerely,

Rafat A. Shahid

Rafat A. Shahid
Assistant Agency Director

c: Edgar B. Howell, Chief, Hazardous Materials Division - files
Kevin Graves, RWQCB
Mike Harper, SWRCB

LOP\Completion
je 4605clos.let

WATER RESOURCES CONTROL BOARD
DIVISION OF WATER QUALITY - UST CLEANUP PROGRAM
SITE SPECIFIC QUARTERLY REPORT
04/01/92 THROUGH 06/30/92

AGENCY # : 10000 SOURCE OF FUNDS: F SUBSTANCE: 8006619
StID : 523
SITE NAME: American Brass & Iron Foundry DATE REPORTED : 10/31/91
ADDRESS : 7825 -0 San Leandro St. DATE CONFIRMED: 10/31/91
CITY/ZIP : Oakland 94621 MULTIPLE RPS : N

SITE STATUS

CASE TYPE: G CONTRACT STATUS: 2 EMERGENCY RESP: -0-
RP SEARCH: - DATE COMPLETED: -0-
PRELIMINARY ASMNT: - DATE UNDERWAY: -0- DATE COMPLETED: -0-
REM INVESTIGATION: - DATE UNDERWAY: -0- DATE COMPLETED: -0-
REMEDIAL ACTION: - DATE UNDERWAY: -0- DATE COMPLETED: -0-
POST REMED ACT MON:- DATE UNDERWAY: -0- DATE COMPLETED: -0-

ENFORCEMENT ACTION TYPE: 1 DATE ENFORCEMENT ACTION TAKEN: 05/28/92
LUFT FIELD MANUAL CONSID: -0-
CASE CLOSED: - DATE CASE CLOSED: -0-
DATE EXCAVATION STARTED : 08/26/91 REMEDIAL ACTIONS TAKEN: ET-

RESPONSIBLE PARTY INFORMATION

RP#1-CONTACT NAME: -0-
COMPANY NAME: -0-
ADDRESS: -0-
CITY/STATE: -0-

Barney,

Please complete Rp information and return to me so I can input.

Thank you,
Mai

LOP - RECORD CHANGE REQUEST FORM

printed:
07/08/94

Mark Out What Needs Changing and Hand to LOP Data Entry
(Name/Address changes go to Annual Programs Data Entry)

AGENCY # : 10000 SOURCE OF FUNDS: F SUBSTANCE: 12034
StID : 2974
SITE NAME: Right Away Redi Mix, Inc. DATE REPORTED : 11/01/91
ADDRESS : 401 Kennedy St DATE CONFIRMED: 11/01/91
CITY/ZIP : Oakland 94606 MULTIPLE RPs : N

SITE STATUS

CASE TYPE: G CONTRACT STATUS: 9 PRIOR CODE:1C3 EMERGENCY RESP:
RP SEARCH: S DATE COMPLETED: 07/20/92
PRELIMINARY ASMNT: C DATE UNDERWAY: 01/24/92 DATE COMPLETED: 06/29/94
REM INVESTIGATION: DATE UNDERWAY: DATE COMPLETED:
REMEDIAL ACTION: DATE UNDERWAY: DATE COMPLETED:
POST REMED ACT MON:C DATE UNDERWAY: 01/24/92 DATE COMPLETED: 06/29/94

ENFORCEMENT ACTION TYPE: 1 DATE ENFORCEMENT ACTION TAKEN: 07/20/92
LUFT FIELD MANUAL CONSID: 3HSCAWG
CASE CLOSED: Y DATE CASE CLOSED: 06/29/94
DATE EXCAVATION STARTED : 11/01/91 REMEDIAL ACTIONS TAKEN: ED

RESPONSIBLE PARTY INFORMATION

RP#1-CONTACT NAME: Mr. Geoff Henrikson
COMPANY NAME: Right Away Redy Mix
ADDRESS: 401 Kennedy St.
CITY/STATE: Oakland Ca 94606

INSPECTOR VERIFICATION:

NAME _____ SIGNATURE _____ DATE _____

DATA ENTRY INPUT:

Name/Address Changes Only

ANNPGMS _____ LOP ____ DATE _____

Case Progress Changes

LOP _____ DATE _____

ATTACHMENTS
LABORATORY SOIL SAMPLE RESULTS

725 Julie Ann Way, Oakland, CA 94621 510 632-0602 FAX 510 638-9447

FILE COPY

94 APR 14 PM 1:58

Thomas Peacock
Dept. of Environmental Health
Hazardous Materials Program
80 Swan Way, Rm. 200

April 13, 1994

Dear Mr. Peacock

Enclosce please find the report that you asked for. Also I inclosed a copy of the original that I believe was sent in at the time the spill was originally discovered. Please let me know if there is anything else that you need to resolve this matter.

Thank you for your cooperation.

Sincerely,

Geoffrey V. Henrikson

UNDERGROUND STORAGE TANK UNAUTHORIZED RELEASE (LEAK) / CONTAMINATION SITE REPORT

EMERGENCY ☐ YES ☒ NO

HAS STATE OFFICE OF EMERGENCY SERVICES REPORT BEEN FILED? ☐ YES ☐ NO

REPORT DATE 2M 4M 1D 3D 1Y 4Y

CASE #

FOR LOCAL AGENCY USE ONLY

I HEREBY CERTIFY THAT I HAVE DISTRIBUTED THIS INFORMATION ACCORDING TO THE DISTRIBUTION SHOWN ON THE INSTRUCTION SHEET ON THE BACK PAGE OF THIS FORM.

SIGNED _____ DATE _____

REPORTED BY

NAME OF INDIVIDUAL FILING REPORT | PHONE | SIGNATURE

REPRESENTING ☐ OWNER/OPERATOR ☐ REGIONAL BOARD ☐ LOCAL AGENCY ☒ OTHER

COMPANY OR AGENCY NAME

ADDRESS — STREET — CITY — STATE — ZIP

RESPONSIBLE PARTY

NAME ☐ UNKNOWN | CONTACT PERSON | PHONE

ADDRESS — STREET — CITY — STATE — ZIP

SITE LOCATION

FACILITY NAME (IF APPLICABLE) | OPERATOR | PHONE

ADDRESS — STREET — CITY — COUNTY — ZIP

CROSS STREET

IMPLEMENTING AGENCIES

LOCAL AGENCY — AGENCY NAME | CONTACT PERSON | PHONE

REGIONAL BOARD | | PHONE

SUBSTANCES INVOLVED

(1) /NAME — QUANTITY LOST (GALLONS) ☒ UNKNOWN

(2) ☐ UNKNOWN

DISCOVERY/ABATEMENT

DATE DISCOVERED 1M 1M 2D 5D 1Y 1Y

HOW DISCOVERED ☐ INVENTORY CONTROL ☐ SUBSURFACE MONITORING ☐ NUISANCE CONDITIONS ☐ TANK TEST ☐ TANK REMOVAL ☒ OTHER

DATE DISCHARGE BEGAN — ☒ UNKNOWN

HAS DISCHARGE BEEN STOPPED? ☒ YES ☐ NO IF YES, DATE

METHOD USED TO STOP DISCHARGE (CHECK ALL THAT APPLY)

☐ REMOVE CONTENTS ☐ CLOSE TANK & REMOVE ☐ REPAIR PIPING
☐ REPAIR TANK ☐ CLOSE TANK & FILL IN PLACE ☐ CHANGE PROCEDURE
☐ REPLACE TANK ☒ OTHER

SOURCE/CAUSE

SOURCE OF DISCHARGE

☐ TANK LEAK ☐ UNKNOWN
☒ PIPING LEAK ☐ OTHER

CAUSE(S)

☐ OVERFILL ☐ RUPTURE/FAILURE ☒ SPILL
☐ CORROSION ☐ UNKNOWN ☐ OTHER

CASE TYPE

CHECK ONE ONLY

☒ UNDETERMINED ☐ SOIL ONLY ☐ GROUNDWATER ☐ DRINKING WATER - (CHECK ONLY IF WATER WELLS HAVE ACTUALLY BEEN AFFECTED)

CURRENT STATUS

CHECK ONE ONLY

☐ NO ACTION TAKEN ☐ PRELIMINARY SITE ASSESSMENT WORKPLAN SUBMITTED ☐ POLLUTION CHARACTERIZATION
☐ LEAK BEING CONFIRMED ☐ PRELIMINARY SITE ASSESSMENT UNDERWAY ☐ POST CLEANUP MONITORING IN PROGRESS
☒ REMEDIATION PLAN ☐ CASE CLOSED (CLEANUP COMPLETED OR UNNECESSARY) ☐ CLEANUP UNDERWAY

REMEDIAL ACTION

CHECK APPROPRIATE ACTION(S) (SEE BACK FOR DETAILS)

☐ CAP SITE (CD) ☐ EXCAVATE & DISPOSE (ED) ☐ REMOVE FREE PRODUCT (FP) ☐ ENHANCED BIO DEGRADATION (IT)
☐ CONTAINMENT BARRIER (CB) ☒ EXCAVATE & TREAT (ET) ☐ PUMP & TREAT GROUNDWATER (GT) ☐ REPLACE SUPPLY (RS)
☐ VACUUM EXTRACT (VE) ☐ NO ACTION REQUIRED (NA) ☐ TREATMENT AT HOOKUP (HU) ☐ VENT SOIL (VS)
☐ OTHER (OT)

COMMENTS

HSC 05 (8/90)

UNDERGROUND STORAGE TANK UNAUTHORIZED RELEASE (LEAK) / CONTAMINATION SITE REPORT

HAZ'ED

EMERGENCY ☐ YES ☒ NO

HAS STATE OFFICE OF EMERGENCY SERVICES REPORT BEEN FILED? ☐ YES ☐ NO 94 APR 14 PM 1:59

REPORT DATE 10/05/91

CASE #

FOR LOCAL AGENCY USE ONLY
I HEREBY CERTIFY THAT I HAVE DISTRIBUTED THIS INFORMATION ACCORDING TO THE DISTRIBUTION SHOWN ON THE INSTRUCTION SHEET ON THE BACK PAGE OF THIS FORM.

SIGNED _____ DATE _____

REPORTED BY

NAME OF INDIVIDUAL FILING REPORT: Geoffry Henrikson
PHONE: (510) 536-1900
SIGNATURE: [signature]

REPRESENTING ☐ OWNER/OPERATOR ☐ REGIONAL BOARD ☐ LOCAL AGENCY ☒ OTHER Agent
COMPANY OR AGENCY NAME: Right Away Redy Mix

ADDRESS (STREET): 401 Kennedy Street
CITY: Oakland
STATE: CA
ZIP: 94606

RESPONSIBLE PARTY

NAME: Right Away Redy Mix ☐ UNKNOWN
CONTACT PERSON: G. Henrikson
PHONE: (510) 769-6242

ADDRESS (STREET): 401 Kennedy Street
CITY: Oakland
STATE: CA
ZIP: 94606

SITE LOCATION

FACILITY NAME (IF APPLICABLE): Right Away Redy Mix
OPERATOR: G. Henrikson
PHONE: (510) 769-6242

ADDRESS (STREET): 401 Kennedy Street
CITY: Oakland
COUNTY: CA
ZIP: 94606

CROSS STREET: 17th Street

IMPLEMENTING AGENCIES

LOCAL AGENCY / AGENCY NAME: Alameda County Health Care Services Agency
CONTACT PERSON: Mutay Chan
PHONE: (510) 271-4320

REGIONAL BOARD: San Francisco Bay Regional Water Quality Control Board
CONTACT PERSON: Dyan Whyte
PHONE: (510) 271-4320

SUBSTANCES INVOLVED

(1) NAME: Diesel Fuel
QUANTITY LOST (GALLONS): _____ ☒ UNKNOWN

(2) _____ ☐ UNKNOWN

DISCOVERY/ABATEMENT

DATE DISCOVERED: 10/05/91
HOW DISCOVERED: ☐ TANK TEST ☐ INVENTORY CONTROL ☐ TANK REMOVAL ☐ SUBSURFACE MONITORING ☒ OTHER Retrofit ☐ NUISANCE CONDITIONS

DATE DISCHARGE BEGAN: ☒ UNKNOWN

HAS DISCHARGE BEEN STOPPED? ☐ YES ☒ NO IF YES, DATE

METHOD USED TO STOP DISCHARGE (CHECK ALL THAT APPLY)
☐ REMOVE CONTENTS ☐ CLOSE TANK & REMOVE ☒ REPAIR PIPING
☐ REPAIR TANK ☐ CLOSE TANK & FILL IN PLACE ☐ CHANGE PROCEDURE
☐ REPLACE TANK ☒ OTHER Install dispenser pan

SOURCE/CAUSE

SOURCE OF DISCHARGE
☐ TANK LEAK ☐ UNKNOWN
☐ PIPING LEAK ☐ OTHER

CAUSE(S)
☐ OVERFILL ☐ RUPTURE/FAILURE ☒ SPILL
☐ CORROSION ☐ UNKNOWN ☐ OTHER

CASE TYPE

CHECK ONE ONLY
☒ UNDETERMINED ☐ SOIL ONLY ☐ GROUNDWATER ☐ DRINKING WATER - (CHECK ONLY IF WATER WELLS HAVE ACTUALLY BEEN AFFECTED)

CURRENT STATUS

CHECK ONE ONLY
☐ NO ACTION TAKEN
☐ LEAK BEING CONFIRMED
☐ REMEDIATION PLAN
☐ PRELIMINARY SITE ASSESSMENT WORKPLAN SUBMITTED
☐ PRELIMINARY SITE ASSESSMENT UNDERWAY
☐ CASE CLOSED (CLEANUP COMPLETED OR UNNECESSARY)
☐ POLLUTION CHARACTERIZATION
☐ POST CLEANUP MONITORING IN PROGRESS
☐ CLEANUP UNDERWAY

REMEDIAL ACTION

CHECK APPROPRIATE ACTION(S) (SEE BACK FOR DETAILS)
☐ CAP SITE (CD)
☐ CONTAINMENT BARRIER (CB)
☐ VACUUM EXTRACT (VE)
☐ EXCAVATE & DISPOSE (ED)
☒ EXCAVATE & TREAT (ET)
☐ NO ACTION REQUIRED (NA)
☐ OTHER (OT)
☐ REMOVE FREE PRODUCT (FP)
☐ PUMP & TREAT GROUNDWATER (GT)
☐ TREATMENT AT HOOKUP (HU)
☐ ENHANCED BIO DEGRADATION (IT)
☐ REPLACE SUPPLY (RS)
☐ VENT SOIL (VS)

COMMENTS

Believed to be historical spillage resulting from filter changes, etc.

HSC 05 (8/90)

S.T.D 2974 2 40 14-17-93

Last letter 7-26-93

check w/ Barney

3:35

12-28-93.

Should consider for case closure

after 1 more QTR.

Table 4. SUMMARY OF GROUNDWATER SAMPLE ANALYTICAL RESULTS, SHELL SERVICE STATION, 4695 THORNTON AVENUE, FREMONT, CALIFORNIA (concluded)

		Results Reported in Micrograms Per Liter (µg/L)					
Well Number	Sample Date	Low to Medium Boiling Point Hydrocarbons (gasoline)	Benzene	Toluene	Ethyl-benzene	Xylenes	High Boiling Point Hydrocarbons (Diesel)
S-5	02/22/89	60	12	3	1	6	--
	03/21/89	50	1.8	9	1	3	<100
	03/21/89d	50	1.9	9	1	3	<100
	04/24/89	<30	<0.3	<0.3	<0.3	<0.3	--
	06/06/89	<30	<0.3	<0.3	<0.3	<0.3	--
	06/06/89d	<30	<0.3	<0.3	<0.3	<0.3	--
	08/25/89	34	<0.3	<0.3	<0.3	<0.3	--
	08/25/89c	54	<0.3	<0.3	<0.3	0.59	350
	11/14/89	<30	0.37	0.32	<0.3	1.0	<50
	02/22/90	<30	0.51	<0.3	<0.3	0.31	<50
	02/22/90c	<30	0.55	<0.3	<0.3	0.30	62
	05/18/90	<30	0.34	0.50	<0.3	0.33	190
S-6	03/16/90	<30	<0.3	<0.3	<0.3	<0.3	<50
	04/13/90	<30	<0.3	<0.3	<0.3	<0.3	--
	04/13/90d	<30	<0.3	<0.3	<0.3	<0.3	--
	05/18/90	<30	<0.3	<0.3	<0.3	<0.3	--
	05/18/90d	<30	<0.3	<0.3	<0.3	<0.3	--
S-7	06/06/89	<30	<0.3	<0.3	<0.3	<0.3	--
	07/31/89	<30	<0.3	<0.3	<0.3	<0.3	<50
	07/31/89d	<30	<0.3	<0.3	<0.3	<0.3	<50
	08/28/89	<30	<0.3	0.31	<0.3	<0.3	<50
	08/28/89d	<30	<0.3	<0.3	<0.3	<0.3	<50
	11/13/89	<30	<0.3	0.39	<0.3	0.37	<50
	02/22/90	<30	0.94	0.59	0.32	0.96	--
	05/18/90	<30	<0.3	<0.3	<0.3	0.44	--
S-8	07/26/89	<30	<0.3	<0.3	<0.3	<0.3	<50
	07/26/89d	<30	<0.3	0.40	<0.3	<0.3	--
	08/25/89	<30	0.59	0.31	<0.3	0.34	1,500
	09/13/89	<30	0.59	0.38	<0.3	<0.3	1,800
	11/13/89	<30	<0.3	<0.3	<0.3	<0.3	1,500
	11/13/89d	<30	<0.3	<0.3	<0.3	0.42	2,200
	12/13/89	<30	<0.3	<0.3	<0.3	<0.3	<50
	12/13/89d	<30	<0.3	<0.3	<0.3	<0.3	<50
	02/22/90	<30	0.35	<0.3	<0.3	<0.3	470
	05/18/90	52	0.60	0.64	<0.3	<0.3	730
Detection Limits:							
2/22/89 to 3/21/89		50	0.5	1	1	3	100
since 4/24/89		30	0.3	0.3	0.3	0.3	50

Other detection limits are in parentheses or preceded by a "<" sign; * = Detection limit not given;

Note:
- = High Boiling Hydrocarbons calculated as diesel appear to be the less volatile constituents of gasoline.
: = Included with xylenes. -- = Not analyzed. d =indicates duplicate sample analytical results.

ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY

DAVID J. KEARS, Agency Director

RAFAT A. SHAHID, ASST. AGENCY DIRECTOR

DEPARTMENT OF ENVIRONMENTAL HEALTH
State Water Resources Control Board
Division of Clean Water Programs
UST Local Oversight Program
80 Swan Way, Rm 200
Oakland, CA 94621
(510) 271-4530

December 28, 1993
STID 2974

Right Away Redy Mix, Inc.
ATTN: Geoffrey Henrikson
401 Kennedy St.
Oakland, CA 94606

RE: 401 Kennedy St., Oakland, CA 94606

Dear Geoffrey Henrikson,

This office has received and reviewed a Quarterly Ground Water Sampling Report by Geo Plexus, Inc. dated November 16, 1993 concerning the above site. The following comment is made concerning this report.

> You mention that the site should be considered for closure. Page 4 of the report explains that the TPHd from November, 1992 and February, 1993 is attributed to residual levels of degraded diesel fuel. In other words: diesel fuel. A minimum of 4 consecutive "clean" quarters is normally required, so you need to submit 1 more quarter of monitoring and this office will close the case.

This office looks forward to the next report.

The site map is difficult to read as it shows only a portion of the site and no adjoining properties. Please expand the site drawing appropriately.

Thank you for your cooperation. If you have any questions or comments, please contact this office at (510) 271-4530.

Sincerely,

Thomas Peacock, Supervising HMS
Hazardous Material Division

cc: David Glick, GeoPlexus, 2922 Scott Blvd.,Santa Clara, CA 95054
Edgar Howell, Chief - Files

ALAMEDA COUNTY
HEALTH CARE SERVICES AGENCY

Hazardous Materials Program
80 Swan Way, Rm. 200
Oakland, CA 94621

David Glick
~~GeoPlexus~~
~~2922~~ Scott Blvd.
Santa Clara CA 95054

GLIC922 9505414338 1992 01/03/94
FORWARDING TIME EXPIRED
GLICK/DAVID
1900 WYATT DR #1
SANTA CLARA CA 95054-1529
RETURN TO SENDER

ALCO HAZMAT
94 JAN -5 PM 3:24

ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY
DAVID J. KEARS, Agency Director

RAFAT A. SHAHID, ASST. AGENCY DIRECTOR
DEPARTMENT OF ENVIRONMENTAL HEALTH
State Water Resources Control Board
Division of Clean Water Programs
UST Local Oversight Program
80 Swan Way, Rm 200
Oakland, CA 94621
(510) 271-4530

December 28, 1993
STID 2974

Right Away Redy Mix, Inc.
ATTN: Geoffrey Henrikson
401 Kennedy St.
Oakland, CA 94606

RE: 401 Kennedy St., Oakland, CA 94606

Dear Geoffrey Henrikson,

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> You mention that the site should be considered for closure. Page 4 of the report explains that the TPHd from November, 1992 and February, 1993 is attributed to residual levels of degraded diesel fuel. In other words: diesel fuel. A minimum of 4 consecutive "clean" quarters is normally required, so you need to submit 1 more quarter of monitoring and this office will close the case.

This office looks forward to the next report.

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Thank you for your cooperation. If you have any questions or comments, please contact this office at (510) 271-4530.

Sincerely,

Thomas Peacock, Supervising HMS
Hazardous Material Division

cc: David Glick, GeoPlexus, 2922 Scott Blvd.,Santa Clara, CA 95054
Edgar Howell, Chief - Files

ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY
DAVID J. KEARS, Agency Director

November 17, 1993
STID 2974

Right Away Redy Mix, Inc.
ATTN: Geoffrey Henrikson
401 Kennedy St.
Oakland, CA 94606

RE: 401 Kennedy St., Oakland, CA 94606

Dear Geoffrey Henrikson,

This office has received and reviewed the Quarterly Groundwater Sampling Report by Geo Plexus, Inc. dated August 31, 1993 concerning the above site. Within the report is also a request for case closure. The consultant sites several reasons why 4 clean quarters should be accepted. We accept two quarters of monitoring. The two quarters that are *'ed show 210 and 220 of some type of unknown contamination. You have not defined what this contamination was other than to say that it was not diesel. You also don't say whether or not it contained some unknown level of diesel or some other unknown material. Without these questions answered we must have 2 more quarters of clean samples in order to close the case.

This office looks forward to the next report. It is not necessary to submit reports to the Regional Board.

Thank you for your cooperation. If you have any questions or comments, please contact this office at (510) 271-4530.

Sincerely,

Thomas Peacock, Supervising HMS
Hazardous Material Division

cc: David Glick, GeoPlexus, 1900 Wyatt Dr., Suite 1, Santa Clara, CA 95054
Edgar Howell, Chief - Files

Extra set!

There exists a vector $\lambda^\circ \in \mathbb{R}^m$ such that

$$\left(\frac{\partial f}{\partial x_j}\right)(\bar{x}^\circ) + \sum_{i=1}^{m} \lambda_i^\circ \left(\frac{\partial g_i}{\partial x_j}\right)(\bar{x}^\circ) = 0 \qquad j=1,\dots,n$$

$$\lambda_i^\circ \left(g_i(\bar{x}^\circ) - b_i\right) = 0 \qquad i=1,\dots,m^1.$$

$$\lambda_i^\circ \leq 0 \qquad i=1,\dots,m^1$$

$$g_i(\bar{x}^\circ) - b_i = 0 \qquad i=m^1+1,\dots,m$$

$$g_i(\bar{x}^\circ) \leq b_i \qquad i=1,\dots,m^1.$$

Proof.

Consider the equality constraints $g_i(\bar{x}) = b_i \quad (i=m^1+1,\dots,m)$

Clearly $g_i(\bar{x}) = b_i$ if and only if $g_i(\bar{x}) \leq b_i$ and $-g_i(\bar{x}) \leq -b_i$.

Hence an equivalent problem is given by

$$\max f(\bar{x})$$

$$\text{subject to} \quad g_i(\bar{x}) \leq b_i \qquad i=1,\dots,m^1.$$

ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY

DAVID J. KEARS, Agency Director

RAFAT A. SHAHID, ASST. AGENCY DIRECTOR

DEPARTMENT OF ENVIRONMENTAL HEALTH
State Water Resources Control Board
Division of Clean Water Programs
UST Local Oversight Program
80 Swan Way, Rm 200
Oakland, CA 94621
(510) 271-4530

July 26, 1993
STID 2974

Right Away Redy Mix, Inc.
ATTN: Geoffrey Henrikson
401 Kennedy St.
Oakland, CA 94606

RE: 401 Kennedy St., Oakland, CA 94606

Dear Geoffrey Henrikson,

This office has received and reviewed the Quarterly Report by Geo Plexus, Inc. dated June 10, 1993 concerning the above site. Thank you for the explanation concerning the source of the leak. It helps to clarify the tank situation, which was not clear before. The drawing does not note the leak's source.

You mention that this is the fourth quarterly event. You have now only 1 quarter of ND for TPHg and a minimum of 4 consecutive "clean" quarters is normally required.

This office looks forward to the next report. It is not necessary to submit reports to the Regional Board.

The site map is difficult to read as it shows only a portion of the site and no adjoining properties.

Thank you for your cooperation. If you have any questions or comments, please contact this office at (510) 271-4530.

Sincerely,

Thomas Peacock, Supervising HMS
Hazardous Material Division

cc: David Glick, GeoPlexus, 2922 Scott Blvd.,Santa Clara, CA 95054
Edgar Howell, Chief - Files

ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY
DAVID J. KEARS, Agency Director

RAFAT A. SHAHID, ASST. AGENCY DIRECTOR

DEPARTMENT OF ENVIRONMENTAL HEALTH
State Water Resources Control Board
Division of Clean Water Programs
UST Local Oversight Program
80 Swan Way, Rm 200
Oakland, CA 94621
(510) 271-4530

March 30, 1993
STID 2974

Right Away Redy Mix, Inc.
ATTN: Geoffrey Henrikson
401 Kennedy St.
Oakland, CA 94606

RE: 401 Kennedy St., Oakland, CA 94606

Dear Geoffrey Henrikson,

This office has received and reviewed the Quarterly Report by Geo Plexus, Inc. dated March 15, 1993 concerning the above site. It appears that, because of the gradient discovered, that at least 1 additional well is needed to adequately define lateral contamination. There is not now a downgradient well from the former tank pit.

There is also a comment from the lab which states that some hydrocarbon peaks were not diesel in nature but were reported as diesel. This office concurs with the recommendation that analysis should be done which can properly report diesel contamination and discover what other hydrocarbon is contributing to the increased level of contamination. This office looks forward to the next report.

The site map is difficult to read as it shows only a portion of the site and no adjoining properties. Also, it is assumed that P-3, marked as a piezometer, is the same P-3 that is the monitoring well.

Thank you for your cooperation. If you have any questions or comments, please contact this office at (510) 271-4530.

Sincerely,

Thomas Peacock, Supervising HMS
Hazardous Material Division

cc: Richard Hiett, RWQCB
David Glick, GeoPlexus, 2922 Scott Blvd.,Santa Clara, CA 95054
Edgar Howell, Chief - Files

ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY
DAVID J. KEARS, Agency Director

RAFAT A. SHAHID, ASST. AGENCY DIRECTOR

DEPARTMENT OF ENVIRONMENTAL HEALTH
State Water Resources Control Board
Division of Clean Water Programs
UST Local Oversight Program
80 Swan Way, Rm 200
Oakland, CA 94621
(510) 271-4530

December 29, 1992
STID 2974

Right Away Redy Mix, Inc.
ATTN: Geoffrey Henrikson
401 Kennedy St.
Oakland, CA 94606

RE: 401 Kennedy St., Oakland, CA 94606

Dear Geoffrey Henrikson,

This office has received and reviewed the Quarterly Report by Geo Plexus, Inc. dated November 20, 1992 concerning the above site. It appears that, because of the gradient discovered, that 1 additional well may be warranted to adequately define lateral contamination.

There is also a comment from the lab which states that some hydrocarbon peaks were not diesel in nature but were reported as diesel. Analysis should be done which can properly report diesel contamination and should discover what other contaminate or constituent is contributing to the increased level of contamination. This office looks forward to the next report. There should be some effort toward developing recommendations.

Thank you for your cooperation. If you have any questions or comments, please contact this office at (510) 271-4530.

Sincerely,

Thomas Peacock, Supervising HMS
Hazardous Material Division

cc: Richard Hiett, RWQCB
David Glick, GeoPlexus, 2922 Scott Blvd.,Santa Clara, CA 95054
Edgar Howell, Chief - Files

ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY
DAVID J. KEARS, Agency Director

RAFAT A. SHAHID, ASST. AGENCY DIRECTOR

DEPARTMENT OF ENVIRONMENTAL HEALTH
State Water Resources Control Board
Division of Clean Water Programs
UST Local Oversight Program
80 Swan Way, Rm 200
Oakland, CA 94621
(510) 271-4530

October 19, 1992
STID 2974

Right Away Redy Mix, Inc.
ATTN: Geoffrey Henrikson
401 Kennedy St.
Oakland, CA 94606

RE: 401 Kennedy St., Oakland, CA 94606

Dear Geoffrey Henrikson,

This office has received and reviewed the Quarterly Report by Geo Plexus, Inc. dated August 19, 1992 concerning the above site. The recommendations on page 3 are accepted. Attached please find a list of information that is required by the Regional Water Quality Control Board for site closure.

Thank you for your cooperation. If you have any questions or comments, please contact this office at (510) 271-4530.

Sincerely,

Thomas Peacock, Supervising HMS
Hazardous Material Division

cc: Richard Hiett, RWQCB
David Glick, GeoPlexus, 2922 Scott Blvd.,Santa Clara, CA 95054
Edgar Howell, Chief - Files

ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY
DAVID J. KEARS, Agency Director

RAFAT A. SHAHID, Assistant Agency Director

DEPARTMENT OF ENVIRONMENTAL HEALTH
Hazardous Materials Division
80 Swan Way, Rm. 200
Oakland, CA 94621
(510) 271-4320

July 30, 1992
STID #2974

Mr. Geoffrey Henrikson
Right Away Redy Mix
401 Kennedy St.
Oakland CA 94606

Re: Comment on Preliminary Site Characterization Report, January 24, 1992, from GeoPlexus, Inc. for Right Away Redy Mix, 401 Kennedy St., Oakland, CA 94606

Dear Mr. Henrikson:

This letter serves to summarize our conversation today regarding our office's concerns at the above site. As you recall, three piezometers were installed at this site. The groundwater gradient was determined to be westerly in the direction of P-3 relative to the dispenser pump area where the initial soil contamination was found. P-3 was subsequently developed and the groundwater analyzed for diesel and BTEX (benzene, toluene, ethylbenzene and xylenes). The water results showed non-detectable BTEX and 0.290 parts per million diesel. Analysis of soil samples taken from borings P-1 and P-2, the other two piezometers, showed non-detectable diesel and BTEX. Because of these results, our office requests that you continue to monitor all three piezometers for groundwater elevation and analyze only P-3 for diesel and BTEX.

You may contact me at (510) 271-4320 should you have any questions.

Sincerely,

Barney M. Chan
Hazardous Materials Specialist

cc: M. Thomson, Alameda County District Attorney Office
R. Hiett, RWQCB
D. Glick, GeoPlexus, Inc., 753 North 9th St., Suite 131, San Jose, CA 95112-3150

WP-401Ken

files

P 367 604 300

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED
NOT FOR INTERNATIONAL MAIL

(BC) #2974 *(See Reverse)*

Sent to Mr. G. Henrikson	
Street and No. 401 Kennedy St.	
P.O., State and ZIP Code Oakland, CA 94606	
Postage	$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt showing to whom and Date Delivered	
Return Receipt showing to whom, Date, and Address of Delivery	
TOTAL Postage and Fees	$
Postmark or Date	

S110 2974

PS Form 3800, June 1985

☆ U.S.G.P.O. 1989-234-555

ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY
DAVID J. KEARS, Agency Director

State Water Resources Control Board
Division of Clean Water Programs
UST Local Oversight Program
RAFAT A. SHAHID, Assistant Agency Director

Certified Mail # P 367 604 300

07/20/92
STID# 2974

DEPARTMENT OF ENVIRONMENTAL HEALTH
Hazardous Materials Division
80 Swan Way, Rm. 200
Oakland, CA 94621
(510) 271-4320

Notice of Requirement to Reimburse

Mr. G. Henrikson
Right Away Redy Mix
401 Kennedy St.
Oakland Ca 94606

Responsible Party
Property Owner

Right Away RedY Mix, Inc.
401 Kennedy St.
Oakland , CA 94606

SITE

Date First Reported 11/01/91
Substance: Diesel
Petroleum: (X)Yes

The federal Petroleum Leaking Underground Storage Tank Trust Fund (Federal Trust Fund) provides funding to pay the local and state agency administrative and oversight costs associated with the cleanup of releases from underground storage tanks. The legislature has authorized funds to pay the local and state agency administrative and oversight costs associated with the cleanup of releases from underground storage tanks. The direct and indirect costs of overseeing removal or remedial action at the above site are funded, in whole or in part, from the Federal Trust Fund. The above individual(s) or entity(ies) have been indentified as the party or parties responsible for investigation and cleanup of the above site. **YOU ARE HEREBY NOTIFIED** that pursuant to Title 42 of the United States Code, Section 6991b(h)(6) and Sections 25297.1 and 25360 of the California Health and Safety Code, the above Responsible Party or Parties must reimburse the State Water Resources Control Board not more than 150 percent of the total amount of site specific oversight costs actually incurred while overseeing the cleanup of the above underground storage tank site, and the above Responsible Party or Parties must make full payment of such costs within 30 days of receipt of a detailed invoice from the State Water Resources Control Board.

Please contact Barney CHAN, Hazardous Materials Specialist at this office if you have any questions concerning this matter.

for Edgar B. Howell, III, Chief
Contract Project Director

cc: Sandra Malos, SWRCB

SWRCB Use: Add: X Reason: New Case

P/O Attn: G. Henriksen
R/P Right Away Redy Mix
401 Kennedy St
Oak 94606

DATE: 7/17/92

TO : Local Oversight Program

FROM: BC

SUBJ: Transfer of Elligible Oversight Case

Site name: Right Away Redy Mix, Inc.

Address: 401 Kennedy St city Oak zip 94606

Closure plan attached? Y (N) DepRef remaining $_____

DepRef Project # U612150 STID #(if any) 2974

Number of Tanks: 0 removed? Y N Date of removal N/A

Leak Report filed? Y (N) Date of Discovery 11/1/91

Samples received? Y N Contamination: diesel

Petroleum (Y) N Types: Avgas Jet leaded unleaded (Diesel)
fuel oil waste oil kerosene solvents

Monitoring wells on site 1 Monitoring schedule? Y N

LUFT category 1 2 3 * H S C A R W G O

Briefly describe the following:

Preliminary Assessment_____

Remedial Action_____

Post Remedial Action Monitoring_____

Enforcement Action_____

During a repiping ~~of~~ and dispenser replacement of diesel tank found up to 1645 ppm TPHd under dispenser over excavated still found 380 ppm TPHd @ 9.5' Geoplexus (Contractor) installed 3 piezometers, took elevation/Gradient & converted the apparent downgradient piezometer into MW-1, found NO BTEX & .290 ppm TPHd - Should continue to monitor MW-1 & take GW levels in piezometers to confirm gradient

PROJECT NAME ETTLER-RYAN NO. 8820011A

Depth (feet)	Samples	Blows	MATERIAL DESCRIPTION	USCS	Well Construction
35	7"	6 11 16	as above, with little lamina sand and gravel, stiff, moist — H Nu = 2 ppm		
40	8"	4 6 7	brown, medium plasticity, stiff, trace fine sand, moist to wet — H Nu = 1.5 ppm		
45			Total Depth = 42 feet * = Lab Sample		
50					
55					
60					
65					
70					
75					
80					

GeoPlexus, Inc.

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

92 MAY 29 PM 3:29

May 20, 1992
Project P91024

Mr. Barney Chan
Alameda County Department of Environmental Health
80 Swan Way
Oakland, CA 94614

ST ID 2974

Subject: Response to Review Comments on Preliminary Site Characterization Report

Reference: (a) Preliminary Site Characterization Report, Right Away Redy Mix, 401 Kennedy Street, Oakland, CA, dated January 24, 1992.

Dear Mr. Chan:

In response to your review comments we would like to present the following clarifications to reference (a).

Ground water was encountered at depths of 12 to 12.5 feet below the ground surface in the exploratory borings at the time of drilling (in the sandy clay/clayey sand unit) and the ground water subsequently rose in each boring to approximately 10 feet which suggested that a hydrostatic pressure condition existed. Based on the low moisture content of the samples obtained from 9 to 13 feet deep in the borings, it was determined that the overlying silty clay units (upper 12 feet) represented a confining boundary. As such, the screened sections of the piezometers were restricted to the saturated zone (minimizing the potential for upward/downward migration of contaminants should they be present). The attached boring logs and well construction diagrams reflect the correct water elevations recorded at the time of drilling and indicate the construction of each piezometer.

Reference (a) should be amended as follows:

> Page 3, Paragraph 5 should be deleted and replaced with "Groundwater was encountered in borings 1 and 2 at a depth of 12.5 feet and in boring 3 at a depth of 12 feet below the ground surface at the time of drilling. Ground water subsequently rose to depths of 9 to 10 feet indicating that a hydrostatic pressure condition existed."

We hope that this information is sufficient for you to proceed with the review of the report. Should you require additional information, please contact our office.

Respectfully submitted,

Geo Plexus, Incorporated

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

Copy to:
Right Away Redy Mix
Mr. Geoffrey Henrikson

753 North 9th Street, Suite 131 • San Jose, California 95112-3150 • Phone 408/287-8588 • FAX 408/287-8646

SUBSURFACE DATA LOG

LOG No. P-1 DATE: 12/27/91
LOCATION: Right Away Redy Mix
EQUIPMENT: Exploration Geoservices
PROJECT No. P91024

DRY DENSITY (lbs cu ft)	MOISTURE (% of dry wt)	"N" VALUE (blows/ft)	SAMPLE TYPE	DEPTH (ft)	LOG	U.S.C.	
						SC	CLAYEY SAND to SANDY CLAY, dark brown, damp, medium dense FILL - with occassional medium gravels, small brick fragments and pieces of wire
	28		S1	5		CL	SILTY CLAY, medium brown to dark gray brown with some light gray mottling, moist, stiff
	38		S2	10			-increasing to very stiff -minor iron staining
			S3				-Groundwater first encountered at 12.5 feet.
	52		S4			CL/SC	SANDY CLAY to CLAYEY SAND, light to medium brown, moist to wet, very stiff
				15		SC	CLAYEY SAND with small gravels, medium brown, wet, dense to very dense.
	59		--	20			Boring terminated at 20.0 feet. 2" diameter piezometer constructed

Figure 3.

SUBSURFACE DATA LOG

LOG No. P-2 DATE: 12/27/91
LOCATION: Right Away Redy Mix
EQUIPMENT: Exploration Geoservices
PROJECT No. P91024

DRY DENSITY (lbs cu ft)	MOISTURE (% of dry wt)	"N" VALUE (blows/ft)	SAMPLE TYPE	DEPTH (ft)	LOG	U.S.C.	
						CL	SANDY CLAY, with some medium grained sand, dark brown, moist, stiff FILL
		23	S1	5		CL	SILTY CLAY, medium brown-gray with some iron staining, moist, stiff
		33	S2	10		CL	SILTY CLAY, grayish brown, moist, stiff to very stiff
		65	S3				▼-Groundwater first encountered at 12.5 feet.
				15		SC	CLAYEY SAND, medium grained sand with few small gravels (¼ inch), medium brown, wet, dense to very dense
		50/5"		20			Boring terminated at 19.5 feet. 2" diameter piezometer constructed

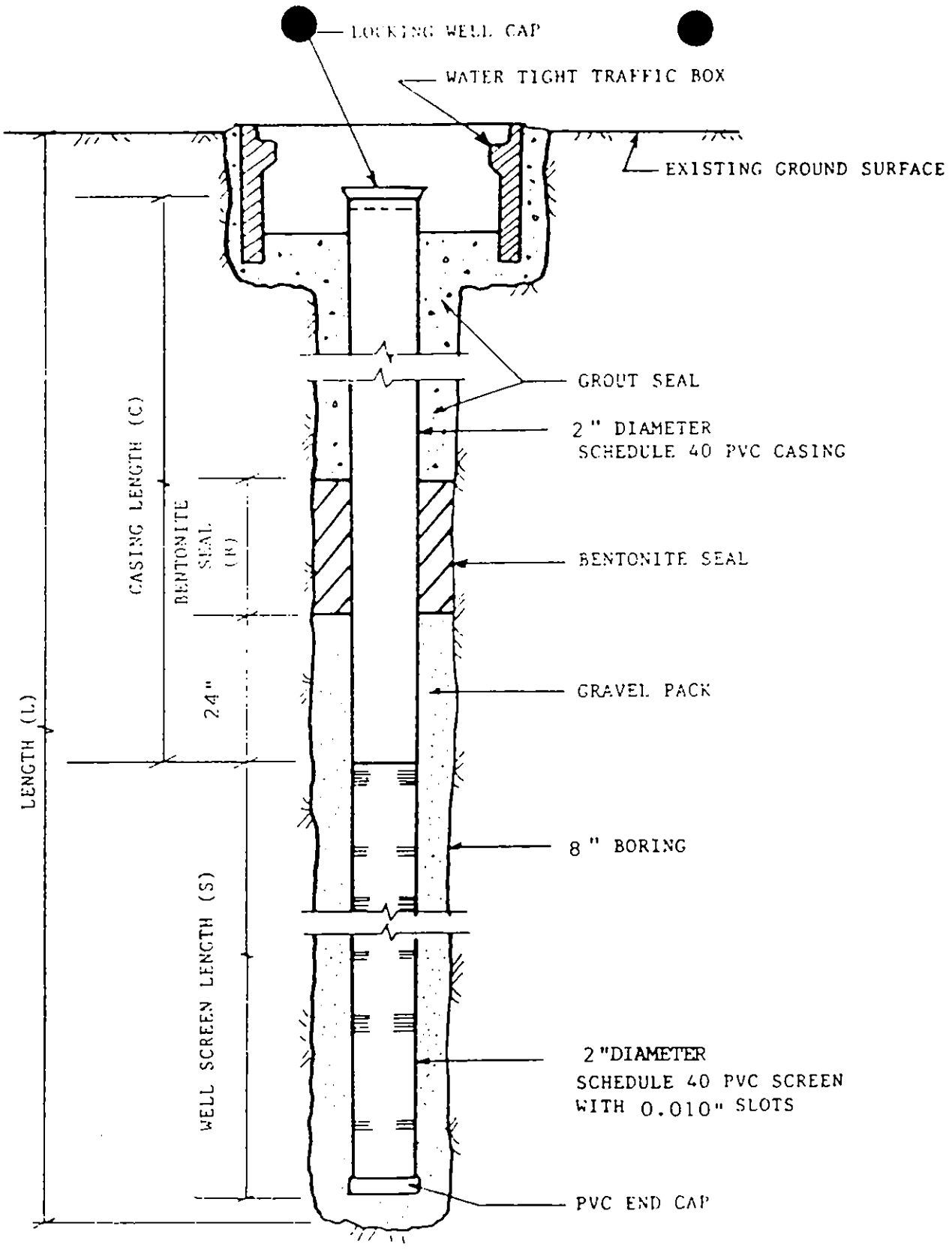
Figure 4.

SUBSURFACE DATA LOG

LOG No. P-3 DATE: 12/27/91
LOCATION: Right Away Redy Mix
EQUIPMENT: Exploration Geoservices
PROJECT No. P91024

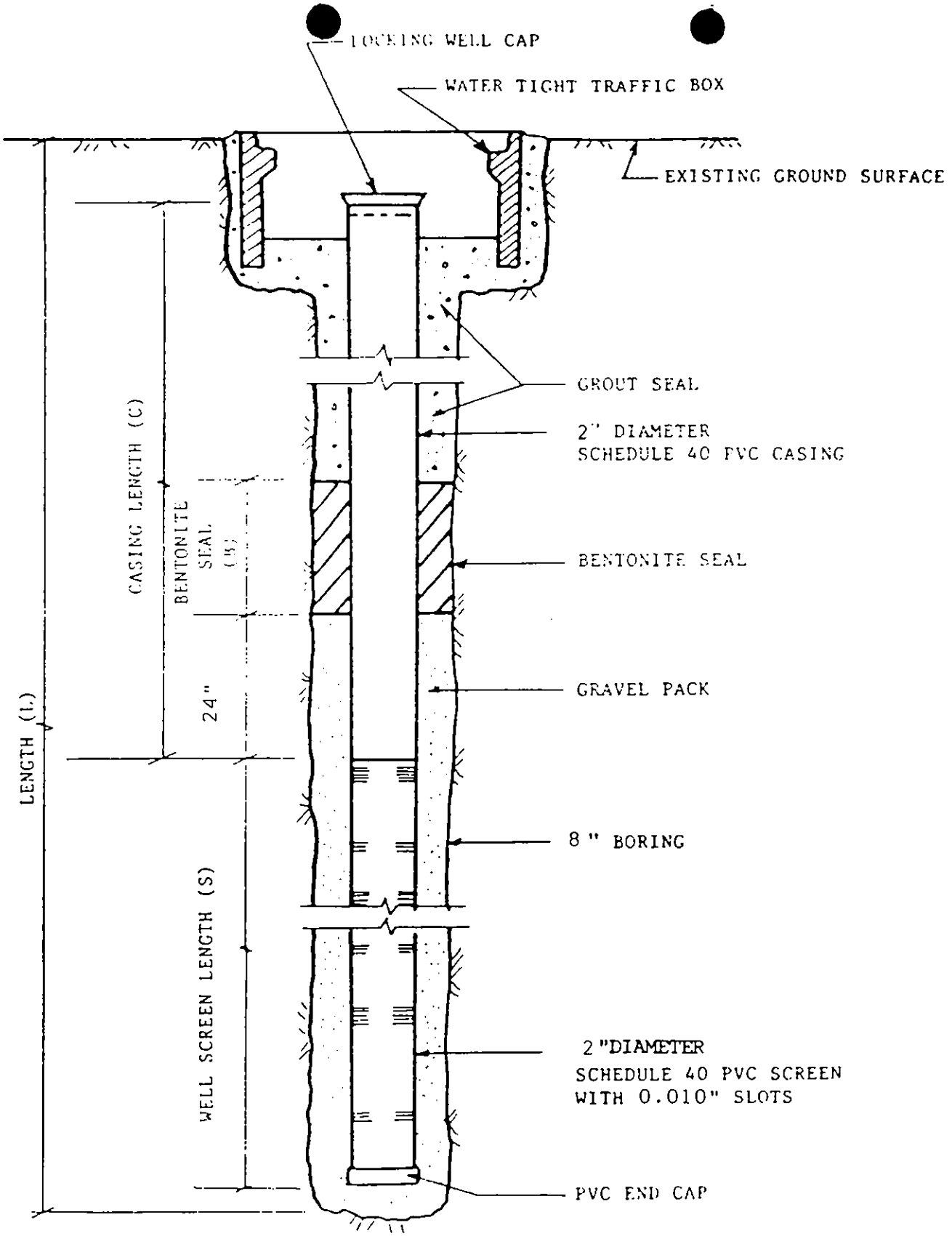
DRY DENSITY (lbs cu. ft.)	MOISTURE (% of dry wt)	"N" VALUE (blows/ft.)	SAMPLE TYPE	DEPTH (ft)	LOG	U.S.C.	
	13		S1	5		CL	SILTY CLAY, medium brown with some gray mottling, moist, stiff; slight petroleum odor
	65		S2	10		CL	SILTY CLAY, medium to dark gray with some lighter brown mottling, moist, very stiff to hard; some iron staining -Groundwater first encountered at 12 feet.
	50/4"		S3			SC	CLAYEY GRAVELLY SAND, medium grained sand with some gravels from 1/4" to 3/8", medium to dark brown, moist to very moist, very dense
	74		S4	15			-wet, hard
	41		S5	20			Boring terminated at 19.0 feet. 2" diameter piezometer constructed

Figure 5.



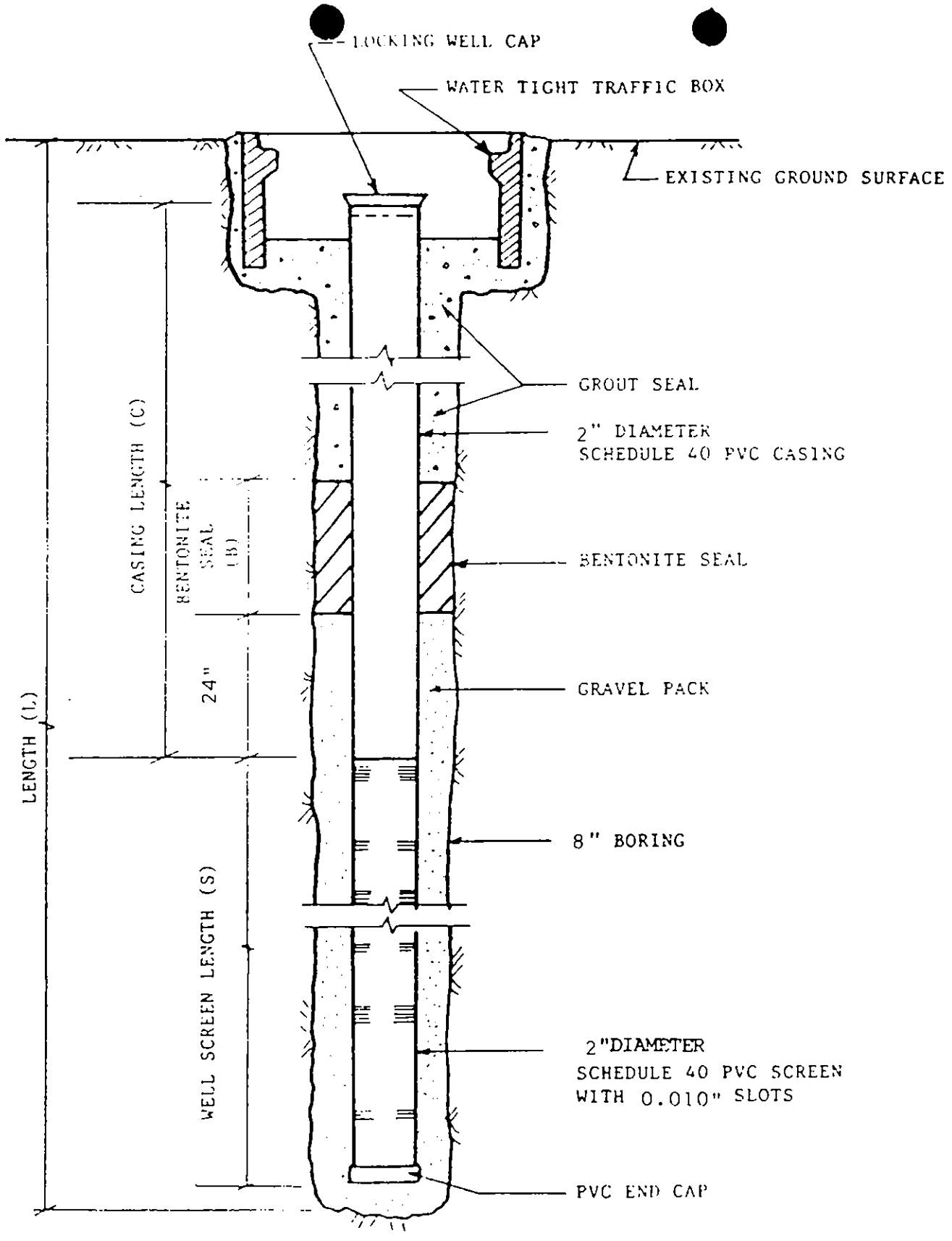
L= 20.0 feet
S= 10.0 feet
C= 10.0 feet
B= 1.0 feet

PIEZOMETER P-1		
DATE 12-27-91	SCALE N/A	DRAWN BY JCM
Right Away Redy Mix		
	Figure 6	



L= 19.5 feet
S= 10.0 feet
C= 9.5 feet
B= 1.0 feet

PIEZOMETER P-2		
DATE 12/27/91	SCALE N/A	DRAWN BY JCM
Right Away Redy Mix		
	Figure 7	



L= 19.0 feet
S= 10.0 feet
C= 9.0 feet
B= 1.0 feet

PIEZOMETER P-3		
DATE 12/27/91	SCALE N/A	DRAWN BY JCM
Right Away Redy Mix		
	Figure 8	

401 Kennedy Street, Oakland, CA 94606 510 536-1900 FAX 510 769-1785

Barney M. Chan
Dept. of Environmental Health
Hazardous Materials Program
80 Swan Way, Rm. 200

April 16, 1992

Dear Mr. Chan:

I must apologize that this report is so long in coming. I was under the impression that the engineer was forwarding a copy to you. I was interested in where we stood and called him today to see what you and he had worked out. I then found out that he is waiting for me to get a response form you as to the next step. Anyway, I guess it is my fault for not making sure things were progressing.

Please read the enclosed report. I will call you next week to get your reaction and recommendations on what we have to do next. If you get to the report sooner and want to call me, feel free to do so at any time. The number at the office I am usually is 769-6242.

Thank you for your cooperation in this matter.

Sincerely,

Geoffrey V. Henrikson

Geoffrey V. Henrikson

Have problems w/ piezometer / new diagram

4/22/92 Called David Glecki, he said there is an error in the piezom/new diagrams.

401 Kennedy John Suttin (KTW)

(1) ~~Excavate~~ further

(2)

BTEX ND

Bottom Sple 380

2,3,4,5 -210 Composite

- - - - - - - - - - - - - - - - - - - -

(1) Eastlake

(2) Julie Ann Way - semi annual

4 times pulled

GeoPlexus, Inc.

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

91 DEC 23 PM 1:41

December 20, 1991
Project P91024-3

ST ID 2924

Mr. Geoffrey Henrikson
Right Away Redy Mix
401 Kennedy Street
Oakland, CA 94606

Subject: Work Plan for Preliminary Site Characterization Investigation
Right Away Redy Mix, 401 Kennedy Street, Oakland, CA

Dear Mr. Henrikson:

In accordance with our agreement, Geo Plexus, Incorporated is pleased to submit the attached Work Plan and Health & Safety Plan for advancing four exploratory borings and the installation of three open standpipe piezometers at the subject site. Based on a ground water survey, the "down-gradient" piezometer would be developed as a ground water monitoring well and sampled.

This Work Plan describes the proposed site investigation activities for a supplemental assessment of the ground water resources at the subject property. A Copy of this Work Plan has been submitted to Mr. Barney Chan, Alameda County Department of Environmental Health. The proposed scope of work has been discussed with Mr. Chan and has tentatively been approved pending submittal of this Work Plan.

An application for a Piezometer/Monitoring Well Permit has been submitted to Alameda County Flood Control and Water Conservation District - Zone 7 for approval. The field investigation is scheduled to be performed on December 27, 1991.

Should you have questions regarding the attached Work Plan or the proposed schedule, please contact our office.

Respectfully submitted,

Geo Plexus, Incorporated

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

Attachments: (1) Work Plan
(2) Health & Safety Plan

CC: BARNEY CHAN
ALAMEDA COUNTY

753 North 9th Street, Suite 131 • San Jose, California 95112-3150 • Phone 408/287-8588 • FAX 408/287-8646

Preliminary Site Characterization Investigation
Work Plan
for
Right Away Redy Mix
401 Kennedy Street
Oakland, CA 94606

INTRODUCTION

The project site is located at 401 Kennedy Street in the City of Oakland, in Alameda County, California. The site is currently occupied by Right Away Redy Mix.

SCOPE OF WORK

Based on information obtained during our site visit, from KTW & Associates personnel, and from hydrogeologic reports prepared for the adjacent property (Lonestar), it is our position that four exploration borings should be advanced in the immediate vicinity of the existing underground storage tank at the project site (see Figure 1). Due to local variations in ground water flow directions, information was not available to assure the "site-specific" direction of ground water flow. Therefore, three of the borings would be completed as open-standpipe piezometers to evaluate the site-specific direction of ground water flow. The "down-gradient" piezometer would be developed as a ground water monitoring well and sampled.

The proposed scope of work is outlined below:

(1) advancing four subsurface exploration borings, collection of soil samples, and completing three of the borings as open-standpipe piezometers;

(2) determine direction of ground water flow and gradient across the site; and

(3) development the "down-gradient" piezometer as a monitoring well and collection of ground water samples for analytical testing;

(4) performing analytical testing on the soil and ground water samples; and

(5) preparation of a report documenting the findings of the investigation and presenting the results of the analytical testing.

Specifics of the individual investigative phases are described in the following sections of this Work Plan.

SUBSURFACE EXPLORATION

Subsurface Borings

Four subsurface exploration borings would be advanced at the project site at the locations identified on Figure 1 to characterize the subsurface soil conditions and to obtain soil samples for analytical testing.

The borings would be drilled by Exploration Geoservices, State of California Licensed Drilling Contractor, C57 License No. 489288. The borings would be logged under the supervision of a State of California Certified Engineering Geologist. Since three of the exploratory borings are intended to be completed as open-standpipe piezometers (and 1 as a ground water monitoring well), Alameda County Flood Control and Water Conservation (Zone 7) Piezometer/Well Permits would would be obtained prior to drilling the exploratory borings.

The drill cuttings and soil samples obtained from the borings would be monitored during drilling to observe moisture changes in the soils and to determine the depth of the first saturated zone. The boring which would not be converted to aa piezometer/monitoring well would be terminated upon intercepting ground water and would be grout filled upon completion of drilling. It is intended that the boring(s) for the monitoring well(s) would be advanced a minimum of 10 feet into the saturated zone (estimated total boring depth of 25 feet) unless a low permeable material is encountered prior to achieving this depth. Should a low permeable zone be encountered prior to achieving the 10 foot depth, the screened interval of the well would be reduced such that the low permeable zone is not penetrated to protect underlying aquifers.

The soil borings would be advanced using an eight-inch, nominal diameter, continuous flight hollow stem auger. Drilling and sampling equipment used for advancing the exploratory borings would be thoroughly steam cleaned before drilling begins and between each boring to prevent the introduction of off-site contamination and cross contamination between borings. Sampling equipment would be cleaned between sample events by steam cleaning or using a phosphate-free detergent bath and double rinsed in hot water baths to prevent cross contamination.

Pre-cleaned stainless steel or brass liners would be placed in the sampler to retain the soil. The drilling and sampling equipment would be steam cleaned subsequent to completion of the field activities. Soil cuttings and rinsate waters derived from the borings/cleaning would be retained in 55-gallon containers and stored on-site during the drilling pending results of the analytical testing.

Soil samples would be obtained at five (5) foot intervals throughout the borings, at changes in lithology, and where obvious soil contamination exists through the use of a 2 inch I.D. split-barrel sampler advanced into the undisturbed soil by a 140 pound hammer repeatedly falling 30 inches. Sand catchers would be used as necessary to retain the samples. A split-barrel, standard penetration sampler would be used should the 2 inch sampler prove ineffective at obtaining the samples. The drill cuttings and soil samples would be monitored in the field for evidence of hydrocarbon content through the use of a portable photo-ionization detector (PID), organic vapor meter (OVM), or similar device.

The soil samples would be immediately sealed in the liners using aluminum foil and plastic caps and properly labeled including: the date, time, sample location, and project number. The samples would be placed on ice immediately for transport to the laboratory under chain-of-custody documentation.

Piezometer Construction

The piezometers would be constructed in accordance with Alameda County Monitoring Well Construction Guidelines by installing 2-inch diameter polyvinyl chloride (PVC) flush-threaded casing and slotted pipe directly through the hollow stem auger. The slotted section of the PVC pipe installed through the saturated zone would have 0.010 inch factory perforations. The slotted pipe would extend a minimum of two feet above the current ground water level to monitor fluctuations in the ground water level. Materials used in the piezometer construction would be thoroughly cleaned prior to introduction into the boring.

The piezometers would be filter-packed with clean monterey silica sand throughout the screened interval. The filter material would be determined based on lithology encountered during drilling and would likely consist of No. 2/16 Lonestar Sand. The filter-pack material would be installed in the annular spacing between the piezometer pipe and the auger as the auger is removed and would extend a minimum of two feet above the top of the screened interval. To assure continuity and integrity of the filter material, and to prevent the bore hole from caving, no more than five foot of auger would be removed at a time.

A one foot thick layer of bentonite pellets would be placed above the filter material to provide an annular seal and the remainder of the boring would be filled with an 11-sack sand-cement slurry to within one foot of grade under direct observation of Alameda County inspection personnel. Should ground water exist in the boring/piezometer in excess of two feet above the bentonite seal, the cement slurry would be placed using the tremmie-method. The piezometer casing would have a locking cap and will be enclosed inside a watertight cast iron or aluminum traffic box installed in concrete flush with the surface.

Ground Water Depth and Gradient Measurements

The location and elevation of each piezometer would be verified and surveyed for determination of site-specific ground water flow direction and gradient. Vertical control would be to the nearest 0.01 inch. Water levels in the piezometers would be measured using an electronic water level probe. The depth to water measurements would be consistently recorded from a scribed location on the top of the piezometer casing. The depth to water measurements would be used to determine the direction of ground water flow and ground water gradient beneath the project site.

MONITORING WELL DEVELOPMENT AND SAMPLING

The "down-gradient" piezometer would be developed as a ground water monitoring well. The monitoring well would be allowed to stabilize for a minimum of 48 hours following construction prior to development activities. The initial well development would be through the use of a 1.7 inch Brainard-Kilman mechanical lift hand pump, an air-lift or nitrogen-lift pump, or a positive displacement bladder pump dependent on the depth to ground water and the screened interval. The well would be developed until a minimum of four well volumes have been purged and the discharged water appears clear of sediment. Electrical conductivity, temperature, and pH of the ground water would be recorded throughout the development process. The well development would continue until the electrical conductivity, temperature, and pH of the discharged water have stabilized. Depth to water measurements would be recorded prior to and following the well development activities.

The well would be allowed to recover for a minimum of 48 hours between development and sampling activities. Free product measurements would be obtained utilizing a product/ground water interface probe or through the use of an acrylic or teflon bailer lowered into the well to obtain a surface water sample. The teflon bailer would be used to collect a surface water sample to observe the presence of hydrocarbon odors, visible sheen, or free product. Depth to water measurements would be also be recorded at this time using an electronic water level probe.

Prior to sampling, a minimum of four well volumes would be purged from the well through the use of a positive displacement bladder pump or teflon bailer. Electrical conductivity, temperature, and pH of the ground water would be recorded throughout the purging process. The purging activities would continue until the electrical conductivity, temperature, and pH of the discharged water have stabilized. Water samples for analytical testing would be obtained through the use of the bladder pump or teflon bailer. The water developed from the monitoring wells would be contained on-site pending receipt of the laboratory test results.

The water samples would be collected in sterilized glass vials with Teflon lined screw caps. The samples would be 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 would be placed on ice immediately for transport to the laboratory under chain-of-custody documentation. Travel blanks or duplicate field blanks are not anticipated to be carried or collected.

Free Product Measurements

Free product measurements would be obtained at the time of each sample acquisition utilizing a product/ground water interface probe or through the use of an acrylic or teflon bailer lowered into the well to obtain a surface water sample. The teflon bailer would be used to collect a surface water sample to observe the presence of hydrocarbon odors, visible sheen, or free product.

ANALYTICAL TESTING

Soil and ground water samples would be submitted to and tested by Anametrix Inc., a State of California, Department of Health Services certified testing laboratory. Analytical testing would be scheduled and performed in accordance with the State of California, Regional Water Quality Control Board Guidelines.

Soil samples would be tested for Total Petroleum Hydrocarbons as diesel by RWQCB Method GCFID (3510/8015) and Volatile Aromatics by EPA Method 8020.

The ground water samples would be be tested for for Total Petroleum Hydrocarbons as diesel by RWQCB Method GCFID (3510/8015) and Volatile Aromatics by EPA Method 8020.

REPORT

A report documenting the findings and observations of the investigation and the results of the analytical laboratory testing would be prepared to include: the findings and boring logs for the subsurface investigation, well logs and well development records; analytical test data, chain-of-custody records, along with other pertinent information obtained throughout the investigative process.

SCHEDULE

The field investigation has been tentatively scheduled to begin on December 27, 1991.

The subsurface investigation and installation of the piezometers are anticipated to be accomplished in one day. It is estimated that the gradient survey, well developed, well purging and sampling would be accomplished during the following two weeks. Standard analytical testing turnaround time of two (2) weeks is anticipated to be used unless directed otherwise. The final report would be submitted within two weeks following receipt of the analytical test data for the ground water samples (estimated January 24, 1992).

Respectfully submitted,

Geo Plexus, Incorporated

DCG:dg

Health & Safety Plan
for
Preliminary Site Characterization Investigation
Right Away Redy Mix
401 Kennedy Street
Oakland, CA 94606

INTRODUCTION

This Health & Safety Plan (HSP) has been prepared for the subsurface investigation work to be performed at 401 Kennedy Street in the City of Oakland, in Alameda County, California. The site is currently occupied by Right Away Redy Mix.

The HSP establishes safety procedures to be followed to alert field personnel and others at the investigation site to potential hazards that could be encountered while conducting the subsurface investigation work and identifies the personal protective equipment required for the specific field activities.

This HSP generally complies with Federal Health and Safety regulations (29 CFR 1910 and 1926), California Health and Safety regulations as set forth in Title 8 of the California Administrative Code, and guidance established by the California Department of Health Services. This plan is to be used by Geo Plexus, Incorporated personnel as a supplement to presented regulations and guidance. Geo Plexus, Incorporated does not accept responsibility for subcontractor employee or property owner actions on any site.

APPLICABLE CODES, STANDARDS, AND REGULATIONS

California Health and Safety Code
Title 22, California Code of Regulations
California State Industrial Safety Orders
29 CFR (Code of Federal Regulations)
40 CFR (Code of Federal Regulations)
California Leaking Underground Fuel Tank (LUST) Manual

PERSONNEL

The field exploration work would be performed under the direction of Ms. Jonisue C. Minor, Project Geologist. The Project Manager for this project is Mr. David C. Glick. Ms. Minor will serve as the Site Safety Officer (SSO) for the field exploration and will perform on-site inspection and monitoring during the drilling. Mr. John Collins (Exploration Geoservices), or assigned driller if Mr. Collins is not assigned to the project, will be the drilling supervisor during the field investigation and would be responsible for operating the drill rig and coordinating the drilling activities. Grouting activities will be performed under the direction and coordination of Mr. Collins.

The SSO must be on-site whenever work is being performed unless an alternate SSO, assigned during the tailgate safety meeting, has been delegated to be acting and all field personnel notified of the change in personnel responsibility. The SSO or any other employee of Geo Plexus Incorporated working within the project area is authorized to suspend work when working conditions become too hazardous and to remove from the site any employee of Geo Plexus, Incorporated or subcontractor employees whose conduct endangers the health and safety of the employee or of others.

The SSO has the responsibility for performing air monitoring for compliance with this SSP and to ensure that the required work practices are employed and correcting work practices that may result in injury or potential exposure to hazardous substances.

Geo Plexus, Incorporated and subcontractor personnel assigned to perform field activities covered by this plan must have active health and safety clearance statuses, which mean that during the past 12 months, they have been cleared to wear respirators and perform their field assignments and have satisfied health and safety training requirements specified in 29 CFR 1910.120 (e).

Anticipated visitors to the project site include representatives from the Alameda County Environmental Health Department and the property owner. Visitors to the project site would be subjected to comply with all regulations, including OSHA 29 CFR 1910.134 (Respiratory Protection) and 29 CFR 1910.120 (Hazardous Waste Operations).

DESCRIPTION OF WORK

The work to be performed consists of advancing four soil borings to an estimated depth of 25 feet below the ground surface, using an eight-inch, nominal diameter, continuous flight hollow stem auger. Three of the borings would be completed as open-standpipe piezometers.

Details of the actual field activities are presented in the Attached Work Plan for the project site which is incorporated herein by reference.

JOB HAZARD ANALYSIS

Site hazards identified with the subsurface exploration and well construction activities include those encountered when operating mechanical equipment along those hazards associated with Portland Cement, grout mixing equipment, and grouting processes.

Site specific hazards exist due to the physical location of the proposed borings/wells include: underground pipelines and utilities, vehicle traffic around the existing facility, pedestrian traffic, and the potential for hazardous materials (defined below) to exist in the soils and ground water encountered by the borings/wells.

Since the investigation is located in the vicinity of a former underground gasoline storage tank, volatile organic compounds associated with halogenated hydrocarbon compounds, chlorinated hydrocarbon compounds, aromatic hydrocarbon compounds, and gasoline products have the potential to be present at the site.

It is anticipated that potential chemical exposure to site personnel could exist for short periods of time (intermittent for one field day). However if a site is unknown or not fully characterized, then the potential for exposure to elevated concentrations of fuel products could occur. Therefore, a brief overview of potential hazards associated with gasoline (highest probable constituent) is presented below:

Cal-OSHA Permissible Exposure Limit (PEL): 300 ppm
ACGIH Threshold Limit Value (TLV): 300 ppm
ACGIH Short Term Exposure Limit (STEL): 500 ppm

GENERAL SAFE WORK PRACTICES

Field personnel, equipment operators, and visitors to the site would be briefed each day in a "tailgate" safety meeting at which time specific daily objectives are discussed and equipment to be used on-site are identified. Potential contaminants which could be encountered during the investigation and risks from exposure and emergency procedures would also be reviewed. All personnel entering the project area (defined as 75 feet from the drill rig) would be required to sign the tailgate safety meeting form documenting their understanding of the HSP. A copy of this HSP and the Work Plan would be available at the job site at a location identified during the tailgate safety meeting.

A regulated project area shall be established as 75 feet from the drill rig. Within the project area, safety equipment shall be worn and smoking, eating, drinking, and use of tobacco products shall be prohibited. The work area defined in this plan includes 20 feet from the drill rig. The project area includes 75 feet from the drill rig. The project area would be marked with barricades and yellow "Caution" flagging to inhibit access to the area.

All field personnel working within the project area will be required to wear personal protection equipment (defined later in this safety plan) as directed by the SSO during the tailgate safety meeting or as directed by the SSO during the field investigation activities.

All personnel assigned to this project shall have been trained and fitted for use of respiratory protective equipment required for this project and any other protective equipment assigned to them.

The drilling and well installation is anticipated to be completed by the end of each working day. As such, fencing or additional site control measures would not be required. Barricades would be left in-place overnight over the completed monitoring wells to allow the concrete seal to cure. Temporary fencing would be installed around the drums containing the drill cuttings and rinsate water.

EXPOSURE MONITORING

Permissible Exposure Levels (PEL) established by the California Code of Regulations or 29CFR 1900.1000 Standards shall be adopted for the site.

Air monitoring shall be conducted on a continuous basis to monitor ambient air conditions within the project area to detect the presence of volatile organic vapors. The monitoring would be performed through the use of a Thermo Environmental 580A Organic Vapor Meter (OVM) or Photovac Photo-Ionization Detector (PID). Samples of the soil materials derived from the borings would be visually inspected and monitored with the OVM or PID to detect emission of volatile organic vapors to detect the presence of hydrocarbon contamination (as gasoline and/or diesel).

During drilling operations, vapor emissions from the boreholes will be measured through the use of the OVM or PID as the cuttings are generated from the borehole, when the auger is extracted from the boring, and during backfilling of the boring. The vapor measurements will be made at a minimum of two zones: approximately 12 inches above ground level adjacent to the auger; and with the breathing zone of the field personnel.

Should the vapor concentrations detected at the ground level zone exceed 1,000 ppm (level of audible alarm) or exceed the PEL within the breathing zone, operations would be suspended, the drill rig motor shut off, and personnel would be directed to remove themselves from the immediate area of the drill rig. The OVM would be removed from the drilling area with the field personnel to continue monitoring the ambient air conditions. Re-entry into the drilling area (20 feet from the drill rig) would be permitted upon reduced volatile concentrations (as determined by the audible alarm shutting off and a minimum 30-minute air monitoring period of readings below the PEL) or by personnel equipped with respirators equipped with appropriate organic cartridges. Work would not resume until an assessment has been made by the SSO and appropriate procedures, which include engineering control measures (i.e. increased ventilation or air circulation, etc), each personnel wearing respirators with appropriate organic cartridges, or each individual wearing supplied air or self contained breathing apparatus equipment and the SSO authorizes continuation of work.

PERSONAL PROTECTIVE EQUIPMENT

Personal protective equipment to be worn by all field personnel in the work area shall consist of neoprene or butyl steel toed boots (calf-length), hard hats, hearing protection, and work gloves. During operations involving eye hazards, safety goggles or glasses shall be worn.

Should inclement weather arise during the field activities, rain gear shall be worn at the discretion of the employee. Rain gear will not be used to replace required protective gear as required by the SSO.

Protective clothing such as polyethylene coated Tyvek coveralls could be worn as an option of the employee. Uncoated Tyvek coveralls may be worn within the work area in general use.

Nitrile, butyl or neoprene gloves must be worn when handling contaminated soil or water encountered during drilling. Surgical vinyl or latex inner gloves are recommended to be worn.

NIOSH-approved respiratory protection shall be worn by personnel potentially exposed to dust during the excavation and shall consist of, as a minimum, fitted half-face respirators equipped with air-purifying (particulate) cartridges.

NIOSH-approved respiratory protection shall be worn when organic vapors are determined to be present within the excavation at concentrations exceeding the PEL as indicated by the field monitoring equipment (OVM or PID). Respiratory protection shall include, as a minimum, fitted half-face air-purifying respirators equipped with organic vapor cartridges. Should concentrations exceed 2xPEL, as determined by the OVM or PID, the investigation activities shall be halted and field personnel shall be required to exit the work area. Personnel re-entering the work area shall be require to be fitted with positive pressure self-contained breathing apparatus (SCBA's). SCBA's shall be required until the concentrations diminish below 2xPEL. Atmospheres greater than 10% LEL, or less than 20% oxygen shall not be entered until the area is properly ventilated and the excavation is determined to be safe to enter by the SSO.

DECONTAMINATION

Decontamination of field equipment is required through steam cleaning and use of phosphate-free detergents as set forth in the work plan for the project. Field decontamination of personnel is not required except when contamination is obvious (visually, by odor, irritation, etc.). Petroleum hydrocarbon products should be removed from skin using a mild detergent and water. Hot water is more effective than cold water. The on-site steam cleaner would be a source of hot water if required. Liquid dish washing detergent is more effective than hand soap.

CONTINGENCY PLANS

Limited first-aid equipment (band aids, antiseptic wipes, cold packs, etc.) would be available at the construction site at a location specified during the tailgate safety meeting. A fire extinguisher will be available along with the drill rig and the location will be identified during the tailgate safety meeting.

Two gallons of de-ionized or distilled water will be available with the first aid equipment should water be required for flushing eyes for dislodging foreign particles or as necessary for first aid applications.

Directions to emergency phone access would be provided during the tailgate safety meeting. A portable cellular phone will be available at the project site and is located in the SSO's vehicle. Field personnel would be instructed about the location and operation of the phone during the tailgate safety meeting.

An alternate SSO would be identified during the tailgate safety meeting to function as SSO in the event the SSO becomes injured and is not capable of performing or coordination emergency activities.

The SSO will notify the PM of any emergency conditions which encountered during the investigation. If the SSO is incapacitated or absent from the site the designated alternate SSO will perform this notification.

In the event of accident, injury, or other emergency the SSO would notify appropriate government agencies or individuals as follows:

Police, Fire, or Ambulance emergency: 911

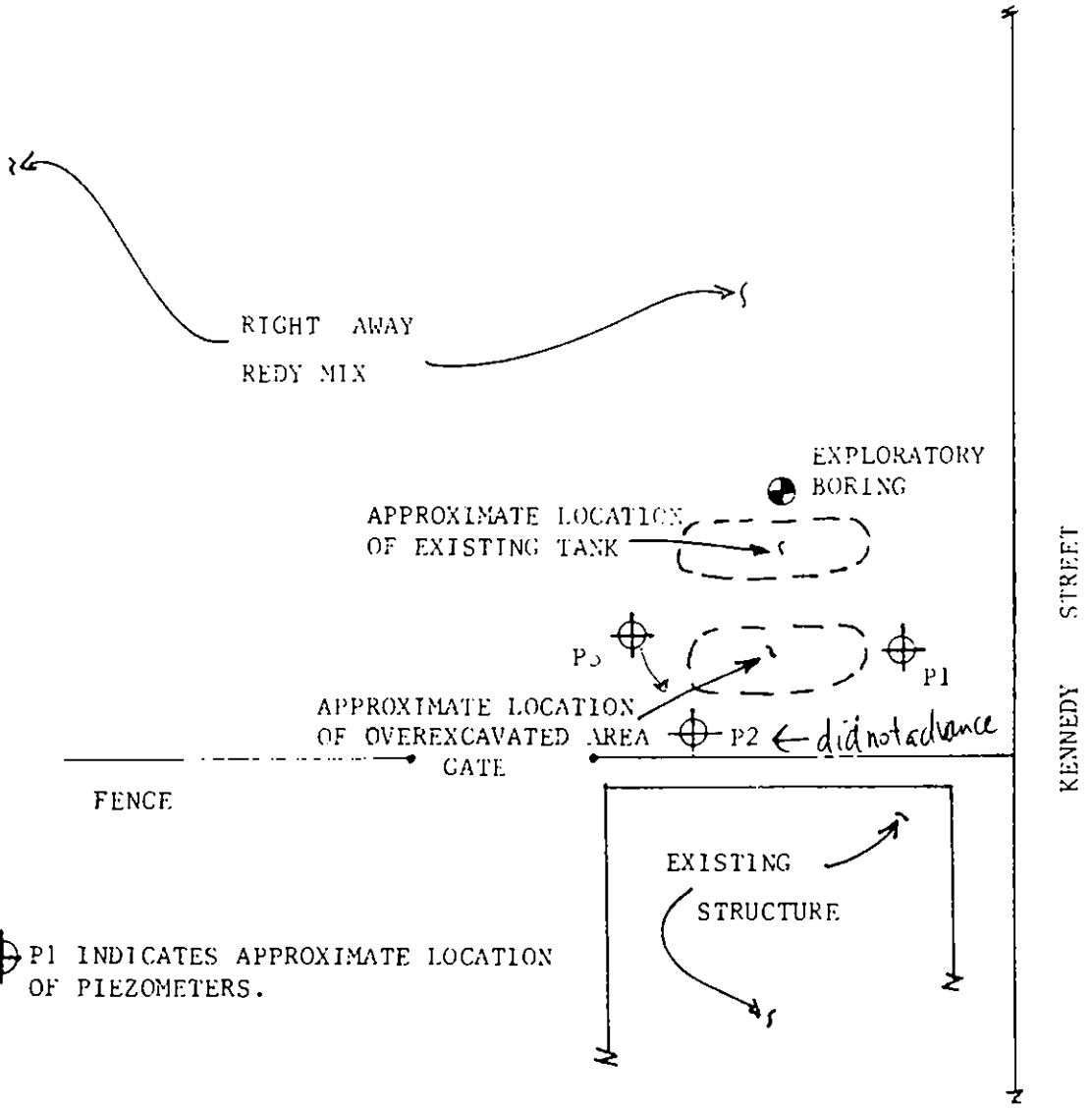
Nearest Emergency Hospital: Oakland Hospital
2648 E. 14th, Oakland
(510) 532-6300

Exploration Geoservices:(408) 280-6822

Geo Plexus, Incorporated: (408) 287-8588

Right Away Redy Mix: (510) 536-1900
Mr. Geoffrey Henrikson

DCG:dg



NOTE: ⊕ P1 INDICATES APPROXIMATE LOCATION OF PIEZOMETERS.

RIGHT AWAY REDY MIX		
DATE 12-20-91	SCALE N/A	DRAWN BY DCG
SITE PLAN		
	Figure 1	

ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY
DAVID J. KEARS, Agency Director

DEPARTMENT OF ENVIRONMENTAL HEALTH
Hazardous Materials Program
80 Swan Way, Rm. 200
Oakland, CA 94621
(415)

December 3, 1991

Mr. Jeff Henrikson
Right Away Redy Mix
401 Kennedy St.
Oakland, CA 94606

Re: Work Plan for Subsurface Investigation at Right Away Redy Mix, 401 Kennedy St., Oakland, CA 94606

Dear Mr. Henrikson:

Our division has received and reviewed the proposed work plan for the above site provided us by Mr. David Glick of Geo Plexus, Incorporated. As mentioned in the work plan, evidence must be provided as to the assumed ground water gradient, otherwise a minimum of three monitoring wells must be installed. Your consultant has provided the locations of the proposed well locations and these are acceptable. You should initiate the proposed work immediately.

You may contact me at (510) 271-4320 should you have any questions.

Sincerely,

Barney M. Chan
Hazardous Materials Specialist

cc: G. Jensen, Alameda County District Attorney Office
D. Glick, Geo Plexus, Inc., 753 North 9th Street, Suite 131, San Jose, CA 95112-3150
E. So, RWQCB

RightAwayWP

GeoPlexus, Inc.

Well & Safety Training • Geo Environmental Resource • Engineering Geology Consultants • Environmental Management Consultants

FAX TRANSMITTAL COVER SHEET

DATE: Nov 22, 1991

NUMBER OF PAGES INCLUDING THIS COVER SHEET: 13

VERIFICATION OF RECEIPT REQUIRED? YES ____ NO ✓

TO: MR. Barney Chan

COMPANY: Alameda County

BUSINESS PHONE: ____

FAX PHONE: (415) 568 3704

SPECIAL FAX INSTRUCTIONS: ____

FROM: David Glick

REPRESENTING: TW & Assoc

PROJECT: Right Away Redy Mix

BUSINESS PHONE: ____ FAX PHONE: ____

REMARKS: Copy of proposal / scope of work for your info.

IF THERE WERE ANY PROBLEMS WITH THIS TRANSMISSION PLEASE CALL:

Dec 27 drilling -
4 borings - 3 perimeter
1 - downgradient developed into MW.

GeoPlexus, Inc.

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

November 21, 1991
Proposal 91AC11E3

Mr. Jeff Henrikson
Right Away Redy Mix
401 Kennedy Street
Oakland, CA 94606

Subject: Proposal for Advancing Four Soil Borings and Installation of Three Ground Water Monitoring Wells at Right Away Redy Mix, 401 Kennedy Street, Oakland, CA

Reference: (a) Telephone Conversation with Mr. Barney Chan, Alameda County Department of Environmental Health, November 19, 1991
(b) Telepnone Conversation with Mr. Jeff Henrikson, November 19, 1991

Dear Mr. Henrikson;

In response to your request, Geo Plexus, Incorporated is pleased to present this Proposal to provide you with Engineering Geology and Environmental Consulting Services for a preliminary assessment of the subsurface soil and ground water conditions present at the subject site. At the direction of Mr. John Sutfin of KTW & Associates, this proposal has been submitted directly to you with a copy to KTW and to Barney Chan. Based on information derived during reference (a), the minimum scope of work for this preliminary assessment includes advancing four exploratory borings in the immediate vicinity of the existing underground storage tank (and dispensing pump) and converting three of the borings to ground water monitoring wells. This scope of work is expanded from the scope of work discussed during reference (b) with the addition of completing two other borings as monitoring wells. This difference arose since the direction of ground water flow beneath the subject site has not been determined with sufficient accuracy to identify which boring should be converted to a monitoring well (well is to be in the "down-gradient direction from the tank and dispensing pump). Should additional information become available during the literature research/work phase of work which would better define the "site specific" ground water flow direction (such as well information from the nearby Lonestar facility), it is anticipated that the scope of work could be reduced from installation of three wells to the initially proposed installation of one monitoring well.

SCOPE OF WORK

Based on information obtained during our site visit, from KTW & Associates personnel, and from references (a) and (b), it is our position that four exploration borings should be advanced in the immediate vicinity of the existing underground storage tank at the project site. At the direction of Mr. Chan, three of the borings would be completed as a ground water monitoring well to assess the potential impact to the soil and ground water resources from the former underground storage tank. Should additional information become available during the literature research/work phase of work which would better define the "site specific" ground water flow direction, it is our position that the scope of work could be modified and only one of the borings (located "down-gradient of the storage tank and dispensing pump) would be completed as a ground water monitoring well.

The proposed scope of work is outlined below:

(1) review existing reports on file with the Alameda County Environmental Health Department and/or Regional Water Quality Control Board to better define the direction of ground water flow beneath the project site;

(2) preparation and submittal of a Work Plan and Monitoring Well Permits to the Alameda County Environmental Health Department for approval;

(3) advancing four subsurface exploration borings, collection of soil samples, and completing three of the borings as a ground water monitoring wells;

(4) development of the monitoring wells and collection of ground water samples for analytical testing;

(5) performing analytical testing on the soil and ground water samples; and

(6) preparation of a report documenting the findings of the investigation and presenting the results of the analytical testing.

Specifics of the individual investigative phases are described in the following sections of this Proposal:

Regulatory Agency Record Review

Existing reports on file with the Alameda County Environmental Health Department and/or the Regional Water Quality Control Board would be reviewed to better define the direction of ground water flow beneath the project site. This information would be used to determine the "down-gradient" direction from the existing storage tank and to reduce the number of ground water monitoring wells installed at the site.

Work Plan

Following review of the existing site documentation, a Work Plan would be prepared describing the nature of the work to be performed at the site which would be submitted to the Alameda County Department of Environmental Health for review and approval. Monitoring Well Permits and a Site Safety Plan would be submitted for permits issuance.

Subsurface Borings

Four subsurface exploration borings would be advanced at the project site at the locations identified during our discussion. It is anticipated that the borings would be drilled by Exploration Geoservices, State of California Licensed Drilling Contractor, C57 License No. 489288. The borings would be logged under the supervision of a State of California Certified Engineering Geologist. Since potentially three of the exploratory borings are intended to be completed as a ground water monitoring wells, Alameda County Monitoring Well Permits would would be obtained prior to drilling the exploratory borings.

The drill cuttings and soil samples obtained from the borings would be monitored during drilling to observe moisture changes in the soils and to determine the depth of the first saturated zone. The boring(s) which would not be converted to monitoring wells would be terminated upon intercepting ground water and would be grout filled upon completion of drilling. It is intended that the boring(s) for the monitoring well(s) would be advanced a minimum of 10 feet into the saturated zone (estimated total boring depth of 25 feet) unless a low permeable material is encountered prior to achieving this depth. Should a low permeable zone be encountered prior to achieving the 10 foot depth, the screened interval of the well would be reduced such that the low permeable zone is not penetrated to protect underlying aquifers.

The soil borings would be advanced using an eight-inch, nominal diameter, continuous flight hollow stem auger. Drilling and sampling equipment used for advancing the exploratory borings would be thoroughly steam cleaned before drilling begins and between each boring to prevent the introduction of off-site contamination and cross contamination between borings. Sampling equipment would be cleaned between sample events by steam cleaning or using a phosphate-free detergent bath and double rinsed in hot water baths to prevent cross contamination.

Pre-cleaned stainless steel or brass liners would be placed in the sampler to retain the soil. The drilling and sampling equipment would be steam cleaned subsequent to completion of the field activities. Soil cuttings and rinsate waters derived from the borings/cleaning would be retained in 55-gallon containers and stored on-site during the drilling pending results of the analytical testing.

Soil samples would be obtained at five (5) foot intervals throughout the borings, at change in lithology, and where obvious soil contamination exists through the use of a 2 inch I.D. split-barrel sampler advanced into the undisturbed soil by a 140 pound hammer repeatedly falling 30 inches. Sand catchers would be used as necessary to retain the samples. A split-barrel, standard penetration sampler would be used should the 2 inch sampler prove ineffective at obtaining the samples. The drill cuttings and soil samples would be monitored in the field for evidence of hydrocarbon content through the use of a portable photo-ionization detector (PID), organic vapor meter (OVM), or similar device.

The soil samples would be immediately sealed in the liners using aluminum foil and plastic caps and properly labeled including: the date, time, sample location, and project number. The samples would be placed on ice immediately for transport to the laboratory under chain-of-custody documentation.

Monitoring Well Construction

The monitoring well(s) would be constructed in accordance with Alameda County Monitoring Well Construction Guidelines by installing 2-inch diameter polyvinyl chloride (PVC) flush-threaded casing and slotted pipe directly through the hollow stem auger. The slotted section of the PVC pipe installed through the saturated zone would have 0.020 inch factory perforations. The slotted pipe would extend a minimum of two feet above the current ground water level to monitor fluctuations in the ground water level. Materials used in the well construction would be thoroughly cleaned prior to introduction into the boring.

The monitoring well would be filter-packed with clean monterey silica sand throughout the screened interval. The filter material would be determined based on lithology encountered during drilling and would likely consist of No. 3 Monterey Sand or No. 2/12 Lonestar Sand. The filter-pack material would be installed in the annular spacing between the monitoring well pipe and the auger as the auger is removed and would extend a minimum of two feet above the top of the screened interval. To assure continuity and integrity of the filter material, and to prevent the bore hole from caving, no more than five foot of auger would be removed at a time.

A one foot thick layer of bentonite pellets would be placed above the filter material to provide an annular seal and the remainder of the boring would be filled with an 11-sack sand-cement slurry to within one foot of grade under direct observation of Alameda County inspection personnel. Should ground water exist in the boring/well in excess of two feet above the bentonite seal, the cement slurry would be placed using the tremmie-method. The well casing would have a locking cap and will be enclosed inside a watertight cast iron or aluminum traffic box installed in concrete flush with the surface.

Well Development and Sampling

The monitoring well would be allowed to stabilize for a minimum of 48 hours following construction prior to development activities. The initial well development would be through the use of a 1.7 inch Brainard-Kilman mechanical lift hand pump, an air-lift or nitrogen-lift pump, or a positive displacement bladder pump dependent on the depth to ground water and the screened interval. The well would be developed until a minimum of four well volumes have been purged and the discharged water appears clear of sediment. Electrical conductivity, temperature, and pH of the ground water would be recorded throughout the development process. The well development would continue until the electrical conductivity, temperature, and pH of the discharged water have stabilized. Depth to water measurements would be recorded prior to and following the well development activities.

The well would be allowed to recover for a minimum of 48 hours between development and sampling activities. Free product measurements would be obtained utilizing a product/ground water interface probe or through the use of an acrylic or teflon bailer lowered into the well to obtain a surface water sample. The teflon bailer would be used to collect a surface water sample to observe the presence of hydrocarbon odors, visible sheen, or free product. Depth to water measurements would be also be recorded at this time using an electronic water level probe.

Prior to sampling, a minimum of four well volumes would be purged from the well through the use of a positive displacement bladder pump or teflon bailer. Electrical conductivity, temperature, and pH of the ground water would be recorded throughout the purging process. The purging activities would continue until the electrical conductivity, temperature, and pH of the discharged water have stabilized. Water samples for analytical testing would be obtained through the use of the bladder pump or teflon bailer. The water developed from the monitoring wells would be contained on-site pending receipt of the laboratory test results.

The water samples would be collected in sterilized glass vials with Teflon lined screw caps. The samples would be 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 would be placed on ice immediately for transport to the laboratory under chain-of-custody documentation. Travel blanks or duplicate field blanks are not anticipated to be carried or collected.

Ground Water Depth and Gradient Measurements

Should three monitoring wells be constructed at the project site, the location and elevation of each would be verified for determination of ground water flow direction and gradient. Vertical control would be to the nearest 0.01 inch. Water levels in the wells would be measured using an electronic water level probe. The depth to water measurements would be consistently recorded from a scribed location on the top of the well casing. The depth to water measurements would be used to determine the direction of ground water flow and ground water gradient beneath the project site.

Free Product Measurements

Free product measurements would be obtained at the time of each sample acquisition utilizing a product/ground water interface probe or through the use of an acrylic or teflon bailer lowered into the well to obtain a surface water sample. The teflon bailer would be used to collect a surface water sample to observe the presence of hydrocarbon odors, visible sheen, or free product.

Analytical Testing

Soil and ground water samples would be submitted to and tested by a State of California, Department of Health Services certified testing laboratory. Analytical testing would be scheduled and performed in accordance with the State of California, Regional Water Quality Control Board Guidelines.

Soil samples would be tested for Total Petroleum Hydrocarbons as diesel by RWQCB Method GCFID (3510/8015) and Volatile Aromatics by EPA Method 8020. (BTEX)

The ground water samples would be be tested for for Total Petroleum Hydrocarbons as diesel by RWQCB Method GCFID (3510/8015) and Volatile Aromatics by EPA Method 8020.

Report

A report documenting the findings and observations of the investigation and the results of the analytical laboratory testing would be prepared to include: the findings and boring logs for the subsurface investigation, well logs and well development records; analytical test data, chain-of-custody records, along with other pertinent information obtained throughout the investigative process.

CORPORATE PROFILE

Geo Plexus, Incorporated (Geo Plexus) is a multidiscipline engineering geology and environmental management consulting firm providing Federal health and safety training and comprehensive professional consulting services to commercial, industrial, and government clients. Geo Plexus is a Woman-Owned, Small Business enterprise comprised of three divisions.

Our Safety Services Division offers a full range of Federal and State mandated Health and Safety Training Programs to satisfy the current training requirements of the Federal OSHA Regulations 29 CFR 1910.120 and upcoming training requirements of CAL-OSHA 5192. Our Engineering Services Division offers a unique service in the provision of geologic and environmental personnel on an "as-needed" basis to meet our clients staffing needs. Our Consulting Division offers professional consulting services including: geology, seismology, hydrogeology, risk assessment, hazardous and toxic materials assessments and investigations, hazardous materials management, technical information research services, and regulatory compliance management as described in the following section.

GEO PLEXUS CONSULTING DIVISION

The Consulting Division of Geo Plexus is a multidiscipline engineering geology and environmental management consulting firm providing comprehensive professional consulting services to commercial, industrial, and government clients. These services include: geology, seismology, hydrogeology, risk assessment, hazardous and toxic materials assessments and investigations, hazardous materials management, technical information research services, and regulatory compliance management.

Our personnel provide diversified experience in engineering geology, hydrology, and environmental management services (including hazardous materials investigation, classification, and remediation services). The Geo Plexus staff has extensive experience in performing geologic and environmental site assessment investigations encompassing nearly all physiographic provinces of Northern California.

Geo Plexus Consulting Division provides a full range of engineering geology and environmental management services including:

- Property Development Feasibility Studies
- Preacquisition/Property Transfer Site Assessments
- Hazardous Materials Site Assessments
- Leaking Underground Storage Tank Assessments
- Soil and Ground Water Contamination Investigations
- Development and Implementation of Remedial Action Programs
- Subsurface Drainage System Design
- Irrigation and Domestic Water Supply Well Systems
- Fault Hazard Investigations and Seismic Risk Assessments

Preliminary Environmental Site Assessments

Geo Plexus Consulting Division performs Preliminary Environmental Site Assessments (also referred to as Phase I and Phase II Site Assessments) for commercial and residential properties for investors, lending institutions, appraisers, public agencies, real estate brokers, and attorneys.

Our assessments include a review of the existing site conditions, current land use, and torical land development of the project site and the surrounding properties. Regulatory sgency documents are reviewed for historical and on-going operational practices, existence of leaking surface or underground storage tanks, visual indications of possible mishandling of toxic substances (e.g., spills or accidents, cleanup operations, etc.), previous testing by others, and punitive actions.

Our reports are prepared to provide a clear understanding of the project site and surrounding properties along with an evaluation of the potential for on-site or off-site migration of hazardous materials occurring in the vicinity of the site.

Soil and Ground Water Contamination Investigations

Geo Plexus personnel are experienced in performing and developing solutions for a broad spectrum of soil and ground water contamination problems. For each project, we provide a multidisciplinary team with the expertise necessary to define the scope of the problem, perform the necessary investigation studies, analyze the data, and provide sound cost effective recommendations.

The staff at Geo Plexus have extensive experience in obtaining samples of soil, rock, buried waste, and fluids through installation of subsurface soil borings, monitoring wells, and test pits. Our personnel have obtained vast field experience in design and installation of ground water monitoring and extraction wells under differing geologic environments including development of water sources located stratigraphicaly below contaminated aquifers. Our field staff personnel are thoroughly familiar with Federal, State, and Local Municipality regulatory requirements and have received intense training and certification in compliance with OSHA requirements.

Appropriate Quality Assurance protocols are implemented for each investigation to assure personnel safety and protection of the environment and to assure the integrity of rock, soil, water samples obtained in the field. The Quality Assurance protocols document all field sampling techniques, sample preservation techniques, and sample shipping/custody documentation from the field site to the laboratory. Geo Plexus personnel are familiar with the requirements for containment and disposal of hazardous materials encountered during field investigations. Comprehensive project specific Site Health and Safety Plans are implemented to minimize generation of waste products as a result of subsurface exploration, soil/water sampling, monitoring well development, or material characterization activities.

Soil and Ground Water Remediation

Geo Plexus personnel have diverse experience with soil and ground water remediation techniques. Soil remediation programs include: enhanced soil aeration, soil venting, vapor extraction, bioremediation, composting and nutrient feed systems. Ground water treatment programs include: ground water extraction combined with carbon adsorption and/or air stripping to remove chlorinated hydrocarbons.

Projects have included:

- Product Recovery Well Systems
- On-Site Bioremediation Treatment
- Ground Water Treatment Systems
- In-Situ Soil Treatment

Geologic/Seismic Hazard and Risk Assessment

Geo Plexus geologists have extensive field experience in identification and classification of geologic structures, fault systems, and other geologic hazards throughout the Western United States. Seismic hazard assessments performed throughout the greater San Francisco Bay include investigations of the Hayward, Greenville, Chabot, and Antioch faults. Primary and Secondary Geologic and Seismic Hazards evaluated as potential site hazards include:

- Ground Surface Rupture and Ground Deformation
- Ground Shaking
- Liquefaction, Lurch Cracking, and Induced Settlement
- Slope Stability and Lateral Spreading
- Probabilistic Risk Assessment

Geologic and seismic hazard investigations are performed through photogeologic interpretation, geologic mapping, geophysical exploration methods, and subsurface exploration (trenching and exploratory borings). Our personnel are trained in direct and remote field techniques to identify rock, soil, and soft sediment deformation for evaluation of geologic structures and evidence of faulting in exploration trenches and subsurface borings.

Development Feasibility

Geo Plexus Consulting Division staff have been responsible for performing geologic and geotechnical engineering investigations for residential, commercial, industrial, municipal and Government facilities throughout California, Nevada, Arizona, Washington and Alaska. These investigations have included performing preliminary and detailed site reconnaissance evaluations, extensive site specific subsurface investigations, hillside stability evaluations, and ground water monitoring for foundation and earthwork recommendations.

Our personnel have extensive experience in preparation of construction project designs and engineering documentation for large and small developments. Our staff has been responsible for the preparation of design plans, specifications, and budget cost estimates along with advertisement, selection, and negotiation of construction contracts.

PERSONNEL

Geo Plexus Consulting Division management and staff personnel present varied and diversified training, field experience, and management skills which prove to be the basis for our multidisciplinary approach to project assignments. The Professional Team assembled for this project comprises exceptionally qualified individuals with extensive first-hand experience with performing geologic and environmental investigations. A brief description of the qualifications of our principal personnel are presented on the following pages.

David Glick, Senior Engineering Geologist, has over 14 years of experience in management, engineering geology, ground water hydrology, geotechnical engineering, and construction technology in industry and government. His experience is varied as to geographic region, technical disciplines, and size and complexity of tasks. Coupling his knowledge of the multidisciplinary fields of engineering geology and geotechnical engineering, results in practical solutions to problems on projects under his direction and guidance.

Jonisue Minor, Senior Project Geologist, has over 14 years of experience in engineering geology, ground water hydrology, and geotechnical engineering. Ms. Minor has been the City of San Jose Assistant Engineering Geologist for the last three years performing geologic review of investigation reports and construction documents for developments within San Jose. Ms. Minor has completed geologic and geotechnical engineering investigations throughout the greater San Francisco Bay Area for both residential and commercial developments.

ISAAC HUVAL has over 30 years of professional geologic experience in field geology, environmental geology, ground water hydrology, and petroleum geology throughout the United States. Mr. Huval has performed detailed geologic and environmental investigations throughout the United States and holds a certification for SARA Waste Management Operations.

JAY JAMALI, Contract Safety Specialist, has performed numerous safety audits and develops compliance documentation for Federal, State, and Local regulations. He is involved in performing industrial hygiene sampling and functions as site specific safety manager for investigations of hazardous materials.

Resumes for key individuals are provided on the following pages.

PERSONAL PROFILE

DAVID GLICK
Senior Engineering Geologist

REGISTRATION

Registered Geologist #4139: California
Certified Engineering Geologist #1338: California
Registered Environmental Assessor #01246: California

EDUCATION

B.S., Geology, San Diego State University, 1980

PROFESSIONAL AFFILIATIONS

Association of Engineering Geologists
Earthquake Engineering Research Institute
Seismological Society of America
National Water Well Association

PROFESSIONAL EXPERIENCE AND BACKGROUND

Mr. Glick has been responsible for the management and execution of preliminary environmental site (Phase I and II) assessments, geologic studies, and hydrogeologic investigations throughout California for the assessment of leaking surface and underground storage tanks, electroplating surface impoundment closures, and landfill investigations. Specific project requirements have included performing subsurface investigations, ground water monitoring, determination of soil properties and hydraulic characteristics, and the assessment of contaminant migration. These investigations have resulted in the evaluation of soil and ground water remediation technologies, preparation of remediation feasibility studies, and the design of site specific remedial action plans.

Mr. Glick has recently completed geologic hazard and seismic risk assessment investigations throughout the San Francisco Bay Area and San Joaquin Valley for residential and commercial developments. These investigations included extensive subsurface exploration augmented with photogeologic interpretation, geologic mapping, and soil stratigraphic analysis to define the nature and extent of faulting and to evaluate the potential hazards associated with faulting and earthquake activity.

From 1980 through 1988, Mr. Glick served as an engineering geologist for the Western Division, Naval Facilities Engineering Command and was responsible for performing geologic, geotechnical engineering, and hydrologic investigations throughout the western United States. Mr. Glick has performed environmental hazard assessments and hydrogeologic investigations for leaking underground and surface fuel tanks and hazardous materials at various Navy and Marine Corps facilities. He was responsible for the selection, negotiations, and direct management of government consultant contracts for investigation and preparation of remedial action construction contracts. His work included managing extensive geotechnical investigations and environmental evaluations for the dredging and disposal of contaminated sediments related to the Navy's west coast Homeporting projects.

PERSONAL PROFILE

JONISUE MINOR
Senior Project Geologist

EDUCATION

B.S., Geology, San Jose State University, 1981

PROFESSIONAL AFFILIATIONS

Association of Engineering Geologists
Geological Society of America
Association for Women Geoscientists

PROFESSIONAL EXPERIENCE AND BACKGROUND

Jonisue C. Minor has over 14 years of experience in management, engineering geology, ground water hydrology, and geotechnical engineering in government and private industry. Ms. Minor was the Assistant City Geologist for the City of San Jose from 1989 to 1991 during which time she performed geologic reviews of investigation reports, evaluations of submittals related to the geologic hazard and grading ordinances, General Plan amendments, environmental impact reports, and responses to City Council inquiries.

From 1986 through 1989 Ms. Minor served as a project geologist for the Western Division, Naval Facilities Engineering Command and was responsible for performing geologic, geotechnical engineering, and hydrologic investigations throughout the western United States. She performed environmental hazard assessments and hydrogeologic investigations for leaking underground and surface fuel tanks and hazardous materials at various Navy and Marine Corps facilities.

From 1977 through 1986 she completed geologic and geotechnical engineering investigations throughout the greater San Francisco Bay Area for both residential, commercial, and government developments. These investigations included extensive geophysical and subsurface exploration, augmented with photogeologic interpretations, geologic mapping, and soil stratigraphic analysis to define the nature of faulting and landslide potential, and to evaluate the potential hazards associated with faulting and earthquake activity.

SCHEDULE AND FEES

We would mobilize for this project within one week of your approval and authorization to proceed. We anticipate that the Work Plan and Well Permits would be completed and submitted within one week from project initiation. The subsurface exploration would be initiated approximately one week following submittal of the Work Plan and Permits. We anticipate that the laboratory testing would be completed within three weeks and that the report would be completed within two weeks following receipt of the analytical test data.

Our fees for this work would be computed in accordance with our current FEE SCHEDULE, a copy of which is attached. Based on this schedule, we estimate that the total charges for the scope of work outlined herein would be as follows:

Document Review and Preparation of Work Plan and Permits	$ 650
Subsurface Investigation	$ 4,000
Well Development and Sampling	$ 700
Analytical Testing	$ 1,500
Report Preparation	$ 800
Estimated Total:	$ 7,650

Should only one monitoring well be required in stead of three, the estimated fees would be reduced by $1,500.

Enclosed are two copies of our Standard Form Agreement for your review. Prior to initiation of work, a deposit of $ 2,200 is required to cover out-of-pocket expenses (drilling, analytical testing, etc.). This deposit would be credited to payment of the work performed. If Geo Plexus, Incorporated is selected for this project, please sign and return both copies of the Agreement along with the deposit as our authorization to proceed. We will return an executed copy of the agreement for your files.

Respectfully submitted,

GEO PLEXUS, INCORPORATED

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

ALAMEDA COUNTY, DEPARTMENT OF ENVIRONMENTAL HEALTH

80 Swan Way, #200
Oakland, CA 94621
(415) 271-4320

Hazardous Materials Division Inspection Form

Site ID# _____ Site Name Right Away Rods Mfg Today's Date 11/12/91

Site Address 401 Kennedy ST EPA ID# _____

City Oak Zip 94606 Phone _____

MAX Amt. Stored > 500lbs/55g/200cf? Y N
Hazardous Waste generated per month? _____

Inspection Categories:
___ I. Haz. Mat/Waste GENERATOR/TRANSPORTER
___ II. Business Plans, Acute Hazardous Materials
___ III. Underground Tanks

The marked items represent violations of the Calif. Administration Code (CAC) or the Health & Safety Code (HS&C)

I.A GENERATOR (Title 22)

	1. Waste ID	* 66471
	2. EPA ID	66472
	3. > 90 days	66508
	4. Label dates	66508
	5. Biennial	66493
Manifest	6. Records	66492
	7. Correct	66484
	8. Copy sent	66492
	9. Exception	66484
	10. Copies Rec'd	66492
Misc.	11. Treatment	66371
	12. On-site Disp. (H.S.&C.)	26189.5
	13. Ex Haz. Waste	66570
Prevention	14. Communications	67121
	15. Aisle Space	67124
	16. Local Authority	67126
	17. Maintenance	67120
	18. Training	67105
Contin. gency	19. Prepared	67140
	20. Name List	67141
	21. Copies	67141
	22. Emg. Coord. Trng.	67144
Containers, Tanks	23. Condition	67241
	24. Compatibility	67242
	25. Maintenance	67243
	26. Inspection	67244
	27. Buffer Zone	67246
	28. Tank Inspection	67259
	29. Containment	67245
	30. Safe Storage	67261
	31. Freeboard	67257

I.B TRANSPORTER (Title 22)

	32. Applic./Insurance	66428
	33. Comp. Cert./CHP insp.	66448
	34. Containers	66465
Manifest	35. Vehicles	66465
	36. EPA ID #s	66531
	37. Correct	66541
	38. HW Delivery	66543
	39. Records	66544
Cont'rs	40. Name/ Covers	66545
	41. Recyclables	66800

Comments: Jim & KTL present

Inspected all pressurized pipes as it was being sparged. No bubbles noticed. Had the brass box & overflow box sparged at 1400 & well reached at 1600 hr, rechecked water level @ 1545 & looked ok

0.75 hr total

Rev 6/88

Contact: _____

Title: _____ Inspector: BLon

Signature: _____ Signature: _____

ALAMEDA COUNTY, DEPARTMENT OF ENVIRONMENTAL HEALTH

80 Swan Way, #200
Oakland, CA 94621
(415) 271-4320

Hazardous Materials Division Inspection Form

Site ID# _____ Site Name _____ Today's Date ___/___/___

Site Address _____ EPA ID# _____

City _____ Zip 94__ Phone _____

MAX Amt. Stored > 500lbs/55g/200cf? Y N
Hazardous Waste generated per month?
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	___ 37. Correct	66541
	___ 38. HW Delivery	66543
	___ 39. Records	66544
Cont'rs	___ 40. Name/ Covers	66545
	___ 41. Recyclables	66800

Comments:

Rev 6/88

Contact: _____

Title: _____ Inspector: _____

Signature: _____ Signature: _____

ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY
DAVID J. KEARS, Agency Director

Did I include the "work plan" and analytical report?

DEPARTMENT OF ENVIRONMENTAL HEALTH
Hazardous Materials Program
80 Swan Way, Rm. 200
Oakland, CA 94621
(415)

November 5, 1991

Right Away Ready Mix
Mr. Geoffrey Henrikson
401 Kennedy St.
Oakland CA 94606

Re: Dispenser Modification and Upgrade for Diesel Tank at Right Away Ready Mix, 401 Kennedy St., Oakland CA 94606

Dear Mr. Henrikson:

Our office has become aware of diesel contamination in soil arising from a subsurface investigation during the performance of the above referenced work at your site. Initial contaminated fill material was uncovered under the former dispenser area. Mr. John Sutfin of KTW, your contractor, informed our office of this situation. Initially, additional backfill/soil was removed from this area and soil sample was taken at the six foot level. To expedite this work, I split soil samples at the six foot depth level. One sample was taken to the County Environmental Health Lab and the other offered to an outside commercial lab. The idea was not to stop progress if the contamination was limited. On November 4, 1991, I received the results of the County lab's analysis. Enclosed, please find a copy of these results. They indicate the soil sample collected at the six foot level contains 1645 ppm,(parts per million), total petroleum hydrocarbon as diesel, TPHd. Because of these results, you are aware that KTW performed additional excavation enlarging the pit laterally as well as vertically to a depth of 9-9.5 feet. Soil samples from each sidewall and the pit floor were taken to determine if the overexcavation had removed all contaminated soil. Further work will be dictated by the analytical results of these samples.

Because of the analytical results obtained by the Environmental Health Lab, this site is considered to have experienced an unauthorized petroleum hydrocarbon fuel release, the extent of which must be assessed and remediated. Enclosed please find an Underground Tank Unauthorized Release (Leak)/ Contamination Site Report for you or your designee to complete. Please return to our office within thirty (30) days, the completed form along with a work plan which addresses the above concerns. Attached please find the contents of a "typical" work plan to use as guidance.

In addition, you are requested to send a check payable to Alameda County Environmental Health in the amount of $432.00, the oversight fee for the modification of one underground tank. Be aware that this fee is set by County Ordinance. All plan review, site inspections,

and other related work pertaining to this investigation will be deducted from this deposit at a rate of $67.00/hr and any unused monies will be refunded to you at the completion of this project.

Please be aware that this is a formal request for technical documents pursuant to the California Water Code, Section 13267 (b). Any extensions of agreed upon deadlines must be confirmed in writing by either this Division or the Regional Water Quality Control Board, RWQCB. All proposals, reports and analytical results pertaining to this investigation and remediation must be sent to our office and the RWQCB to the attention of Mr. Eddy So. Their address is : 2101 Webster St., 4th Floor, Oakland, CA 94612.

You may contact me at (510) 271-4320 should you have any questions regarding this letter.

Sincerely,

Barney M. Chan
Hazardous Materials Specialist

enclosures

cc: G. Jensen, Alameda County District Attorney, Consumer and Environmental Protection Division
E. So, RWQCB
H. Hatayama, DOHS
T. Gregory, KTW

401KennWP

435 23rd Ave
Charles Campanella

ALAMEDA COUNTY, DEPARTMENT OF ENVIRONMENTAL HEALTH

80 Swan Way, #200
Oakland, CA 94621
(415) 271-4320

Hazardous Materials Division Inspection Form

I

Site ID# ______ Site Name Right Away Ready Mix Today's Date 11/4/91

Site Address 401 Kennedy St EPA ID# ______

City Oak Zip 94606 Phone ______

MAX Amt. Stored > 500lbs/55g/200cf? Y N
Hazardous Waste generated per month? ______

Inspection Categories:
___ I. Haz. Mat/Waste GENERATOR/TRANSPORTER
___ II. Business Plans, Acute Hazardous Materials
___ III. Underground Tanks

The marked items represent violations of the Calif. Administration Code (CAC) or the Health & Safety Code (HS&C)

I.A GENERATOR (Title 22)

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Manifest	__ 6. Records	66492
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	__ 8. Copy sent	66492
	__ 9. Exception	66484
	__ 10. Copies Rec'd	66492
Misc.	__ 11. Treatment	66371
	__ 12. On-site Disp. (H.S.&C.)	26189.5
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Prevention	__ 14. Communications	67121
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	__ 17. Maintenance	67120
	__ 18. Training	67105
Contingency	__ 19. Prepared	67140
	__ 20. Name List	67141
	__ 21. Copies	67141
	__ 22. Emg. Coord. Tmg.	67144
Containers, Tanks	__ 23. Condition	67241
	__ 24. Compatibility	67242
	__ 25. Maintenance	67243
	__ 26. Inspection	67244
	__ 27. Buffer Zone	67246
	__ 28. Tank Inspection	67259
	__ 29. Containment	67245
	__ 30. Safe Storage	67261
	__ 31. Freeboard	67257

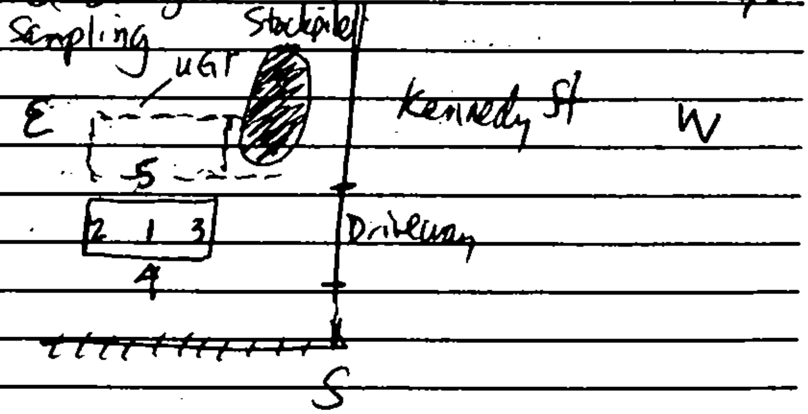
I.B TRANSPORTER (Title 22)

	Item	Code
	__ 32. Applic./Insurance	66428
	__ 33. Comp. Cert./CHP Insp.	66448
	__ 34. Containers	66465
Manifest	__ 35. Vehicles	66466
	__ 36. EPA ID #s	66531
	__ 37. Correct	66541
	__ 38. HW Delivery	66543
	__ 39. Records	66544
Cont'd	__ 40. Name/ Covers	66545
	__ 41. Recyclables	66800

Rev 6/88

Comments: Ilhr.

Pit area under former dispenser has been widened & deepened to ~ 9-9.5'. Pit is currently ~ 6'x9'x9.5'. Soil samples taken from pit bottom (1) East side of pit (2), West side (actually a floor sample) (3), South wall sample (#4) ~ 1' in from initial side wall and from the North wall (5). Samples can be run as a composite but would need < 20ppm to consider no problem. To be run for TPH-d + BTEX. North wall sloughed off while sampling



Tom Gregory + John S. present + samplers

Contact: ______________________

Title: ______________________ Inspector: ______________________

Signature: ______________________ Signature: ______________________

IMPORTANT MESSAGE

FOR B-C

DATE 11/1/91 TIME 1:20 A.M. (P.M.)

M Darcy

OF LAB

PHONE _____
AREA CODE NUMBER EXTENSION

TELEPHONED		PLEASE CALL	X
CAME TO SEE YOU		WILL CALL AGAIN	
WANTS TO SEE YOU		RUSH	
RETURNED YOUR CALL		SPECIAL ATTENTION	

MESSAGE Call
(1645 pm) Right Away
Reddy Mix.

Scott Hendrikson - (Pres)

SIGNED _____

LITHO IN U.S.A.

TOPS FORM 3002S

401 Kenn WP

white -env.health
yellow -facility
pink -files

ALAMEDA COUNTY, DEPARTMENT OF ENVIRONMENTAL HEALTH

80 Swan Way, #200
Oakland, CA 94621
(415) 271-4320

Hazardous Materials Division Inspection Form

Site ID# _____ Site Name Right Away Ready Mix Today's Date 10/30/91

Site Address 401 Kennedy St EPA ID# _____

City Oak Zip 94606 Phone 536-1902

MAX Amt Stored > 500lbs/55g/200cf? Y N
Hazardous Waste generated per month? _____

Inspection Categories:
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	37. Correct	66541
	38. HW Delivery	66543
	39. Records	66544
Cont'd	40. Name/ Covers	66545
	41. Recyclables	66800

Rev 6/88

Comments:

Inspected the modification of dispenser & island @ 401 Kennedy St.
KTW will (1) install new island
(2) install new dispenser
(3) install a bravo box
(4) extend vent line to fence
(5) Install an automatic tank gauging device.
Contact John Sutfin - KTW, Don - Right Away
Encountered some diesel contaminated soil under dispenser - Dallas Theis to dig out the affected soil ~ 3 yds - and sample soil should analyze for TPHd. a split sample was given to KTW for analysis BC 10/30/91-1610 & I took another BC 10/30/91-1615 to the Env Lab. If sample is <100, I will allow them to continue - ~~Em~~ 0.75hr
11/4/91 - Recd results from Darcy - 1645 ppm. needs to: (1) define lateral & vertical extent (2) install mon. 1 MW downgradient or 3 MW if gradient not known
(3) Fill out UFR
(4) Deposit $432 for county oversight

Contact: _____

Title: _____ Inspector: _____

Signature: _____ Signature: _____

400 Kenn WP

white -env.health
yellow -facility
pink -files

ALAMEDA COUNTY, DEPARTMENT OF ENVIRONMENTAL HEALTH

80 Swan Way, #200
Oakland, CA 94621
(415) 271-4320

Hazardous Materials Division Inspection Form

Site ID# ______ Site Name Right Away Ready Mix Today's Date 10/30/91

Site Address 401 Kennedy St EPA ID# ______

City Oak Zip 94606 Phone 536-1900

MAX Amt. Stored > 500lbs/55g/200cf? Y N
Hazardous Waste generated per month?

Inspection Categories:
___ I. Haz. Mat/Waste GENERATOR/TRANSPORTER
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Misc.	11. Treatment	66371
	12. On-site Disp. (H.S.&C.)	261895
	13. Ex Haz. Waste	66570
Prevention	14. Communications	67121
	15. Aisle Space	67124
	16. Local Authority	67126
	17. Maintenance	67120
	18. Training	67105
Contingency	19. Prepared	67140
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Manifest	35. Vehicles	66465
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	37. Correct	66541
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Rev 6/88

Comments:

Inspected the modification of dispenser & island @ 401 Kennedy St.
KTW will (1) install new island
(2) install new dispenser
(3) install a bravo box
(4) extend vent line to fence
(5) install an automatic tank measuring device.
Contact John Sutton - KTW, Don - Right Away
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needs to: (1) define lateral + vertical extent
(2) install min: 1 MW downgradient or 3 MW if gradient not known
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(4) Deposit $432 for County oversight

Contact: ______
Title: ______
Signature: ______

Inspector: ______
Signature: ______

white	-env.health
yellow	-facility
pink	-files

ALAMEDA COUNTY, DEPARTMENT OF
ENVIRONMENTAL HEALTH

80 Swan Way, #200
Oakland, CA 94621
(415) 271-4320

Hazardous Materials Division Inspection Form

Site ID# ______ Site Name Right Away Redy Mix Today's Date 10/30/91

Site Address 401 Kennedy St EPA ID# ______

City Oak Zip 94606 Phone 536-1900

MAX Amt. Stored > 500lbs/55g/200cf? Y N
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Inspection Categories:
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	Item	Code
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	34. Containers	66465
Manifest	35. Vehicles	66465
	36. EPA ID #s	66531
	37. Correct	66541
	38. HW Delivery	66543
	39. Records	66544
Cont'rs	40. Name/ Covers	66545
	41. Recyclables	66800

Rev 6/88

Comments:

Inspected the [illegible] [illegible] dispenser island @ 401 Kennedy St
KTW will [illegible] install [illegible]
[illegible] install new dispenser
[illegible] [illegible] Drive box
[illegible] extend vent line to [illegible]
[illegible] install [illegible] [illegible] overfill device
[illegible] Jim Sutton - KTW, Don - Right Away
[illegible] Some [illegible] contamination [illegible]
[illegible] dispenser [illegible]
[illegible] Soil - 3 yds - [illegible] sample soil
[illegible] analyze to [illegible] [illegible]
[illegible] KTW [illegible] analyze [illegible] 10/30/91 - 1610
[illegible] 10/30/91 - 1615 to [illegible]
[illegible] sample [illegible] [illegible]
[illegible] 0.75 ft
11/4/91 Recd results from Danny - 164 ppm
needs to: (1) [illegible] [illegible]
2.) [illegible] KTW [illegible]
[illegible] Anomaly
3.) fill [illegible] [illegible]
[illegible] 432 for [illegible]

Contact: ______________________

Title: ______________________ Inspector: [illegible]

Signature: ______________________ Signature: ______________________

ALAMEDA COUNTY HEALTH CARE SERVICES AGENCY
DEPARTMENT OF ENVIRONMENTAL HEALTH
ENVIRONMENTAL HEALTH LABORATORY

ANALYTICAL REQUEST

Laboratory No. 91-083

Sample Identification One soil sample from Right Away Ready Mix,401 Kennedy St.,Oaklanc

Analyses Requested by: Barney Chan

Date Collected: 10/30/91 Collected by: Barney Chan

Date Received: 10/31/91 Received by: Newton Leung

Analyses Requested TPH (Diesel)

Background Information to check if there is Diesel Contamination in soil.

ANALYTICAL RESULTS

Parameter	Observation or Result
Sample Identification	BC10/30/91-1615
Lab#	91-083
TPH (Diesel),ppm	1645ppm

Conclusions: The sample contains 1645ppm Diesel.

Date Analyses Completed: 11/1/91 Chemist: Darcy Wong

Approved: D.W.S

Distribution: Barney Chan, T. Shirasawa,R. Shahid,

BC/cdb
7/85

white - lab
yellow - insp. file
pink - fac. file

ALAMEDA COUNTY HEALTH CARE SERVICES AGENCY
DIVISION OF HAZARDOUS MATERIALS
80 SWAN WAY, ROOM 200
OAKLAND, CA 94621
(415) 271-4320

LABORATORY SERVICE REQUEST

SITENAME Right Away Ready Mix
ADDRESS 401 Kennedy St.
SAMPLE SUBMITTED TO: Env Lab
DATE SUBMITTED 10/31/91
SEND INVOICE TO:

SEND ANALYTICAL REPORT TO ABOVE OR:
B. Chan

ATTN:

X ASAP
RUSH = ABOUT 1 WEEK TURNAROUND
ROUTINE = ABOUT 2 WEEKS TURN-AROUND

SAMPLE NO.	DATE/TIME COLLECTED	TYPE OF MATERIAL (WATER, SOIL OR MATRIX)	VOLUME/ WEIGHT	FIELD OBSERVATION	ANALYSIS REQUESTED
BC 10/30/91-1615	10/30/91 1615	soil, 6' BGS under dispenser	2oz	Slight odor	TPH diesel

Chain of Custody:

	Signature	Title	Inclusive Dates
1.	Barney Chan	Haz Mat Specialist	10/30/91 — 10/31/91
2.	[illegible]	CHEMIST	10/31/91
3.			

rev.10/88
mam

white - lab
yellow - insp. file
pink - fac. file

ALAMEDA COUNTY HEALTH CARE SERVICES AGENCY
DIVISION OF HAZARDOUS MATERIALS
80 SWAN WAY, ROOM 200
OAKLAND, CA 94621
(415) 271-4320

LABORATORY SERVICE REQUEST

SITENAME Right Away Ready Mix
ADDRESS 401 Kennedy St.
SAMPLE SUBMITTED TO: Env Lab
DATE SUBMITTED 10/31/91
SEND INVOICE TO:

SEND ANALYTICAL REPORT TO ABOVE OR:
B. Chan

ATIN:

x ASAP
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	Signature	Title	Inclusive Dates
1.	Barney Chan	Haz Mat Specialist	10/30/91 — 10/31/91
2.	[illegible]	[illegible]	10/31/91
3.			

rev.10/88
mam

GeoPlexus, Inc.

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

ALCO HAZMAT
'93 NOV 22 PM 2:26

November 16, 1993

Mr. Geoffrey Henrikson
Right Away Redy Mix
401 Kennedy Street
Oakland, CA 94606

Subject: November, 1993 Quarterly Ground Water Sampling Report

Dear Mr. Henrikson:

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 the analytical test data for the ground water samples collected on November 10, 1993.

Ground water measurements recorded during the sampling efforts indicate that the direction of ground water flow is in an easterly direction which places Monitoring Well P-3 in the down-gradient direction from the former/current fuel dispensing island area (location of previous release). The analytical testing did not detect concentrations of Total Petroleum Hydrocarbons as diesel, Oil & Grease, or Volatile Aromatic Compounds (Benzene, Toluene, Ethyl Benzene, and Xylene) in the water samples from Monitoring Well P-3. Based on the results of the quarterly ground water data, it is our opinion that the source of the release was abated during the excavation activities and construction of the new dispensing island and that additional site characterization and/or continued monitoring does not appear warranted. It is recommended that the site be considered for closure.

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:

Mr. Thomas Peacock
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

Respectfully submitted,
Geo Plexus, Incorporated

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

REGISTERED GEOLOGIST
DAVID C. GLICK
No. 1338
CERTIFIED
ENGINEERING
GEOLOGIST
STATE OF CALIFORNIA

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

GeoPlexus, Inc.

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

GROUND WATER SAMPLING REPORT

for

RIGHT AWAY REDY MIX

401 KENNEDY STREET

OAKLAND, CALIFORNIA

November 16, 1993

Project C92032

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

GROUND WATER SAMPLING REPORT
for
RIGHT AWAY REDY MIX
401 KENNEDY STREET
OAKLAND, CALIFORNIA

INTRODUCTION

The project site is located at 401 Kennedy Street in the City of Oakland, in Alameda County, California as indicated on Figure 1 and is currently occupied by Right Away Redy Mix as indicated on Figure 2.

Three open-standpipe piezometers were installed around the existing underground diesel fuel storage tank and dispensing island (see Figure 3) in December, 1991 by Geo Plexus, Incorporated to obtain soil samples for analytical testing and to establish site-specific ground water flow information. The focus of the investigation was to acquire ground water samples from the "down-gradient" direction of the former/existing dispenser pump area. The top of the piezometer casings were surveyed to establish relative elevations and it was determined that piezometer P-3 was located down gradient of the dispensing pump area (location of previous release). Piezometer P-3 was subsequently developed as a ground water monitoring well (identified as Monitoring Well P-3) and was sampled.

Low concentrations of Total Petroleum Hydrocarbons as diesel (290 ppb) were detected in the ground water in January, 1992. These concentrations reduced to 78 ppb in August, 1992. Low concentrations (210-220 ppb) of non-discreet petroleum hydrocarbons were detected in the ground water in November, 1992 and February, 1993. The quality control report accompanying the November and February data indicated that the constituents detected were non-discreet petroleum hydrocarbons which did not correlate with the chromatographic pattern of the diesel standard used by the analytical testing laboratory. The analytical testing schedule was expanded during the last two quarters to further characterize the non-discreet petroleum hydrocarbons previously detected and reported as Total Petroleum Hydrocarbons as diesel.

This report presents the recorded ground water elevations, the sampling protocol, and results of the analytical testing performed on the ground water samples collected from Monitoring Well P-3 on November 10, 1993.

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, visible sheens, or odors were not observed in the initial bailer water samples or following purging of the well.

Prior to sampling Monitoring Well P-3, five 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. 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 (HCl) 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 well 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 well and other piezometers at the site were established during previous investigations with vertical control of 0.01 foot. Prior to purging the monitoring well, 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 an easterly direction (see Figure 3) at a gradient of 0.0054 ft/ft with Monitoring Well P-3 in the down-gradient direction from the former/existing dispensing island (focus of investigation).

ANALYTICAL TESTING

The ground water samples were submitted to and tested by McCampbell Analytical, a State of California Certified Testing Laboratory. The samples were tested for Total Petroleum Hydrocarbons as diesel by Method GCFID 3550/8015, Volatile Aromatics by EPA Method 8020/5030, and Oil & Grease by Method 5520. 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 10.5-11 feet below the ground surface and flows across the site in an easterly direction at a gradient of 0.0054 ft/ft. The flow direction places Monitoring Well P-3 in a down-gradient direction from the dispenser island.

The analytical testing did not detect reportable quantities of Total Petroleum Hydrocarbons as diesel, Volatile Aromatic Compounds (Benzene, Toluene, Ethyl Benzene, and Xylene), or Oil & Grease. Tables 1 and 2 summarize the current analytical test results along with the previous analytical testing results.

TABLE 1

SUMMARY OF GROUND WATER ANALYTICAL TEST DATA

Date Sampled	Total Petroleum Hydrocarbons	Benzene	Toluene	Ethyl-Benzene	Total Xylenes
1-8-92	290	N.D.	N.D.	N.D.	N.D.
8-17-92	74	N.D.	N.D.	N.D.	N.D.
11-2-92	210*	N.D.	N.D.	N.D.	N.D.
2-5-93	220*	N.D.	N.D.	N.D.	55
5-25-93	ND	N.D.	N.D.	N.D.	N.D.
8-20-93	ND	N.D.	N.D.	N.D.	N.D.
11-10-93	ND	N.D.	N.D.	N.D.	N.D.

ppb

Note: Total Petroleum Hydrocarbons as diesel.
* Compounds reported as Total Petroleum Hydrocarbons as diesel reported to be discrete hydrocarbon peaks which did not correlate with diesel standard used by the analytical testing laboratory and not indicative of diesel fuel.
N.D. indicates compounds not detected.

TABLE 2

SUMMARY OF GROUND WATER ANALYTICAL TEST DATA

Date Sampled	Total Petroleum Hydrocarbons	Oil & Grease
5-25-93	ND	ND
8-20-93	--	ND
11-10-93	--	ND

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

The diesel constituents detected in the ground water in January and August, 1992 could be attributed to the diesel contaminated fuel which was encountered, excavated, and removed from the former fuel dispenser island area. However, the constituents reported as Total Petroleum Hydrocarbons as diesel in November, 1992 and February, 1993 (which were reported to be discrete hydrocarbon peaks not indicative of diesel fuel) could be attributed to residual levels of degraded diesel fuel resulting from the site remedial work (excavation and removal of the source).

The expanded testing, which was implemented to further characterize the non-discrete hydrocarbon products, has not identified the presence of these discrete peaks, Total Petroleum Hydrocarbons as gasoline, Total Petroleum Hydrocarbons as diesel, Oil & Grease, or Volatile Aromatic Compounds (Benzene, Toluene, Ethyl Benzene, and Xylene) in the ground water during the last two quarters.

Based on the results of the quarterly ground water data, it is our opinion that the source of the release was abated during the excavation activities and construction of the new dispensing island and that additional site characterization and/or continued monitoring does not appear warranted.

It is our recommendation that the site be considered for closure.

LIMITATIONS

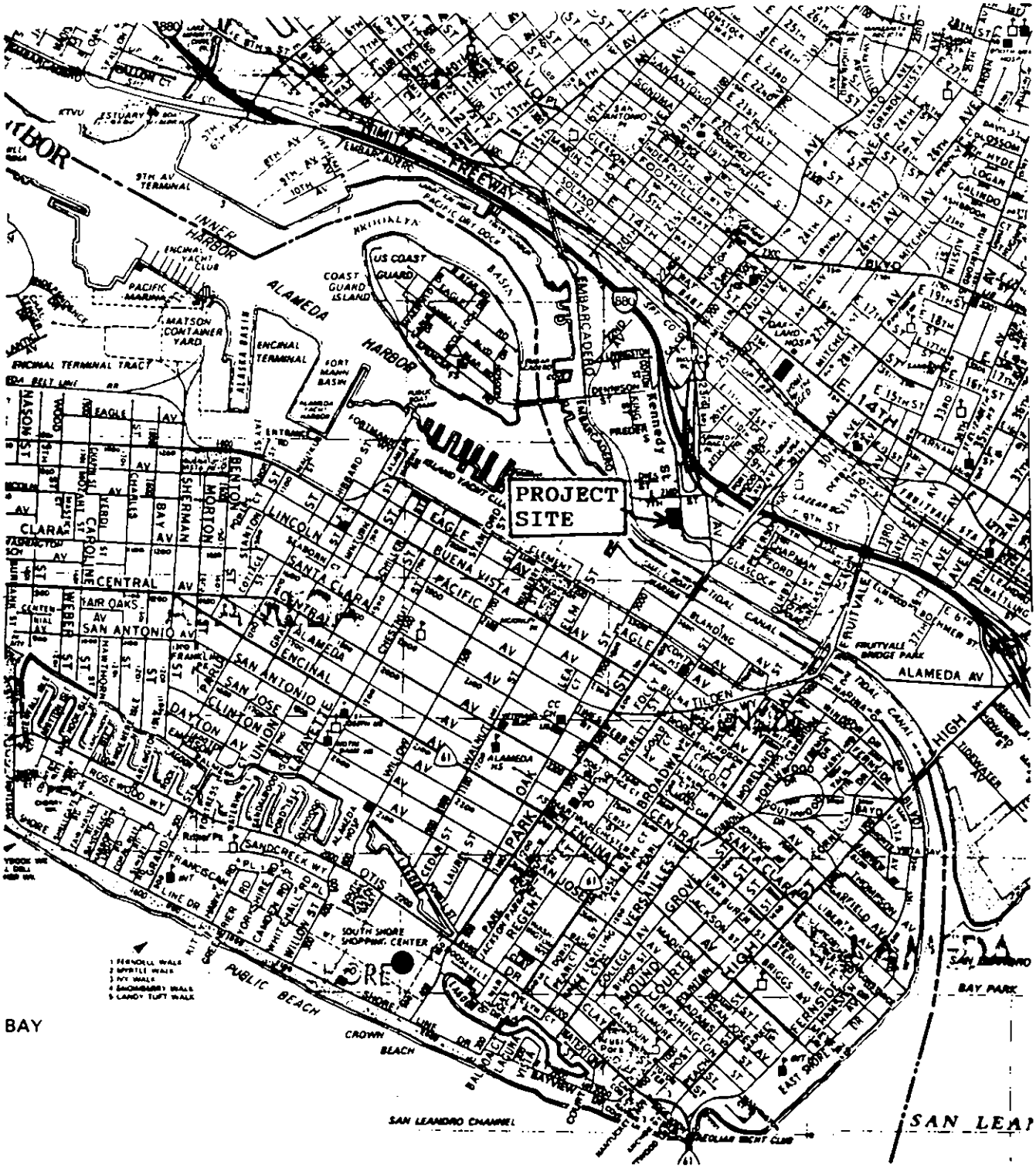
We have only observed a small portion of the pertinent subsurface and ground water conditions present at the site. The conclusions and recommendations made herein are based on the assumption that subsurface and ground water conditions do not deviate appreciably from those described in the reports and 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.

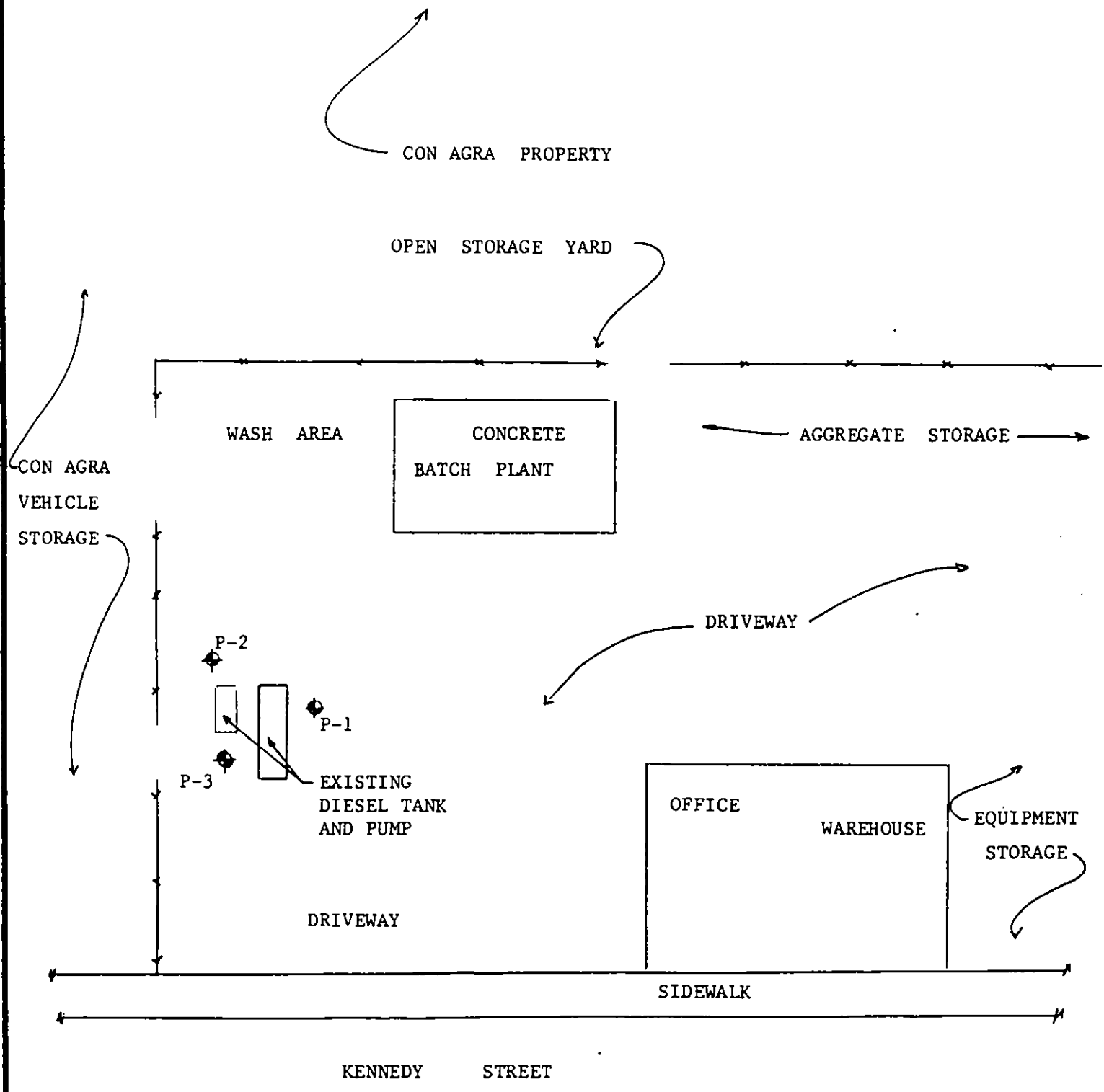
If you have questions regarding the findings, conclusions, or recommendations contained in this report, please contact us. We appreciate the opportunity to serve you.

Geo Plexus, Incorporated



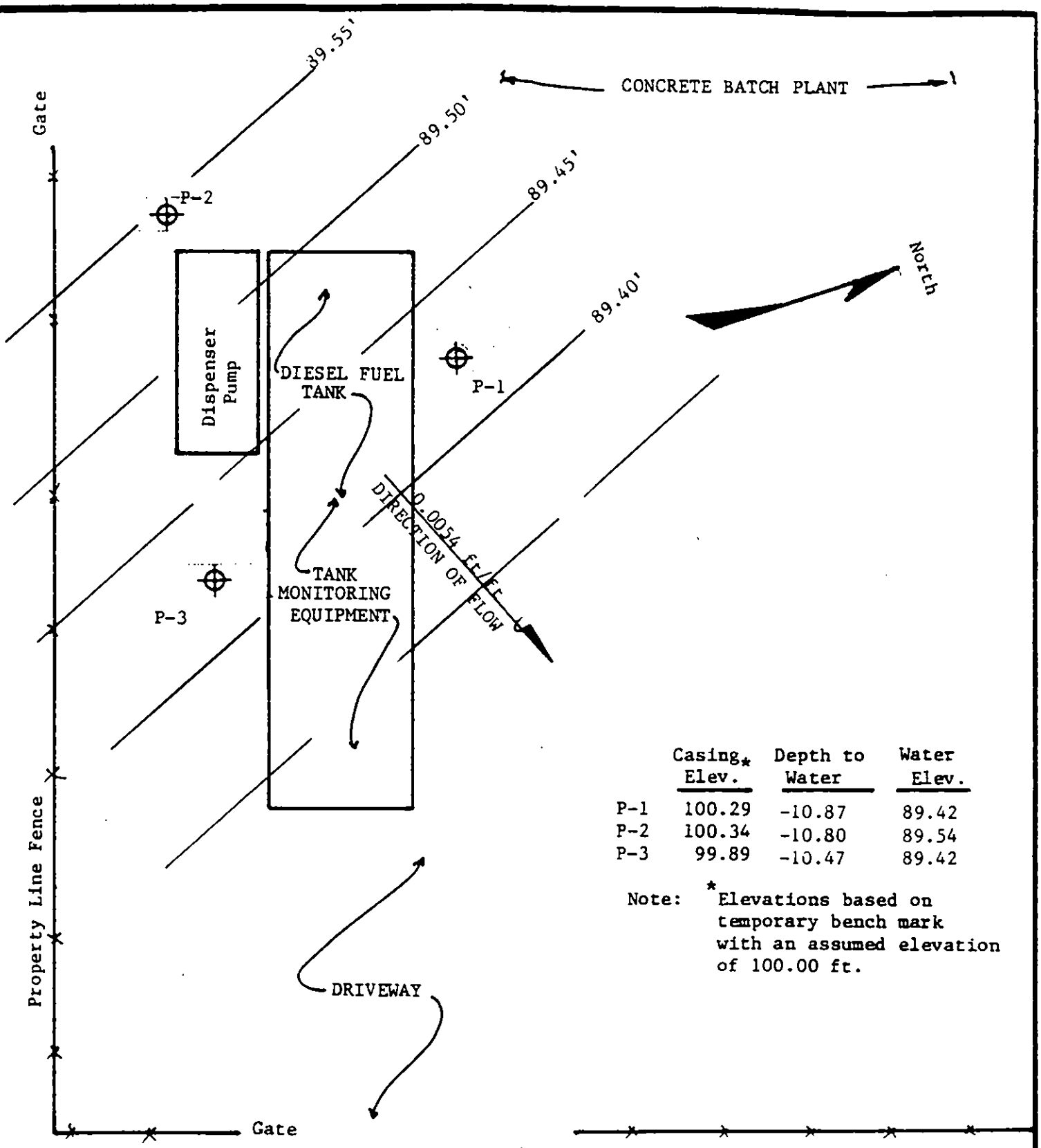
RIGHT AWAY REDY MIX		
DATE 1/92	SCALE NA	DRAWN BY JCM
VICINITY MAP		
P91024	Figure 1	

GeoPlexus, Inc.



RIGHT AWAY REDY MIX		
DATE 8/31/93	SCALE n/a	DRAWN BY dcg
SITE PLAN		
	Figure 2	

GeoPlexus, Inc.



	Casing* Elev.	Depth to Water	Water Elev.
P-1	100.29	-10.87	89.42
P-2	100.34	-10.80	89.54
P-3	99.89	-10.47	89.42

Note: *Elevations based on temporary bench mark with an assumed elevation of 100.00 ft.

P-1 indicates approximate location of piezometers.

RIGHT AWAY REDY MIX

DATE	SCALE	DRAWN BY
11-10-93	1"=10'	DCG/JCM

GRADIENT MAP

Figure 3

GeoPlexus, Inc.

APPENDIX A

CHAIN-OF-CUSTODY FORM
AND
ANALYTICAL TEST DATA

Geo Plexus, Inc. [redacted] 1900 W[redacted]rive, S[redacted] Santa [redacted], Cali[redacted] 950[redacted]
Phone: (408) 987-0210 Fax: (408) 988-0815

CHAIN-OF-CUSTODY

PROJECT NUMBER	PROJECT NAME
C92032	Right Away

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	TPHD	BTEX	O11&Grease	Condition of Samples	Initial
MW P3 WS1 A,B	11/10/93	1055		/	MON well P3	2 CA	Acidified 40 ml VOA			✓		Good	MK
MW P3 WS2 A,B,C	11/10/93	1055		/	MON well P3	3 CA	1 LTR AMBER		✓		✓	1	

[redacted]

ICE/T ___
GOOD CONDITION ___
HEAD SPACE ABSENT ___
PRESERVATIVE APPROPRIATE ___
CONTAINERS ___

VOAS O&G METALS OTHER

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time
[signature]	11/11/93 1300	J R Hamilton	11-11-93 1300
J R Hamilton	11-11-93 1410	[signature]	11-11-93 14:10
Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time

Remarks: Purchase Order No.:
STANDARD TURNAROUND

COMPANY: Geo Plexus, Inc.
ADDRESS: 1900 Wyatt Drive, Suite 1 Santa Clara, CA 95054
PHONE : (408)987-0210 FAX : (408)988-0815

2066

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:# C92032; Right Away	Date Sampled: 11/10/93
		Date Received: 11/11/93
	Client Contact: David Glick	Date Extracted: 11/13/93
	Client P.O:	Date Analyzed: 11/13/93

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)+	Benzene	Toluene	Ethylbenzene	Xylenes	% Rec. Surrogate
33068	MWP3/WS1A	W	—	ND	ND	ND	ND	94
Detection Limit unless otherwise 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:# C92032; Right Away	Date Sampled: 11/10/93
		Date Received: 11/11/93
	Client Contact: David Glick	Date Extracted: 11/11/93
	Client P.O:	Date Analyzed: 11/11/93

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)+	% Recovery Surrogate
33069	MWP3/WS2A	W	ND,f	91
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

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:# C92032; Right Away	Date Sampled: 11/10/93
		Date Received: 11/11/93
	Client Contact: David Glick	Date Extracted: 11/12/93
	Client P.O:	Date Analyzed: 11/12/93

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
33069	MWP3/WS2A	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

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

QC REPORT FOR HYDROCARBON ANALYSES

Date: 11/10-11/11/93 Matrix: Water

Analyte	Concentration (ug/L)			Amount Spiked	% Recovery		RPD
	Sample	MS	MSD		MS	MSD	
TPH (gas)	0.0	108.8	108.3	100	108.8	108.3	0.4
Benzene	0	10.3	10.1	10	103.0	101.0	2.0
Toluene	0	10.6	10.3	10	106.0	103.0	2.9
Ethyl Benzene	0	10.2	10	10	102.0	100.0	2.0
Xylenes	0	32.4	32	30	108.0	106.7	1.2
TPH (diesel)	0	128	134	150 *	86	89	4.0
TRPH (oil & grease)	6500	39200	39500	29600	110	111	0.8

% Rec. = (MS - Sample) / amount spiked x 100

RPD = (MS - MSD) / (MS + MSD) x 2 x 100

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

QC REPORT FOR HYDROCARBON ANALYSES

Date: 11/12-11/13/93 Matrix: Water

Analyte	Concentration (ug/L)			Amount Spiked	% Recovery		RPD
	Sample	MS	MSD		MS	MSD	
TPH (gas)	0.0	115.7	113.1	100	115.7	113.1	2.3
Benzene	0	11	10.8	10	110.0	108.0	1.8
Toluene	0	10.8	10.5	10	108.0	105.0	2.8
Ethyl Benzene	0	10.7	10.5	10	107.0	105.0	1.9
Xylenes	0	33.4	32.4	30	111.3	108.0	3.0
TPH (diesel)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
TRPH (oil & grease)	0	20400	20300	20000	102	102	0.5

% Rec. = (MS - Sample) / amount spiked x 100

RPD = (MS - MSD) / (MS + MSD) x 2 x 100

GeoPlexus, Inc.

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

August 31, 1993

Mr. Geoffrey Henrikson
Right Away Redy Mix
401 Kennedy Street
Oakland, CA 94606

2974

Subject: August, 1993 Quarterly Ground Water Sampling Report

Dear Mr. Henrikson:

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 August 20, 1993. The report also presents additional responses to issues previously presented by Alameda County Department of Environmental Health personnel.

Ground water measurements recorded during the sampling efforts indicate that the direction of ground water flow is in an easterly direction at a gradient of 0.0043 ft/ft. This places Monitoring Well P-3 in the down-gradient direction from the former/current fuel dispensing island area (location of previous release).

The analytical testing did not detect concentrations of Total Petroleum Hydrocarbons as diesel, Oil & Grease, or Volatile Aromatic Compounds (Benzene, Toluene, Ethyl Benzene, and Xylene) in the water samples from Monitoring Well P-3. This is the second quarter where the analytical testing did not detect Total Petroleum Hydrocarbons as diesel, Oil and Grease or Volatile Aromatic Compounds (Benzene, Toluene, Ethyl Benzene, and Xylene). The previous analytical testing included only Total Petroleum Hydrocarbons as diesel and Volatile Aromatic Compounds.

The previous analytical testing detected low concentrations of Total Petroleum Hydrocarbons as diesel (290 ppb) in January, 1992 and these concentrations reduced to 78 ppb in August 1992. Low concentrations (210-220 ppb) of non-discreet petroleum hydrocarbons were detected in the ground water in November, 1992 and February, 1993; however, the quality control report accompanying the November and February data indicated that the constituents detected were non-discreet petroleum hydrocarbons which did not correlate with the chromatographic pattern of the diesel standard used by the analytical testing laboratory. The analytical testing schedule was expanded in May and August, 1993 to further characterize the non-discreet petroleum hydrocarbons previously detected and reported as Total Petroleum Hydrocarbons as diesel. The expanded testing has not detected these compounds.

93 SEP 14 PM 12:50

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

The diesel constituents detected in the ground water in January and August, 1992 could be attributed to the diesel contaminated fuel which was encountered, excavated, and removed from the former fuel dispenser island area. The constituents reported as Total Petroleum Hydrocarbons as diesel in November, 1992 and February, 1993 were reported to be discrete hydrocarbon peaks which did not correlate with diesel standard used by the analytical testing laboratory and were not indicative of diesel fuel. The expanded testing which was implemented to further characterize the non-discrete hydrocarbon products (which were reported as diesel) has not identified the presence of Total Petroleum Hydrocarbons as gasoline, Total Petroleum Hydrocarbons as diesel, Oil & Grease, or Volatile Aromatic Compounds (Benzene, Toluene, Ethyl Benzene, and Xylene) in the ground water during the last two quarters.

Based on the results of the quarterly ground water data, it is our opinion that the source of the release was abated during the excavation activities and construction of the new dispensing island and that additional site characterization and/or continued monitoring does not appear warranted. It is recommended that the site be considered for closure.

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:

Mr. Thomas Peacock
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

Respectfully submitted,

Geo Plexus, Incorporated

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

REGISTERED GEOLOGIST
DAVID C. GLICK
No. 1338
CERTIFIED
ENGINEERING
GEOLOGIST
STATE OF CALIFORNIA

GeoPlexus, Inc.

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

GROUND WATER SAMPLING REPORT

for

RIGHT AWAY REDY MIX

401 KENNEDY STREET

OAKLAND, CALIFORNIA

August 31, 1993

Project C92032

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

GROUND WATER SAMPLING REPORT
for
RIGHT AWAY REDY MIX
401 KENNEDY STREET
OAKLAND, CALIFORNIA

INTRODUCTION

The project site is located at 401 Kennedy Street in the City of Oakland, in Alameda County, California as indicated on Figure 1 and is currently occupied by Right Away Redy Mix as indicated on Figure 2.

Three open-standpipe piezometers were installed around the existing underground diesel fuel storage tank and dispensing island (see Figure 3) in December, 1991 by Geo Plexus, Incorporated to obtain soil samples for analytical testing and to establish site-specific ground water flow information. The focus of the investigation was to acquire ground water samples from the "down-gradient" direction of the former/existing dispenser pump area. The top of the piezometer casings were surveyed to establish relative elevations and it was determined that piezometer P-3 was located down gradient of the dispensing pump area (location of previous release). Piezometer P-3 was subsequently developed as a ground water monitoring well (identified as Monitoring Well P-3) and was sampled.

Low concentrations of Total Petroleum Hydrocarbons as diesel (290 ppb) were detected in the ground water in January, 1992. These concentrations reduced to 78 ppb in August, 1992. Low concentrations (210-220 ppb) of non-discreet petroleum hydrocarbons were detected in the ground water in November, 1992 and February, 1993. The quality control report accompanying the November and February data indicated that the constituents detected were non-discreet petroleum hydrocarbons which did not correlate with the chromatographic pattern of the diesel standard used by the analytical testing laboratory. The analytical testing schedule was expanded during the last two quarters to further characterize the non-discreet petroleum hydrocarbons previously detected and reported as Total Petroleum Hydrocarbons as diesel.

This report presents the recorded ground water elevations, the sampling protocol, and results of the analytical testing performed on the ground water samples collected from Monitoring Well P-3 on August 20, 1993.

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, visible sheens, or odors were not observed in the initial bailer water samples or following purging of the well.

Prior to sampling Monitoring Well P-3, five 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. 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 (HCl) 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 well 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 well and other piezometers at the site were established during previous investigations with vertical control of 0.01 foot. Prior to purging the monitoring well, 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 an easterly direction (see Figure 3) at a gradient of 0.0043 ft/ft with Monitoring Well P-3 in the down-gradient direction from the former/existing dispensing island (focus of investigation).

ANALYTICAL TESTING

The ground water samples were submitted to and tested by McCampbell Analytical, a State of California Certified Testing Laboratory. The samples were tested for Total Petroleum Hydrocarbons as diesel by Method GCFID 3550/8015, Volatile Aromatics by EPA Method 8020/5030, and Oil & Grease by Method 5520. 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 10-10.5 feet below the ground surface and flows across the site in an easterly direction at a gradient of 0.0043 ft/ft. The flow direction places Monitoring Well P-3 in a down-gradient direction from the dispenser island.

The analytical testing did not detect reportable quantities of Total Petroleum Hydrocarbons as diesel, Volatile Aromatic Compounds (Benzene, Toluene, Ethyl Benzene, and Xylene), or Oil & Grease. Tables 1 and 2 summarize the current analytical test results along with the previous analytical testing results.

TABLE 1

SUMMARY OF GROUND WATER ANALYTICAL TEST DATA

Date Sampled	Total Petroleum Hydrocarbons	Benzene	Toluene	Ethyl-Benzene	Total Xylenes
1-8-92	290	N.D.	N.D.	N.D.	N.D.
8-17-92	74	N.D.	N.D.	N.D.	N.D.
11-2-92	210*	N.D.	N.D.	N.D.	N.D.
2-5-93	220*	N.D.	N.D.	N.D.	55
5-25-93	ND	N.D.	N.D.	N.D.	N.D.
8-20-93	ND	N.D.	N.D.	N.D.	N.D.

Note: Total Petroleum Hydrocarbons as diesel.
* Compounds reported as Total Petroleum Hydrocarbons as diesel reported to be discrete hydrocarbon peaks which did not correlate with diesel standard used by the analytical testing laboratory and not indicative of diesel fuel.
N.D. indicates compounds not detected.

TABLE 2

SUMMARY OF GROUND WATER ANALYTICAL TEST DATA

Date Sampled	Total Petroleum Hydrocarbons	Oil & Grease
5-25-93	ND	ND
8-20-93	--	ND

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

The diesel constituents detected in the ground water in January and August, 1992 could be attributed to the diesel contaminated fuel which was encountered, excavated, and removed from the former fuel dispenser island area. However, the constituents reported as Total Petroleum Hydrocarbons as diesel in November, 1992 and February, 1993 (which were reported to be discrete hydrocarbon peaks not indicative of diesel fuel) could be attributed to residual levels of degraded diesel fuel resulting from the site remedial work (excavation and removal of the source).

The expanded testing, which was implemented to further characterize the non-discrete hydrocarbon products, has not identified the presence of these discrete peaks, Total Petroleum Hydrocarbons as gasoline, Total Petroleum Hydrocarbons as diesel, Oil & Grease, or Volatile Aromatic Compounds (Benzene, Toluene, Ethyl Benzene, and Xylene) in the ground water during the last two quarters.

Based on the results of the quarterly ground water data, it is our opinion that the source of the release was abated during the excavation activities and construction of the new dispensing island and that additional site characterization and/or continued monitoring does not appear warranted.

It is our recommendation that the site be considered for closure.

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.

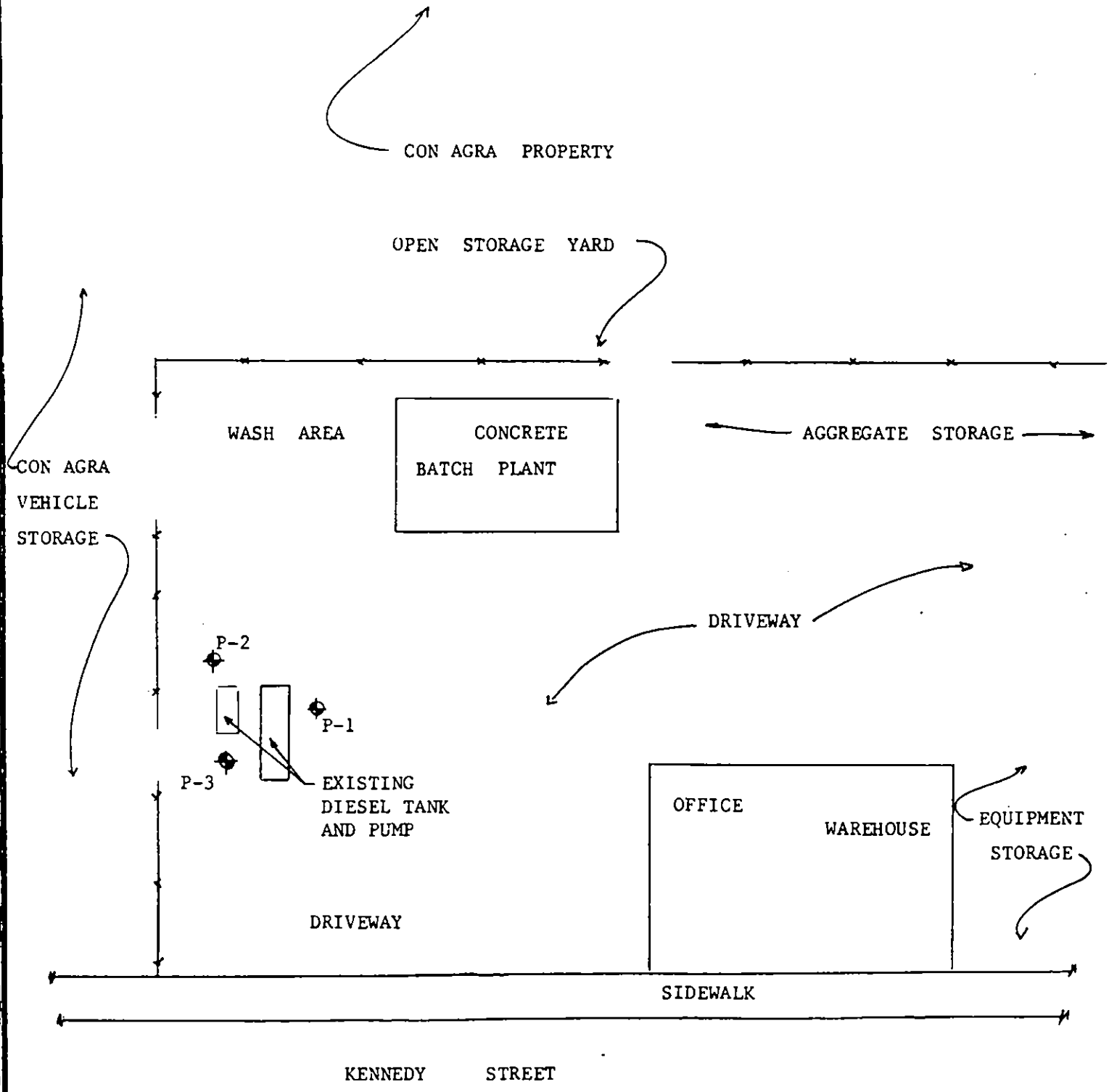
No attempt was made to verify the accuracy of the published information prepared by others used in preparation of this assessment report.

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

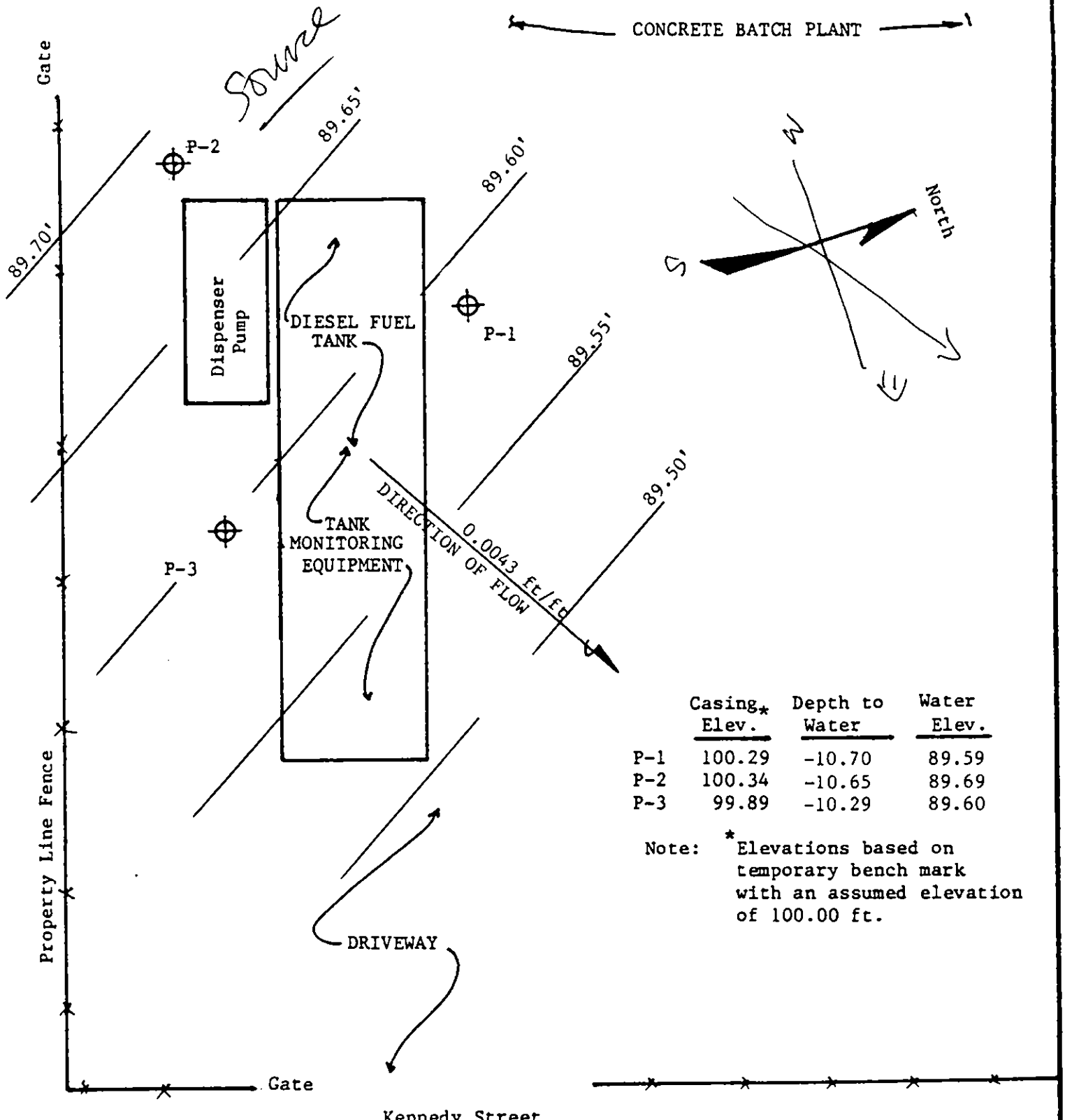
RIGHT AWAY REDY MIX		
DATE 1/92	SCALE NA	DRAWN BY JCM
VICINITY MAP		
P91024	Figure 1	

GeoPlexus, Inc.



RIGHT AWAY REDY MIX		
DATE 8/31/93	SCALE n/a	DRAWN BY dcg
SITE PLAN		
	Figure 2	

GeoPlexus, Inc.



	Casing* Elev.	Depth to Water	Water Elev.
P-1	100.29	-10.70	89.59
P-2	100.34	-10.65	89.69
P-3	99.89	-10.29	89.60

Note: *Elevations based on temporary bench mark with an assumed elevation of 100.00 ft.

P-1 indicates approximate location of piezometers.

RIGHT AWAY REDY MIX

DATE	SCALE	DRAWN BY
8-20-93	1"=10'	DCG/JCM

GRADIENT MAP

Figure 3

GeoPlexus, Inc.

APPENDIX A

CHAIN-OF-CUSTODY FORM
AND
ANALYTICAL TEST DATA

Geo Plexus, Inc. [redacted] C H [redacted] I [redacted] O [redacted] C [redacted] T [redacted] Y [redacted]

1900 Wyatt Drive Ste. I, Santa Clara, California 95054
Phone: (408) [redacted] 0210 Fax: (408) 988-0815

PROJECT NUMBER: C92032

PROJECT NAME: Right Away

Send Report Attention of: DAVID GLICK

Report Due: / /

Verbal Due: / /

Sample Number	Date	Time	Comp	Grab	Station Location	Number of Cntnrs	Type of Containers	TPHG	TPHD	BTEX	5520 Oil&Grease						Condition of Samples	Initial
P3-WS1A,B	8/20/93	1240		/	mon well P3	2ea	Acidified 40 ml VOA			✓							31912	
P3-WS2A,B,C	8/20/93	1240		/	mon well P3	3ea	1 LTR Amber		✓		✓						31913	

ICE/T° ✓

GOOD CONDITION ✓

HEAD SPACE ABSENT ✓

	VOAS	O & G	METALS	OTHER
PRESERVATIVE	✓			

APPROPRIATE CONTAINERS ✓

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time
[signature]	8/24/93 1850	R Hamilton	8/24/93 1850
R Hamilton	8/24/93 2000	[signature]	8/24/93 20:00

Remarks: Purchase Order No.: 93.3046

STANDARD TURNAROUND

COMPANY: Geo Plexus, Inc.

ADDRESS: 1900 Wyatt Drive, Suite I Santa Clara, CA 95054

PHONE : (408)987-0210 FAX : (408)988-0815

2066

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: # C92032; Right Away	Date Sampled: 08/20/93
		Date Received: 08/24/93
	Client Contact: David Glick	Date Extracted: 08/26/93
	Client P.O: 93.3046	Date Analyzed: 08/26/93

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)+	Benzene	Toluene	Ethylben-zene	Xylenes	% Rec. Surrogate
31912	P3-WS 1A	W	—	ND	ND	ND	ND	105
Detection Limit unless otherwise 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: # C92032; Right Away	Date Sampled: 08/20/93
		Date Received: 08/24/93
	Client Contact: David Glick	Date Extracted: 08/26/93
	Client P.O: 93.3046	Date Analyzed: 08/27/93

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)+	% Recovery Surrogate
31913	P3-WS 2B	W	ND,e,f	95
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(aged diesel?; oil/); 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

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: # C92032; Right Away	Date Sampled: 08/20/93
		Date Received: 08/24/93
	Client Contact: David Glick	Date Extracted: 08/27/93
	Client P.O: 93.3046	Date Analyzed: 08/27/93

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
31913	P3-WS 2B	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

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

QC REPORT FOR HYDROCARBON ANALYSES

Date: 08/26-08/27/93 Matrix: Water

Analyte	Concentration (ug/L)			Amount Spiked	% Recovery		RPD
	Sample	MS	MSD		MS	MSD	
TPH (gas)	0.0	107.1	102.8	101	106	102	4.1
Benzene	0.0	10.5	10.4	10	105	104	1.0
Toluene	0.0	10.8	10.4	10	108	104	3.8
Ethyl Benzene	0.0	10.1	10.3	10	101	103	2.0
Xylenes	0.0	32.4	31.6	30	108	105	2.5
TPH (diesel)	0	124	128	150	83	85	3.5
TRPH (oil & grease)	0	17400	18500	20000	87	93	6.1

% Rec. = (MS - Sample) / amount spiked x 100

RPD = (MS - MSD) / (MS + MSD) x 2 x 100

GeoPlexus, Inc.

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

June 10, 1993

STID 2974

Mr. Geoffrey Henrikson
Right Away Redy Mix
401 Kennedy Street
Oakland, CA 94606

Subject: May, 1993 Quarterly Ground Water Sampling Report

Dear Mr. Henrikson:

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 May 25, 1993. The report also presents a response to issues presented by Mr. Thomas Peacock (Alameda County Department of Environmental Health).

In accordance with the request/directive from Mr. Thomas Peacock to further characterize the hydrocarbon products detected in the latest two sample events, the ground water samples were analyzed for Total Petroleum Hydrocarbons as gasoline, Total Petroleum Hydrocarbons as diesel, Oil & Grease and Volatile Aromatic Compounds.

Ground water measurements recorded during the sampling efforts indicate that the direction of ground water flow is in an easterly direction at a gradient of 0.0016 ft/ft. This places Monitoring Wells P-1 and P-3 in a down- to cross-gradient direction from the dispensing island area (which was the "initial" source and point of concern). The existing double-walled underground storage tank has not been raised as an issue to date and has not been the focus of investigation effort.

In summary, the extended analytical testing of the water samples obtained from Monitoring Well P-3 did not contain detectable concentrations of Total Petroleum Hydrocarbons as gasoline, Total Petroleum Hydrocarbons as diesel, Oil & Grease and Volatile Aromatic Compounds. As stated during previous correspondence, the compounds identified as Total Petroleum Hydrocarbons as diesel during the two previous testing episodes appear to be unrelated to the project site.

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

Based on the results of the initial and quarterly ground water data, additional site characterization does not appear warranted at this time and is not recommended. The ground water monitoring wells are scheduled to be sampled again in August, 1993 (fourth quarterly event) in accordance with the direction for quarterly monitoring from the Alameda County Health Care Services, Department of Environmental Health.

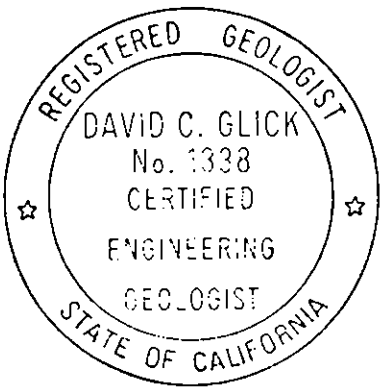
It has been a pleasure to be of service to you on this project. Questions or comments regarding the attached report should be addressed to the undersigned. Copies of this report should be forwarded to:

Mr. Thomas Peacock
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

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

GROUND WATER SAMPLING REPORT

for

RIGHT AWAY REDY MIX

401 KENNEDY STREET

OAKLAND, CALIFORNIA

June 10, 1993

Project C92032

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

GROUND WATER SAMPLING REPORT
for
RIGHT AWAY REDY MIX
401 KENNEDY STREET
OAKLAND, CALIFORNIA

INTRODUCTION

The project site is located at 401 Kennedy Street in the City of Oakland, in Alameda County, California as indicated on Figure 1. The site is currently occupied by Right Away Redy Mix.

Three open-standpipe piezometers were installed around the existing underground diesel fuel storage tank and dispensing island in December, 1991 by Geo Plexus, Incorporated to obtain soil samples for analytical testing and to establish site-specific ground water flow information. The focus of the investigation was to acquire ground water samples from the "down-gradient" direction of the former/existing dispenser pump area. The top of the piezometer casings were surveyed to establish relative elevations and it was determined that piezometer P-3 was located down gradient of the dispensing pump area (location of previous release). Piezometer P-3 was subsequently developed as a ground water monitoring well (identified as Monitoring Well P-3) and was sampled.

This report is the third scheduled quarterly monitoring report and presents the recorded ground water elevations, the sampling protocol, and results of the analytical testing performed on the ground water samples collected from Monitoring Well P-3 on May 25, 1993.

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 Monitoring Well P-3, five 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 40 ml. vials and 1 ltr. 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 (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 well 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 well and other piezometers at the site were established during previous investigations with vertical control of 0.01 foot. Prior to purging the monitoring well, 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 an easterly direction (see Figure 2) at a gradient of 0.0016 ft/ft with Monitoring Wells P-1 and P-3 in a down- to cross-gradient direction from the dispensing island (focus of investigation).

ANALYTICAL TESTING

The ground water samples were submitted to and tested by McCampbell Analytical, a State of California Certified Testing Laboratory. The samples were tested for Total Total Petroleum Hydrocarbons as gasoline by Method GCFID 5030/8015, Petroleum Hydrocarbons as diesel by Method GCFID 3550/8015, Volatile Aromatics by EPA Method 8020/5030, and Oil & Grease by Method 5520. 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 10-10.5 feet below the ground surface and flows across the site in an easterly direction at a gradient of 0.0016 ft/ft. The flow direction places Monitoring Wells P-1 and P-3 in a down- to cross-gradient direction from the dispenser island.

The analytical testing did not detect reportable quantities of Total Petroleum Hydrocarbons as gasoline, Total Petroleum Hydrocarbons as diesel, Volatile Aromatic Compounds (Benzene, Toluene, Ethyl Benzene, and Xylene), or Oil & Grease. Tables 1 and 2 summarize the current analytical test results along with the previous analytical testing results.

TABLE 1

SUMMARY OF GROUND WATER ANALYTICAL TEST DATA

Date Sampled	Total Petroleum Hydrocarbons	Benzene	Toluene	Ethyl-Benzene	Total Xylenes
Monitoring Well P-3					
1-8-92	290	N.D.	N.D.	N.D.	N.D.
8-17-92	74	N.D.	N.D.	N.D.	N.D.
11-2-92	210	N.D.	N.D.	N.D.	N.D.
2-5-93	220	N.D.	N.D.	N.D.	55
5-25-93	ND	N.D.	N.D.	N.D.	N.D.

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

TABLE 2

SUMMARY OF GROUND WATER ANALYTICAL TEST DATA

Date Sampled	Total Petroleum Hydrocarbons	Oil & Grease
Monitoring Well P-3		
5-25-93	ND	ND

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

Based on the extended analytical testing performed, the hydrocarbon products previously detected are not consistent with the chromatographic patterns of Total Petroleum Hydrocarbons as gasoline Total Petroleum Hydrocarbons as diesel or Oil & Grease. It is noted that the analytical report indicates the presence of isolated hydrocarbon peaks not associated with the compounds analyzed.

Based on the results of the initial and quarterly ground water data, additional site characterization does not appear warranted at this time and is not recommended. The ground water monitoring wells are scheduled to be sampled again in August, 1993 (fourth quarterly event) 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.

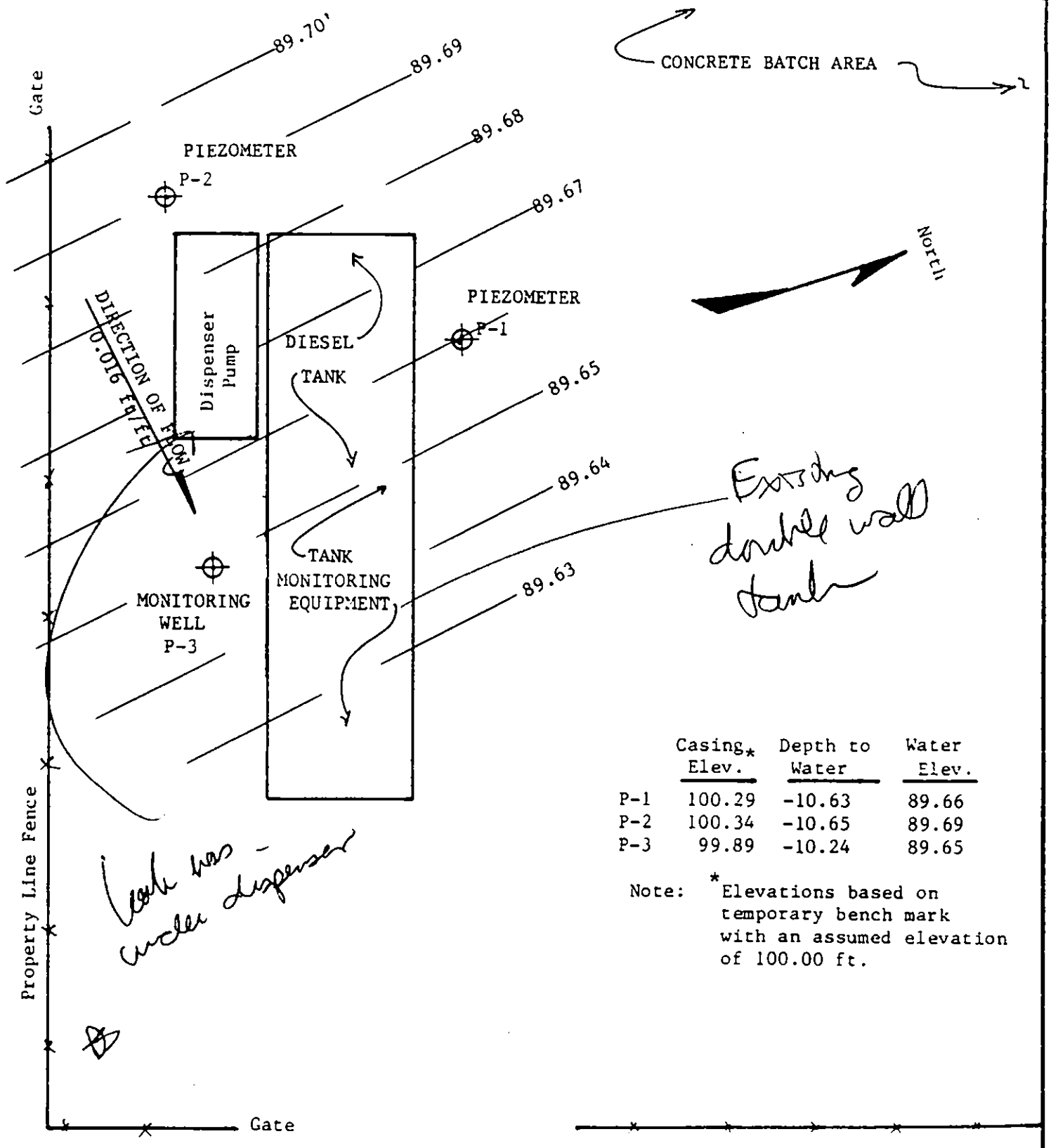
No attempt was made to verify the accuracy of the published information prepared by others used in preparation of this assessment report.

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

RIGHT AWAY REDY MIX		
DATE 1/92	SCALE NA	DRAWN BY JCM
VICINITY MAP		
P91024	Figure 1	

GeoPlexus, Inc.



	Casing* Elev.	Depth to Water	Water Elev.
P-1	100.29	-10.63	89.66
P-2	100.34	-10.65	89.69
P-3	99.89	-10.24	89.65

Note: *Elevations based on temporary bench mark with an assumed elevation of 100.00 ft.

P-1 indicates approximate location of piezometers.

RIGHT AWAY REDY MIX

DATE	SCALE	DRAWN BY
5-25-93	1"=10'	DCG/JCM

GRADIENT MAP

Figure 2

GeoPlexus, Inc.

APPENDIX A

CHAIN-OF-CUSTODY FORM
AND
ANALYTICAL TEST DATA

Geo Plexus, Incorporated
1900 Wyatt Drive, Suite 1, Santa Clara, California 95054 Phone 408/987-0210 Fax 408/988-0815

GEO PLEXUS, INC.

CHAIN-OF-CUSTODY

1900 Wyatt Drive, Ste. 1, Santa Clara, California 95054
Phone: (408) 987-0210 Fax: (408) 988-0815

PROJECT NUMBER	PROJECT NAME
C92032	Right Away Ready Mix

Send Report Attention of:	Report Due	Verbal Due
David Glick	/ /	/ /

Sample Number	Date	Time	Comp	Grab	Station Location	Number of Cntnrs	Type of Containers	TPHG	TPHD	BTEX	5520 Oil&Grease	Condition of Samples	Initial
MWA-WS1A,B	5/25/93	1230		/	MON WELL A	2EA	ACIDIFIED 40 ml VOA			✓		30671	
MW1-WS1A,B	5/25/93	1345		/	MON WELL 1	2EA	ACIDIFIED 40 ml VOA			✓		30672	
MW1-WS2A,B,C	5/25/93	1345		/	MON WELL 1	3EA	LITR AMBER		✓		✓	30673	

ICE/T° ✓
GOOD CONDITION ✓
HEAD SPACE ABSENT ✓
APPROPRIATE CONTAINERS ✓

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time
[signature]	5/27/93 11:28	[signature]	5/27/93 16:38
Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time
James R Hamilton	5/27/93 12:47	[signature]	5-27-93 12:47
Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time

Remarks: Purchase Order No.: 93-3031

STANDARD TURNAROUND

COMPANY: Geo Plexus, Inc.
ADDRESS: 1900 Wyatt Drive, Suite 1 Santa Clara, CA 95054
PHONE: (408) 987-0210 FAX: (408) 988-0815

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: #C92032; Right Away Redy Mix	Date Sampled: 05/25/93
		Date Received: 05/27/93
	Client Contact: David Glick	Date Extracted:
	Client P.O: 93-3031	Date Analyzed: 05/28/93

Low Boiling Point (C6-C12) TPH* as Gasoline and 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	Ethyl Benzene	Xylenes	% Rec. Surrogate
30671	MWA-WS1A	W	ND	ND	ND	ND	ND	113
30672	MW1-WS1A	W	ND,f	ND	ND	ND	ND	103
Detection Limit unless otherwise 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 and soils in mg/kg

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) predominately unmodified or weakly modified gasoline; b) heavier gasoline range compounds predominate (aged gasoline?); c) lighter gasoline range compounds predominate (the most mobile gasoline compounds); d) heavy and light gasoline range compounds predominate (aged gasoline together with introduced light compounds?); e) gasoline range compounds predominate; no recognizable pattern; f) one to a few isolated peaks present; g) strongly aged gasoline or diesel range compounds predominate.

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: #C92032; Right Away Redy Mix	Date Sampled: 05/25/93
		Date Received: 05/27/93
	Client Contact: David Glick	Date Extracted: 05/27/93
	Client P.O: 93-3031	Date Analyzed: 05/27/93

Medium Boiling Point (C10-C23) TPH* 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)+
30673	MW1-WS2A	W	ND,e
Detection Limit unless otherwise stated; ND means Not Detected		W	50 ug/L
		S	10 mg/kg

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

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) predominately unmodified or weakly modified diesel; b) diesel range compounds predominate; no recognizable pattern; c) diesel range compounds together with gasoline range compounds; d) gasoline range compounds predominate; e) medium boiling point pattern that does not match diesel(oil-range or aged diesel?); f) one to a few isolated peaks present; g) oil range compounds predominate.

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: #C92032; Right Away Redy Mix	Date Sampled: 05/25/93
		Date Received: 05/27/93
	Client Contact: David Glick	Date Extracted: 06/02/93
	Client P.O: 93-3031	Date Analyzed: 06/03/93

Total Recoverable Petroleum Hydrocarbons as Oil & Grease (with Silica Gel Clean-up) *

Standard Methods 5520 E&F or 503 D&E for solids and 5520 B&F or 503 A&E for liquids

Lab ID	Client ID	Matrix	TRPH
30673	MW1-WS2A	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

Edward Hamilton, Lab Director

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

QC REPORT FOR HYDROCARBON ANALYSES

Date: 05/24/-05/28/93 Matrix: Water

Analyte	Concentration (ug/L)			Amount Spiked	% Recovery		RPD
	Sample	MS	MSD		MS	MSD	
TPH (gas)	0.0	94.9	90.8	101	94	90	4.4
Benzene	0.0	10.8	10.5	10	108	105	2.8
Toluene	0.0	11.3	10.8	10	113	108	4.5
Ethyl Benzene	0.0	10.9	10.5	10	109	105	3.7
Xylenes	0.0	32.4	31.1	30	108	104	4.1
TPH (diesel)	0	134	138	150	89	92	3.2
TRPH (oil & grease)	0	26	27	20.8	126	130	2.6

% Rec. = (MS - Sample) / amount spiked x 100

RPD = (MS - MSD) / (MS + MSD) x 2 x 100

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

QC REPORT FOR HYDROCARBON ANALYSES

Date: 06/03/92 Matrix: Water

Analyte	Concentration (ug/L)			Amount Spiked	% Recovery		RPD
	Sample	MS	MSD		MS	MSD	
TPH (gas)	0.0	97.0	93.9	101	96	93	3.3
Benzene	0.0	10.6	10.4	10	106	104	1.9
Toluene	0.0	11.1	10.7	10	111	107	3.7
Ethyl Benzene	0.0	10.5	10.5	10	105	105	0.0
Xylenes	0.0	31.0	31.0	30	103	103	0.0
TPH (diesel)	0	129	139	150	86	93	7.4
TRPH (oil & grease)	0	210	207	200	105	104	1.4

% Rec. = (MS - Sample) / amount spiked x 100

RPD = (MS - MSD) / (MS + MSD) x 2 x 100

GeoPlexus, Inc.

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

March 15, 1993

Mr. Geoffrey Henrikson
Right Away Redy Mix
401 Kennedy Street
Oakland, CA 94606

Subject: February, 1993 Quarterly Ground Water Sampling Report

Dear Mr. Henrikson:

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 February 5, 1993.

In summary, the water samples obtained from Monitoring Well P-3 continue to contain detectable concentrations (220 ppb) of hydrocarbon products which were not consistent with the chromatographic patterns of Total Petroleum Hydrocarbons as diesel. Total Xylenes were detected at 55 ppb. Benzene, Toluene, and Ethyl Benzene were not detected. In accordance with the request/directive from Mr. Barney Chan (Alameda County Department of Environmental Health), it is recommended that additional ground water samples be collected during the next sample event and analyzed for Total Petroleum Hydrocarbons as Oil & Grease to characterize the hydrocarbon products detected in the latest two sample events.

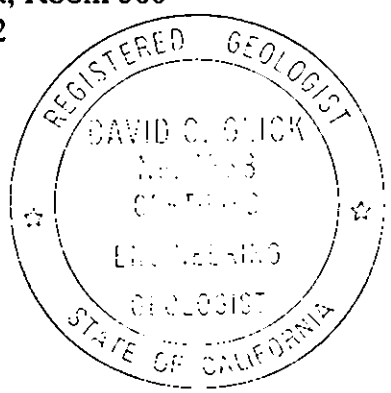
It has been a pleasure to be of service to you on this project. Questions or comments regarding the attached report should be addressed to the undersigned. Copies of this report should be forwarded to:

Mr. Barney Chan
Alameda County Health Care Services
Department of Environmental Health
80 Swan Way, Room 200
Oakland, CA 94621

Mr. R. Hiett
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



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

GeoPlexus, Inc.

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

GROUND WATER SAMPLING REPORT

for

RIGHT AWAY REDY MIX

401 KENNEDY STREET

OAKLAND, CALIFORNIA

March 15, 1993

Project C92032

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

GROUND WATER SAMPLING REPORT
for
RIGHT AWAY REDY MIX
401 KENNEDY STREET
OAKLAND, CALIFORNIA

INTRODUCTION

The project site is located at 401 Kennedy Street in the City of Oakland, in Alameda County, California as indicated on Figure 1. The site is currently occupied by Right Away Redy Mix.

Three open-standpipe piezometers were installed around the existing underground diesel fuel storage tank and dispensing island in December, 1991 by Geo Plexus, Incorporated to obtain soil samples for analytical testing and to establish site-specific ground water flow information. The top of the piezometer casings were surveyed to establish relative elevations and it was determined that piezometer P-3 was located down gradient of the dispensing pump area (location of previous release). Piezometer P-3 was subsequently developed as a ground water monitoring well (identified as Monitoring Well P-3) and was sampled.

This report is the second scheduled quarterly monitoring report and presents the recorded ground water elevations, the sampling protocol, and results of the analytical testing performed on the ground water samples collected from Monitoring Well P-3 on March 5, 1993. As noted on the chain-of-custody the sampling technician mis-indicated the sampling date as January 5, 1993 in stead of February 5, 1993. The sample dates were corrected at the analytical laboratory.

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 Monitoring Well P-3, 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 40 ml. vials and 1 ltr. 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 (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 well 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 well and other piezometers at the site were established during previous investigations with vertical control of 0.01 foot. Prior to purging the monitoring well, 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 northeast direction (see Figure 2) at a gradient of 0.0096 ft/ft with Monitoring Wells P-1 and P-3 in a down- to cross-gradient direction from the dispensing island and existing underground diesel fuel storage tank.

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 diesel by Method GCFID 3550/8015 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 9-10.5 feet below the ground surface and flows across the site in a northeast direction at a gradient of 0.0096 ft/ft. The flow direction places Monitoring Wells P-1 and P-3 in a down- to cross-gradient direction from the dispenser island and existing underground diesel fuel storage tank.

The analytical testing detected reportable quantities of Total Petroleum Hydrocarbons products at a concentration of 220 ppb in the water sample obtained from Monitoring Well P-3 which were not consistent with the chromatographic patterns of Total Petroleum Hydrocarbons as diesel. It is noted that the analytical report states that the concentration reported as diesel is primarily due to the presence of discrete hydrocarbon peaks not indicative of diesel.

Total Xylenes were detected at 55 ppb in the water sample obtained from Monitoring Well P-3. Benzene, Toluene, and Ethylbenzene were not detected. Table 1 summarizes the current analytical test results along with the previous analytical testing results.

TABLE 1

SUMMARY OF GROUND WATER ANALYTICAL TEST DATA

Date Sampled	Total Petroleum Hydrocarbons	Benzene	Toluene	Ethyl-Benzene	Total Xylenes
Monitoring Well P-3					
1-8-92	290	N.D.	N.D.	N.D.	N.D.
8-17-92	74	N.D.	N.D.	N.D.	N.D.
11-2-92	210	N.D.	N.D.	N.D.	N.D.
2-5-93	220	N.D.	N.D.	N.D.	55

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

BTEX needed

The ground water monitoring wells located at the project site are scheduled to be sampled again in May, 1993 in accordance with the direction for quarterly monitoring from the Alameda County Health Care Services, Department of Environmental Health.

In accordance with the request/directive from Mr. Barney Chan (Alameda County Department of Environmental Health), it is recommended that additional ground water samples be collected during the next sample event and analyzed for Total Petroleum Hydrocarbons as Oil & Grease to characterize the hydrocarbon products detected in the latest two sample events.

LIMITATIONS

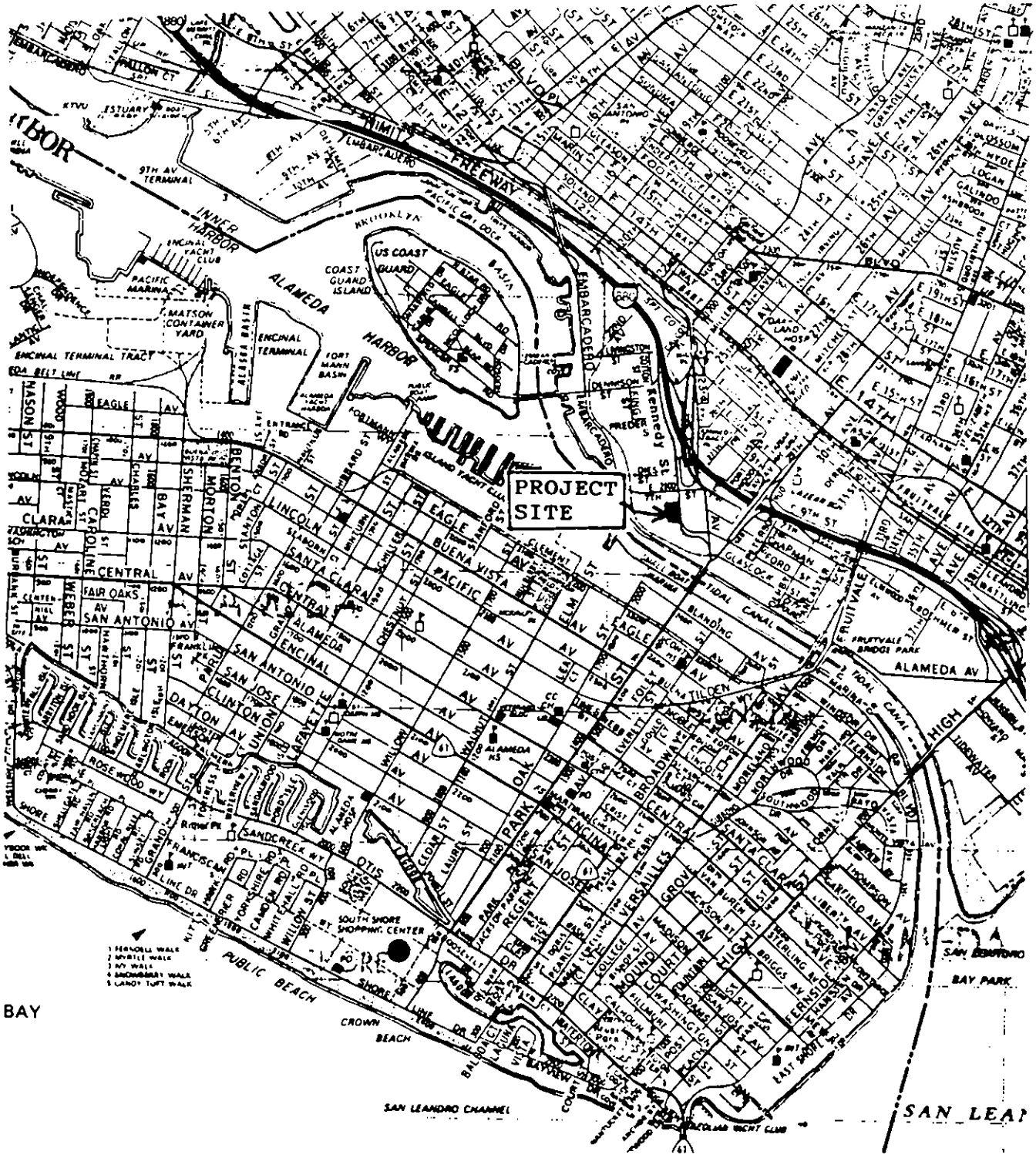
We have only observed a small portion of the pertinent subsurface and ground water conditions present at the site. The conclusions and recommendations made herein are based on the assumption that subsurface and ground water conditions do not deviate appreciably from those described in the reports and 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.

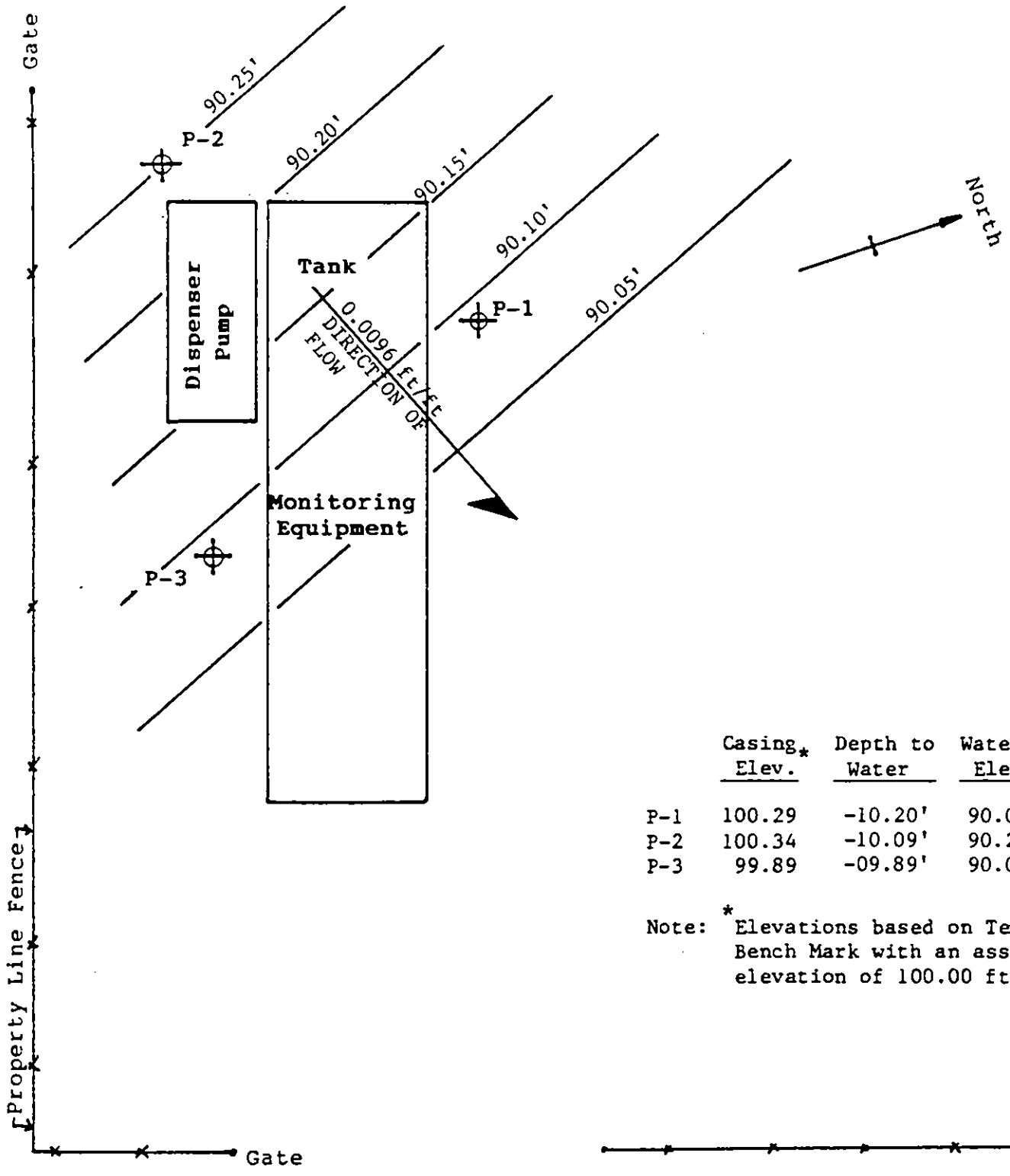
If you have questions regarding the findings, conclusions, or recommendations contained in this report, please contact us. We appreciate the opportunity to serve you.

Geo Plexus, Incorporated



RIGHT AWAY REDY MIX		
DATE 1/92	SCALE NA	DRAWN BY JCM
VICINITY MAP		
P91024	Figure 1	

GeoPlexus, Inc.



	Casing Elev.*	Depth to Water	Water Elev.
P-1	100.29	-10.20'	90.09'
P-2	100.34	-10.09'	90.25'
P-3	99.89	-09.89'	90.09'

Note: *Elevations based on Temporary Bench Mark with an assumed elevation of 100.00 ft.

P-1 indicates approximate location of piezometers

RIGHT AWAY REDY MIX

DATE	SCALE	DRAWN BY
2/5/93	1"=10'	DCG/JCM

SITE PLAN

Figure 2

GeoPlexus, Inc.

APPENDIX A

CHAIN-OF-CUSTODY FORM
AND
ANALYTICAL TEST DATA

GeoPlexus, Inc. — CHAIN-OF-CUSTODY

1900 Wyatt Drive, Ste. 1, Santa Clara, California 95054
Phone: (408) 987-0210 Fax: (408) 988-0815

PROJECT NUMBER	PROJECT NAME
C92032	Right Away Redy mix

Send Report Attention of:	Report Due	Verbal Due
David Glick	2/22/93	/ /

	Sample Number	Date	Time	Comp	Grab	Station Location	Number of Cntnrs	Type of Containers	Type of Analysis: TPHG	TPHD	BTEX	Oil&Grease	Condition of Samples	Initial
1	Trip Blanks A,B	LAB	LAB		/	LAB	2 ea	40 ml VOA			/			
2	P-3 WS-1 A,B	2/5/93	1235		/	mon well P-3	2 ea	Acidified 40 ml VOA			/			
3	P-3 WS 2 A,B	2/5/93	1238		/	mon well P-3	2 ea	/ LTR		/				

2/8/93 Per David Glick sampled 2/5/93 CV

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time
	2-8-93		2-8-93
Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time
Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time

Remarks: Purchase Order No.: 93-3010

STANDARD TURNAROUND

COMPANY: Geo Plexus, Inc.
ADDRESS: 1900 Wyatt Drive, Suite 1 Santa Clara, CA 95054
PHONE: (408)987-0210 FAX: (408)988-0815

2066

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

MR. DAVID C. GLICK
GEOPLEXUS, INC.
1900 WYATT DRIVE, SUITE #1
SANTA CLARA, CA 95054

Workorder # : 9302071
Date Received : 02/05/93
Project ID : C92032
Purchase Order: 93-3010
Department : GC
Sub-Department: TPH

SAMPLE INFORMATION:

ANAMETRIX SAMPLE ID	CLIENT SAMPLE ID	MATRIX	DATE SAMPLED	METHOD
9302071- 1	TB A-B	WATER	01/07/93	BTEX
9302071- 2	P-3 WS-1	WATER	02/05/93	BTEX
9302071- 3	P-3 WS-2	WATER	02/05/93	TPHd

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

MR. DAVID C. GLICK
GEOPLEXUS, INC.
1900 WYATT DRIVE, SUITE #1
SANTA CLARA, CA 95054

Workorder # : 9302071
Date Received : 02/05/93
Project ID : C92032
Purchase Order: 93-3010
Department : GC
Sub-Department: TPH

QA/QC SUMMARY :

- The concentration reported as diesel for sample P-3 WS-2 is due to the presence of a combination of discrete hydrocarbon peaks not indicative of diesel and a heavier petroleum product, possibly motor oil.

Cheryl Brauner 2/12/93
Department Supervisor Date

Reagie Dawson 2/12/93
Chemist Date

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

Anametrix W.O.: 9302071
Matrix : WATER
Date Sampled : 01/07 & 02/05/93

Project Number : C92032
Date Released : 02/19/93

COMPOUNDS	Reporting Limit (ug/L)	Sample I.D.# TB A-B -01	Sample I.D.# P-3 WS-1 -02	Sample I.D.# BF1101E3 BLANK
Benzene	0.5	ND	ND	ND
Toluene	0.5	ND	ND	ND
Ethylbenzene	0.5	ND	ND	ND
Total Xylenes	0.5	ND	55	ND
% Surrogate Recovery		105%	93%	119%
Instrument I.D.		HP4	HP4	HP4
Date Analyzed		02/11/93	02/11/93	02/11/93
RLMF		1	1	1

ND - Not detected at or above the practical quantitation limit for the method.
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 61-139%

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

Reggie Timmons 2/22/93
Analyst Date

Supervisor Date

ANALYSIS DATA SHEET - TOTAL PETROLEUM HYDROCARBONS AS DIESEL
ANAMETRIX, INC. (408) 432-8192

Anametrix W.O.: 9302071
Matrix : WATER
Date Sampled : 02/05/93
Date Extracted: 02/09/93

Project Number : C92032
Date Released : 02/19/93
Instrument I.D.: HP23

Anametrix I.D.	Client I.D.	Date Analyzed	Reporting Limit (ug/L)	Amount Found (ug/L)
9302071-03	P-3 WS-2	02/11/93	50	220
DWBL020993	METHOD BLANK	02/10/93	50	ND

Note : Reporting limit is obtained by multiplying the dilution factor times 50 ug/L.
ND - Not detected at or above the practical quantitation limit for the method.
TPHd - Total Petroleum Hydrocarbons as diesel is determined by GCFID following sample extraction by EPA Method 3510.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

Reggie Davison 2/22/93
Analyst Date

Cheryl Balmer 2/[illegible]
Supervisor Date

TOTAL EXTRACTABLE HYDROCARBON LABORATORY CONTROL SAMPLE REPORT
EPA METHOD 3510 WITH GC/FID
ANAMETRIX, INC. (408) 432-8192

Sample I.D. : LAB CONTROL SAMPLE
Matrix : WATER
Date Sampled : N/A
Date Extracted: 02/09/93
Date Analyzed : 02/10/93

Anametrix I.D. : LCSW0210
Analyst :
Supervisor :
Date Released : 02/18/93
Instrument I.D.: HP23

COMPOUND	SPIKE AMT (ug/L)	LCS REC (ug/L)	% REC LCS	LCSD REC (ug/L)	% REC LCSD	RPD	% REC LIMITS
DIESEL	1250	910	73%	925	74%	2%	47-130

*Quality control established by Anametrix, Inc.

GeoPlexus, Inc.

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

November 20, 1992
92 DEC 10 Project: C92032

Mr. Geoffrey Henrikson
Right Away Redy Mix
401 Kennedy Street
Oakland, CA 94606

STIP 3974

Subject: November, 1992 Quarterly Ground Water Sampling Report for
Right Away Redy Mix, 401 Kennedy Street, Oakland, CA

Dear Mr. Henrikson:

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 November 2, 1992.

In summary, the water samples obtained from Monitoring Well P-3 contained detectable concentrations of Total Petroleum Hydrocarbons as diesel but did not contain detectable concentrations of 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 is in February, 1993. Questions or comments regarding the attached report should be addressed to the undersigned. Copies of this report should be forwarded to:

Mr. Barney Chan
Alameda County Health Care Services
Department of Environmental Health
80 Swan Way, Room 200
Oakland, CA 94621

Mr. R. Hiett
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

REGISTERED GEOLOGIST
DAVID C. GLICK
No. 1338
CERTIFIED
ENGINEERING
GEOLOGIST
STATE OF CALIFORNIA

Enclosure:
Ground Water Sampling Report

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

GeoPlexus, Inc.

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

GROUND WATER SAMPLING REPORT

for

RIGHT AWAY REDY MIX

401 KENNEDY STREET

OAKLAND, CALIFORNIA

November 8, 1992

Project C92032

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

GROUND WATER SAMPLING REPORT
for
RIGHT AWAY REDY MIX
401 KENNEDY STREET
OAKLAND, CALIFORNIA

INTRODUCTION

The project site is located at 401 Kennedy Street in the City of Oakland, in Alameda County, California as indicated on Figure 1. The site is currently occupied by Right Away Redy Mix.

Three open-standpipe piezometers were installed around the existing underground diesel fuel storage tank and dispensing island in December, 1991 by Geo Plexus, Incorporated to obtain soil samples for analytical testing and to establish site-specific ground water flow information. The top of the piezometer casings were surveyed to establish relative elevations and it was determined that piezometer P-3 was located down gradient of the dispensing pump area (location of previous release). Piezometer P-3 was subsequently developed as a ground water monitoring well (identified as Monitoring Well P-3) and was sampled.

This report is the second scheduled quarterly monitoring report and presents the recorded ground water elevations, the sampling protocol, and results of the analytical testing performed on the ground water samples collected from Monitoring Well P-3 on November 2, 1992.

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 Monitoring Well P-3, 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 40 ml. vials and 1 ltr. 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 (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 well 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 well and other piezometers at the site were established during previous investigations with vertical control of 0.01 foot. Prior to purging the monitoring well, 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 northeast direction (see Figure 2) at a gradient of 0.0059 ft/ft with Monitoring Well P-3 in a down- to cross-gradient direction from the dispensing island and existing underground diesel fuel storage tank.

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 diesel by Method GCFID 3550/8015 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 10-11 feet below the ground surface and flows across the site in a northeast direction at a gradient of 0.0059 ft/ft. The flow direction places Monitoring Well P-3 in a down- to cross-gradient direction from the dispenser island and existing underground diesel fuel storage tank.

The analytical testing detected reportable quantities of Total Petroleum Hydrocarbons as diesel at a concentration of 210 ppb in the water sample obtained from Monitoring Well P-3. It is noted that the analytical report states that the concentration reported as diesel is primarily due to the presence of discrete hydrocarbon peaks not indicative of diesel. Volatile Aromatics (Benzene, Toluene, Ethylbenzene, and Total Xylenes) were not detected in the water sample obtained from Monitoring Well P-3. Table 1 summarizes the current analytical test results along with the previous analytical testing results.

TABLE 1

SUMMARY OF GROUND WATER ANALYTICAL TEST DATA

Date Sampled	Total Petroleum Hydrocarbons	Benzene	Toluene	Ethyl-Benzene	Total Xylenes
Monitoring Well P-3					
1-8-92	290	N.D.	N.D.	N.D.	N.D.
8-17-92	74	N.D.	N.D.	N.D.	N.D.
11-2-92	210	N.D.	N.D.	N.D.	N.D.

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

The ground water monitoring wells located at the project site are scheduled to be sampled again in February, 1993 in accordance with the direction for quarterly monitoring from the Alameda County Health Care Services, Department of Environmental Health.

LIMITATIONS

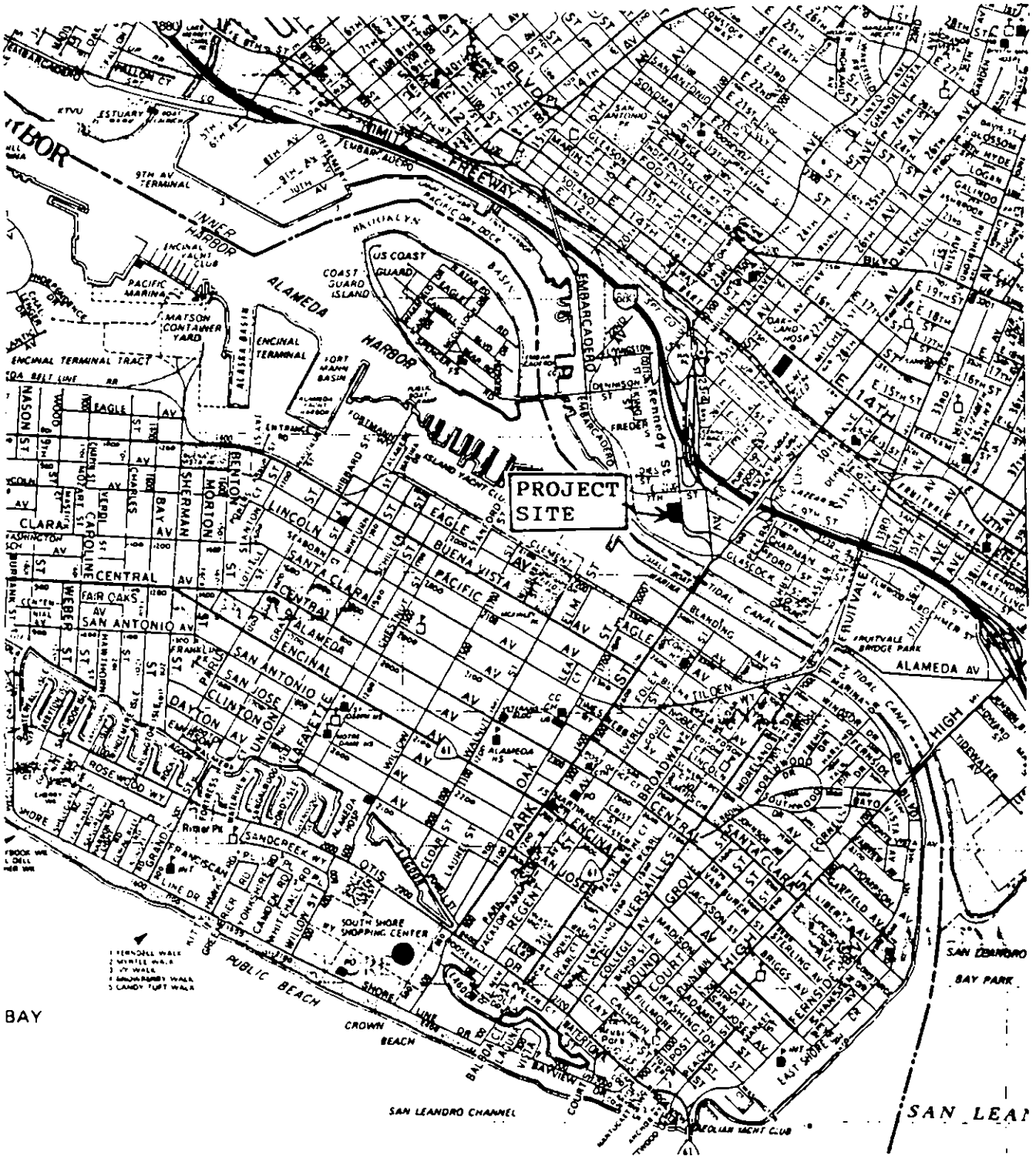
We have only observed a small portion of the pertinent subsurface and ground water conditions present at the site. The conclusions and recommendations made herein are based on the assumption that subsurface and ground water conditions do not deviate appreciably from those described in the reports and 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.

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

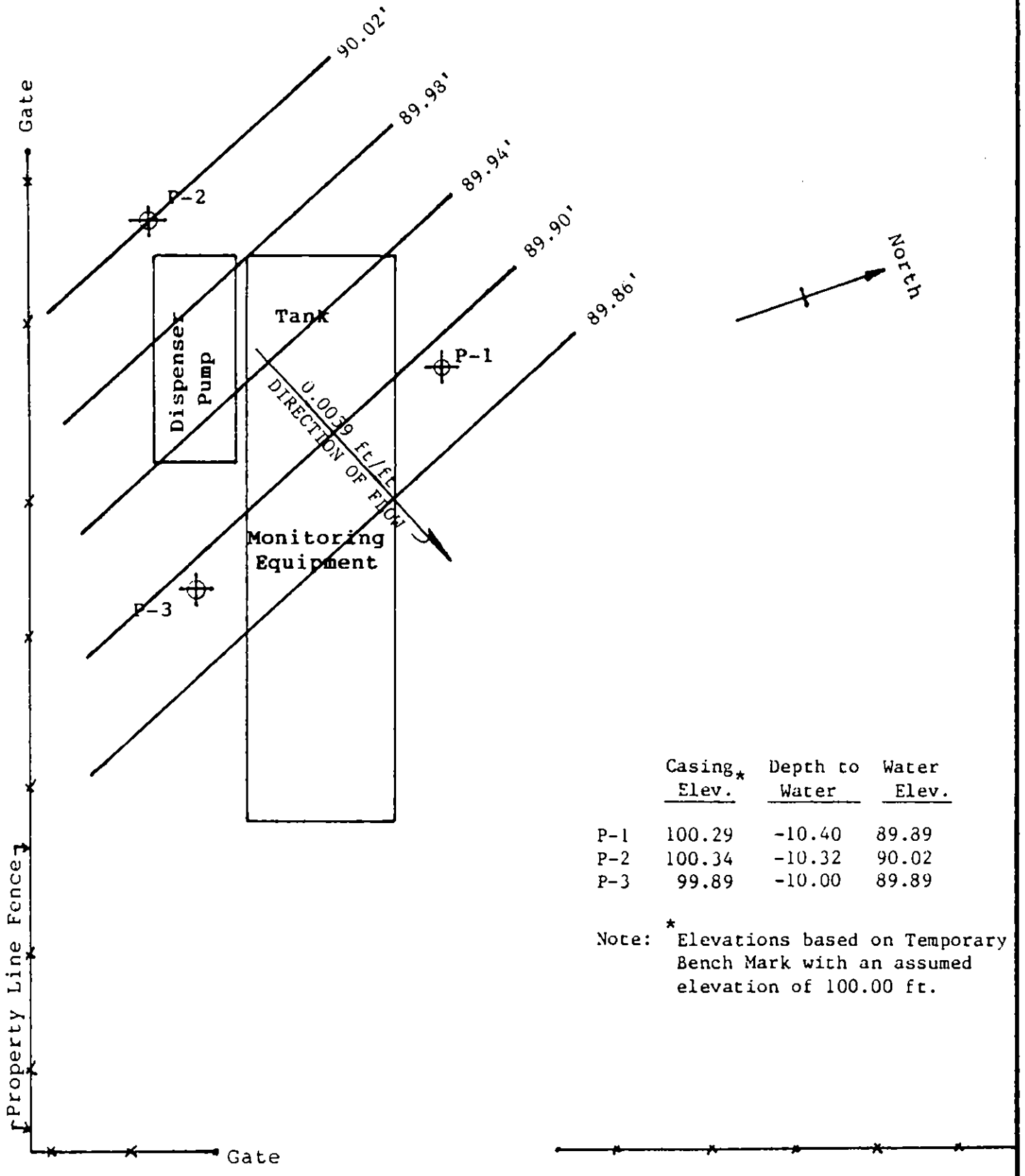
If you have questions regarding the findings, conclusions, or recommendations contained in this report, please contact us. We appreciate the opportunity to serve you.

Geo Plexus, Incorporated



RIGHT AWAY READY MIX		
DATE 1/92	SCALE NA	DRAWN BY JCM
VICINITY MAP		
P91024	Figure 1	

GeoPlexus, Inc.



	Casing Elev.*	Depth to Water	Water Elev.
P-1	100.29	-10.40	89.89
P-2	100.34	-10.32	90.02
P-3	99.89	-10.00	89.89

Note: * Elevations based on Temporary Bench Mark with an assumed elevation of 100.00 ft.

P-1 indicates approximate location of piezometers

RIGHT AWAY REDY MIX

DATE	SCALE	DRAWN BY
11-2-92	1"=10'	DCG/JCM

SITE PLAN

Figure 2

GeoPlexus, Inc.

APPENDIX A

CHAIN-OF-CUSTODY FORM
AND
ANALYTICAL TEST DATA

Geo Plus, Inc.

CHAIN-OF-CUSTODY

[redacted] Wy[redacted]ve, St[redacted]nta [redacted] Calif[redacted] 9505[redacted]
Phone (408) 987-0210 Fax (408) 988-0815

PROJECT NUMBER	PROJECT NAME
192029	Right Away Redy mix

Send Report Attention of: David Glick

Report Due: / /

Verbal Due: / /

Type of Analysis: Luft Standards

Sample Number	Date	Time	Comp	Grab	Station Location	Number of Cntnrs	Type of Containers	TPHL	TPHD	BTEX	Oil&Grease	Condition of Samples	Initial
MWA-WS1-MB	11/2/92	0930		✓	mon well A	2 ea	Acidified 40 ML VOA			✓			
MWP-3 WS1-MBS	11/2/92	1218		✓	mon well P3	3 ea	Acidified 40 ML VOA			✓			
MWP-3 WS2-MB	11/2/92	1226 / 1229		✓	mon well P3	2 ea	1 LTR		✓				

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time
Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time
Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time

Remarks: Purchase Order No.:

Standard Turnaround

COMPANY: Geo Plus, Inc.
ADDRESS: 1900 Wyatt Drive, Suite 1 Santa Clara, CA 95054
PHONE: (408) 987-0210 FAX: (408) 988-0815

2066

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

MR. DAVID C. GLICK
GEOPLEXUS, INC.
1900 WYATT DRIVE, SUITE #1
SANTA CLARA, CA 95054

Workorder # : 9211008
Date Received : 11/02/92
Project ID : C92029
Purchase Order: 92-30062
Department : GC
Sub-Department: TPH

SAMPLE INFORMATION:

ANAMETRIX SAMPLE ID	CLIENT SAMPLE ID	MATRIX	DATE SAMPLED	METHOD
9211008- 1	MWA	WATER	11/02/92	BTEX
9211008- 2	MWP-3	WATER	11/02/92	BTEX
9211008- 2	MWP-3	WATER	11/02/92	TPHd

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

MR. DAVID C. GLICK
GEOPLEXUS, INC.
1900 WYATT DRIVE, SUITE #1
SANTA CLARA, CA 95054

Workorder # : 9211008
Date Received : 11/02/92
Project ID : C92029
Purchase Order: 92-30062
Department : GC
Sub-Department: TPH

QA/QC SUMMARY :

- The concentration reported as diesel for sample MWP-3 is primarily due to the presence of discrete hydrocarbon peaks not indicative of diesel.

Department Supervisor — Date

Chemist — 11/13/92 Date

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

Anametrix W.O.: 9211008
Matrix : WATER
Date Sampled : 11/02/92

Project Number : C92029
Date Released : 11/12/92

COMPOUNDS	Reporting Limit (ug/L)	Sample I.D.# MWA -01	Sample I.D.# MWP-3 -02	Sample I.D.# BN0905E3 BLANK	Sample I.D.# BN0501E3 BLANK
Benzene	0.5	ND	ND	ND	ND
Toluene	0.5	ND	ND	ND	ND
Ethylbenzene	0.5	ND	ND	ND	ND
Total Xylenes	0.5	ND	ND	ND	ND
% Surrogate Recovery		104%	121%	109%	90%
Instrument I.D.		HP8	HP8	HP8	HP8
Date Analyzed		11/10/92	11/06/92	11/09/92	11/05/92
RLMF		1	1	1	1

ND - Not detected at or above the practical quantitation limit for the method.
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.

Analyst Date

Supervisor 11/13/92 Date

ANALYSIS DATA SHEET - TOTAL PETROLEUM HYDROCARBONS AS DIESEL
ANAMETRIX, INC. (408) 432-8192

Anametrix W.O.: 9211008
Matrix : WATER
Date Sampled : 11/02/92
Date Extracted: 11/05/92

Project Number : C92029
Date Released : 11/12/92
Instrument I.D.: HP23

Anametrix I.D.	Client I.D.	Date Analyzed	Reporting Limit (ug/L)	Amount Found (ug/L)
9211008-02	MWP-3	11/07/92	50	210
DWBL110592	METHOD BLANK	11/06/92	50	ND

Note : Reporting limit is obtained by multiplying the dilution factor times 50 ug/L.
ND - Not detected at or above the practical quantitation limit for the method.
TPHd - Total Petroleum Hydrocarbons as diesel is determined by GCFID following sample extraction by EPA Method 3510.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

Peggie Dawson 11/13/92
Analyst Date

Supervisor 11/13/92
Supervisor Date

TOTAL VOLATILE HYDROCARBON MATRIX SPIKE REPORT
EPA METHOD 5030 WITH GC/FID
ANAMETRIX, INC. (408) 432-8192

Sample I.D. : C92029 MWP-3
Matrix : WATER
Date Sampled : 11/02/92
Date Analyzed : 11/06/92

Anametrix I.D. : 9211008-02
Analyst : RD
Supervisor : [illegible]
Date Released : 11/12/92
Instrument I.D.: HP8

COMPOUND	SPIKE AMT (ug/L)	SAMPLE CONC (ug/L)	REC MS	%REC MS	REC MD (ug/L)	%REC MD	RPD	%REC LIMITS
BENZENE	10.0	0.0	9.7	97%	7.6	76%	-24%	49-159
TOLUENE	10.0	0.0	11.0	110%	8.7	87%	-23%	53-156
ETHYLBENZENE	10.0	0.0	9.3	93%	8.6	86%	-8%	54-151
TOTAL XYLENES	10.0	0.0	9.8	98%	8.1	81%	-19%	56-157
p-BFB				97%		117%		53-147

* Quality control established by Anametrix, Inc.

BTEX LABORATORY CONTROL SAMPLE REPORT
EPA METHOD 5030 WITH GC/PID
ANAMETRIX, INC. (408) 432-8192

Sample I.D.	: LAB CONTROL SAMPLE	Anametrix I.D.	: LCSW1106
Matrix	: WATER	Analyst	: RD
Date Sampled	: N/A	Supervisor	:
Date Analyzed	: 11/06/92	Date Released	: 11/12/92
		Instrument ID	: HP8

COMPOUND	SPIKE AMT. (ug/L)	LCS (ug/L)	REC LCS	%REC LIMITS
Benzene	10.0	8.3	83%	49-159
Toluene	10.0	9.9	99%	53-156
Ethylbenzene	10.0	9.6	96%	54-151
TOTAL Xylenes	10.0	9.5	95%	56-157
P-BFB			93%	53-147

* Limits established by Anametrix, Inc.

TOTAL EXTRACTABLE HYDROCARBON LABORATORY CONTROL SAMPLE REPORT
EPA METHOD 3510 WITH GC/FID
ANAMETRIX, INC. (408) 432-8192

Sample I.D. : LAB CONTROL SAMPLE
Matrix : WATER
Date Sampled : N/A
Date Extracted: 11/05/92
Date Analyzed : 11/07/92

Anametrix I.D. : LCSW1105
Analyst :
Supervisor :
Date Released : 11/12/92
Instrument I.D.: HP23

COMPOUND	SPIKE AMT (ug/L)	LCS REC (ug/L)	% REC LCS	LCSD REC (ug/L)	% REC LCSD	RPD	% REC LIMITS
DIESEL	1250	1200	96%	890	71%	-30%	63-130

*Quality control established by Anametrix, Inc.

GeoPlexus, Inc.

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

92 SEP 17 P 3:3

September 8, 1992
Project C92032

Mr. Geoffrey Henrikson
Right Away Redy Mix
401 Kennedy Street
Oakland, CA 94606

Subject: August, 1992 Quarterly Ground Water Sampling Report for
Right Away Redy Mix, 401 Kennedy Street, Oakland, CA

Dear Mr. Henrikson:

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 August 17, 1992.

In summary, the water samples obtained from Monitoring Well P-3 contained detectable concentrations of Total Petroleum Hydrocarbons as diesel (74 ppb) but did not contain detectable concentrations of Volatile Aromatic Compounds (Benzene, Toluene, Ethyl Benzene, and Xylenes). The diesel concentrations are significantly reduced from the 290 ppb recorded in January, 1992.

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

Mr. Barney Chan
Alameda County Health Care Services
Department of Environmental Health
80 Swan Way, Room 200
Oakland, CA 94621

Mr. R. Hiett
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

REGISTERED GEOLOGIST
DAVID C. GLICK
No. 1338
CERTIFIED
ENGINEERING
GEOLOGIST
STATE OF CALIFORNIA

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

RIGHT AWAY REDY MIX

401 KENNEDY STREET

OAKLAND, CALIFORNIA

September 8, 1992

Project C92032

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

GROUND WATER SAMPLING REPORT
for
RIGHT AWAY REDY MIX
401 KENNEDY STREET
OAKLAND, CALIFORNIA

INTRODUCTION

The project site is located at 401 Kennedy Street in the City of Oakland, in Alameda County, California as indicated on Figure 1. The site is currently occupied by Right Away Redy Mix.

Three open-standpipe piezometers were installed around the existing underground diesel fuel storage tank and dispensing island in December, 1991 by Geo Plexus, Incorporated to obtain soil samples for analytical testing and to establish site-specific ground water flow information. The top of the piezometer casings were surveyed to establish relative elevations and it was determined that piezometer P-3 was located down gradient of the dispensing pump area (location of previous release). Piezometer P-3 was subsequently developed as a ground water monitoring well (identified as Monitoring Well P-3) and was sampled.

This report is the first scheduled quarterly monitoring report and presents the recorded ground water elevations, the sampling protocol, and results of the analytical testing performed on the ground water samples collected from Monitoring Well P-3 on August 17, 1992.

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 Monitoring Well P-3, 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.

SUMMARY OF FINDINGS

Ground water elevations recorded during the sampling suggest that ground water is at a depth of 10-11 feet below the ground surface and flows across the site in an easterly direction at a gradient of 0.0015 ft/ft. The easterly flow direction places Monitoring Well P-3 in a "down-gradient" direction from the dispenser island and existing underground diesel fuel storage tank.

The analytical test detected reportable quantities of Total Petroleum Hydrocarbons as diesel at a concentration of 74 ppb in the water sample obtained from Monitoring Well P-3. Volatile Aromatics (Benzene, Toluene, Ethylbenzene, and Total Xylenes) were not detected in the water sample obtained from Monitoring Well P-3. Table 1 summarizes the current analytical test results along with the previous analytical testing results.

TABLE 1

SUMMARY OF GROUND WATER ANALYTICAL TEST DATA

Date Sampled	Total Petroleum Hydrocarbons	Benzene	Toluene	Ethyl-Benzene	Total Xylenes
Monitoring Well P-3					
1-8-92	290	N.D.	N.D.	N.D.	N.D.
8-17-92	74	N.D.	N.D.	N.D.	N.D.

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

The concentrations of Total Petroleum Hydrocarbons as diesel has reduced significantly from the 290 ppb concentrations recorded in January, 1992 (following remedial over-excavation activities).

RECOMMENDATIONS

The ground water monitoring wells located at the project site are scheduled to be sampled again in November, 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.

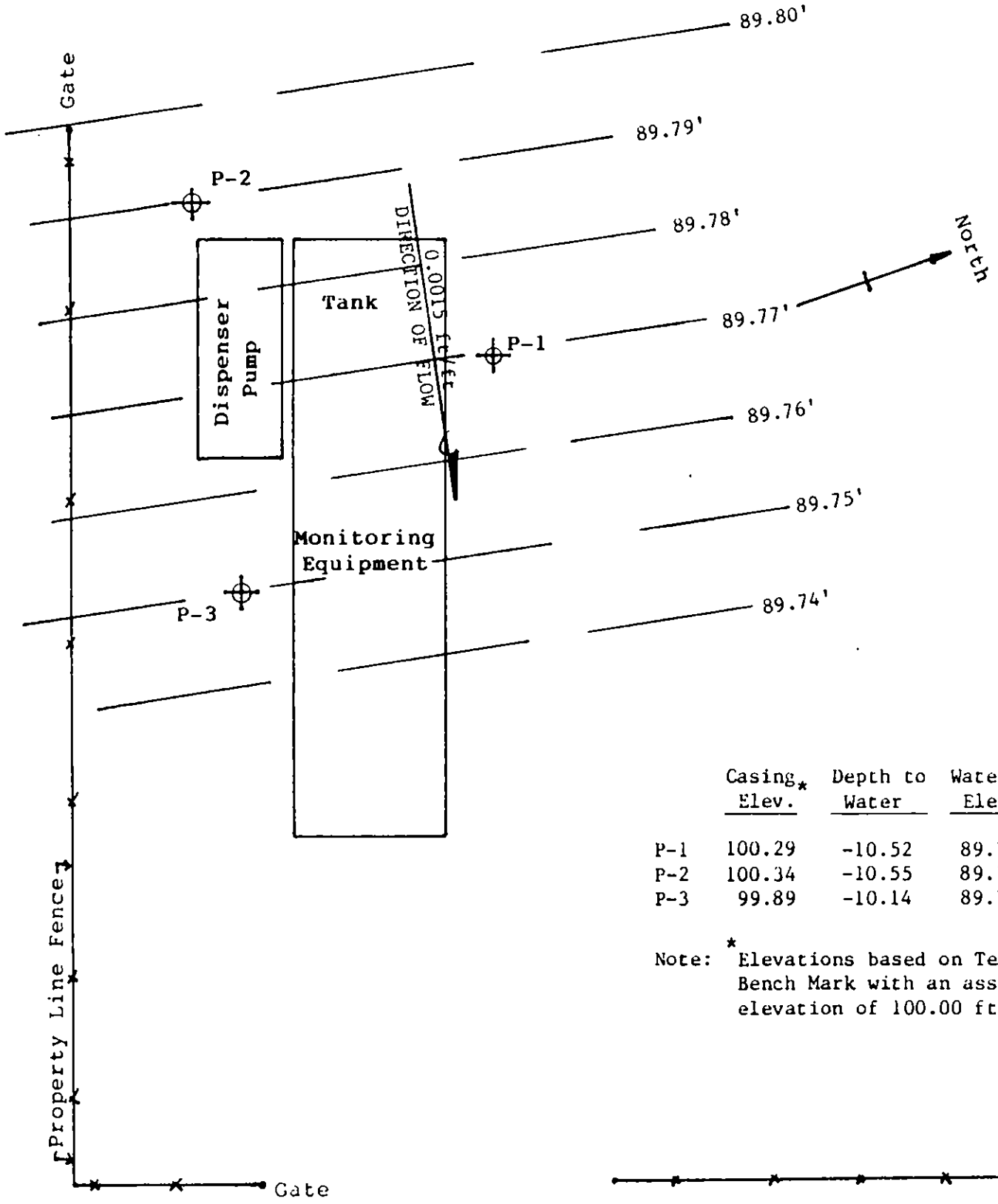
No attempt was made to verify the accuracy of the published information prepared by others used in preparation of this assessment report.

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

RIGHT AWAY REDY MIX		
DATE 1/92	SCALE NA	DRAWN BY JCM
VICINITY MAP		
P91024	Figure 1	

GeoPlexus, Inc.



	Casing* Elev.	Depth to Water	Water Elev.
P-1	100.29	-10.52	89.77
P-2	100.34	-10.55	89.79
P-3	99.89	-10.14	89.75

Note: * Elevations based on Temporary Bench Mark with an assumed elevation of 100.00 ft.

⊕ P-1 indicates approximate location of piezometers

RIGHT AWAY REDY MIX

DATE	SCALE	DRAWN BY
8/17/92	1"=10'	DCG/JCM

SITE PLAN

Figure 2

GeoPlexus, Inc.

APPENDIX A

CHAIN-OF-CUSTODY FORM
AND
ANALYTICAL TEST DATA

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

CHAIN-OF-CUSTODY

17.15

PROJECT NUMBER	PROJECT NAME
C92029	Right Away

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: BTEX	Type of Analysis: TPHd	Condition of Samples	Initial
(1) MWP-3 DUP WS1A,B,C	8/17/92	1545		1	MON WELL 1	3CA	ACIDIFIED 40 ml VOA	✓			
(2) MWP-3 DUP WS2A,B	8/17/92	1545		1	MON WELL 1	2CA	1 LTR		✓		

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time
[signature]	8/18/92 1700	Michelle D Aguilar	8/18/92 1700
Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time
Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time

Remarks: Purchase Order No.: 92.30038

STANDARD TURN AROUND

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 # : 9208204
Date Received : 08/18/92
Project ID : C92029
Purchase Order: 92.30038
Department : GC
Sub-Department: TPH

SAMPLE INFORMATION:

ANAMETRIX SAMPLE ID	CLIENT SAMPLE ID	MATRIX	DATE SAMPLED	METHOD
9208204- 1	MWP-3	WATER	08/17/92	BTEX
9208204- 1	MWP-3	WATER	08/17/92	TPHd

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

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

Workorder # : 9208204
Date Received : 08/18/92
Project ID : C92029
Purchase Order: 92.30038
Department : GC
Sub-Department: TPH

QA/QC SUMMARY :

- No QA/QC problems encountered for this sample.

Department Supervisor Date

Chemist Date

ANALYSIS DATA SHEET - TOTAL PETROLEUM HYDROCARBONS AS DIESEL
ANAMETRIX, INC. (408) 432-8192

Anametrix W.O.: 9208204
Matrix : WATER
Date Sampled : 08/17/92
Date Extracted: 08/19/92

Project Number : C92029
Date Released : 08/31/92
Instrument I.D.: HP23

Anametrix I.D.	Client I.D.	Date Analyzed	Reporting Limit (ug/L)	Amount Found (ug/L)
9208204-01	MWP-3	08/24/92	50	74
DWBL081992	METHOD BLANK	08/23/92	50	ND

Note : Reporting limit is obtained by multiplying the dilution factor times 50 ug/L.
ND - Not detected at or above the practical quantitation limit for the method.
TPHd - Total Petroleum Hydrocarbons as diesel is determined by GCFID following sample extraction by EPA Method 3510.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

Reggie Jamison 9/1/92
Analyst Date

Chuck Brenner 9/1/92
Supervisor Date

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

Anametrix W.O.: 9208204
Matrix : WATER
Date Sampled : 08/17/92

Project Number : C92029
Date Released : 08/31/92

COMPOUNDS	Reporting Limit (ug/L)	Sample I.D.# MWP-3 -01	Sample I.D.# BG2502E3 BLANK
Benzene	0.5	ND	ND
Toluene	0.5	ND	ND
Ethylbenzene	0.5	ND	ND
Total Xylenes	0.5	ND	ND
% Surrogate Recovery		84%	89%
Instrument I.D.		HP4	HP4
Date Analyzed		08/25/92	08/25/92
RLMF		1	1

ND - Not detected at or above the practical quantitation limit for the method.
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.

Peggie Davisson 9/1/92
Analyst Date

Cheryl Balsam 9/1/92
Supervisor Date

GeoPlexus, Inc.

COPY

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

January 24, 1992
Project P91024

Mr. Geoffrey V. Henrikson
Right Away Redy Mix
401 Kennedy Street
Oakland, CA 94606

Subject: Preliminary Site Characterization Investigation Report
Right Away Redy Mix, 401 Kennedy Street, Oakland, CA

Dear Mr. Henrikson:

As requested and authorized, the attached Preliminary Site Characterization Investigation Report has been prepared to document the field investigation efforts performed at the subject site related to installation of three piezometers, one of which was subsequently developed into a ground water monitoring well. The report presents the findings of the investigation and analytical testing performed on soil and ground water samples obtained during the investigation along with conclusions and recommendations based on these findings.

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.

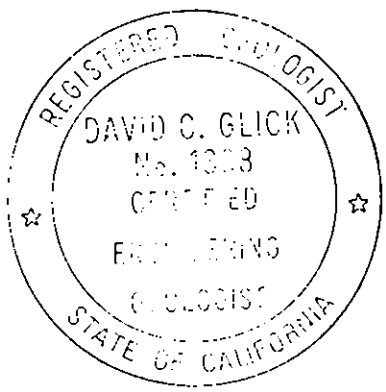
Respectfully submitted,

Geo Plexus, Incorporated

Jonisue C. Minor

Jonisue C. Minor
Senior Project Geologist

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



753 North 9th Street, Suite 131 • San Jose, California 95112-3150 • Phone 408/287-8588 • FAX 408/287-8646

PRELIMINARY

SITE CHARACTERIZATION INVESTIGATION

for

RIGHT AWAY REDY MIX

401 KENNEDY STREET

OAKLAND, CALIFORNIA

January 24, 1992

GEO PLEXUS, INCORPORATED
753 N. 9th Street, Suite 131, San Jose, CA 95112

PRELIMINARY
SITE CHARACTERIZATION INVESTIGATION
for
RIGHT AWAY REDY MIX
401 KENNEDY STREET
OAKLAND, CALIFORNIA

INTRODUCTION

The project site is located at 401 Kennedy Street in the City of Oakland, in Alameda County, California as indicated on Figure 1. The site is currently occupied by Right Away Redy Mix.

SCOPE OF WORK

To characterize the potential impact to the underlying soil and ground water resources present at the site, Geo Plexus, Incorporated performed an investigation as described below:

(1) advancing three subsurface exploration borings to a maximum depth of 20 feet in the immediate area of the dispensing pump and underground storage tank to define the subsurface conditions and to obtain soil samples from the soil borings for analytical testing;

(2) complete the three borings as open-standpipe piezometers to define the ground water conditions at the site;

(3) survey the well locations and determine the direction of ground water flow and gradient;

(4) develop the down-gradient piezometer as a monitoring well and collection of ground water samples for analytical testing;

(5) performing analytical testing on the soil and ground water samples; and

(6) preparation of this report documenting the findings of the investigation and presenting the results of the analytical testing.

Specifics of the individual investigative phases are described in the following sections of this report.

SUBSURFACE INVESTIGATION

Three subsurface exploration borings were advanced in the immediate vicinity of the dispensing pump and underground storage tank (see Figure 2) to characterize the underlying soils and to obtain soil samples for analytical testing. The borings were drilled by Exploration Geoservices, a State of California Licensed Drilling Contractor, C57 License No. 489288.

The borings were advanced using an eight (8) inch, nominal diameter, continuous flight hollow stem auger. Soil samples were obtained from the borings at five foot intervals through the use of a 2-inch I.D. split-barrel sampler. The sampler was advanced into the undisturbed soil ahead of the auger by a 140 pound hammer repeatedly falling 30 inches. Sand catchers were used as necessary to retain the samples. Pre-cleaned brass liners were placed in the sampler to retain the soil. The blow counts necessary to advance the sampler were recorded for each 6-inch interval. The boring was logged under the supervision of a State of California Certified Engineering Geologist. The Boring Logs are presented as Figures 3-5.

The drill cuttings and soil samples obtained from the borings were monitored during drilling to observe moisture changes in the soils and to determine the depth of the first saturated zone. The borings were advanced a maximum of 10 feet into the saturated zone.

The drilling and sampling equipment was thoroughly steam cleaned before drilling began to prevent the introduction of off-site contamination and the augers were steam cleaned between borings to prevent cross-contamination. The sampling equipment was cleaned between each sample event by washing in a hot water bath with a phosphate-free detergent and then rinsed in a hot water bath to prevent cross contamination. The soil cuttings and rinsate water derived from the soil borings and steam cleaning were contained in 55-gallon containers. Disposal of the contained soil remains the responsibility of the client.

The soil samples obtained from the borings were immediately sealed in the liners using aluminum foil and plastic caps and properly labeled including: the date, time, sample location, and project number. The samples were placed on ice immediately for storage and were transported to the laboratory under chain-of-custody documentation (see Appendix A).

PIEZOMETER INSTALLATION

Following completion of the drilling, the borings were completed as open standpipe piezometers (identified as Piezometers P-1, P-2 and P-3) constructed in accordance with Alameda County Monitoring Well Construction Guidelines. The piezometers were constructed by installing 2-inch diameter polyvinyl chloride (PVC) flush-threaded casing and slotted pipe directly through the hollow stem auger. The slotted section of the PVC pipe was installed through the saturated zone in the piezometers had 0.010 inch factory perforations. The PVC materials used in the piezometer construction were thoroughly cleaned prior to introduction into the boring.

The piezometers were filter-packed with clean #2/16 silica sand throughout the screened interval. The filter-pack material was installed in the annular spacing between the piezometer well pipe and the bore hole wall as the auger was removed. The filter-pack was extended two feet above the top of the screened interval. To assure continuity and integrity of the filter material, and to prevent the bore hole from caving, no more than five feet of auger was removed at a time during placement of the filter-pack.

A one foot thick layer of bentonite pellets was placed above the filter material to provide an annular seal. The bentonite was hydrated with water prior to placement of the grout seal. The remainder of the boring was filled with an 11-sack cement-sand slurry to within one foot of grade. A locking cap was placed on the PVC well casing and a water tight aluminum traffic box was installed in concrete flush with the ground surface over the well casing. Figures 6-8 illustrate the construction of Piezometers P-1, P-2, and P-3, respectively.

SUBSURFACE CONDITIONS

The soil borings revealed near uniform subsurface soil conditions consisting of interbedded medium brown sandy clay to clayey sand to a depth of 20 feet (limit of borings). Borings 1 and 2 encountered approximately 4 feet of fill, probably from the installation of the dispensing island.

Ground water was encountered in the exploration borings at a depth of approximately 9.5 feet below the ground surface at the time of drilling.

GRADIENT SURVEY

The elevation of the top of each piezometer casing was established with vertical control to 0.01 feet. The depth to ground water (measured to the nearest 0.01 foot) was measured with an electronic water level meter in each piezometer. Depth to ground water measurements were recorded at three different times (high tide, low tide, and intertidal

levels) to determine if the site was subject to tidal influences. Ground water elevations recorded during the investigation suggest that the ground water is located approximately 9.0 to 9.5 feet below the ground surface and flows across the site is in a easterly direction at a gradient of 0.006 ft/ft (see Figure 9). The various water levels recorded did not indicate changes in the direction of flow. Piezometer P-3 was determined to be located down-gradient of the dispensing pump.

MONITORING WELL DEVELOPMENT

Piezometer P-3 was identified as the down gradient well and was subsequently developed into a monitoring well. Piezometers P-1 and P-2 were not developed. Free product measurements were obtained for each piezometer prior to development of piezometer P-3 utilizing an acrylic 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 sheen were not observed in the well.

The piezometers were allowed to stabilize for a minimum of 48 hours following construction prior to development activities. The initial development of piezometer P-3 was through the use of an acrylic bailer. The piezometer/well was developed until a minimum of four well volumes had been purged and the discharged water appeared clear of sediment. Electrical conductivity, temperature, and pH of the ground water was recorded throughout the development process. The piezometer/well development continued until the electrical conductivity, temperature, and pH of the discharged water stabilized (approximately 6 well volumes). Depth to water measurements were recorded prior to and following the well development activities. The water developed from the piezometer/well was contained on-site in a 55-gallon container pending receipt of the laboratory test results.

MONITORING WELL SAMPLING

Free product measurements were obtained for the piezometer/monitoring well 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 or visible sheen was not observed in the well prior to the purging activities.

Prior to sampling, a minimum of four well volumes were purged from piezometer P-3 through the use of a teflon bailer. Electrical conductivity, temperature, and pH of the ground water was recorded throughout the development process. The purging activity continued until the electrical conductivity, temperature, and pH of the discharged water stabilized. The water purged from the piezometer/well was contained on-site in a 55-gallon container 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 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.

A travel blank was obtained from the analytical testing laboratory, transported to the field with the sample vials, and was submitted along with other samples for analysis (identified as MW-A). The samples were placed on ice immediately for transport to the laboratory under chain-of-custody documentation.

ANALYTICAL TESTING

The soil and ground water samples were submitted to and tested by Anametrix, 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 soil samples were tested for 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.

The ground water samples were tested for Total Petroleum Hydrocarbons as diesel by Method GCFID 3550/8015 and Volatile Aromatics by EPA Method 602 as indicated on the Chain-of-Custody Form. The travel blank was tested for Volatile Aromatics by EPA Method 602. The analytical test data, along with the Chain-of-Custody Forms are presented in Appendix A.

CONCLUSIONS

The analytical testing did not detect Total Petroleum Hydrocarbons as diesel in the soil samples obtained from the exploratory borings for Piezometers P-1, P-2 or P-3. The analytical testing did not detect Volatile Organics (Benzene, Toluene, Ethyl Benzene, and Xylenes) in the soil samples obtained from piezometers P-1 and P-3. Low concentrations of Xylenes (0.007 ppm and 0.006 ppm) were detected in soil samples obtained at depths of 10 and 13 feet in piezometer P-2.

The analytical testing did not detect Volatile Organics (Benzene, Toluene, Ethyl Benzene, and Xylenes) in the water samples obtained from Monitoring Well P-3; however, Total Petroleum Hydrocarbons as diesel were detected at a concentration of 290 parts per billion.

Low concentrations of Toluene and Xylenes were detected in the travel blank (identified as MWA). These concentrations are attributed to analytical error.

RECOMMENDATION

It is recommended that the remaining two piezometers be developed into monitoring well and sampled to further evaluate the presence of hydrocarbon products in the ground water.

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.

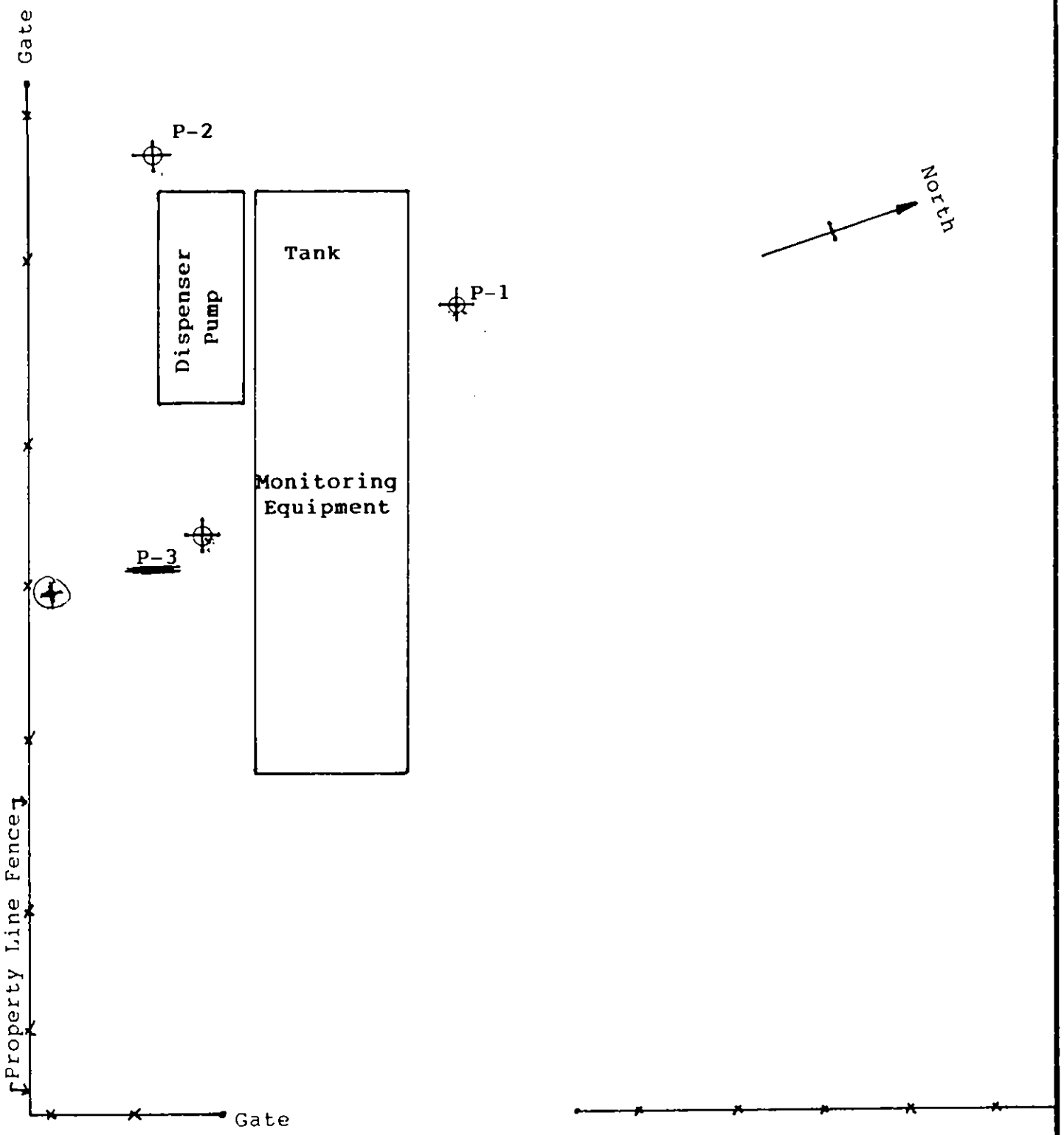
Geo Plexus, Incorporated provides consulting services in the fields of Geology and Engineering Geology performed in accordance with presently accepted professional practices. Professional judgments presented herein are based partly on information obtained from review of published documents, partly on 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.

RIGHT AWAY READY MIX		
DATE 1/92	SCALE NA	DRAWN BY JCM
VICINITY MAP		
P91024	Figure 1	

GeoPlexus, Inc.



P-1 indicates approximate location of piezometers

RIGHT AWAY REDY MIX

DATE	SCALE	DRAWN BY
1/92	1"=10'	DCG/JCM

SITE PLAN

P91024 | Figure 2

GeoPlexus, Inc.

SUBSURFACE DATA LOG

LOG No. P-1 DATE: 12/27/91
LOCATION: Right Away Redy Mix
EQUIPMENT: Exploration Geoservices
PROJECT No. P91024

DRY DENSITY (lbs cu ft)	MOISTURE (% of dry wt)	"N" VALUE (blows/ft)	SAMPLE TYPE	DEPTH (ft)	LOG	U.S.C.	
						SC	CLAYEY SAND to SANDY CLAY, dark brown, damp, medium dense FILL - with occassional medium gravels, small brick fragments and pieces of wire
		28	S1	5		CL	SILTY CLAY, medium brown to dark gray brown with some light gray mottling, moist, stiff
		38	S2	10			▽ -increasing to very stiff -minor iron staining
		52	S3 S4			CL/ SC	SANDY CLAY to CLAYEY SAND, light to medium brown, moist to wet, very stiff
				15		SC	CLAYEY SAND with small gravels, medium brown, wet, dense to very dense.
		59	--	20			Boring terminated at 20.0 feet. 2" diameter piezometer constructed

Figure 3.

SUBSURFACE DATA LOG

LOG No. P-2 DATE: 12/27/91
LOCATION: Right Away Redy Mix
EQUIPMENT: Exploration Geoservices
PROJECT No. P91024

DRY DENSITY (lbs cu ft)	MOISTURE (% of dry wt)	"N" VALUE (blows/ft)	SAMPLE TYPE	DEPTH (ft)	LOG	U.S.C.	
				0		CL	SANDY CLAY, with some medium grained sand, dark brown, moist, stiff FILL
		23	S1	5		CL	SILTY CLAY, medium brown-gray with some iron staining, moist, stiff
		33	S2	10		CL	▽ SILTY CLAY, grayish brown, moist, stiff to very stiff
		65	S3			SC	CLAYEY SAND, medium grained sand with few small gravels (¼ inch), medium brown, wet, dense to very dense
		50/5"		15			
				20			Boring terminated at 19.5 feet. 2" diameter piezometer constructed

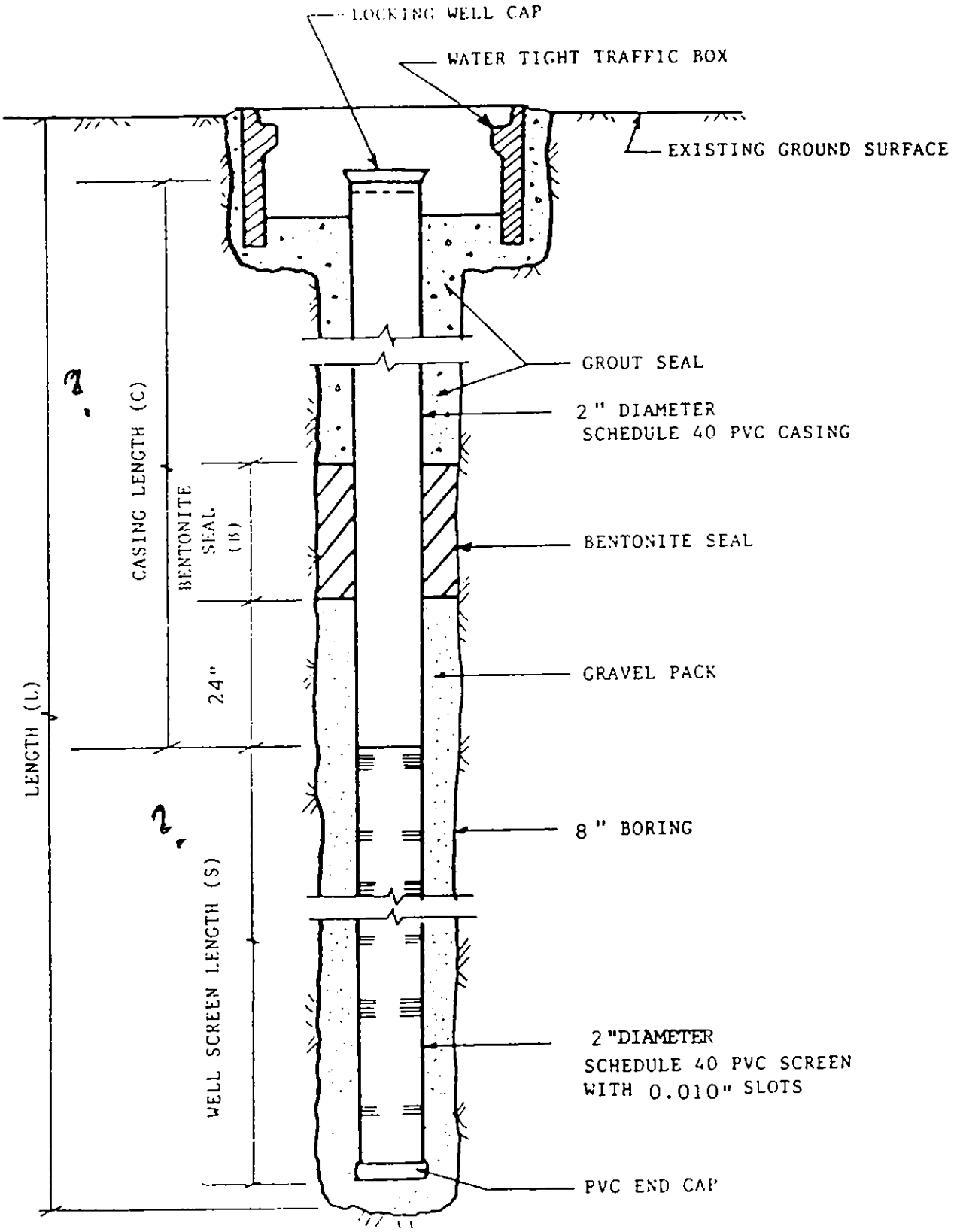
Figure 4.

SUBSURFACE DATA LOG

LOG No. P-3 DATE: 12/27/91
LOCATION: Right Away Redy Mix
EQUIPMENT: Exploration Geoservices
PROJECT No. P91024

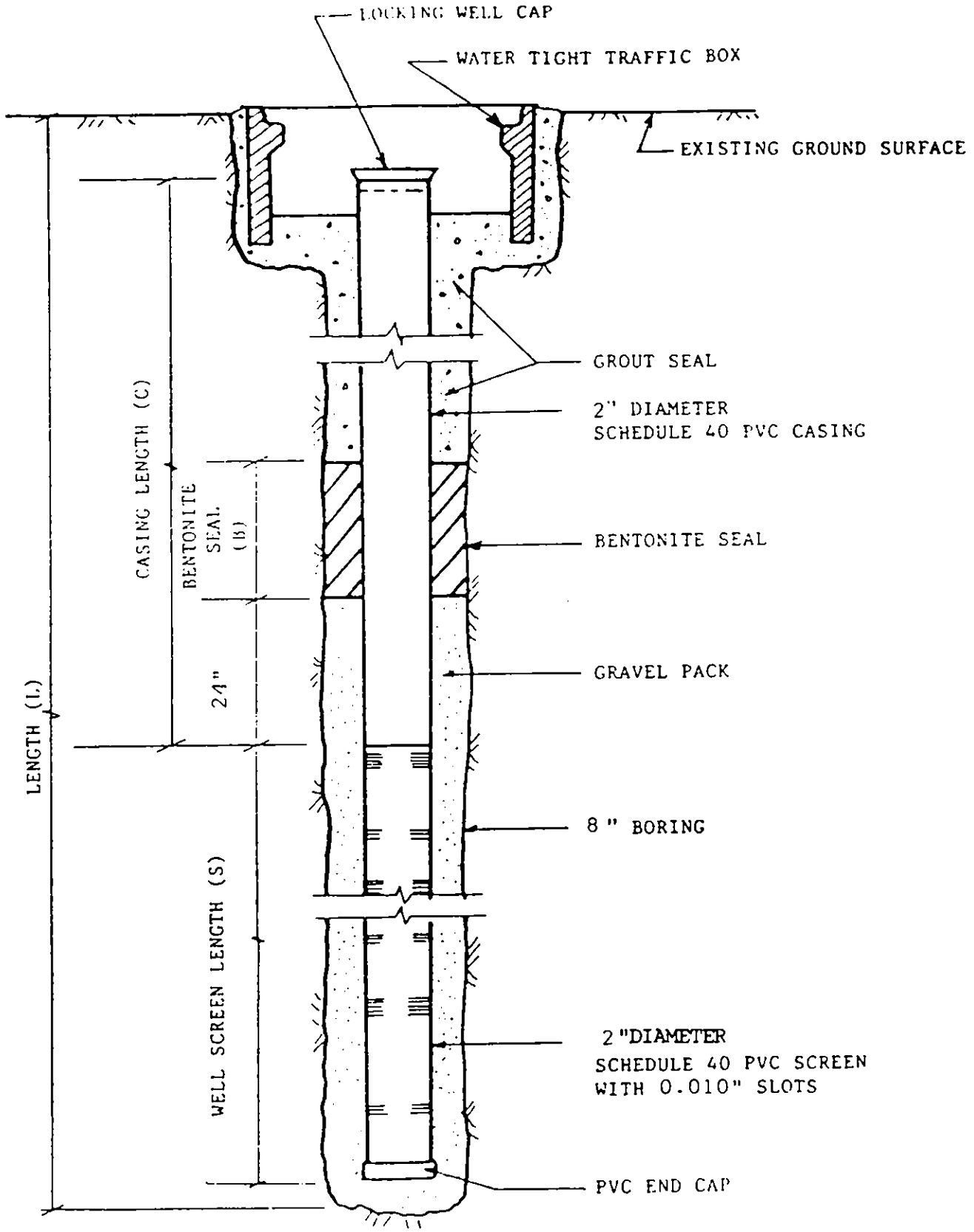
DRY DENSITY (lbs cu ft)	MOISTURE (% of dry wt)	"N" VALUE (blows/ft)	SAMPLE TYPE	DEPTH (ft)	LOG	U.S.C.	
				0		CL	SILTY CLAY, medium brown with some gray mottling, moist, stiff; slight petroleum odor
		13	S1	5			
		65	S2	10		CL	SILTY CLAY, medium to dark gray with some lighter brown mottling, moist, very stiff to hard; some iron staining
		50/4"	S3			SC	CLAYEY GRAVELLY SAND, medium grained sand with some gravels from 1/4" to 3/8", medium to dark brown, moist to very moist, very dense
		74	S4	15			-wet, hard
		41	S5	20			Boring terminated at 19.0 feet. 2" diameter piezometer constructed

Figure 5.



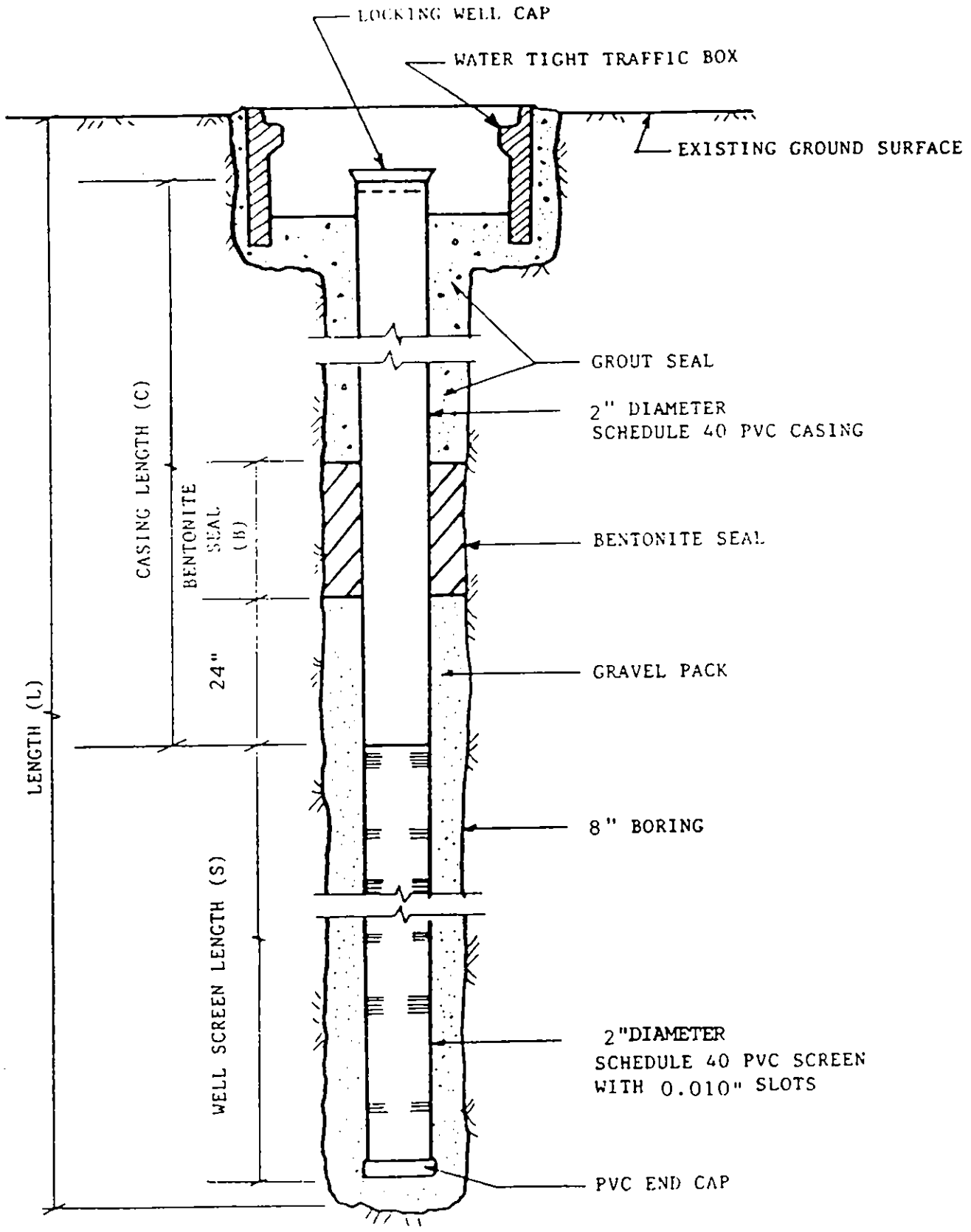
L= 20.0 feet
S= 10.0 feet
C= 10.0 feet
B= 1.0 feet

PIEZOMETER P-1		
DATE 12-27-91	SCALE N/A	DRAWN BY JCM
Right Away Redy Mix		
	Figure 6	



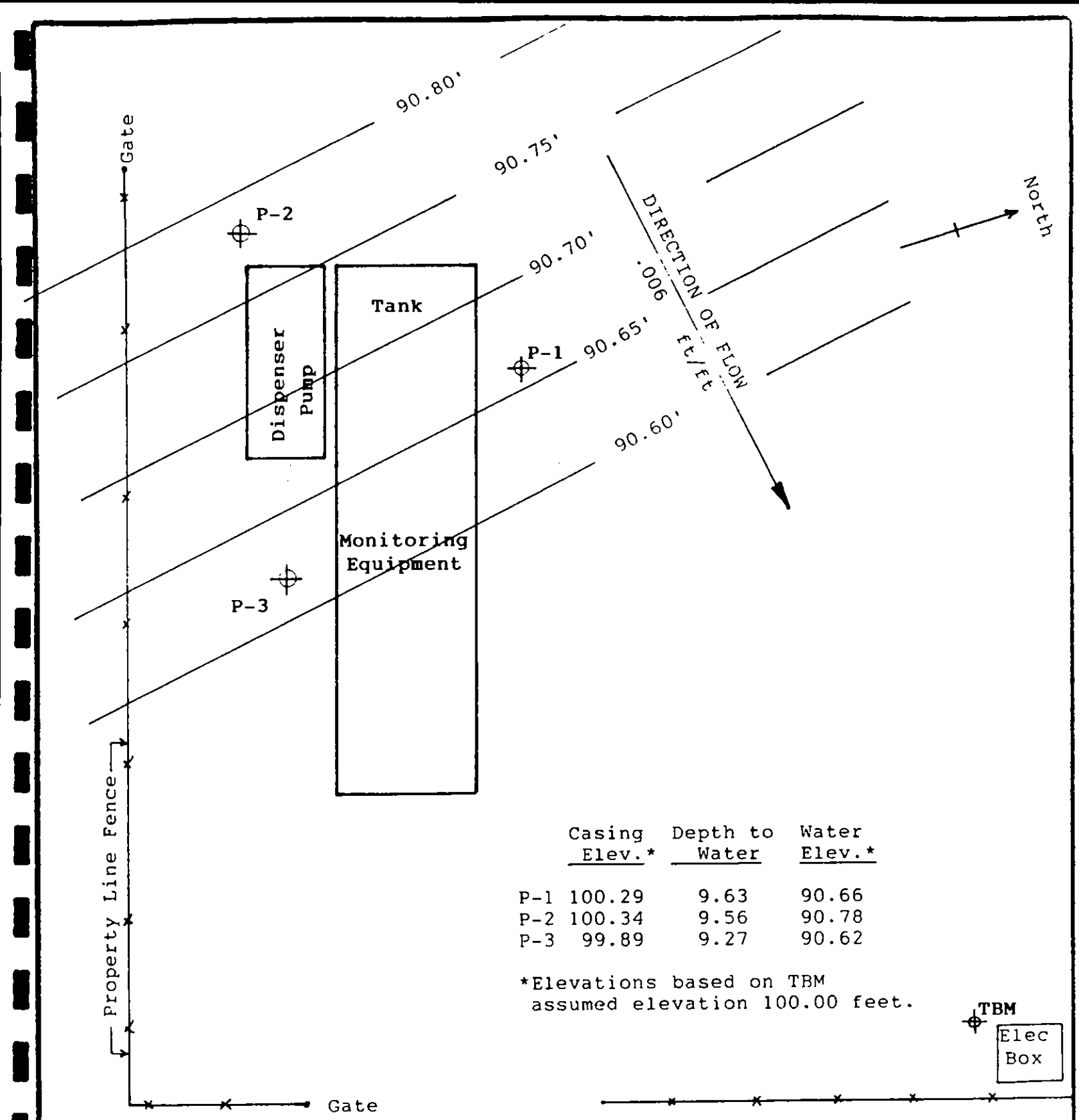
L= 19.0 feet
S= 10.0 feet
C= 9.0 feet
B= 1.0 feet

PIEZOMETER P-2		
DATE 12/27/91	SCALE N/A	DRAWN BY JCM
Right Away Redy Mix		
	Figure 7	



L= 19.5 feet
S= 10.0 feet
C= 9.5 feet
B= 1.0 feet

PIEZOMETER P-3		
DATE 12/27/91	SCALE N/A	DRAWN BY JCM
Right Away Redy Mix		
	Figure 8	



	Casing Elev.*	Depth to Water	Water Elev.*
P-1	100.29	9.63	90.66
P-2	100.34	9.56	90.78
P-3	99.89	9.27	90.62

*Elevations based on TBM assumed elevation 100.00 feet.

NOTE: TBM - Temporary Bench Mark

P-1 indicates approximate location of piezometers

RIGHT AWAY REDY MIX		
DATE 1/92	SCALE 1"=10'	DRAWN BY DCG/JCM
GROUND WATER GRADIENT PLAN		
P91024	Figure 9	

GeoPlexus, Inc.

APPENDIX A

CHAIN-OF-CUSTODY FORMS
AND
ANALYTICAL TEST DATA

GEO PLEXUS, INC.

CHAIN-OF-CUSTODY RECORD

753 North 9th Street, Suite 131
San Jose, California 95112-3130
Phone 408/287-8588 • FAX 408/287-8646

PROJECT NUMBER	PROJECT NAME
P91024-3	Right Away Redy Mix

Send Report Attention of: Jonisue C. Minor

Report Due: / /

Verbal Due: / /

	Sample Number	Date	Time	Comp	Grab	Station Location	Number of Cntnrs	Type of Containers	Type of Analysis: TPHd/BTEX	Condition of Samples	Initial
1	P1-S2	12/27/91	1038			Piez.1 9.5-10.0	1 ea.	6" brass tubes	✓	samples	
2	P1-S3		1045			Piez.1 12.0-12.5			✓	Received on ice	
3	P2-S2		1240			Piez.2 9.5-10.0			✓	chilled in proper	
4	P2-S3		1250			Piez.2 12-12.5			✓	containers.	
5	P3-S2		0830			Piez.3 9.5-10.0			✓		
6	P3-S4		0845			Piez.3 12-12.5			✓		

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time
Jonisue C Minor	12/30/91 1612	Fast Brake	12-30-91 1612

Remarks: Standard Turnaround
Brass tubes covered w/aluminum foil & plastic caps

COMPANY: Geo Plexus, Inc.
ADDRESS: 753 N. 9th St. #131, San Jose, CA 95112
PHONE: (408) 287-8588 FAX: (408) 287-8646

2066

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

MS. JONISUE C. MINOR
GEOPLEXUS, INC.
753 N. 9TH ST. #131
SAN JOSE, CA 95112

Workorder # : 9112270
Date Received : 12/30/91
Project ID : P91024-3
Purchase Order: N/A
Department : GC
Sub-Department: TPH

SAMPLE INFORMATION:

ANAMETRIX SAMPLE ID	CLIENT SAMPLE ID	MATRIX	DATE SAMPLED	METHOD
9112270- 1	P1-S2	SOIL	12/27/91	BTEX
9112270- 2	P1-S3	SOIL	12/27/91	BTEX
9112270- 3	P2-S2	SOIL	12/27/91	BTEX
9112270- 4	P2-S3	SOIL	12/27/91	BTEX
9112270- 5	P3-S2	SOIL	12/27/91	BTEX
9112270- 6	P3-S4	SOIL	12/27/91	BTEX
9112270- 1	P1-S2	SOIL	12/27/91	TPHd
9112270- 2	P1-S3	SOIL	12/27/91	TPHd
9112270- 3	P2-S2	SOIL	12/27/91	TPHd
9112270- 4	P2-S3	SOIL	12/27/91	TPHd
9112270- 5	P3-S2	SOIL	12/27/91	TPHd
9112270- 6	P3-S4	SOIL	12/27/91	TPHd

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

MS. JONISUE C. MINOR
GEOPLEXUS, INC.
753 N. 9TH ST. #131
SAN JOSE, CA 95112

Workorder # : 9112270
Date Received : 12/30/91
Project ID : P91024-3
Purchase Order: N/A
Department : GC
Sub-Department: TPH

QA/QC SUMMARY :

- No QA/QC problems encountered for these samples.

Department Supervisor Date

Chemist 1.3.92 Date

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

Anametrix W.O.: 9112270
Matrix : SOIL
Date Sampled : 12/27/91

Project Number : P91024-3
Date Released : 01/08/92

COMPOUNDS	Reporting (mg/Kg)	Sample I.D.# P1-S2 -01	Sample I.D.# P1-S3 -02	Sample I.D.# P2-S2 -03	Sample I.D.# P2-S3 -04	Sample I.D.# P3-S2 -05
Benzene	0.005	ND	ND	ND	ND	ND
Toluene	0.005	ND	ND	ND	ND	ND
Ethylbenzene	0.005	ND	ND	ND	ND	ND
Total Xylenes	0.005	ND	ND	0.007	0.006	ND
% Surrogate Recovery		125%	121%	74%	102%	89%
Instrument I.D.		HP21	HP21	HP21	HP21	HP21
Date Analyzed		01/02/92	01/02/92	01/02/92	01/02/92	01/02/92
RLMF		1	1	1	1	1

ND - Not detected at or above the practical quantitation limit for the method.
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.

Analyst Date

Supervisor Date

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

Anametrix W.O.: 9112270
Matrix : SOIL
Date Sampled : 12/27/91

Project Number : P91024-3
Date Released : 01/08/92

COMPOUNDS	Reporting (mg/Kg)	Sample I.D.# P3-S4 -06	Sample I.D.# 21B0102A BLANK
Benzene	0.005	ND	ND
Toluene	0.005	ND	ND
Ethylbenzene	0.005	ND	ND
Total Xylenes	0.005	ND	ND
% Surrogate Recovery		96%	114%
Instrument I.D.		HP21	HP21
Date Analyzed		01/02/92	01/02/92
RLMF		1	1

ND - Not detected at or above the practical quantitation limit for the method.
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.

Analyst Date

Supervisor Date

ANALYSIS DATA SHEET - TOTAL PETROLEUM HYDROCARBONS AS DIESEL
ANAMETRIX, INC. (408) 432-8192

Anametrix W.O.: 9112207
Matrix : SOIL
Date Sampled : 12/27/91
Date Extracted: 12/31/91

Project Number : P91024-3
Date Released : 01/08/92
Instrument I.D.: HP23

Anametrix I.D.	Client I.D.	Date Analyzed	Reporting Limit (mg/Kg)	Amount Found (mg/Kg)
9112270-01	P1-S2	01/02/92	10	ND
9112270-02	P1-S3	01/02/92	10	ND
9112270-03	P2-S2	01/02/92	10	ND
9112270-04	P2-S3	01/02/92	10	ND
9112270-05	P3-S2	01/02/92	10	ND
9112270-06	P3-S4	01/02/92	10	ND
DSBL123191	METHOD BLANK	01/02/92	10	ND

Note : Reporting limit is obtained by multiplying the dilution factor times 10 mg/Kg.
ND - Not detected at or above the practical quantitation limit for the method.
TPHd - Total Petroleum Hydrocarbons as diesel is determined by GCFID following sample extraction by EPA Method 3550.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

Analyst Date

Supervisor Date

TOTAL EXTRACTABLE HYDROCARBON MATRIX SPIKE REPORT
EPA METHOD 3550 WITH GC/FID
ANAMETRIX, INC. (408) 432-8192

Sample I.D. : P91024-3 P3-S2
Matrix : SOIL
Date Sampled : 12/27/91
Date Extracted: 12/31/91
Date Analyzed : 01/02/91

Anametrix I.D. : 9112270-05
Analyst : CF
Supervisor : CB
Date Released : 01/08/91
Instrument I.D.: HP 23

COMPOUND	SPIKE AMT. (mg/Kg)	MS (mg/Kg)	%REC MS	MSD (mg/Kg)	%REC MSD	RPD	%REC LIMITS
Diesel	125	110	88%	110	88%	0%	32-143

* Limits established by Anametrix, Inc.

GeoPlexus, Inc. [redacted] San Jose, California 95112-3150 Phone [redacted] 287-85[redacted] X 40[redacted]

PROJECT NUMBER	PROJECT NAME
P91024-3	Right Away Redy Mix

Send Report Attention of:	Report Due	Verbal Due
Jonisue C Minor	/ /	/ /

	Sample Number	Date	Time	Comp	Grab	Station Location	Number of Cntnrs	Type of Containers	Type of Analysis: TPHd	Type of Analysis: BTEX	Condition of Samples	Initial
1	MWA WS1A,B	1/8/92	1015		/	MON WELL A	2ea	40 ml VOA		✓	sample	
2	P3 WS1-A,B,C	↓	1308	Sample		Piezometer 3	3ea.	40 ml VOA		✓	Received cool	
3	P3 WS2-A,B	↓	1310	Sample located		Piezometer 3	2ea	1 ltr amber	✓		proper containers no bubbles.	

Relinquished by:(Signature)	Date/Time	Received by: (Signature)	Date/Time
Jonisue Minor	1/8/92 1944	[illegible]	1/9/92 1044
/	/	/	/
/	/	/	/

Remarks: Standard Turnaround

COMPANY: Geo Plexus Inc
ADDRESS: 753 N 9th St # 131, San Jose 95112
PHONE : 287-8588 FAX : 287 864.

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

MS. JONISUE C. MINOR
GEOPLEXUS, INC.
753 N. 9TH ST. #131
SAN JOSE, CA 95112

Workorder # : 9201041
Date Received : 01/08/92
Project ID : P91024-3
Purchase Order: N/A
Department : GC
Sub-Department: TPH

SAMPLE INFORMATION:

ANAMETRIX SAMPLE ID	CLIENT SAMPLE ID	MATRIX	DATE SAMPLED	METHOD
9201041- 1	MWA WS1A,B	WATER	01/08/92	BTEX
9201041- 2	P3 WS1A,B,C	WATER	01/08/92	BTEX
9201041- 3	P3 WS2A,B	WATER	01/08/92	TPHd

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

MS. JONISUE C. MINOR
GEOPLEXUS, INC.
753 N. 9TH ST. #131
SAN JOSE, CA 95112

Workorder # : 9201041
Date Received : 01/08/92
Project ID : P91024-3
Purchase Order: N/A
Department : GC
Sub-Department: TPH

QA/QC SUMMARY :

- No QA/QC problems encountered for these samples.

Department Supervisor Date

Chemist 1.21.92 Date

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

Anametrix W.O.: 9201041
Matrix : WATER
Date Sampled : 01/08/92

Project Number : P91024-3
Date Released : 01/21/92

COMPOUNDS	Reporting Limit (ug/L)	Sample I.D.# MWA WS1A,B -01	Sample I.D.# P3 WS1A,B,C -02	Sample I.D.# 21B0115E BLANK
Benzene	0.5	ND	ND	ND
Toluene	0.5	0.9	ND	ND
Ethylbenzene	0.5	ND	ND	ND
Total Xylenes	0.5	0.7	ND	ND
% Surrogate Recovery		133%	118%	130%
Instrument I.D.		HP21	HP21	HP21
Date Analyzed		01/15/92	01/15/92	01/15/92
RLMF		1	1	1

ND - Not detected at or above the practical quantitation limit for the method.
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.

Analyst 1.21.92 Date

Supervisor Date

ANALYSIS DATA SHEET - TOTAL PETROLEUM HYDROCARBONS AS DIESEL
ANAMETRIX, INC. (408) 432-8192

Anametrix W.O.: 9201041
Matrix : WATER
Date Sampled : 01/08/92
Date Extracted: 01/10/92

Project Number : P91024-3
Date Released : 01/21/92
Instrument I.D.: HP23

Anametrix I.D.	Client I.D.	Date Analyzed	Reporting Limit (ug/L)	Amount Found (ug/L)
9201041-03	P3 WS2A,B	01/10/92	50	290
DWBL011092	METHOD BLANK	01/10/92	50	ND

Note : Reporting limit is obtained by multiplying the dilution factor times 50ug/L.
ND - Not detected at or above the practical quantitation limit for the method.
TPHd - Total Petroleum Hydrocarbons as diesel is determined by GCFID following sample extraction by EPA Method 3510.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

Analyst 1.21.92 Date

Supervisor Date

TOTAL EXTRACTABLE HYDROCARBON METHOD SPIKE REPORT
EPA METHOD 3510 WITH GC/FID
ANAMETRIX, INC. (408) 432-8192

Sample I.D. : METHOD SPIKE
Matrix : REAGENT WATER
Date Sampled : N/A
Date Extracted: 01/08/92
Date Analyzed : 01/10/92

Anametrix I.D. : SPK010892
Analyst : CF
Supervisor : JC
Date Released : 01/21/92
Instrument I.D.: HP 23

COMPOUND	SPIKE AMT. (ug/L)	MS (ug/L)	%REC MS	MSD (ug/L)	%REC MSD	RPD	%REC LIMITS
Diesel	1250	1100	88%	1100	88%	0%	36-150

* Limits established by Anametrix, Inc.

BTEX MATRIX SPIKE REPORT
EPA METHOD 5030 WITH GC/PID
ANAMETRIX, INC. (408) 432-8192

Sample I.D. : P91024-3 P3 WS1A,B,C
Matrix : WATER
Date Sampled : 01/08/92
Date Analyzed : 01/15/92

Anametrix I.D.: 9201041-02
Analyst : JY
Supervisor : RL
Date Released : 01/23/92
Instrument ID : HP21

COMPOUND	SPIKE AMT. (ug/L)	MS (ug/L)	REC MS	MSD (ug/L)	REC MSD	RPD	%REC LIMITS
Benzene	10.0	9.8	98%	9.6	96%	-2%	46-149
Toluene	10.0	9.6	96%	9.4	94%	-2%	43-146
Ethylbenzene	10.0	9.5	95%	9.4	94%	-1%	51-138
M+P-Xylenes	6.7	6.4	96%	6.3	94%	-2%	39-161
O-Xylene	3.3	3.2	88%	3.2	97%	0%	37-156
P-BFB			131%		139%		53-147%

* Limits established by Anametrix, Inc.