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

ENVIRONMENTAL HEALTH SERVICES
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577
(510) 567-6700
(510) 337-9335 (FAX)

REMEDIAL ACTION COMPLETION CERTIFICATION

StID 1833 - 1025 98th Ave, Oakland, CA
(1-1,000 and 1-2,000 gallon diesel tanks removed in February 11, 1987 and September 19, 1992, respectively)

July 22, 1998

Mr. John Tatum
98th Ave Associates
1025 98th Ave
Oakland, CA 94603

Dear Mr. Tatum:

This letter confirms the completion of site investigation and remedial action for the underground storage tanks formerly located at the above-described location. Thank you for your cooperation throughout this investigation. Your willingness and promptness in responding to our inquiries concerning the former underground storage tanks are greatly appreciated.

Based on information in the above-referenced file 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, Section 2721(e) of the California Code of Regulations.

Please contact our office if you have any questions regarding this matter.

Sincerely,

Mee Ling Tung, Director

cc: Richard Pantages, Chief of Division of Environmental Protection
Chuck Headlee, RWQCB
Dave Deaner, SWRCB
Leroy Griffin, OFD
files-ec (pioneer12)

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

ENVIRONMENTAL HEALTH SERVICES
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577
(510) 567-6700
(510) 337-9335 (FAX)

StID 1833

July 22, 1998

Mr. John Tatum
98th Ave Associates
1025 98th Ave
Oakland, CA 94603

Re: Fuel Leak Site Case Closure for 1025 98th Ave, Oakland, CA 94603

Dear Mr. Tatum:

This letter transmits the enclosed underground storage tank (UST) case closure letter in accordance with Chapter 6.75 (Article 4, Section 25299.37[h]). The State Water Resources Control Board adopted this letter on February 20, 1997. As of March 1, 1997, the Alameda County Environmental Protection Division is required to use this case closure letter for all UST leak sites. We are also transmitting to you the enclosed case closure summary. These documents confirm the completion of the investigation and cleanup of the reported release at the subject site. The subject fuel leak case is closed.

SITE INVESTIGATION AND CLEANUP SUMMARY

Please be advised that the following conditions exist at the site:

- up to 1,900 ppm TPH as diesel and 0.11 ppm benzene exists in soil beneath the site;
- up to 20,000 ppb TPH as diesel and 310 ppb benzene exists in groundwater beneath the site; and,
- a risk management plan has been submitted to address future soil excavation and/or redevelopment of the site.

If you have any questions, please contact me at (510) 567-6762.

eva chu
Hazardous Materials Specialist

enlosures: 1. Case Closure Letter, 2. Case Closure Summary

c: Frank Kliewer, City of Oakland-Planning, 1330 Broadway, 2nd Fl, Oakland, CA 94612
files (pioneer13)

Need to Input

CASE CLOSURE SUMMARY
Leaking Underground Fuel Storage Tank Program

I. AGENCY INFORMATION Date: December 3, 1997

Agency name: **Alameda County-HazMat** Address: **1131 Harbor Bay Pkwy**
City/State/Zip: **Alameda, CA 94502** Phone: **(510) 567-6700**
Responsible staff person: **Eva Chu** Title: **Hazardous Materials Spec.**

II. CASE INFORMATION

Site facility name: **Pioneer Packing**
Site facility address: **1025 98th Ave, Oakland, CA 94603**
RB LUSTIS Case No: **N/A** Local Case No./LOP Case No.: **1833**
URF filing date: SWEEPS No: **N/A**

Responsible Parties:	Addresses:	Phone Numbers:
John Tatum **98th Ave Associates**	**1025 98th Ave** **Oakland, CA 94603**	

Tank No:	Size in gal.:	Contents:	Closed in-place or removed?:	Date:
1	1,000	Diesel	Removed	2/11/87
2	2,000	Diesel	Removed	9/19/92

III. RELEASE AND SITE CHARACTERIZATION INFORMATION

Cause and type of release: **Unknown**
Site characterization complete? **YES**
Date approved by oversight agency: **10/29/97**
Monitoring Wells installed? **Yes** Number: **1**
Proper screened interval? **Yes, 8.5' to 18.5' bgs**
Highest GW depth below ground surface: **6.0'** Lowest depth: **9.5' in PPMW-1**
Flow direction: **West-southwest**
Most sensitive current use: **Commercial**
Are drinking water wells affected? **No** Aquifer name: **Unknown**
Is surface water affected? **No** Nearest affected SW name: **NA**
Off-site beneficial use impacts (addresses/locations): **None**

Report(s) on file? **YES** Where is report(s) filed? **Alameda County**
1131 Harbor Bay Pkwy
Alameda, CA 94502

Treatment and Disposal of Affected Material:

Material	Amount (include units)	Action (Treatment or Disposal w/destination)	Date
Tank	2 USTs	Disposed by H&H, San Francisco	2/87 & 9/92
Soil	Unknown	Unknown	
Rinseate	100 gal.	Disposed by Petroleum Recycling in Patterson, CA	9/18/92

Maximum Documented Contaminant Concentrations - - Before and After Cleanup

Contaminant	Soil (ppm) Before[1]	Soil (ppm) After[2]	Water (ppb) Before[3]	Water (ppb) After[4]
TPH (Diesel)	1,500	1,900	20,000	130
Benzene	ND	0.11	310	ND
Toluene	ND	0.12	ND	ND
Ethylbenzene	NA	0.15	ND	ND
Xylenes	ND	0.58	0.86	ND
MtBE	NA	NA	NA	ND

NOTE: 1 maximum concentrations from 1K diesel UST pit at time of removal, 2/87
2 maximum concentrations from 2K diesel UST pit after overexcavation, 10/92
3 grab water sample from exploratory borings, 11/93
4 most recent groundwater sample from well PPMW-1, 1/97

Comments (Depth of Remediation, etc.):

See Section VII, Additional Comments, etc...

IV. CLOSURE

Does completed corrective action protect existing beneficial uses per the Regional Board Basin Plan? _____
Does completed corrective action protect potential beneficial uses per the Regional Board Basin Plan? _____
Does corrective action protect public health for current land use? **YES**
Site management requirements: **A site safety plan must be prepared for construction workers in the event excavation/trenching is proposed in the vicinity of residual soil and groundwater contamination.**
Should corrective action be reviewed if land use changes? **YES**
Monitoring wells Decommissioned: **No, pending site closure**
Number Decommissioned: **0** Number Retained: **1**
List enforcement actions taken:

List enforcement actions rescinded:

V. LOCAL AGENCY REPRESENTATIVE DATA

Name: **Eva Chu** Title: **Haz Mat Specialist**

Signature: [signature] Date: 12/19/97

Reviewed by

Name: **Brian Oliva** Title: **Haz Mat Specialist**

Signature: [signature] Date: 12-9-97

Name: **Thomas Peacock** Title: **Supervisor**

Signature: [signature] Date: 12-19-97

VI. RWQCB NOTIFICATION

Date Submitted to RB: 12/29/97 RB Response: Concur

RWQCB Staff Name: ~~Kevin Graves~~ Stephen Hill Title: ~~AWRCB~~ ES II 97

Signature: [signature] Date: 1/20/98

VII. ADDITIONAL COMMENTS, DATA, ETC.

In February 1987 a 1K gallon diesel UST was removed by Paradiso Construction. Groundwater entered the pit at a depth of ~10.5' to 11' bgs. A sidewall soil sample (A1) was collected at ~6" above the standing water level and analyzed for TPHd and BTX. Up to 1,500ppm TPHd and ND levels of BTX were identified. The pit was overexcavated to a depth of 15'bgs and soil sample E1 was collected from the sidewall (~14' bgs), ~6" above groundwater level. Only 16ppm TPHd was identified from E1. (See Fig 1, 2)

On September 19, 1992 a 2K gallon diesel UST was removed by Decon. Two soil samples (S-1 and S-2) were collected and analyzed for TPHd and BTEX. Trace levels of BTEX were identified. TPHd results were not available for review by this office. However, stained soil was noted in the pit. Additional overexcavation was performed in October and November 1992. Confirmatory soil samples (X1 through X10; OX-1 through OX-3) were collected and analyzed for TPHd and BTEX. The highest benzene concentration was from sample X-4 at 0.11ppm. And the highest TPHd concentration was from sample X-1 at 1,900 ppm. (See Fig 2, 3; Table 1, 2, and 3)

To delineate the extent of soil and groundwater contamination, three series of exploratory borings were advanced in the vicinity of the former 2K diesel UST. Each series of borings were advanced further west and north of the pit because hydrocarbon contamination continued to be identified. Borings EB1, EB2, EB3, and MW-1 were advanced in August 1992 where TPHd

concentrations in soil ranged from 110 to 880 ppm; borings EB-4 through EB-8 were drilled in November 1993 where TPHd levels in soil ranged from ND to 710ppm, and TPHd in groundwater ranged from 340 to 20,000ppb and benzene levels ranged from 230 to 310ppb; and, borings EB-9 through EB-15 were advanced in January 1997 where TPHd concentration in soil ranged from ND to 23ppm and TPHd in groundwater ranged from ND to 79ppb. (See Fig 4, 5, 6; Table 4, 5)

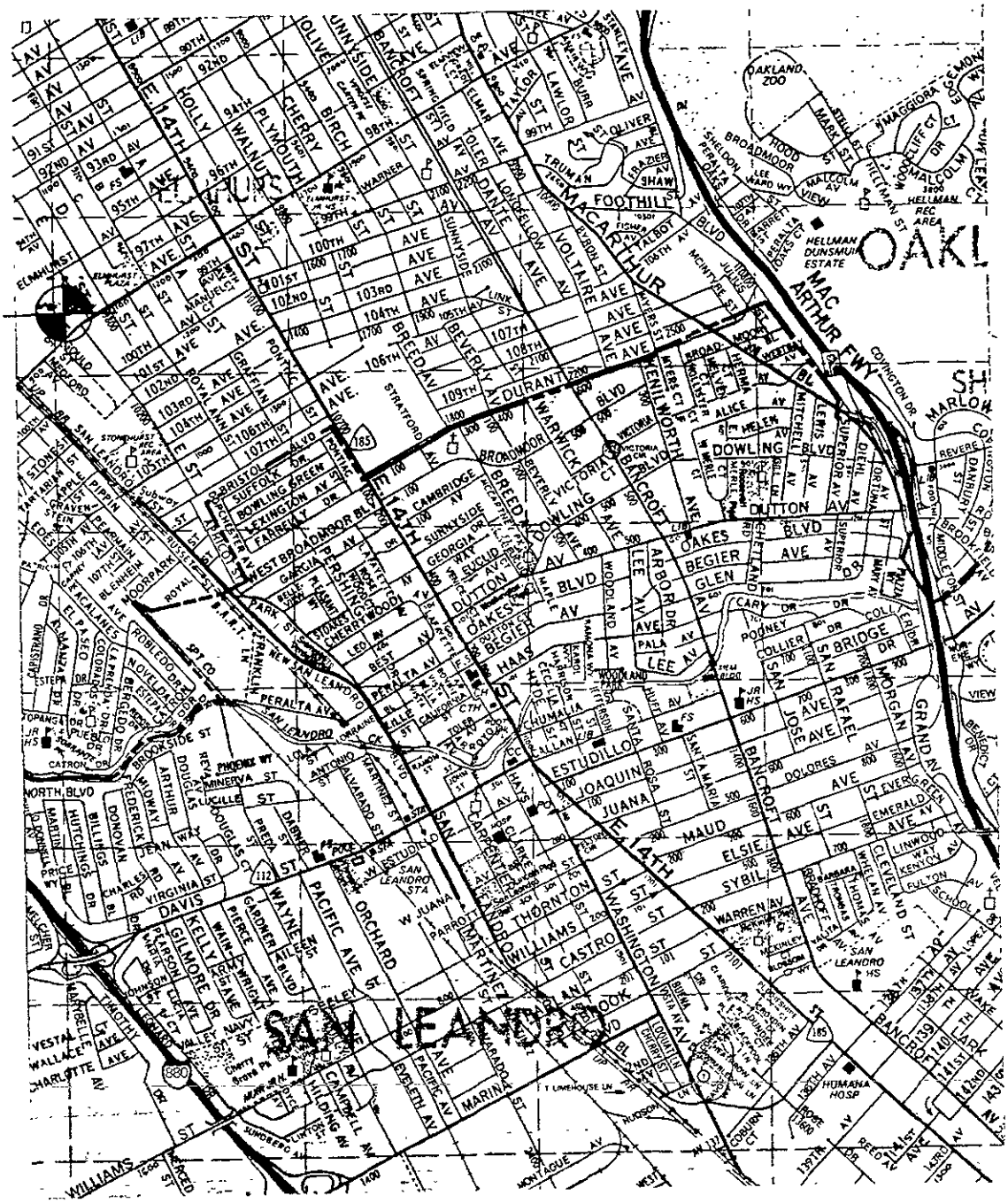
It appears soil contamination is limited to the immediate vicinity of the former USTs (at ~20' to 30' from the edge of the former excavation) and at a depth of ~8' to 12'bgs. Groundwater from well MW-1 has been sampled from 9/92 to 1/97. Low levels of TPHd (up to 380ppb) and no BTEX or MTBE have been detected (see Table 6). Higher levels of TPHd (up to 20,000ppb) and benzene (310ppb) have been identified in borings advanced ~15' north of the former tank excavation. The plume does not appear to be migrating because soil and water samples collected from borings located ~30' to 40' from the former tank excavation did not contain elevated TPHd or BTEX.

Under current use scenario residual diesel and benzene in soil and groundwater should not pose a risk to human health.

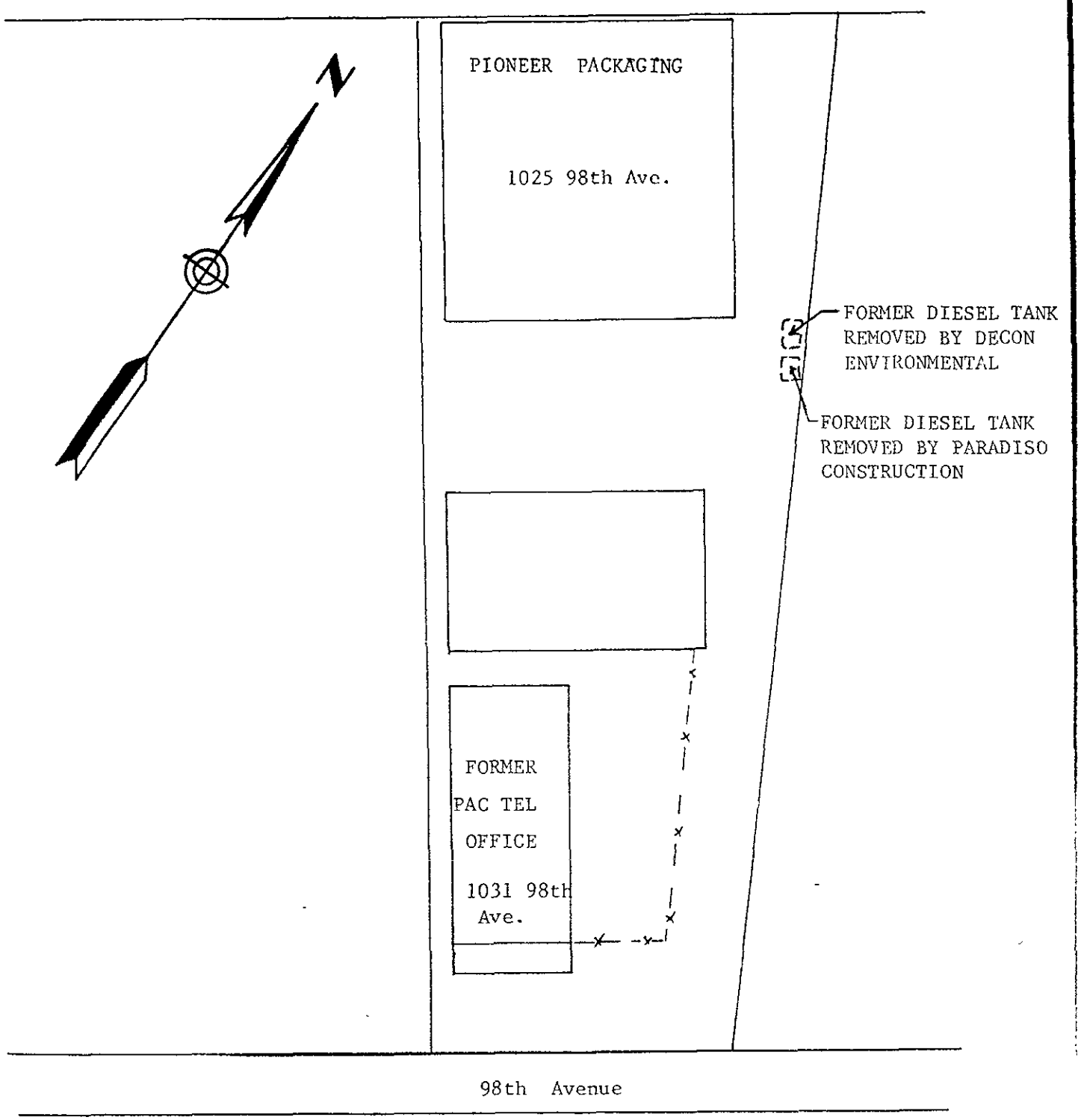
In summary, case closure is recommended because:

- the leak and ongoing sources have been removed;
- the site has been adequately characterized;
- the dissolved plume is not migrating;
- no water wells, surface water, or other sensitive receptors are likely to be impacted; and,
- the site presents no significant risk to human health or the environment.

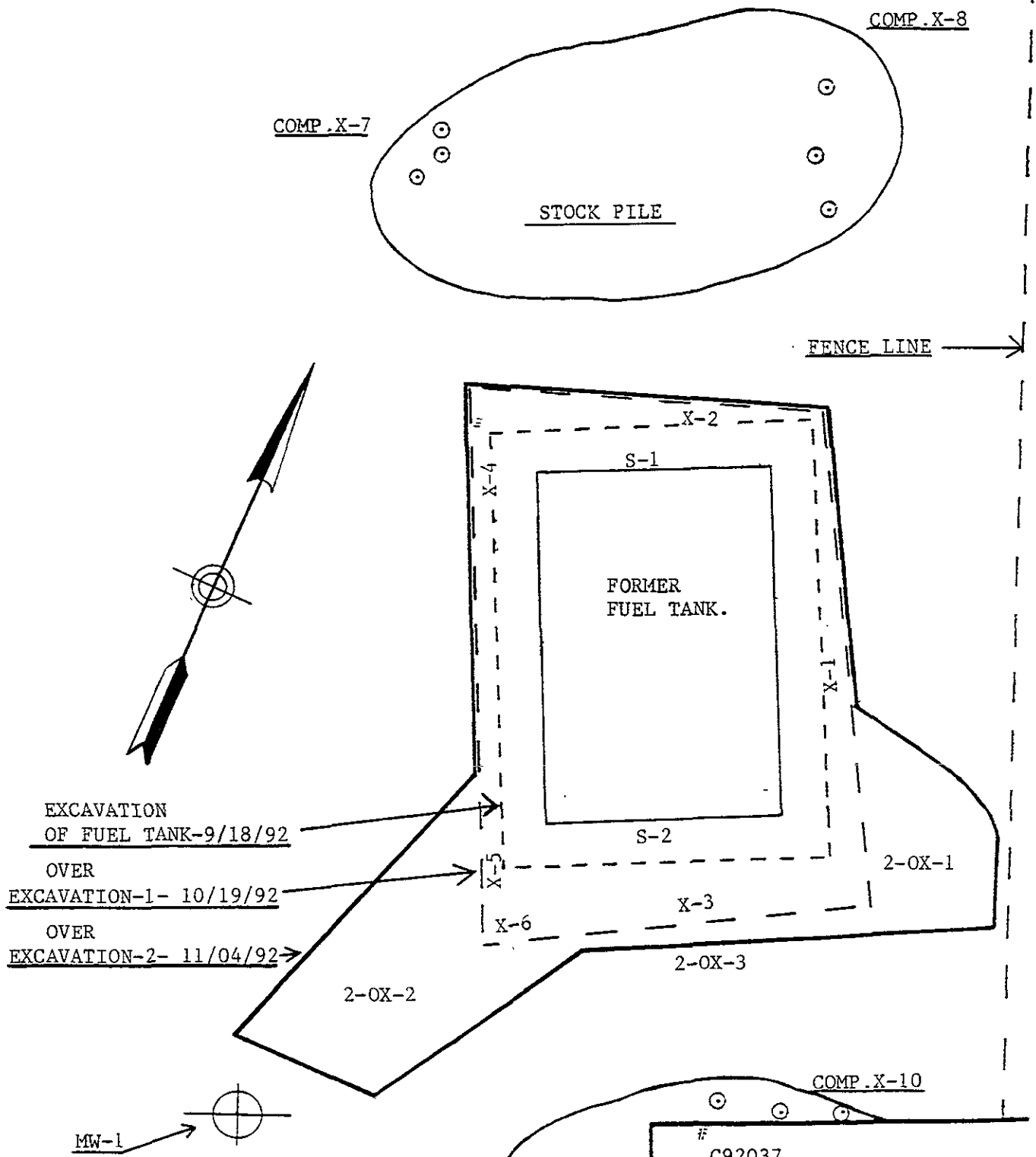
PROJECT SITE



PIONEER PACKAGING SITE		
DATE 8/21/92	SCALE N/A	DRAWN BY dcg
LOCATION MAP		
	Figure 1	



PIONEER PACKING SITE		
DATE 9/30/92	SCALE 1"=100'	DRAWN BY dcg
SITE PLAN		
	FIGURE 2	



# C92037		
DATE 11/30/92	SCALE 1"=5'	DRAWN BY twf
Pioneer Packing (1025)		
		Figure # 3

GeoPlexus, Inc.

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

CERTIFICATE OF ANALYSIS

LABORATORY NO.: 55568
CLIENT: DECON ENVIRONMENTAL SERVICES
CLIENT JOB NO.: PIONEER PACKING

DATE RECEIVED:09/21/92
DATE REPORTED:09/28/92

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

LAB #	Sample Identification	Concentration(mg/kg) Benzene	Toluene	Ethyl Benzene	Xylenes
1	C-1,2,3,4 COMP	ND<.003	0.007	0.008	0.090
2	S1	ND<.003	0.13	0.40	0.86
3	S2	ND<.030	ND<.030	ND<.030	0.55

mg/kg - parts per million (ppm)

Method Detection Limit in Soil: 0.003 mg/kg

QAQC Summary:

Daily Standard run at 20 ug/L: RPD = <15%
MS/MSD Average Recovery = 90%: Duplicate RPD = 2%

Richard Srna, Ph.D.
Laboratory Manager

Table 1

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

CERTIFICATE OF ANALYSIS

LABORATORY NO.: 55683
CLIENT: DECON ENVIRONMENTAL SERVICES
CLIENT JOB NO.: C92037

DATE RECEIVED: 10/20/92
DATE REPORTED: 10/28/92

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

LAB #	Sample Identification	Concentration (mg/kg) Diesel Range
1	X1	1900
2	X2	260
3	X3	ND<10
4	X4	930
5	X5	1600
6	X6	ND<10
7	X7	ND<10
8	X8	24
9	X9	740
10	X10	920

mg/kg - parts per million (ppm)

Minimum Detection Limit for Diesel in Soil: 10mg/kg

QAQC Summary:

Daily Standard run at 200mg/L: %DIFF Diesel = <15%
MS/MSD Average Recovery = 94%: Duplicate RPD = 6%

Richard Srna, Ph.D.

Cecilia G. Joaquin (for)
Laboratory Director

Table 2

Superior Precision Analytical, Inc.
1555 Burke, Unit I • San Francisco, California 94124 • (415) 647 7081 / fax (415) 821-7123

CERTIFICATE OF ANALYSIS

LABORATORY NO.: 55683
CLIENT: DECON ENVIRONMENTAL SERVICES
CLIENT JOB NO.: C92037

DATE RECEIVED:10/20/92
DATE REPORTED:10/28/92

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

LAB #	Sample Identification		Concentration(mg/kg) Benzene	Toluene	Ethyl Benzene	Xylenes
		depth of sample				
1	X1	7-8'	ND<0.03	ND<0.03	0.058	0.34
2	X2	8-9	ND<.003	0.008	ND<.003	0.012
3	X3	7-8	0.006	0.015	ND<.003	0.005
4	X4	9-10'	0.11	0.12	0.15	0.41
5	X5	9-10'	ND<0.06	ND<0.06	ND<0.06	0.58
6	X6	13-14'	ND<.003	ND<.003	ND<.003	ND<.003
7	X7		0.004	0.006	ND<.003	ND<.003
8	X8	Stockpile	0.004	0.011	0.003	0.14
9	X9		ND<0.03	ND<0.03	ND<0.03	0.31
10	X10		ND<.015	ND<.015	ND<.015	0.040

mg/kg - parts per million (ppm)

Method Detection Limit in Soil: 0.003 mg/kg

QAQC Summary:

Daily Standard run at 20 ug/L: RPD = <15%
MS/MSD Average Recovery = 98%: Duplicate RPD = 5%

Richard Srna, Ph.D.

Cecilia S. Jaquinn (for)
Laboratory Manager

Cont Table 2

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

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

LABORATORY NO.: 55728 DATE RECEIVED: 11/05/92
CLIENT: DECON ENVIRONMENTAL SERVICES DATE REPORTED: 11/09/92
CLIENT JOB NO.: C92037

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

LAB #	Sample Identification	Concentration (mg/kg) Diesel Range
1	2-OX-1	45
2	2-OX-2	12
3	2-OX-3	ND<10

mg/kg - parts per million (ppm)

Minimum Detection Limit for Diesel in Soil: 10mg/kg

QAQC Summary:

Daily Standard run at 200mg/L: %DIFF Diesel = <15%
MS/MSD Average Recovery = 85%: Duplicate RPD = 11%

Richard Srna, Ph.D.

Cecilia G. Jaramillo (for)
Laboratory Director

Table 3

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

CERTIFICATE OF ANALYSIS

LABORATORY NO.: 55728
CLIENT: DECON ENVIRONMENTAL SERVICES
CLIENT JOB NO.: C92037

DATE RECEIVED:11/05/92
DATE REPORTED:11/09/92

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

LAB #	Sample Identification	Concentration (mg/kg) Benzene	Toluene	Ethyl Benzene	Xylenes
1	2-OX-1	ND<.003	ND<.003	ND<.003	0.018
2	2-OX-2	ND<.003	ND<.003	ND<.003	0.007
3	2-OX-3	ND<.003	ND<.003	ND<.003	ND<.003

depth of sample > 12'

mg/kg - parts per million (ppm)

Method Detection Limit in Soil: 0.003 mg/kg

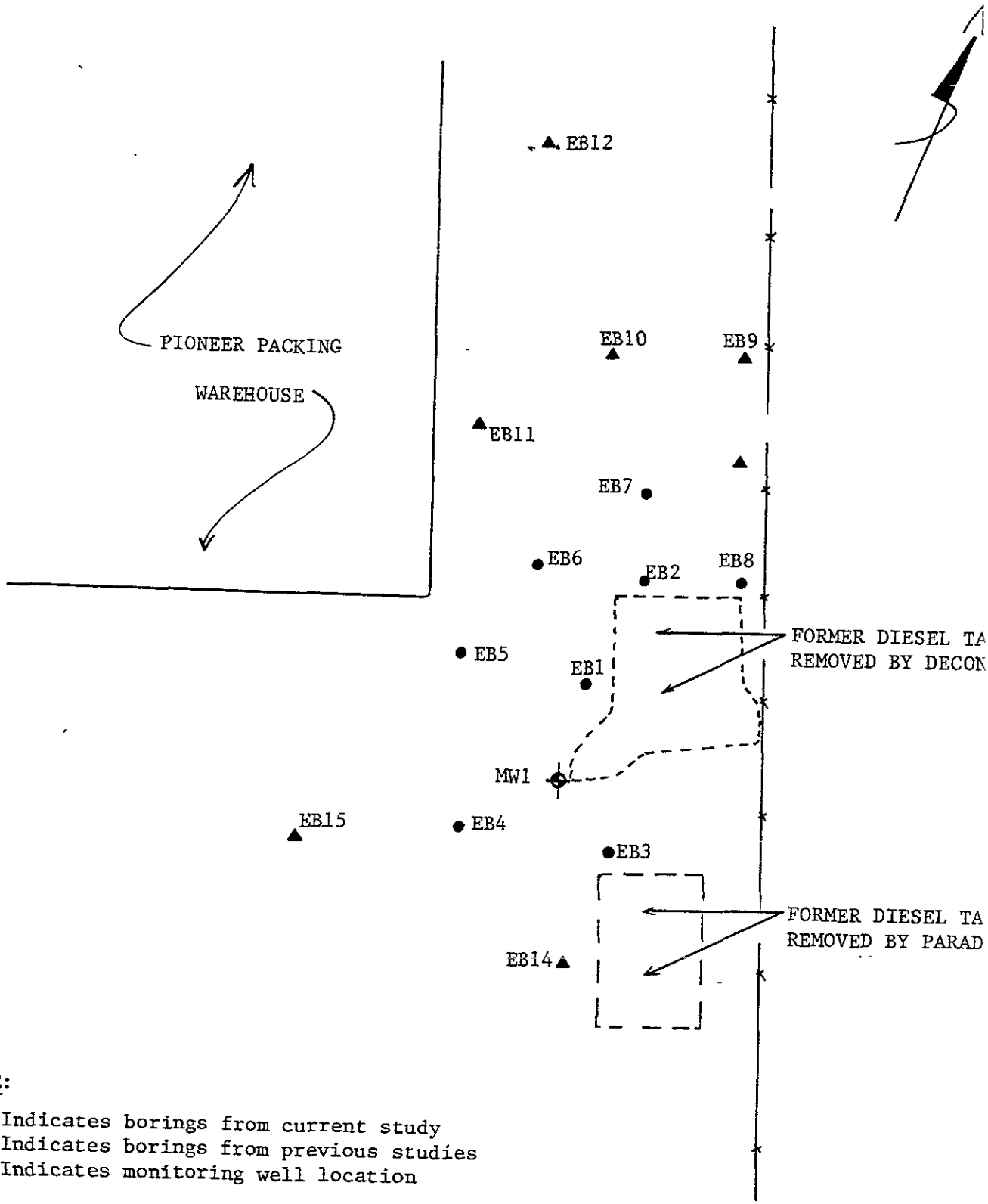
QAQC Summary:

Daily Standard run at 20 ug/L: RPD = <15%
MS/MSD Average Recovery = 101%: Duplicate RPD = 13%

Richard Srna, Ph.D.

Cecilia G Jauregui (for)
Laboratory Manager

cont. Table 3

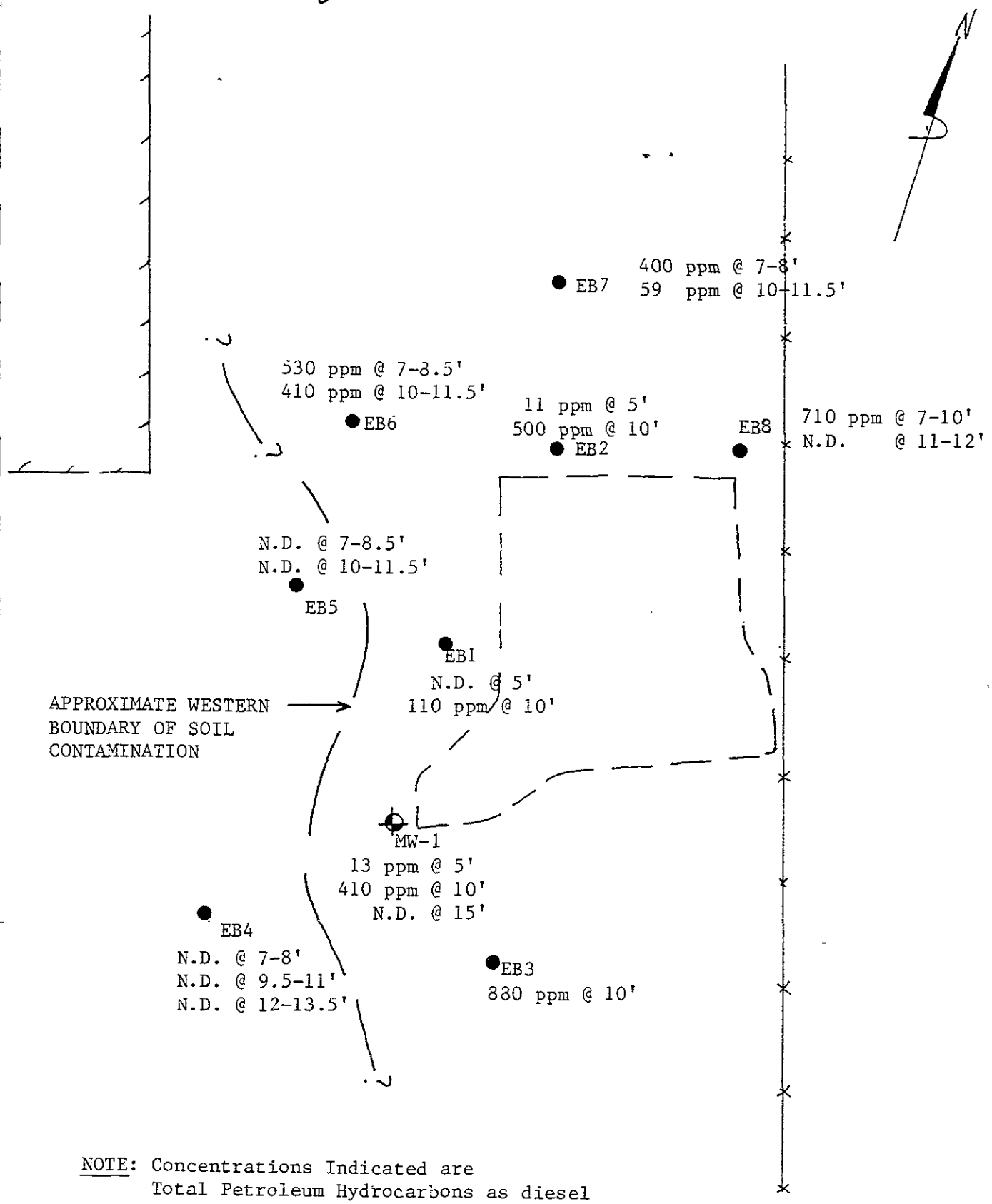


NOTE:

- ▲ Indicates borings from current study
- ● Indicates borings from previous studies
- ⌖ Indicates monitoring well location

PIONEER PACKING		
DATE 1/30/97	SCALE 1"=20'	DRAWN BY dcg
BORING LOCATION PLAN		
	Figure 4	

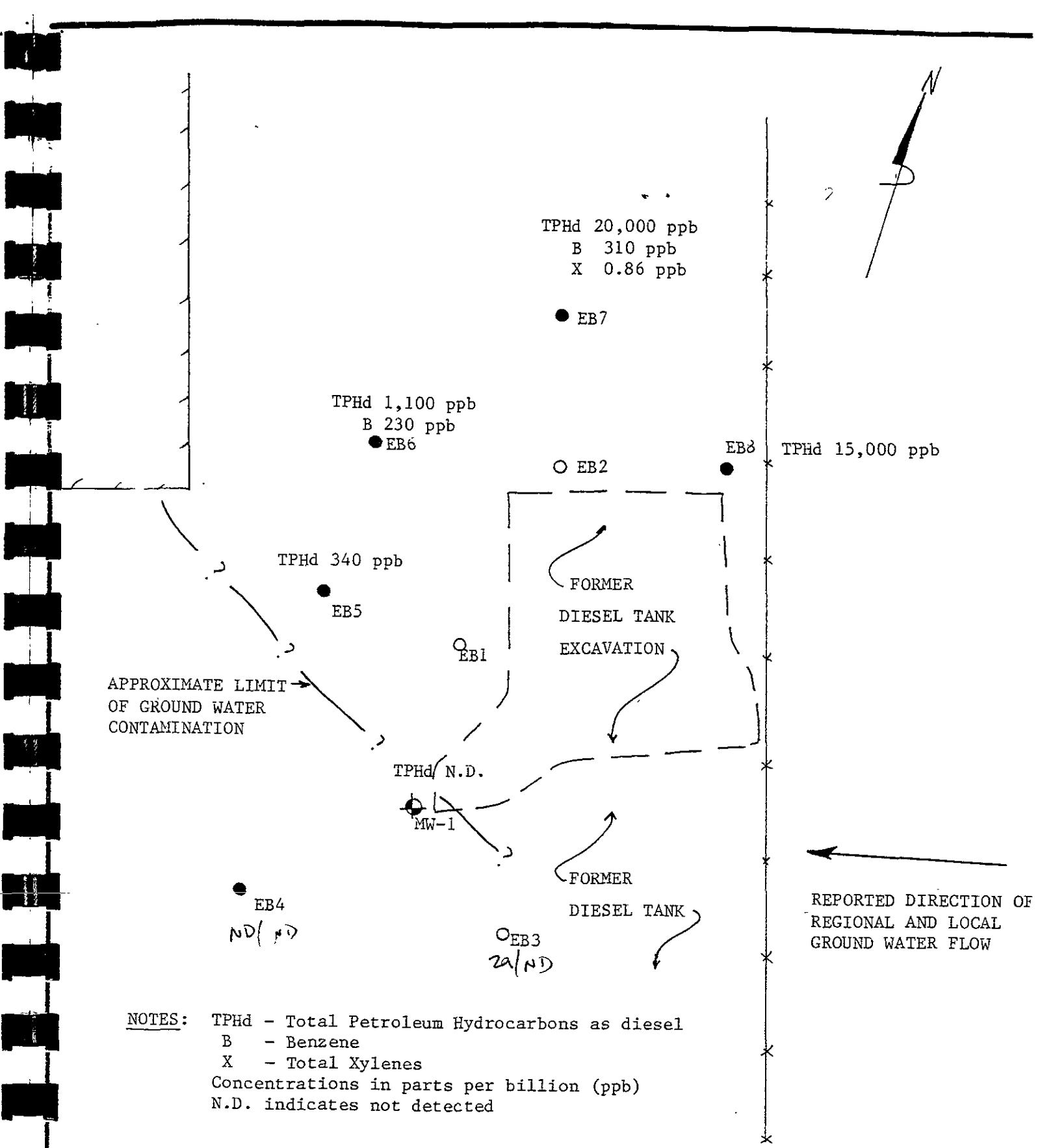
GeoPlexus, Inc.



NOTE: Concentrations Indicated are
Total Petroleum Hydrocarbons as diesel
Depth is below ground surface

PIONEER PACKING		
DATE 11-6-93	SCALE 1"=10'	DRAWN BY dcg
SOIL CONCNETRATION PLAN		
	Figure 5	

GeoPlexus, Inc.



NOTES: TPHd - Total Petroleum Hydrocarbons as diesel
B - Benzene
X - Total Xylenes
Concentrations in parts per billion (ppb)
N.D. indicates not detected

PIONEER PACKING		
DATE 11-6-93	SCALE 1"=10'	DRAWN BY dcg
GROUND WATER CONCNETRATION		
		Figure 6

GeoPlexus, Inc.

Water samples for analytical testing were obtained through the use of a teflon bailer and were collected in sterilized glass vials with Teflon lined screw caps. The samples were immediately sealed in the vials and properly labeled including: the date, time, sample location, project number, and indication of any preservatives added to the sample. 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 McCampbell Analytical, Inc., a State of California certified laboratory. Analytical testing was scheduled and performed in accordance with the State of California, Regional Water Quality Control Board and Alameda County Department of Environmental Health Guidelines. The samples were tested for Total Petroleum Hydrocarbons as diesel by Method GCFID 3550/8015, Total Petroleum Hydrocarbons as gasoline by Method GCFID 5030/8015, and Volatile Aromatic Compounds (BTEX and MTBE) by EPA Method 8020/5030. The Chain-of-Custody Form and analytical test data are attached in Appendix B.

The analytical test data for the geo-probe soil and ground water samples are summarized on Tables 1 and 2, respectfully. Table 3 summarizes the current analytical test results for the monitoring well samples, along with the results of the previous analytical testing.

TABLE 4
GEO-PROBE SOIL ANALYTICAL TEST DATA

Sample	Total Petroleum Hydrocarbons	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE
EB9-S1, 10-10.5'	ND/ND	ND	ND	ND	ND	ND
EB9-S2, 15-15.5'	ND/ND	ND	ND	ND	ND	ND
EB10-S2, 15-15.5'	ND/ND	ND	ND	ND	ND	ND
EB10-S3, 18.5-19'	ND/ND	ND	ND	ND	ND	ND
EB11-S1, 9.5-10'	ND/ND	ND	ND	ND	ND	ND
EB11-S2, 14.5-15'	ND/ND	ND	ND	ND	ND	ND
EB11-S3, 18.5-19'	ND/ND	ND	ND	ND	ND	ND
EB12-S1, 10.5-11'	ND/ND	ND	ND	ND	ND	ND
EB12-S2, 15.5-16'	ND/ND	ND	ND	ND	ND	ND
EB13-S1, 10.5-11'	ND/ND	ND	ND	ND	ND	ND
EB13-S2, 15.5-16'	ND/ND	ND	ND	ND	ND	ND
EB13-S3, 18.5-19'	ND/ND	ND	ND	ND	ND	ND
EB14-S1, 9.5-10'	1.5/23	ND	ND	ND	ND	ND
EB14-S2, 13.5-14'	ND/ND	ND	ND	ND	ND	ND

Notes: Total Petroleum Hydrocarbons listed as TPHgasoline/TPHdiesel
Concentrations reported as Parts Per Million (mg/kg).
ND indicates that concentrations below detection limit.

TABLE 5
GEO-PROBE GROUND WATER ANALYTICAL TEST DATA

Sample	Total Petroleum Hydrocarbons	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE
EB9-WS1	ND/ND	ND	ND	ND	ND	ND
EB10-WS1	ND/ND	ND	ND	ND	ND	ND
EB11-WS1	ND/ND	ND	ND	ND	ND	ND
EB12-WS1	ND/ND	ND	ND	ND	ND	ND
EB13-WS1	ND/ND	ND	ND	ND	ND	ND
EB15-WS1	ND/79	ND	ND	ND	ND	ND

Notes: Total Petroleum Hydrocarbons listed as TPHgasoline/TPHdiesel
Concentrations reported as Parts Per Billion (ug/l).
ND indicates that concentrations below detection limit.

TABLE 6
SUMMARY OF GROUND WATER ANALYTICAL TEST DATA

Date Sample	Total Petroleum Hydrocarbons	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE
9-09-92	ND	ND	ND	ND	ND	
3-02-93	380	ND	ND	ND	ND	
6-21-93	51	ND	ND	ND	ND	
9-13-93	ND	ND	ND	ND	ND	
12-21-93	61	ND	ND	ND	ND	
8-17-94	97	ND	ND	ND	ND	
1-20-97	130	ND	ND	ND	ND	ND

Note: ND - indicates constituent not detected.
Total Petroleum Hydrocarbons reported as diesel in ppb.

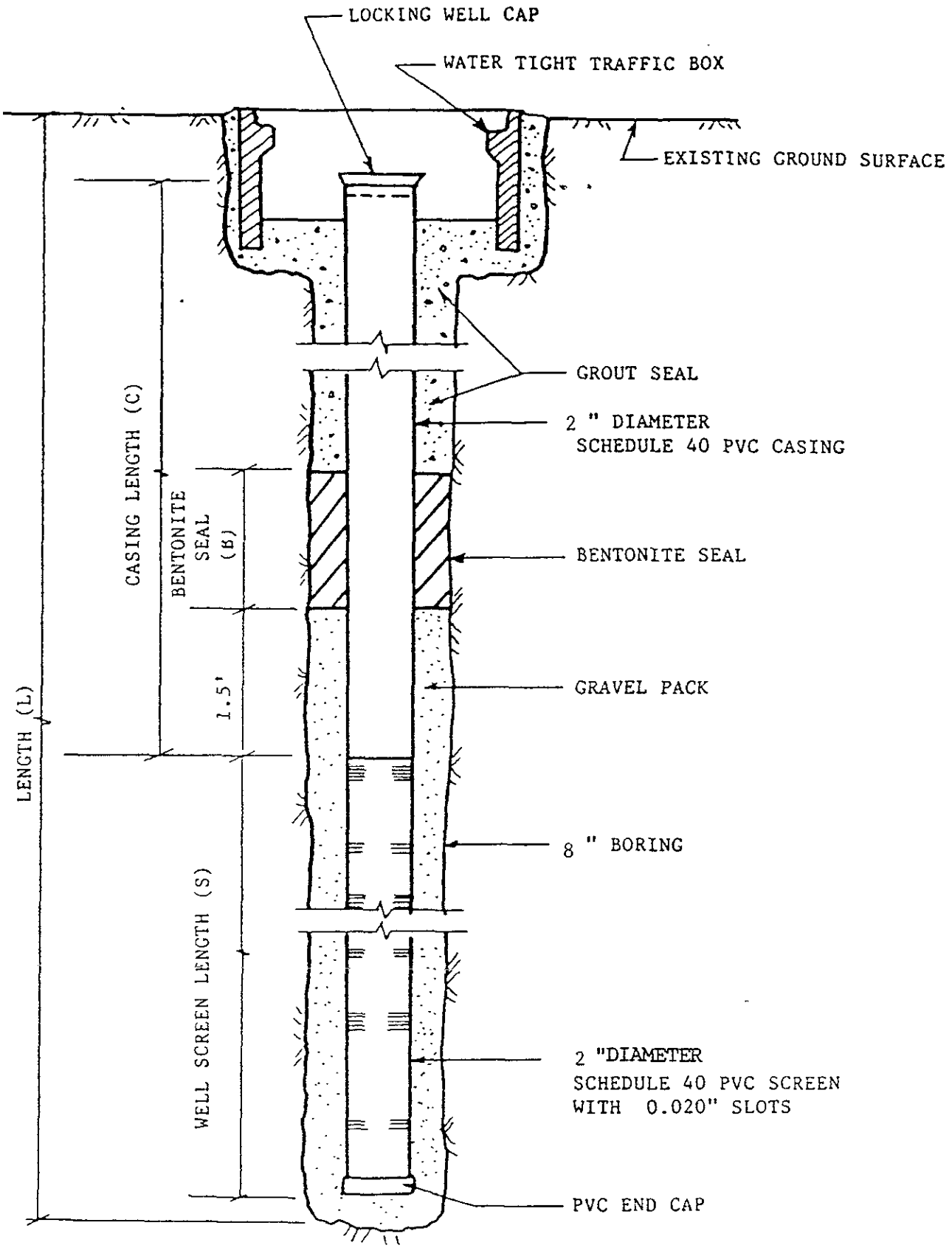
SUBSURFACE DATA LOG

LOG No. MW-1 DATE: 8/27/92
LOCATION: Pioneer Packing-1025 98th Ave
EQUIPMENT:
PROJECT No.

DRY DENSITY (lbs cu. ft.)	MOISTURE (% of dry wt.)	"N" VALUE (blows/ft.)	OVM READING (ppm)	SAMPLE TYPE	DEPTH (ft)	LOG	U.S.C.	
								SANDY GRAVEL (Aggregate Base)
								SILTY CLAY, dark-gray, moist, stiff
		18		S1	5			SILTY CLAY, medium brown, moist, stiff slight diesel odor in S-1
								SILTY SAND, green, moist, loose, strong diesel odor from cuttings
		8		S2	10			SILTY CLAY, medium brown,firm, slight diesel odor in S-2
		10		S3	15			no odor from S-3, wet, firm
		20		S4				SILTY SAND, medium brown, wet, dense
					20			Bottom of Boring 19.0 feet. Ground water encountered at 10 feet at time of drilling. 2-inch monitoring well installed.

Please see [illegible]

FIGURE 7



L= 18.5'
S= 10.0'
C= 8.5'
B= 1.0'

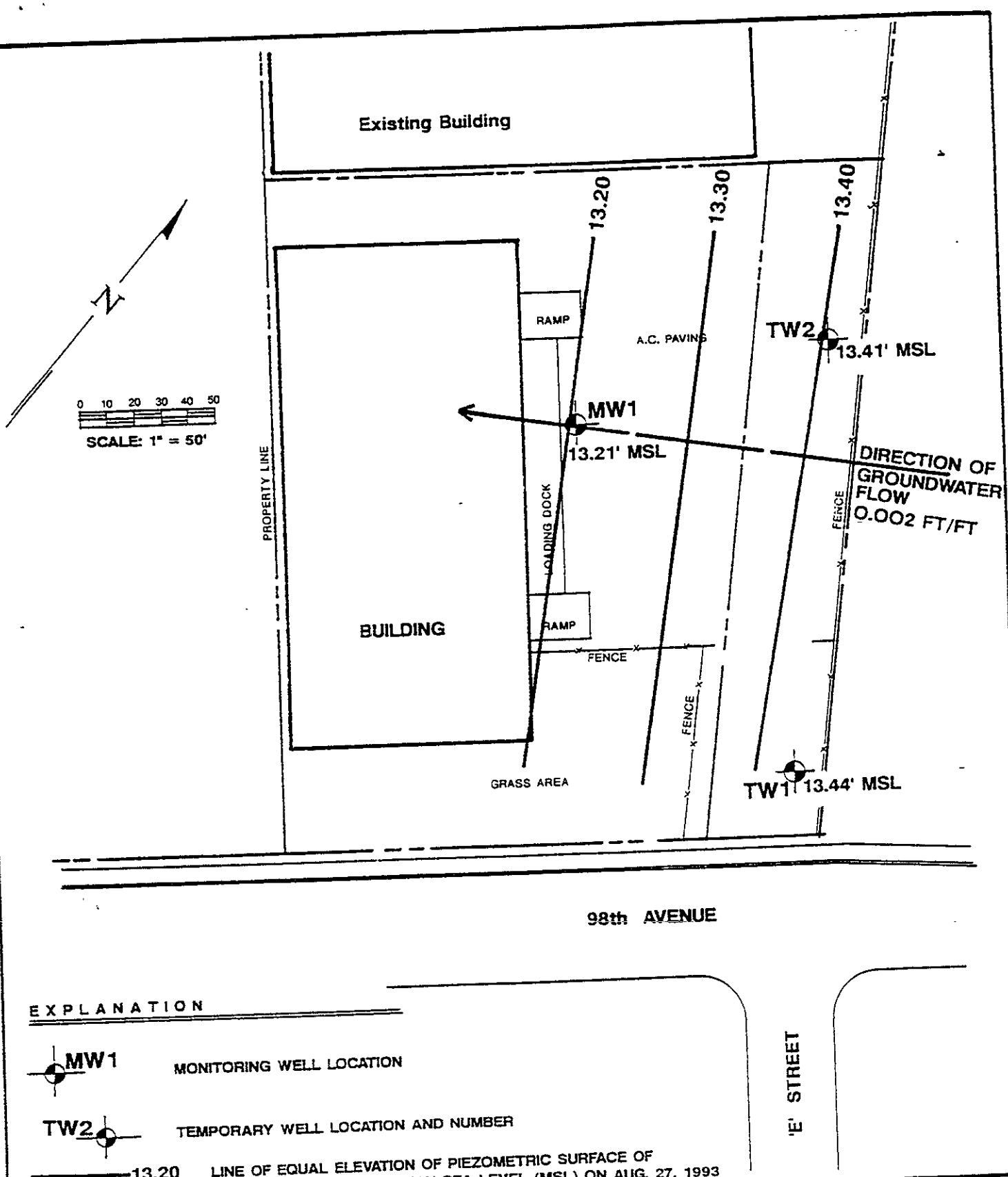
MONITORING WELL MW-1

DATE	SCALE	DRAWN BY
8/27/92	n/a	dcg

1025 98th Avenue Site

GeoPlexus, Inc.

Figure 8



EXPLANATION

MW1 MONITORING WELL LOCATION

TW2 TEMPORARY WELL LOCATION AND NUMBER

13.20 LINE OF EQUAL ELEVATION OF PIEZOMETRIC SURFACE OF GROUNDWATER ABOVE MEAN SEA LEVEL (MSL) ON AUG. 27, 1993

ATEC Environmental Consultants
Sacramento • CA

GROUNDWATER GRADIENT MAP

PIONEER PACKING (Formerly PACIFIC BELL)
1031 98th Avenue, Oakland, California

APPROVED BY	DRAWN BY	DATE	PROJECT NO.	FIGURE 3
	ECH	9/14/93	59-07-9301052	