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

RAFAT A. SHAHID, DIRECTOR

DEPARTMENT OF ENVIRONMENTAL HEALTH
1131 Harbor Bay Parkway
Alameda, CA 94502-6577
(510) 567-6777

December 1, 1995

REMEDIAL ACTION COMPLETION CERTIFICATION

Mr. Robert Fitzmaurice
J.H. Fitzmaurice Inc.
2857 Hannah Street
Oakland, California 94608

RE: J.H. Fitzmaurice, Inc.
2857 Hannah Street, Oakland, California 94608
STID # 3248

Dear Mr. Fitzmaurice:

This letter confirms the completion of site investigation and remedial action for the four underground storage tanks (285 gallon waste oil, 1000 gallon gasoline, 8000 gallon gasoline and 8000 gallon diesel) removed on December 21, 1989 and June 17, 1991 at the above described location. Enclosed is the Case Closure Summary for the referenced site for your records.

Based upon the available information, including the current land use, and with the provision that the information provided to this agency was accurate and representative of site conditions, no further action related to the four underground storage tanks release is required.

This notice is issued pursuant to a regulation contained in Title 23, California Code of Regulations, Division 3, Chapter 16, Section 2721 (e). If a change in the present land use is proposed, the property owner must promptly notify this agency.

Please contact Susan L. Hugo at (510) 567-6780 if you have any questions regarding this matter.

Sincerely,

Jun Makishima

Jun Makishima, Interim Director

Enclosure

c: Gordon Coleman, Acting Chief, Environmental Protection - files
Kevin Graves, RWQCB
Mike Harper, SWRCB (with enclosure)

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

RAFAT A. SHAHID, DIRECTOR

DEPARTMENT OF ENVIRONMENTAL HEALTH
State Water Resources Control Board
Division of Clean Water Programs
UST Local Oversight Program
1131 Harbor Bay Parkway
Alameda, CA 94502-6577
(510) 567-6700

August 15, 1995
STID # 3248

Mr. Robert Fitzmaurice
J.H. Fitzmaurice, Inc.
2857 Hannah Street
Oakland, California 94608

RE: Case Closure - J.H. Fitzmaurice
2857 Hannah Street, Oakland, CA 94608

Dear Mr. Fitzmaurice:

The Alameda County Department of Environmental Health, Environmental Protection Division has recently received concurrence from the Regional Water Quality Control Board regarding this office determination that no further action is required concerning the removal of four underground storage tanks (1 - 285 gallon waste oil/gasoline, 1 - 1000 gallon gasoline, 1 - 8000 gallon gasoline and 1 - 8000 gallon diesel) at the referenced site.

Please be advised that the three groundwater monitoring wells (MW-1, MW-2 and MW-3) at the site must be properly decommissioned before our agency will issue the **Remedial Action Completion Certification** (closure letter) for the subject site. A report must be submitted documenting the abandonment of the three monitoring wells.

Additionally, you will need to notify this office 72 hours in advance of the well abandonment field activities so I can schedule a site visit.

If you have any questions concerning this letter, please contact me at (510) 567- 6780.

Sincerely,

Susan L. Hugo
Senior Hazardous Materials Specialist

cc: Jun Makishima, Interim Director, Environmental Health
Leroy Todd, Acting Chief, Environmental Protection Division / files
Kevin Graves, San Francisco Bay RWQCB

CASE CLOSURE SUMMARY
Leaking Underground Fuel Storage Tank Program

I. AGENCY INFORMATION

Date: July 18, 1995
Agency name: Alameda County-HazMat
Address: 1131 Harbor Bay Parkway
City/State/Zip: Alameda, CA 94502
Phone: (510) 567-6700
Responsible staff person: Susan Hugo
Title: Sr. Hazardous Materials Spec.

II. CASE INFORMATION

Site facility name: J.H. Fitzmaurice, Inc.
Site facility address: 2857 Hannah Street, Oakland, CA 94608
RB LUSTIS Case No: N/A
Local Case No./LOP Case No.: 3248
URF filing date: 9/26/91
SWEEPS No: N/A

Responsible Parties:	Addresses:	Phone Numbers:
Mr. Robert Fitzmaurice	2857 Hannah Street Oakland, CA 94608	(510) 444-7561

Tank No:	Size in gal.:	Contents:	Closed in-place or removed?:	Date:
1	285	Waste oil/gasoline	Removed	12/21/89
2	1000	Gasoline	Removed	12/21/89
3	8000	Gasoline	Removed	6/17/91
4	8000	Diesel	Removed	6/17/91

III. RELEASE AND SITE CHARACTERIZATION INFORMATION

Cause and type of release: Tank leaked, holes found in one tank (575 gal.)
Site characterization complete? YES
Date approved by oversight agency: 12/9/91
Monitoring Wells installed? YES Number: Three (3)
Proper screened interval? YES
Highest GW depth below ground surface: 5.07 ft. Lowest depth: 11.57 ft.
Flow direction: South
Most sensitive current use: Mixed commercial and industrial
Are drinking water wells affected? NO Aquifer name: NA
Is surface water affected? NO Nearest affected SW name: NA
Off-site beneficial use impacts (addresses/locations): NA
Report(s) on file? YES Where is report(s) filed? Alameda County
1131 Harbor Bay Parkway, Alameda, CA 94502-6577

Treatment and Disposal of Affected Material:

Material	Amount (include units)	Action (Treatment of Disposal w/destination)	Date
Tank	1-285 gallon &	H&H - 220 China Basin Street	12/21/89
	1-1000 gallon	San Francisco, CA	12/21/89
	2-8000 gallon	Erickson - Richmond, CA	6/17/91
Soil	144 yards	BFI, Livermore	5/21/92
	108 yards	BFI, Livermore	2/2-3/93
Water, fuel & oil	450 gallons	H&H - 220 China Basin Street	12/19/89
Used oil & rinsate	375 gallons	Refineries Services - 13331 North Hwy. 33, Patterson , CA	6/17/91
Rain water	aprox. 2000 gal.	Discharged into storm drain approved by RWQCB	4/17/92

Leaking Underground Fuel Storage Tank Program

III. RELEASE AND SITE CHARACTERIZATION INFORMATION (Continued)
Maximum Documented Contaminant Concentrations - - Before and After Cleanup

Contaminant	Soil (ppm)		Water (ppb)	
	Before	After	*Before	After
TPH (Gas)	850	190	13,000	ND (<50)
TPH (Diesel)	1000	250	-	ND (<50)
Benzene	0.53	0.52	1,700	0.55
Toluene	3.0	1.3	1,800	ND (<0.3)
Xylene	1.5	0.44	4,400	ND (<0.3)
Ethylbenzene	1.7	0.28	720	ND (<0.3)
Oil & grease	60	ND (<50)	-	-
Total Lead	-	4.4	-	-

* Groundwater sample collected from the 8000 gallon gasoline tank pit.

Comments (Depth of Remediation, etc.):

Four underground storage tanks were removed at the site on two separate occasions (12/21/89 & 6/17/91).

Two underground storage tanks (285 gallon waste oil/gasoline and 1000 gallon gasoline) were removed in December 21, 1989 from beneath the sidewalk along Hannah Street. Soil samples collected from the bottom of the excavation found up to 140 ppm TPH gasoline, 0.53 ppm benzene, 0.27 ppm toluene, 1.7 ppm ethyl benzene, and 1.5 ppm xylene. In April 1992, additional soil investigation was conducted in the tank areas to determine the limits of the contamination. Two borings were drilled (one in each tank excavation) to 9 feet depth. Soil sample A-1 collected from the boring at three feet depth in the area of the 285 gallon tank found contamination up to 850 ppm TPH gasoline, 60 ppm oil & grease, 0.038 ppm benzene, 0.16 ppm toluene, 1.3 ppm ethylbenzene and 4.5 ppm xylene. Soil sample B-3 collected from the boring at 9 feet depth in the area of the 1000 gallon tank showed up to 520 ppm TPH gasoline, 0.13 ppm benzene, 3.0 ppm toluene, 2.6 ppm ethylbenzene, and 4.1 ppm xylene. Chlorinated solvents, semi volatiles, and metals Pb, Cd, Ni, Zn and Cr were not analyzed because the tank was identified as a gasoline tank. Limited overexcavation was conducted in October 1992 to remove the contaminated soil underneath the sidewalk. Confirmation sidewall samples collected at 5.5 feet depth showed residual soil contamination up to 190 ppm TPH gasoline, 0.52 ppm benzene, 1.3 ppm toluene, 0.28 ppm ethyl benzene, and 0.44 ppm xylenes. Confirmation samples from the floor of the excavation at 12 feet bgs found low levels of contamination (2.6 ppm TPH gasoline, 0.029 ppm benzene, 0.010 ppm toluene, 0.051 ppm ethyl benzene, and 0.012 ppm xylene.

On June 17, 1991, two underground storage tanks (8,000 gallon gasoline and 8,000 gallon diesel) were removed from the site. Soil samples collected from the gasoline UST excavation were non detect for TPH gasoline, toluene, and ethyl benzene. However, low levels of benzene (0.028 ppm) and xylene (0.032 ppm) were found. Soil samples from the diesel UST excavation identified 1000 ppm TPH diesel, 0.035 ppm toluene and 0.47 ppm xylene.

In May of 1992, the diesel UST pit was overexcavated and confirmation soil samples from the excavation walls (at 5 to 6 feet bgs) and floor (at 12 feet bgs) showed residual soil contamination up to 250 ppm TPH diesel, 75 ppm TPH gasoline and 0.025 ppm xylenes. Benzene, toluene and ethyl benzene were not detected in the confirmation samples.

Three shallow groundwater monitoring wells were installed on July 9, 1993. Groundwater elevation ranged from -0.83 to 0.91 msl and gradient is to the south. Groundwater monitoring wells were sampled on 7/93, 12/93, 3/94 and 6/94. TPH gasoline, toluene, ethyl benzene and xylene were not detected in any monitoring event. TPH diesel was found in MW-3 at 72 ppb (12/93) and 56 ppb (3/94) but was not detected during the last sampling event (6/94). Monitoring well MW-2 found benzene at 0.82 ppb only during the second sampling event (12/93). Monitoring well MW-1 found benzene at 0.55ppb and 0.83 ppb during the last two sampling events (3/94 and 6/94).

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: **NO (Will be decommissioned upon approval of case closure)**
Number Decommissioned: **NA** Number Retained: **NA**
List enforcement actions taken: **NA**
List enforcement actions rescinded: **NA**

V. LOCAL AGENCY REPRESENTATIVE DATA

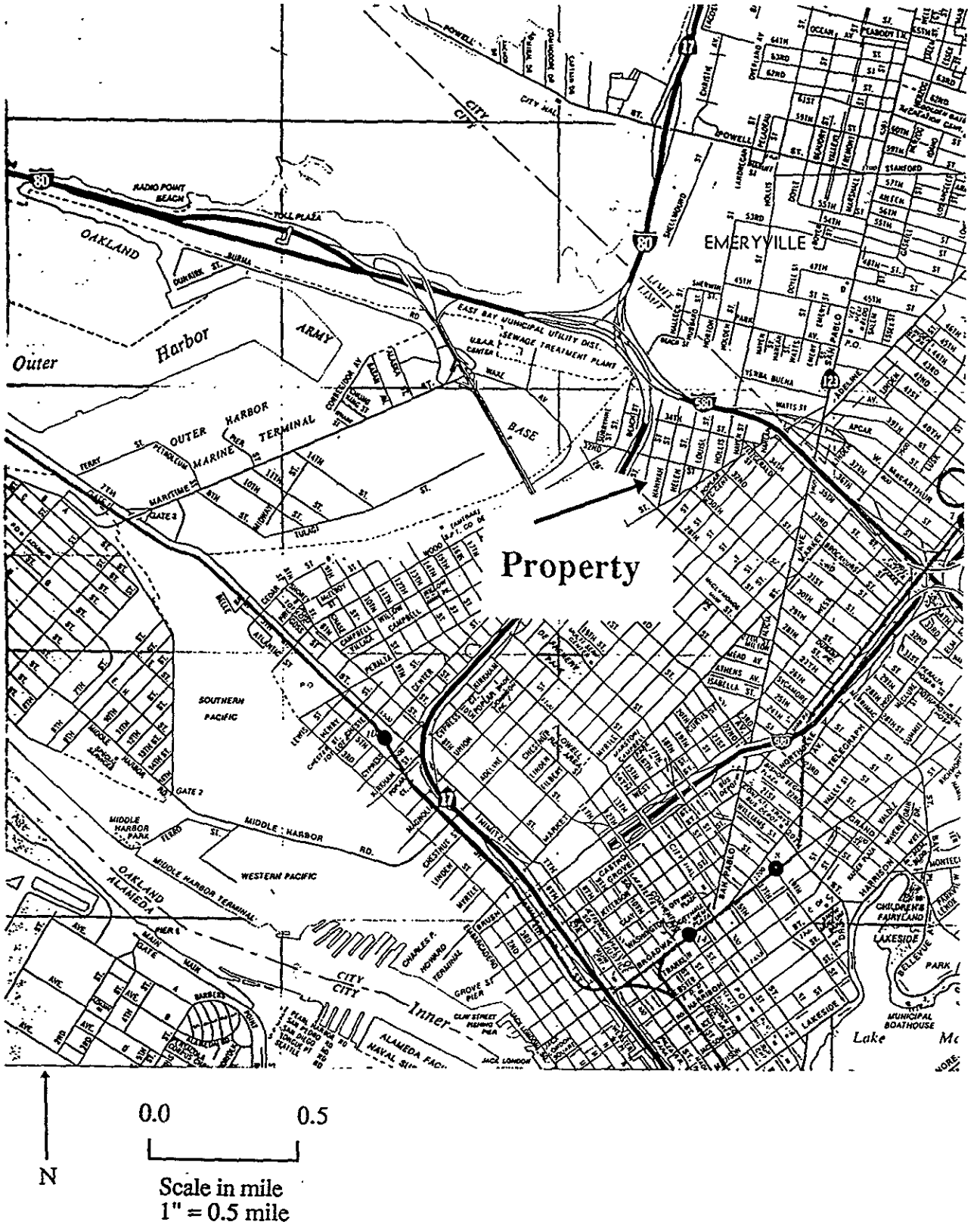
Name: **Susan L. Hugo** Title: **Sr. Hazardous Materials Specialist**
Signature: Susan L. Hugo Date: 7/18/95
Reviewed by
Name: **Amy Leech** Title: **Hazardous Materials Specialist**
Signature: Amy K. Leech Date: 8/3/95
Name: **Eva Chu** Title: **Hazardous Materials Specialist**
Signature: Eva Chu Date: 8/4/95

VI. RWQCB NOTIFICATION

Date Submitted to RB: 8/4/95
RWQCB Staff Name: Kevin Graves RB Response: Approved
Title: Water Resources Control Engineer
Date: 8/11/95

VII. ADDITIONAL COMMENTS, DATA, ETC.

Aggressive source removal has occurred at the site. The potential beneficial uses of the groundwater do not appear to be threatened to a significant extent from the release that occurred at the site associated with the former four underground storage tanks.



Subsurface Environmental, Inc. 4030 Pacheco Blvd., Suite 1 Martinez, CA 94553		VICINITY MAP 2857 Hannah Street Oakland, California	
Project No. 025-01	Date: October 1991	Drawn by: OPJ	Figure No. 1

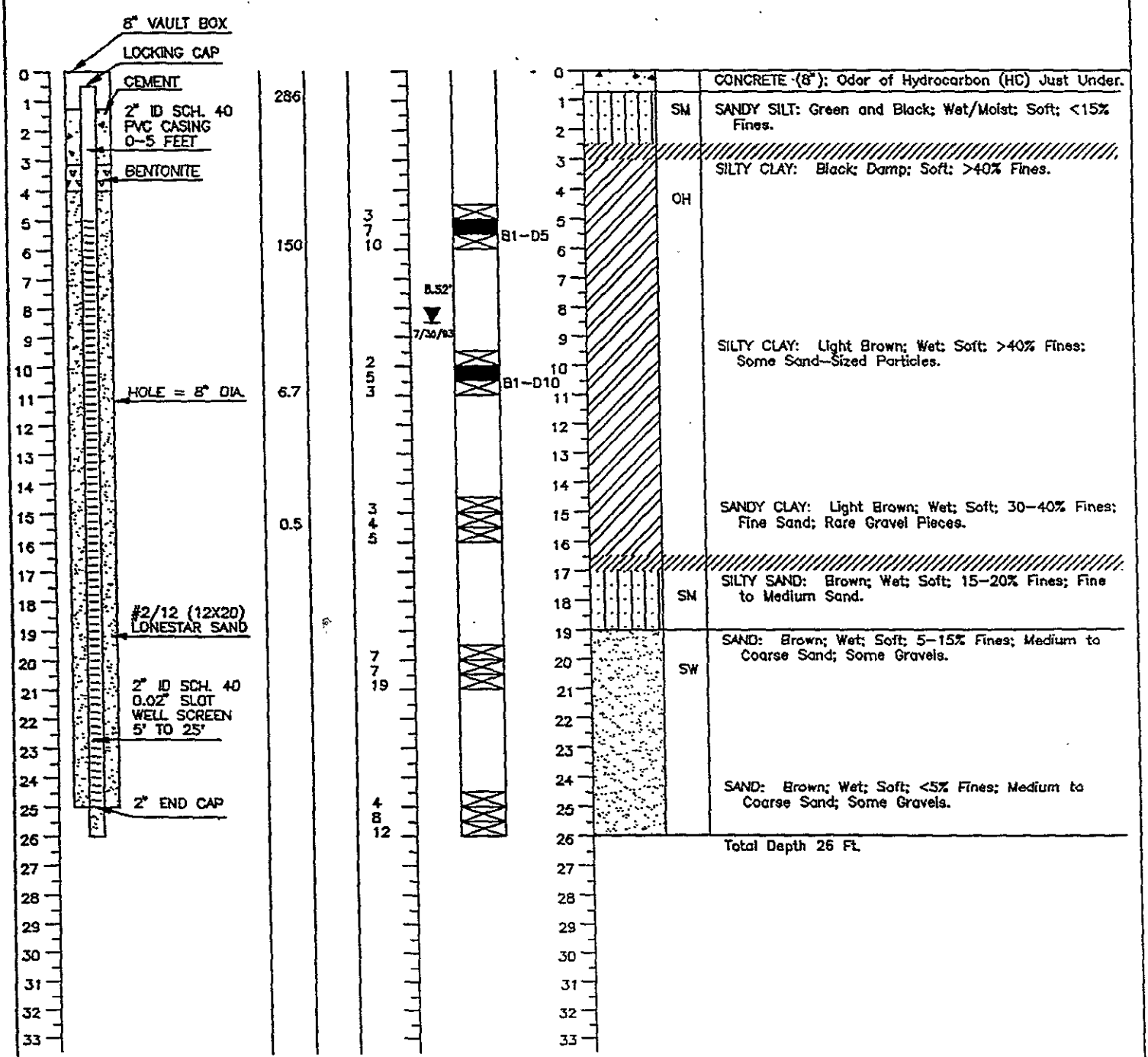
RIEDEL ENVIRONMENTAL SERVICES, INC

4138 LAKESIDE DRIVE
RICHMOND, CALIFORNIA 94806
(510) 222-7810

LOG OF BORING/MONITORING WELL B1/MW1

SHEET 1 OF 1

PROJECT NO.: 4218-9301	DRILLING CO.: West Hazmat	BORING TOTAL DEPTH (FT): 26
PROJECT NAME: J. H. Fitzmaurice	DRILL RIG MODEL: CME 55	TOP OF CASING ELEVATION (FT MSL)
LOCATION: 2857 Hannah St. Oakland, CA	DRILLING METHOD: 8" Hollow Stem Auger	TOP OF VAULT BOX ELEV. (FT MSL)
FILE NAME: D:\ACAD\DRAW9-93\FITZMAB1	SAMPLER TYPE: 2" Split Spoon	SCREENED INTERVAL: 5-25
	LOGGED BY: C. Merritt	LOCAL AGENCY: ACFC/WCD
DATE DRILLED: 7/9/93	APPROVED BY: C. Merritt	PERMIT NO.: 93317



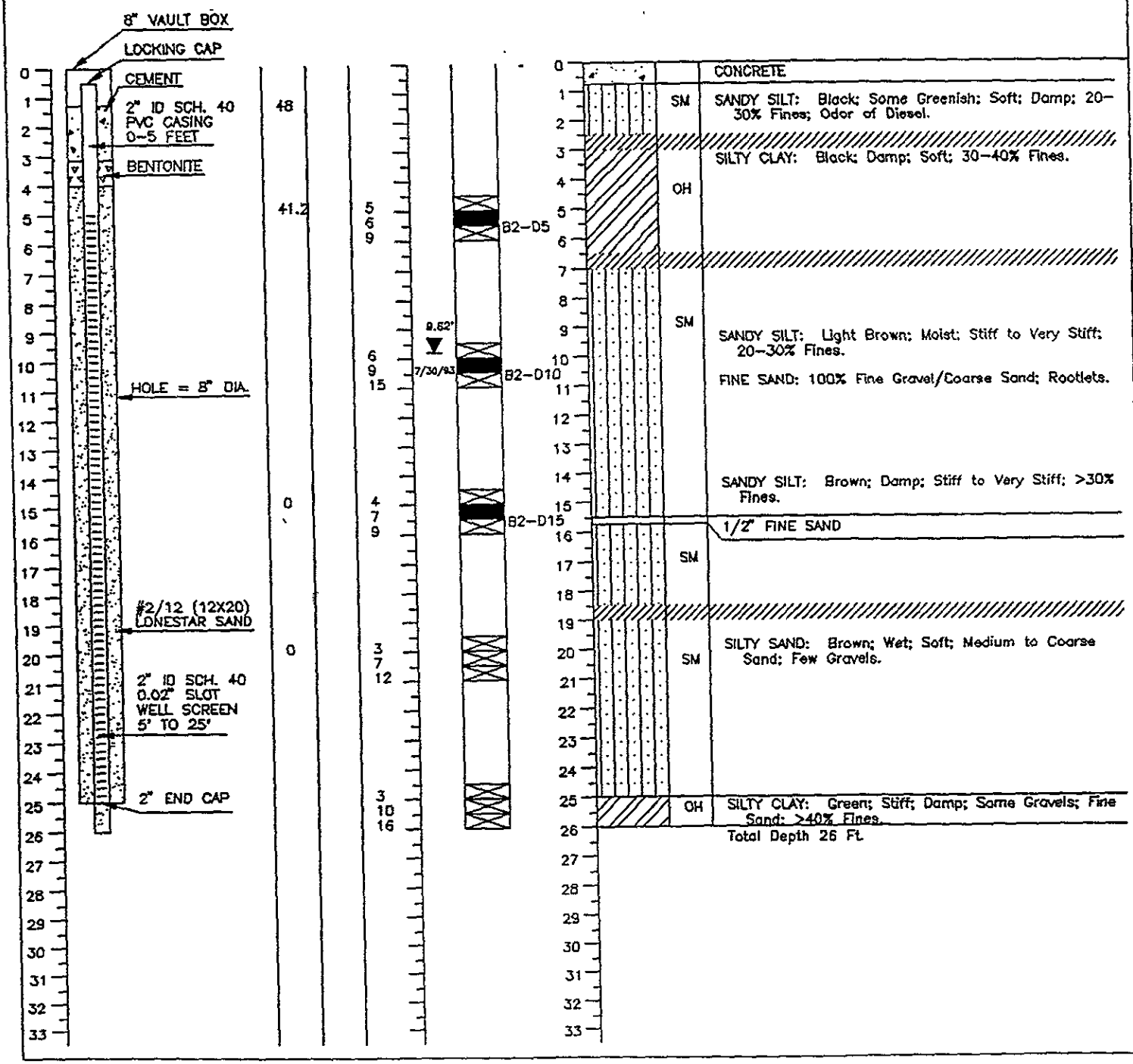
RIEDEL ENVIRONMENTAL SERVICES, INC

4138 LAKESIDE DRIVE
RICHMOND, CALIFORNIA 94806
(510) 222-7810

LOG OF BORING/MONITORING WELL B2/MW2

SHEET 1 OF 1

PROJECT NO.: 4218-9301	DRILLING CO.: West Hazmat	BORING TOTAL DEPTH (FT): 26
PROJECT NAME: J. H. Fitzmaurice	DRILL RIG MODEL: CME 55	TOP OF CASING ELEVATION (FT MSL)
LOCATION: 2857 Hannah St. Oakland, CA	DRILLING METHOD: 8" Hollow Stem Auger	TOP OF VAULT BOX ELEV. (FT MSL)
FILE NAME: D:\ACAD\DRAW9-93\FITZMAB1	SAMPLER TYPE: 2" Split Spoon	SCREENED INTERVAL: 5-25
	LOGGED BY: C. Merritt	LOCAL AGENCY: ACFC/WCD
DATE DRILLED: 7/9/93	APPROVED BY: C. Deek	PERMIT NO.: 93317



RIEDEL ENVIRONMENTAL SERVICES, INC

4138 LAKESIDE DRIVE
RICHMOND, CALIFORNIA 94806
(510) 222-7810

LOG OF BORING/MONITORING WELL B3/MW3

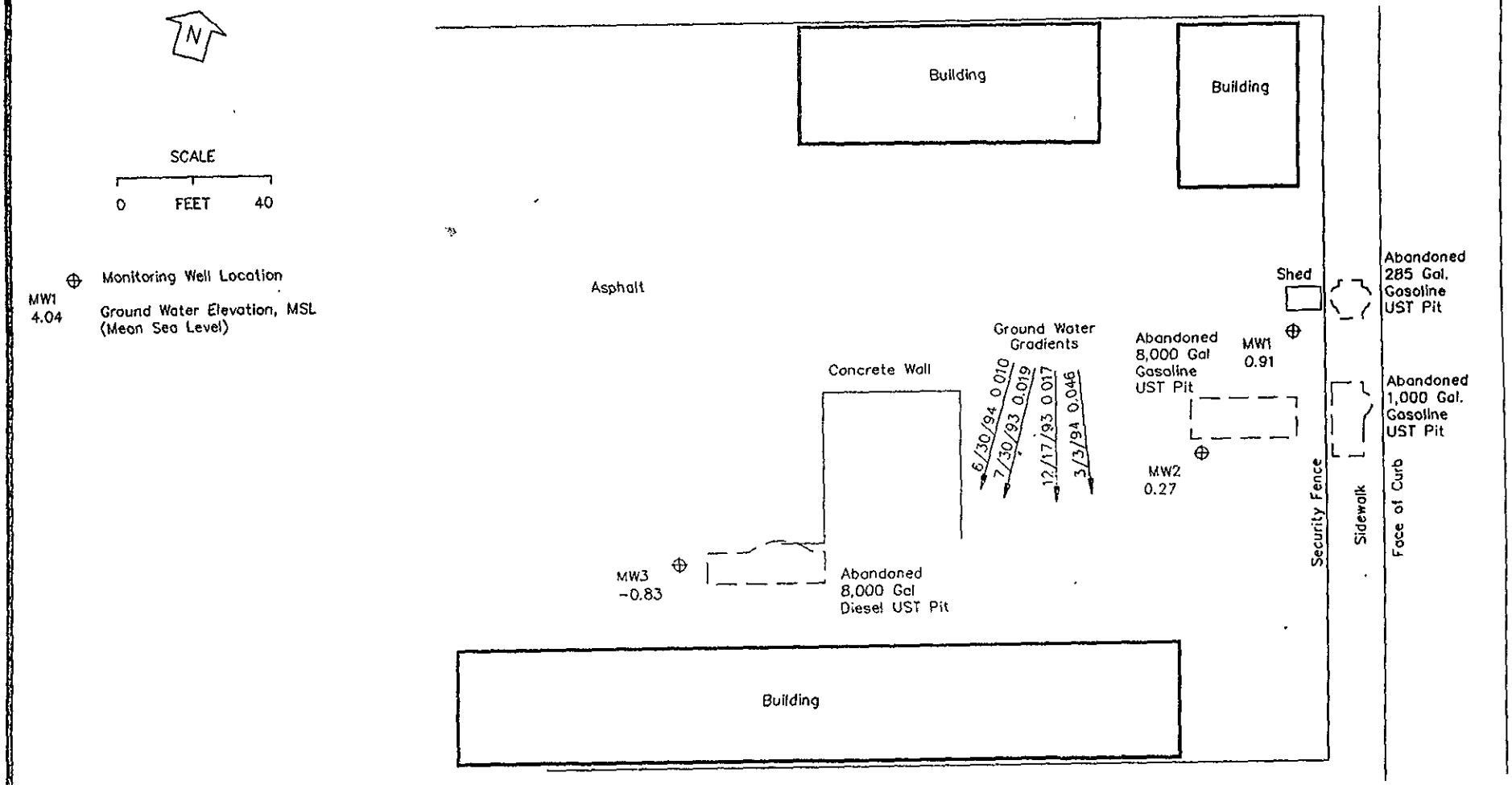
SHEET 1 OF 1

PROJECT NO.: 4218-9301	DRILLING CO.: West Hazmat	BORING TOTAL DEPTH (FT): 26
PROJECT NAME: J. H. Fitzmaurice	DRILL RIG MODEL: CME 55	TOP OF CASING ELEVATION (FT MSL)
LOCATION: 2857 Hannah St. Oakland, CA	DRILLING METHOD: 8" Hollow Stem Auger	TOP OF VAULT BOX ELEV. (FT MSL)
FILE NAME: D:\ACAD\DRAW9-93\FITZMAB1	SAMPLER TYPE: 2" Split Spoon	SCREENED INTERVAL: 5-25
	LOGGED BY: C. Merritt	LOCAL AGENCY: ACFC/WCD
DATE DRILLED: 7/9/93	APPROVED BY: C. Daft	PERMIT NO.: 93317

DEPTH IN FT	WELL CONSTRUCTION DIAGRAM	PID (PPM)	PENETROMETER TSF	BLOWS/6 IN	GROUND WATER LEVELS	SAMPLES	SAMPLE I.D.	DEPTH IN FT	LITHOGRAPHIC COLUMN	LITHOGRAPHIC DESCRIPTION
0-33	8" VAULT BOX LOCKING CAP CEMENT 2" ID SCH. 40 PVC CASING 0-5 FEET BENTONITE HOLE = 8" DIA. #2/12 (12X20) LONESTAR SAND 2" ID SCH. 40 0.02" SLOT WELL SCREEN 5' TO 25' 2" END CAP	4.3 0		4 7 10 4 10 14 3 7 12 3 6 9 25 20 20	11.57' 7/30/93		B3-D5 B3-D10 B3-D15 B3-D20	0-33	SM OH SM OH SM GW	CONCRETE over BASEROCK SILTY SAND: Black; Soft; Moist; 10-20% Fines FINE SAND: Medium; Soft; Brown; Damp. Color Change to Gray, Wet. SILTY CLAY: Black; Damp; Stiff to Very Stiff; >30% Fines. SANDY SILT: Gray; Soft; Damp; Fine Sand; 20-30% Fines; Gravel and Coarse Sand 5-10%. SILTY CLAY: Light Brown; Damp with Water-Filled Channels; 10-20% Very Fine Sand. SILTY SAND: Light Brown; Wet; Soft; Very Fine Sand; 15-20% Fines. Increasing Gravel and Coarse Sand SANDY GRAVEL: Brown; Soft; Wet; Medium to Coarse Sand; 5-15% Fines. Total Depth 26 Ft.

Base Map Based on Ron Archer, RCE Survey Plat, August 5, 1993

Drawn:	C.Barton	Checked:	C.Barton 8/14/94	Job No:	4218-9301
Date:	8/9/94	Approved:	R.Meeth 8/10/94	CAD File:	Draw8-94\FitzmaS4

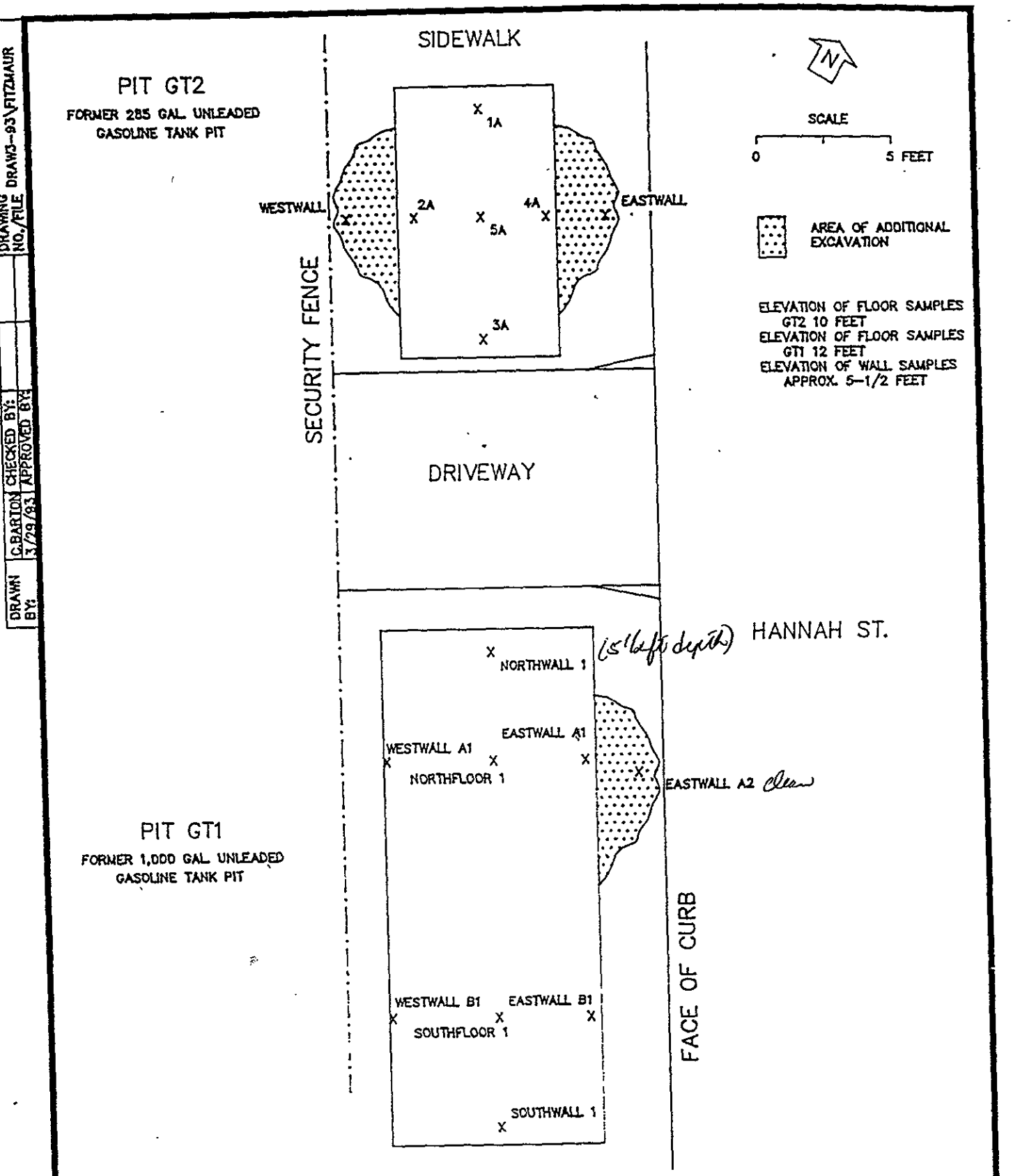


SITE MAP WITH WELL LOCATIONS
J.H. FITZMAURICE, INC.
2857 HANNAH ST, OAKLAND, CA

RES PROJECT 4218-9301

FIGURE 2

RIEDEL ENVIRONMENTAL SERVICES, INC RICHMOND, CALIFORNIA



SOIL SAMPLING LOCATIONS
OCTOBER 13 & 22, 1992
FITZMAURICE REMEDIATION
2857 HANNAH ST, OAKLAND, CA
RES PROJECT 4272-9217

RIEDEL ENVIRONMENTAL SERVICES, INC RICHMOND, CALIFORNIA

FIGURE 2

Water levels within the three monitoring wells were measured prior to ground water sampling. The depths to water measured in the three wells ranged from 8.20 to 11.23 feet below the top of the well casings. The elevation of ground water in each well was determined from the depth to water measurements and the top of casing elevations which were surveyed to mean sea level (msl) by Ron Archer and Associates. ground water elevation in the three wells ranged from -0.83 to 0.91 feet msl. The ground water elevations in the three wells result in a gradient of 0.01 to the south as indicated in Figure 2.

3.0 LABORATORY ANALYSIS

The water samples obtained from the three monitoring wells were analyzed by Precision Analytical Laboratory. Samples obtained from monitoring wells MW1 (MW1-1.94) and MW2 (MW2-1.94) were analyzed for TPHg and BTEX compounds. Sample MW3-1.94 was analyzed for TPHd and BTEX compounds. The results of the water sample analyses indicate that 0.55 ppb benzene was present in the water sample obtained from MW-1. All other analyzed petroleum constituents were not present in the water samples at concentrations above laboratory detection limits. A summary of the quarterly ground water monitoring data is included in Table 1. Laboratory analytical results and chain of custody documentation are included in Appendix C.

TABLE 1. Summary of Ground Water Monitoring Data

Well	Date Sampled	Depth to Water (feet)	Ground Water Elevation (feet msl)*	Sample ID	TPH Gasoline (µg/l)	TPH Diesel (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)
MW1	7-30-93	8.52	0.59	MW1-1.93	<50	—	<0.3	<0.3	<0.3	<0.3
MW1	12-17-93	6.50	2.61	MW1-2.93	<50	—	<0.3	<0.3	<0.3	<0.3
MW1	3-03-94	5.07	4.04	MW1-1.94	<50	—	0.83	<0.3	<0.3	<0.3
MW1	6-30-94	8.20	0.91	MW1-2.94	<50	—	0.55	<0.3	<0.3	<0.3
MW2	7-30-93	9.60	-0.06	MW2-1.93	<50	—	<0.3	<0.3	<0.3	<0.3
MW2	12-17-93	7.60	1.94	MW2-2.93	<50	—	0.82	<0.3	<0.3	<0.3
MW2	3-03-94	7.15	2.39	MW2-1.94	<50	—	<0.3	<0.3	<0.3	<0.3
MW2	6-30-94	9.27	0.27	MW2-2.94	<50	—	<0.3	<0.3	<0.3	<0.3
MW3	7-30-93	11.57	-1.17	MW3-1.93	—	<50	<0.3	<0.3	<0.3	<0.3
MW3	12-17-93	9.00	1.40	MW3-2.93	—	72	<0.3	<0.3	<0.3	<0.3
MW3	3-03-94	8.56	1.84	MW3-1.94	<50	56	<0.3	<0.3	<0.3	<0.3
MW3	6-30-94	11.23	-0.83	MW3-2.94	<50	<50	<0.3	<0.3	<0.3	<0.3

Notes:

µg/l Micrograms per liter or parts per billion (ppb).
<50 Indicates that the constituent analyzed was not detected at a concentration above the stated detection limit.
* Ground water elevations in feet above mean sea level.
— Constituent was not analyzed in this sample.

(MDLs) of 1.0 ppm and 0.005 ppm respectively. The southern portion of the west sidewall (Westwall B1) contained 3.6 ppm TPH-g and the northern area of the west sidewall (Westwall A1) contained 3.4 ppm TPH-g. Westwall A1 contained 0.038 ppm benzene, 0.078 ppm xylenes and 0.008 ethylbenzene. Toluene was below the MDL of 0.005 ppm. The Westwall B1 soil sample contained 0.056 ppm xylenes. Benzene, ethylbenzene and toluene were all below the MDL. The Northfloor 1 soil sample contained 2.6 ppm TPH-g, 0.029 benzene, 0.010 ppm toluene, 0.012 ppm xylenes and 0.051 ppm ethylbenzene. The north area of the east sidewall (Eastwall A1) contained 130 ppm TPH-g, 0.19 ppm benzene, 0.88 ppm toluene, 1.7 ppm xylenes and 0.53 ppm ethylbenzene. Sample Eastwall A2 was obtained at the completion of the additional excavation. The results of the onsite analyses of sample EastwallA2 indicated that all gasoline constituents were below the MDL. The analytical results from pit GT1 are summarized below in Table 1. Chain-of-custody protocol and laboratory analytical reports are provided in Appendix B.

TABLE 1. Summary of Soil Sampling Data From Pit GT1

Sample ID	date sampled	TPH gasoline (mg/kg)	benzene (mg/kg)	toluene (mg/kg)	ethyl-benzene (mg/kg)	xylenes (mg/kg)
Northwall 1	10-13-92	<1.0	<0.005	<0.005	<0.005	<0.005
Westwall A1	10-13-92	3.4	0.038	<0.005	0.008	0.078
Westwall B1	10-13-93	3.6	<0.005	<0.005	<0.005	0.056
Southwall 1	10-13-93	<1.0	<0.005	<0.005	<0.005	<0.005
Eastwall B1	10-13-92	<1.0	<0.005	<0.005	<0.005	<0.005
Eastwall A1	10-13-92	130	0.19	0.88	0.53	1.7
Eastwall A2	10-13-92	<1.0	<0.005	<0.005	<0.005	<0.005
Northfloor 1	10-13-92	2.6	0.029	0.010	0.051	0.012
Southfloor 1	10-13-93	<1.0	<0.005	<0.005	<0.005	<0.005

mg/kg Milligrams per kilogram or parts per million (ppm)

<50 Indicates that the constituent analyzed was not detected at a concentration above the stated detection limit.

Based on the results of the onsite analysis, RES obtained permission from the ACDEH to backfill, compact, and re-surface pit GT1.

3.1.2 Pit GT2

As a result of the erroneous initial description of the 280-gallon UST, the ACDEH required the excavation (pit GT2) to be analyzed for TPH-d (by EPA Method 3550) and oil and grease (by Standard Method 3550 D & F), as well as TPH-g and BTEX.

The north sidewall (Sample 1A) and the floor sample (5A) did not contain TPH-g, BTEX, TPH-d or oil and grease above the respective MDLs. Soil samples 2A, 3A, and 4A, contained 320, 14, and 56 ppm TPH-g respectively. Samples 2A and 4A contained varying concentrations of BTEX constituents. None of the samples obtained from GT2 contained detectable levels of TPH-d or oil and grease.

On 22 October 1992, additional overexcavation of the east and west sidewalls of pit GT2 was conducted. The soils in the area of the two samples 2A and 4A were manually excavated. Soil samples from the westwall and eastwall were obtained and submitted for analysis of TPH-g and BTEX at Precision Analytical, in Richmond, California. The results of the laboratory analysis indicate that sample Westwall contained 190 ppm TPH-g, 0.52 ppm benzene, 1.3 ppm toluene, 0.28 ethylbenzene, and 0.44 ppm xylenes. Sample Eastwall contained 110 ppm TPH-g, 0.08 ppm toluene and xylenes. Benzene and ethylbenzene were below the MDLs.

TABLE 2. Summary of Soil Sampling Data From Pit GT2

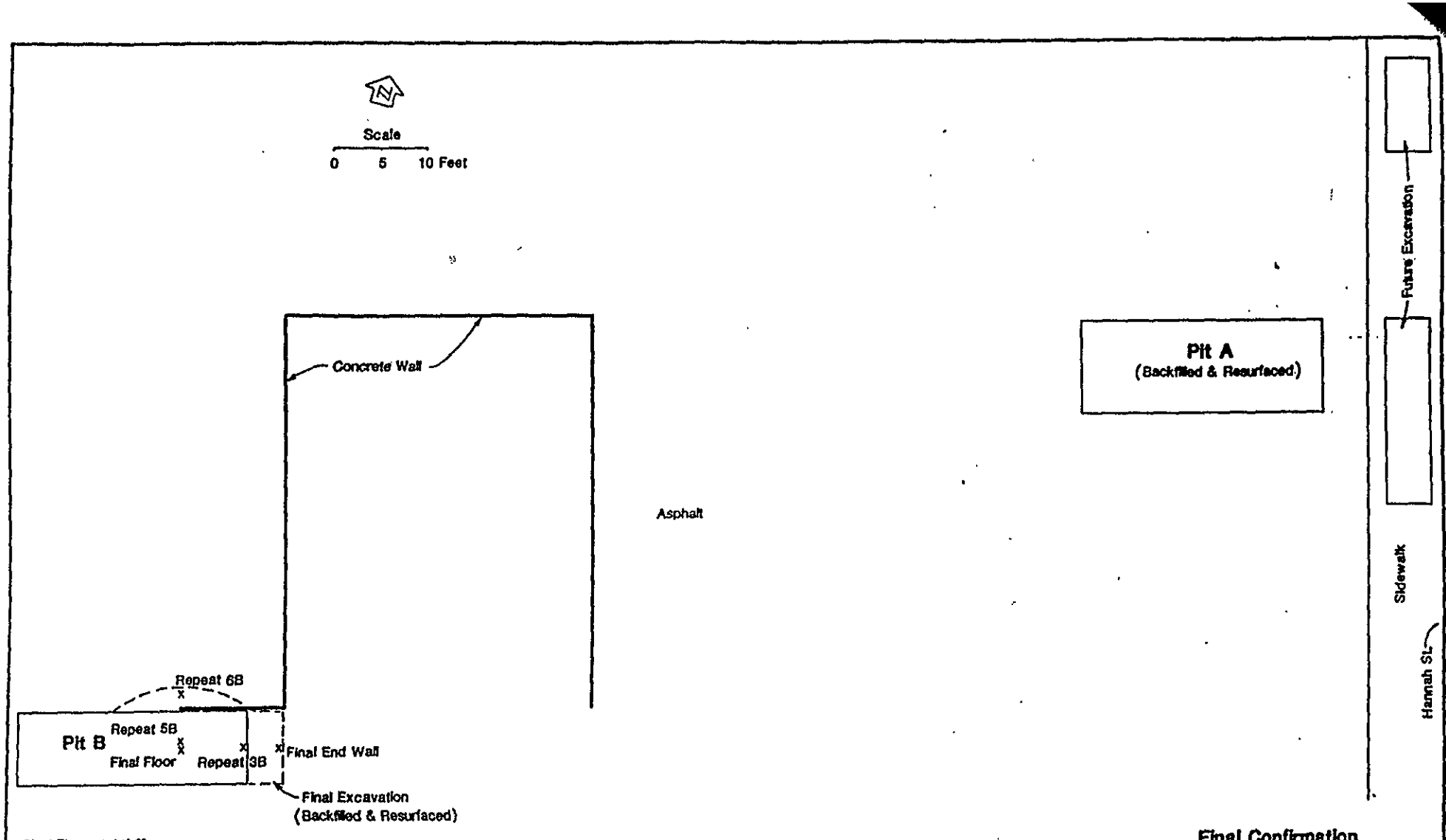
Sample ID	date sampled	TPH gasoline (mg/kg)	TPH diesel (mg/kg)	benzene (mg/kg)	toluene (mg/kg)	ethyl-benzene (mg/kg)	total xylenes (mg/kg)	Total Oil & Grease (mg/kg)
1A	10-13-92	<1.0	<5.0	<0.005	<0.005	<0.005	<0.005	<50
2A	10-13-93	320	<5.0	2.4	<0.005	0.92	2.6	<50
Westwall	10-22-93	190	*	0.52	1.3	0.28	0.44	*
3A	10-13-92	14	<5.0	<0.005	<0.005	<0.005	<0.005	<50
4A	10-13-92	56	<5.0	0.027	0.034	0.19	1.3	<50
Eastwall	10-22-93	110	*	<0.015	0.08	<0.015	0.08	*
5A	10-13-92	<1.0	<5.0	<0.005	<0.005	<0.005	<0.005	<50

mg/kg Milligrams per kilogram or parts per million (ppm)

<50 Indicates that the constituent analyzed was not detected at a concentration above the stated detection limit.

* Not analyzed.

Upon review the results of the laboratory testing of samples taken from the sidewalls and the physical site complications associated with pit GT2, permission was given by Susan Hugo with the ACDEH to backfill and re-surface the remaining pit.



Final Confirmation Sample Locations
Fitzmaurice Remediation
2857 Hannah St., Oakland

RES Project 4272-9217

FIGURE 3

RIEDEL ENVIRONMENTAL SERVICES, INC. Richmond, California

Alta Building Materials Storage Area

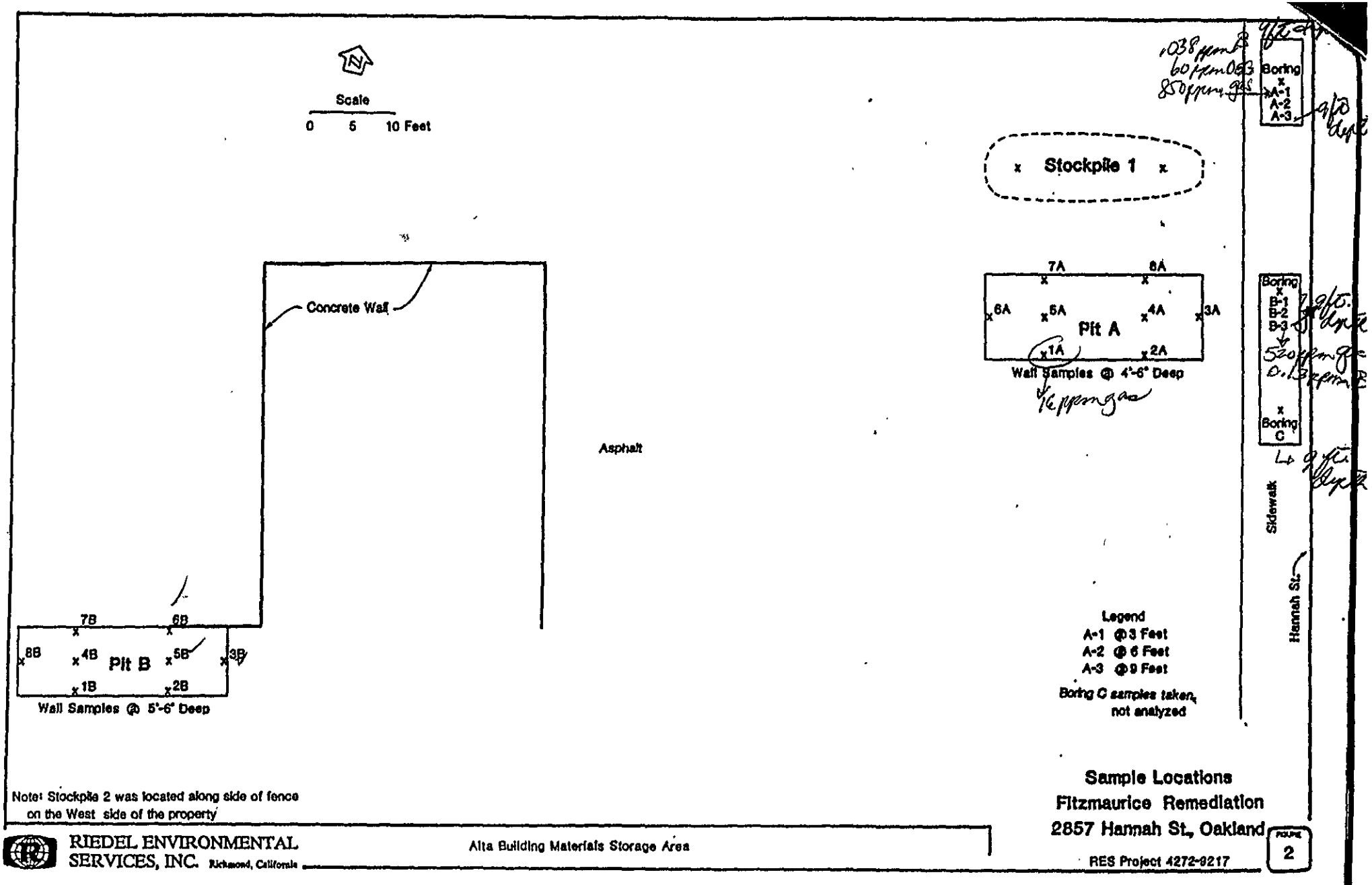

N
Scale
0 5 10 Feet
Stockpile 1
Concrete Wall
Asphalt
7A
6A
5A
4A
3A
2A
1A
Pit A
Wall Samples @ 4'-6' Deep
7B
6B
5B
4B
3B
2B
1B
Pit B
Wall Samples @ 5'-6' Deep
Boring
A-1
A-2
A-3
Boring
B-1
B-2
B-3
Boring
C
Sidewalk
Hannah St.
Legend
A-1 @ 3 Feet
A-2 @ 6 Feet
A-3 @ 9 Feet
Boring C samples taken, not analyzed
Note: Stockpile 2 was located along side of fence on the West side of the property
RIEDEL ENVIRONMENTAL SERVICES, INC. Richmond, California
Alta Building Materials Storage Area
Sample Locations
Fitzmaurice Remediation
2857 Hannah St., Oakland
RES Project 4272-9217
FIGURE 2

TABLE 3
SOIL SAMPLE RESULTS PIT B
2857 HANNAH STREET, OAKLAND, CALIFORNIA
APRIL 23, 1992

SAMPLE I.D. NUMBERS	TPH-DIESEL (mg/Kg)
1B	ND<1.0
2B	ND<1.0
3B	160
4B	ND<1.0
5B	60
6B	18
7B	ND<1.0
8B	ND<1.0

REPEAT SOIL SAMPLES PIT B
MAY 21, 1992

	SAMPLE IDENTIFICATION		
ANALYSES	REPEAT 3B	REPEAT 5B	REPEAT6 B
TPH-G	41	1.1	ND<1.0
TPH-D	530	96	ND<1.0
BENZENE	ND	ND	ND
TOLUENE	ND	ND	ND
ETHYL-BENZENE	ND	ND	ND
XYLENES	0.09	0.005	ND

Notes:

ND: The concentration was below the method detection limit (MDL). The detection limit for BTEX constituents was 0.005 ppm.

TABLE 4
FINAL SOIL SAMPLES PIT B
2857 HANNAH STREET, OAKLAND, CALIFORNIA
JUNE 9, 1992

ANALYSES	FINAL END WALL	FINAL FLOOR
TPH-D	ND<1	250
TPH-G	ND<1.0	75
BENZENE	ND	ND
TOLUENE	ND.	ND
ETHYL-BENZENE	ND	ND
XYLENES	ND	0.025

Notes: ND: Concentration is below the method detection limit (MDL). The detection limit for the BTEX constituents is 0.005 ppm. Concentrations are in ppm (parts per million).

TABLE 1 - SOIL ANALYSES RESULTS
2857 HANNAH STREET, OAKLAND, CALIFORNIA
MARCH 18, 1992

	SAMPLE IDENTIFICATION			
ANALYSES	**A-1** 3 ft depth	**B-3** 9 ft depth	**STOCK PILE 1**	**STOCK PILE 2**
TPH-D (ppm)	*	*	*	ND<0.05
TPH-G (ppm)	850	520	1.9_1	0.48_1
OIL AND GREASE (ppm)	60	*	*	*
BENZENE	0.038	0.13	2.0_2	1.8_2
TOLUENE	0.160	3.0	26_2	6.2_2
ETHYLBENZENE	1.3	2.6	18_2	ND<0.3
XYLENE	4.5	4.1	325_2	4.8_2
REACTIVITY	*	*	ND<1	ND<1
CORROSIVITY	*	*	7.5	7.9
IGNITABILITY	*	*	NO	NO
STLC LEAD (ppm)	*	*	0.4	*

Notes: ND: Compound below the method detection limit (MDL).

1 - Analysed per EPA method 1311/5030 Toxicity Characteristic Leaching Procedure (TCLP). Units are represented in ppm.
2 - Analysed per EPA method 1311/602 TCLP. Units are in parts per billion (ppb).
* - Not analyzed for this constituent.
Water samples collected from Pit A and Pit B were analysed for TPH-g, BTEX and TPH-d. All chemical constituents were not detected and are therefore not represented.

TABLE 2 - SOIL ANALYSES RESULTS PIT A (1A-4A)
2857 HANNAH STREET, OAKLAND, CALIFORNIA

	SAMPLE IDENTIFICATION			
ANALYSES	**1A**	**2A**	**3A**	**4A**
TPH-G	16	1.9	1.7	1.1
BENZENE	ND	ND	ND	ND
TOLUENE	ND	ND	ND	ND
ETHYLBENZENE	ND	ND	ND	ND
XYLENES	ND	ND	0.005	0.031

SOIL SAMPLES PIT A (5A-8A)

ANALYSES	5A	6A	7A	8A
TPH-G	ND < 1.0	2.0	3.4	ND < 1.0
BENZENE	ND	ND	ND	ND
TOLUENE	ND	ND	ND	ND
ETHYLBENZENE	ND	ND	ND	ND
XYLENES	ND	ND	ND	0.015

Notes: ND: Concentration is below the method detection limit (MDL). The detection limit for the BTEX constituents is 0.005 ppm. Concentrations are in ppm (parts per million).