

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 4535 - 701 Fremont Ave., San Leandro CA94577
(2-1K gallons tanks removed on 5/30/89)**

January 11, 1999

Mr. Bob Gardner
C/O Gardner & Associates
701 Fremont Ave.
San Leandro, CA 94577

Dear Mr. Gardner:

This letter confirms the completion of site investigation and remedial action for the underground storage tank 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 tank 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
Files-AG

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ENVIRONMENTAL HEALTH SERVICES

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StID 4535

January 4, 1999

Mr. Bob Gardner
C/O Gardner and Associates
701 Fremont Avenue
San Leandro, CA 94577

**Re: Fuel Leak Site Case Closure for S & S Building Supply at 701 Fremont Ave.,
San Leandro, CA**

Dear Mr. Gardner:

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 360ppm TPH as gasoline and .87ppm benzene exists in soil beneath the site;
- up to 23ppb benzene exists in groundwater beneath the site; and,
- a site safety plan must be prepared for construction workers in the event of excavation/trenching is proposed in the vicinity of residual soil and groundwater contamination.

If you have any questions, please contact me at (510) 567-6876.


Amir K. Gholami, REHS
Hazardous Materials Specialist

enclosures: 1. Case Closure Letter 2. Case Closure Summary

c: files

01-1273

CALIFORNIA REGIONAL WATER

MAR 04 1997 /CB

CASE CLOSURE SUMMARY
Leaking Underground Fuel Storage Tank Program

I. AGENCY INFORMATION

Date: January 14, 1997

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

II. CASE INFORMATION

Site facility name: S & S Building Supply
Site facility address: 701 Fremont Avenue, San Leandro, CA 94577
RB LUSTIS Case No: N/A Local Case No./LOP Case No.: 4535
URF filing date: 2/10/88 SWEEPS No: N/A

Responsible Parties: Addresses: Phone Numbers:
Bob Gardner, c/o Gardner & Associates (510) 351-7020
701 Fremont Avenue, San Leandro, CA 94577

<u>Tank No:</u>	<u>Size in gal.:</u>	<u>Contents:</u>	<u>Closed in-place or removed?:</u>	<u>Date:</u>
1	1000	gasoline	removed	5/30/89
2	1000	gasoline	removed	5/30/89

III. RELEASE AND SITE CHARACTERIZATION INFORMATION

Cause and type of release: Unknown
Site characterization complete? YES
Date approved by oversight agency: October 23, 1994
Monitoring Wells installed? YES Number: three (3)
Proper screened interval? YES
Highest GW depth below ground surface: 10.59'
Lowest depth: 14.96 in well MW-3.
Flow direction: generally towards the south
Most sensitive current use: commercial/industrial
Are drinking water wells affected? NO Aquifer name: San Leandro Cone
Is surface water affected? NO Nearest affected SW name: N/A
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:

<u>Material</u>	<u>Amount (include units)</u>	<u>Action (Treatment or Disposal w/destination)</u>	<u>Date</u>
Tank & Piping Free Product	2 x 1000-gallon	Disposal/H & H Ship Service S. San Francisco, CA	5/30/89
Soil	unknown	Aerated on-site, returned to excavation.	
Groundwater Rinsate	100 gallons	Disposal/H & H Ship Service S. San Francisco, CA	5/30/89

Maximum Documented Contaminant Concentrations - - Before and After Cleanup

<u>Contaminant</u>	<u>Soil (ppm)</u>		<u>Water (ppb)</u>	
	<u>Before¹</u>	<u>After²</u>	<u>Before³</u>	<u>After⁴</u>
TPH (Gas)	7600	360	35,000	2,600
TPH (Diesel)	---	---	---	---
Benzene	130	0.87	5.6	23
Toluene	360	1.2	<25	7
Ethyl benzene	100	3.5	140	89
Xylenes	630	17	430	110
Oil & Grease	NA	NA	NA	NA
Heavy metals	"	"	"	"
Other	"	"	"	"

NA=Not Analyzed

Comments (Depth of Remediation, etc.):

Two 1,000-gallon gasoline underground storage tanks (USTs) and dispenser island were removed during excavation activities in late May/early June 1989 by Paradiso Construction. Four soil samples (A1, A2, B1 and B2) were collected from beneath each end of the two USTs. Laboratory analysis of soil samples (B1 and B2), collected from beneath the northern and southern

¹"Before" results were obtained from soil sample B-1, collected at a depth of approximately 8.5 feet below ground surface (bgs), below the westernmost UST.

²"After" results were obtained from boring MW-1 collected at a depth of approximately 15.0-15.5 feet bgs.

³"Before" TPHg and TEX results were revealed in the water sample collected from MW-1; benzene results were revealed in the split sample collected from MW-3 (on 11/3/94).

⁴"After" results were obtained from monitoring well MW-3 for the February 1, 1996 sampling event.

ends of the westernmost UST detected total petroleum hydrocarbons as gasoline (TPHg) at concentrations of 7,600 ppm and 2,300 ppm, respectively. Benzene was detected in soil samples B-1 and B-2 at concentrations of 130 ppm and 15 ppm, respectively. During UST removals, holes were noted in the westernmost UST by San Leandro Fire Department personnel. Laboratory analysis of soil samples collected from beneath the easternmost UST did not detect TPHg or benzene, toluene, ethyl benzene and total xylenes (BTEX) above their corresponding laboratory detection limits.


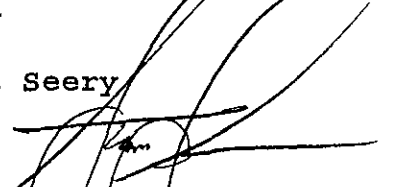
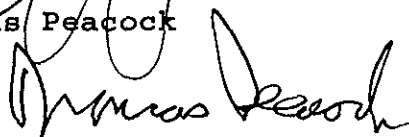
During October 1989, Paradiso Construction over-excavated the UST pit. Five (5) composite soil samples were collected (C1 through C5) from the stockpiled soil after aeration. Analysis revealed non-detectable concentrations of TPHg and BTEX. The stockpiled soil was subsequently used to backfill the excavation. Although additional soil was removed from the excavation during over-excavation activities, no confirmation soil samples were collected. The excavation reportedly was extended to groundwater at an approximate depth of 10 to 12 feet bgs during over-excavation activities.

See Section VII, Additional Comments, etc...

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: **None**
Should corrective action be reviewed if land use changes? **Yes**
Monitoring wells Decommissioned: **No, pending closure**
Number Decommissioned: **None** Number Retained: **three (3)**
List enforcement actions taken: **"Notice of Violation" (NOV) letter sent May 31, 1994 for failure to submit a PSA work plan.**
List enforcement actions rescinded: **N/A**

V. LOCAL AGENCY REPRESENTATIVE DATA

Name: Dale Klettke	Title: Hazardous Materials Specialist
Signature: 	Date: 1/14/97
Reviewed by	
Name: Scott Seery	Title: Sr. Hazardous Materials Specialist
Signature: 	Date: 1/14/97
Name: Thomas Peacock	Title: Supervising HazMat Specialist
Signature: 	Date: 2-14-97

VI. RWQCB NOTIFICATION

Date Submitted to RB:

RB Response: *Approved*

RWQCB Staff Name: *Kevin Graves*

Title: AWRCE

Signature: *[Handwritten Signature]*

Date: *3-18-97*

VII. ADDITIONAL COMMENTS, DATA, ETC.

To evaluate soil and groundwater quality at the site, exploratory borings EB-1, MW-1, MW-2 and MW-3 were drilled on October 27, 1994 at the locations shown on Figure 2. Boring EB-1 was drilled to a depth of approximately 16.5 feet bgs. Borings MW-1, MW-2 and MW-3 were drilled into the shallow water-bearing zone to an approximate depth of 25 feet and subsequently converted to 2-inch-diameter groundwater monitoring wells.

Initial analytical results for the soil samples collected from borings during October 1994 are summarized in Table 1.

Cumulative results of laboratory analyses of groundwater samples collected from the three monitoring wells (MW-1, MW-2 and MW-3) for the five (5) sampling events (11/3/94, 1/25/95, 4/28/95, 8/15/95 and 2/1/96) are summarized in Table 2.

The concentrations of petroleum hydrocarbons detected in the three monitoring wells appear to be fairly stabilized. Although the concentrations of benzene detected in the groundwater samples exceed maximum contaminant levels (MCLs), the shallow groundwater is not a current or expected future source of drinking water. The petroleum hydrocarbon plume will likely further attenuate over time due to natural biodegradation and other factors. Therefore, continued groundwater monitoring is not warranted.

Case closure is warranted for this site as a "Low-Risk Groundwater Case" for the following reasons.

- a) The source appears to have been sufficiently removed.

No confirmation soil samples were collected after over-excavation of the UST pit, however soil samples were collected during installation of "confirmed" down-gradient monitoring well MW-1. Laboratory analysis of the soil sample collected from MW-1, at a depth of 15.0-15.5 feet bgs, revealed TPHg and BTEX at concentrations of 360, 0.87, 1.2, 3.5 and 17 mg/kg, respectively (See Figure 2).

- b) The site has been adequately characterized.

Although plume boundaries have not been delineated to non-detectable limits, expected plume dimensions are reasonably anticipated to be confined within site boundaries. In addition, a "confirmed" groundwater flow direction has been established.

- c) The dissolved hydrocarbon plume appears to be stable and is not migrating.

Three groundwater monitoring wells were initially sampled on 11/3/94. Historical groundwater analyses (11/3/94 to 2/1/96) have revealed maximum benzene concentrations of 27 ug/L. Concentrations of petroleum hydrocarbons appear to be reasonably stabilized, and will likely decrease over time due to natural biodegradation and other attenuation factors.

- d) No water walls, deeper drinking water wells, surface water or other sensitive receptors are likely to be impacted.

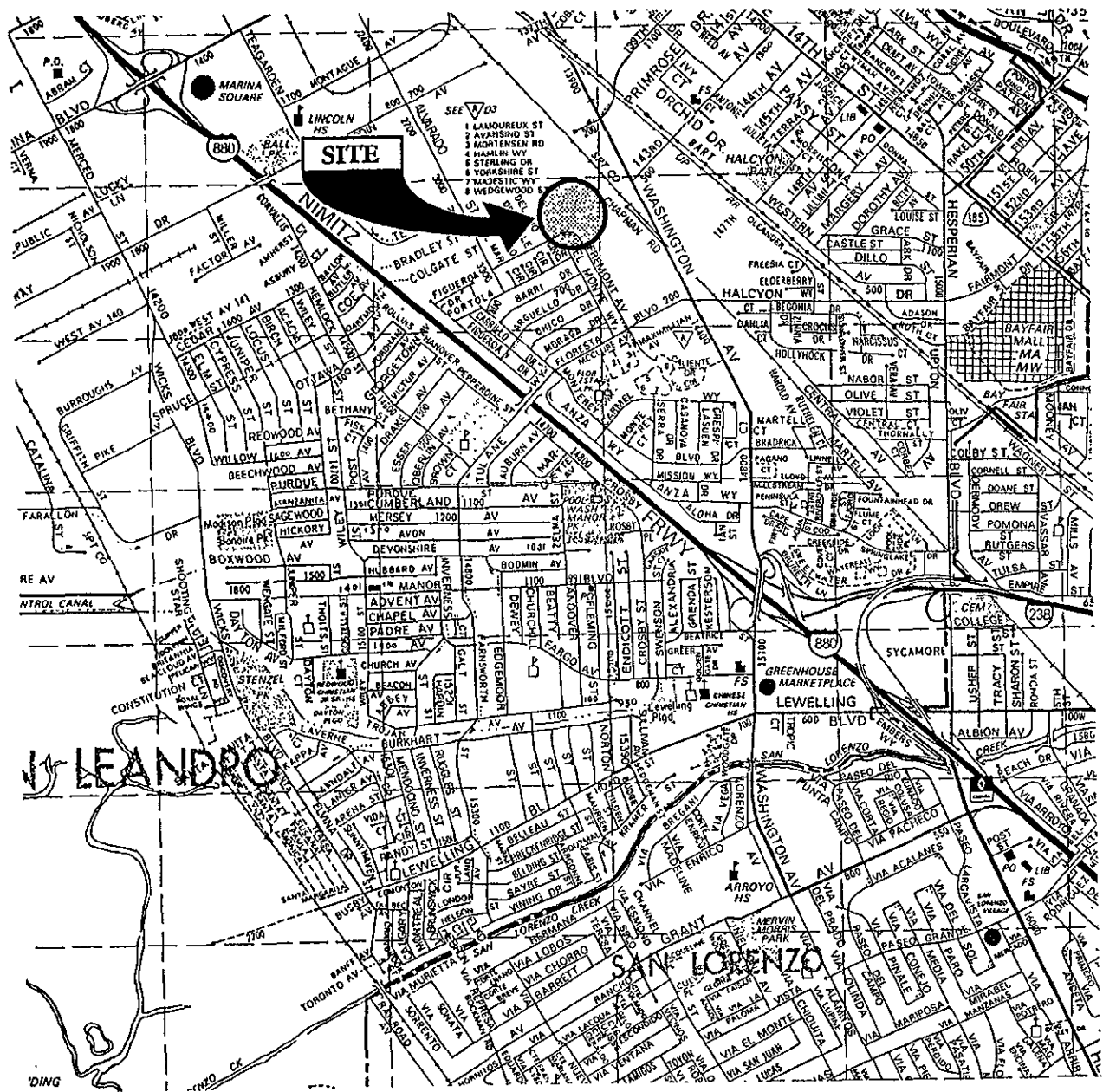
No sensitive receptors appear likely to be impacted, for no complete plausible exposure pathways are present at this site.

- e) The site presents no significant risk to human health or the environment.

Benzene soil concentrations identified in the initial pit sample B-1 (130 mg/kg) and the soil sample collected at a depth of 15' bgs from boring MW-1 (0.87 mg/kg) exceed the ASTM RBSL (0.49 mg/kg, target level 1E-04) for the exposure pathway "Soil-Vapor Intrusion from Soil to Buildings" for a commercial/industrial receptor. In addition, the benzene concentration detected in the soil sample B-1 exceeds the ASTM RBSL (13.25 mg/kg, target level 1E-04) for the exposure pathway "Soil-Volatilization to Outdoor Air" for a commercial/industrial receptor. However, it is not expected to pose a potential exposure risk for the following reasons:

- ◆ both boring MW-1 and the former tank pit are 70-80' distant from the "main building" where potential receptors may be present; and the "storage building" is 25' upgradient of the former tank pit.
- ◆ site geology is comprised of layered sedimentary deposits, the last 7' of which before reaching surface grade are comprised of silty clay, therefore limiting vertical vapor transport.
- ◆ overexcavation of the former tank pit likely removed the bulk of contaminated sediments previously identified in the "source area".
- ◆ Soil and groundwater volatilization to indoor/outdoor air is greatly impeded due to the asphaltic concrete capping.

For these reasons, no complete exposure pathways appear to be present, although Tier 1 RBSLs may have been exceeded. Therefore, no apparent risk is posed by allowing latent contamination to remain in place, and this case warrants closure.



"Reproduced with permission granted by THOMAS BROS. MAPS."

1063-1, 11/30 BAF*EB

VICINITY MAP
S & S BUILDING SUPPLY
San Leandro, California

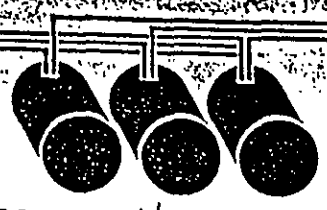
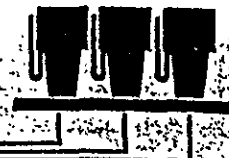
LOWNEY ASSOCIATES
Environmental/Geotechnical/Engineering Services

FIGURE 1
1063-1, December 1994

1063-1

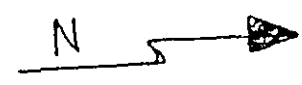
PARADISO CONSTRUCTION CO.

GENERAL & PETROLEUM CONTRACTORS

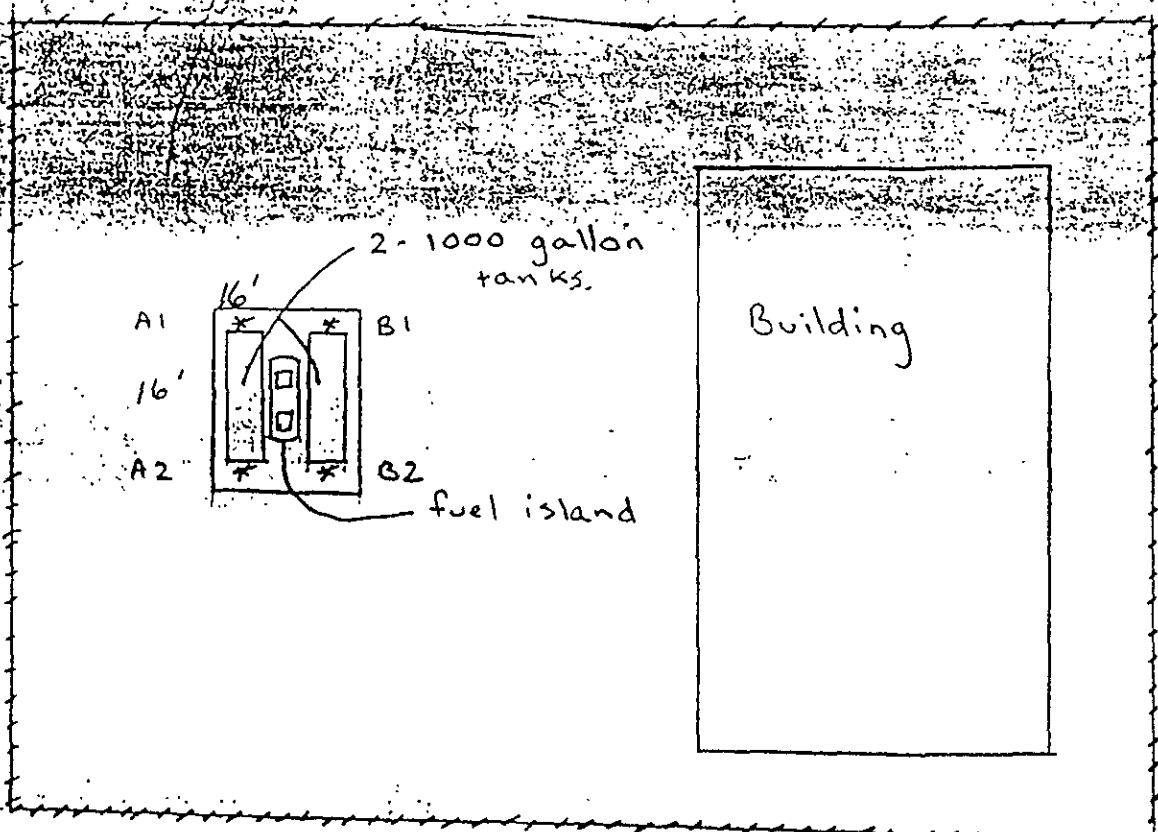


LICENSE NO. 259820
P.O. BOX 6397
9220 "G" STREET OAKLAND, CA 94603
(415) 562-5511

ITEM 11.



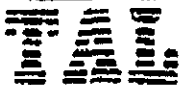
FREMONT ST.



Site Plan
(NTS)

* soil sample location.

S&S Building Supply
701 Fremont Ave
San Leandro, CA.



DATE: 6/16/89

LOG NO.: 7446

DATE RECEIVED: 6/1/89

CUSTOMER: Paradiso Construction Company

REQUESTER: Eric Montesano

PROJECT: No. 528, S and S Building Supply

Sample Type: Soil

Method and Constituent	Units	A 1		A 2		B 1	
		Concentration	Detection Limit	Concentration	Detection Limit	Concentration	Detection Limit
DHS Method:							
Total Petroleum Hydrocarbons as Gasoline	mg/kg	< 0.5	0.5	< 0.5	0.5	7,600	30
Modified EPA Method 8020:							
Benzene	mg/kg	< 0.03	0.03	< 0.03	0.03	130	4
Toluene	mg/kg	< 0.03	0.03	< 0.03	0.03	360	4
Xylenes	mg/kg	< 0.1	0.1	< 0.1	0.1	630	20
Ethyl Benzene	mg/kg	< 0.04	0.04	< 0.04	0.04	100	5

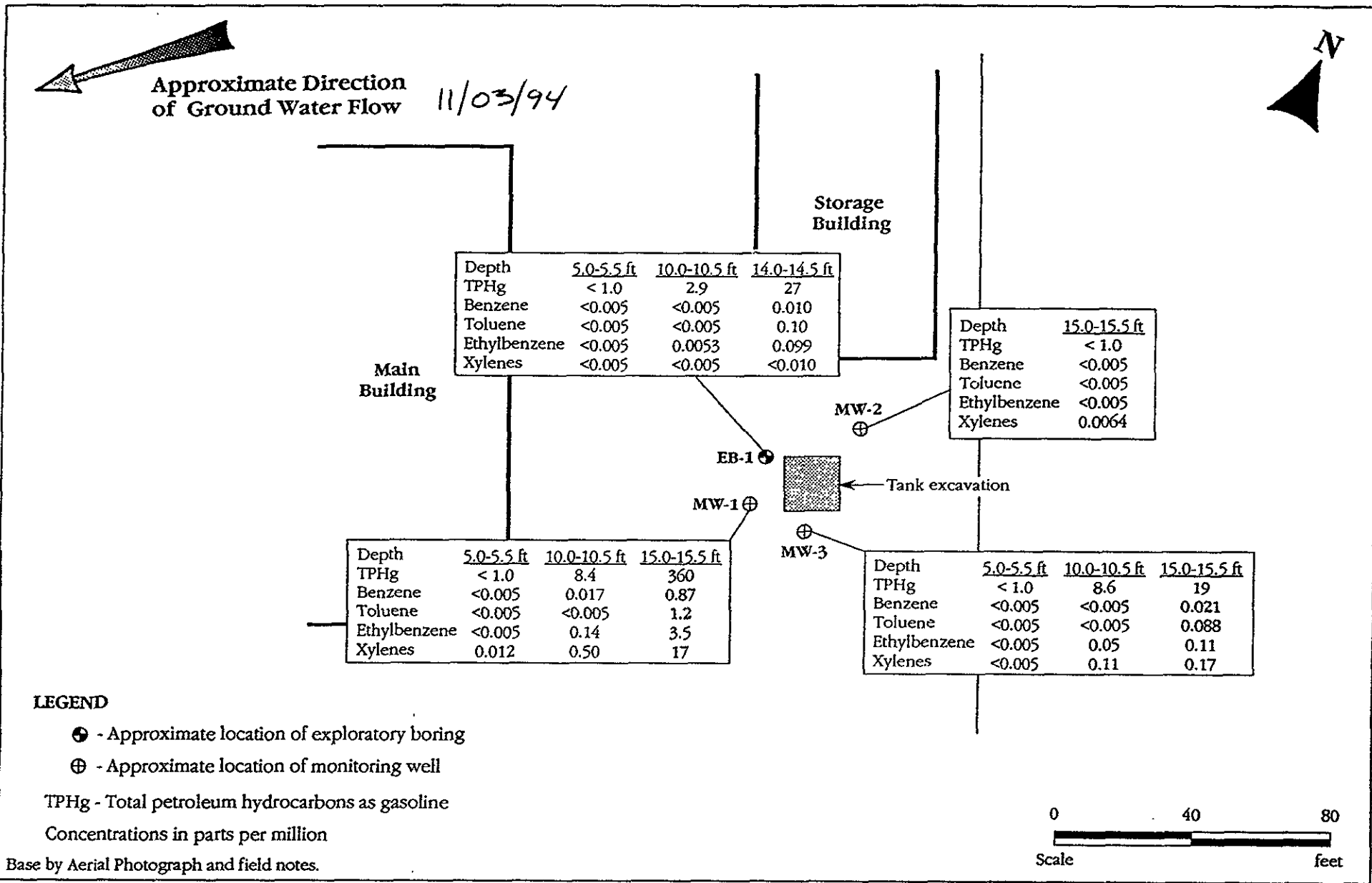
Method and Constituent	Units	B 2	
		Concentration	Detection Limit

DHS Method:

Total Petroleum Hydrocarbons as Gasoline	mg/kg	2,300	30
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Modified EPA Method 8020:

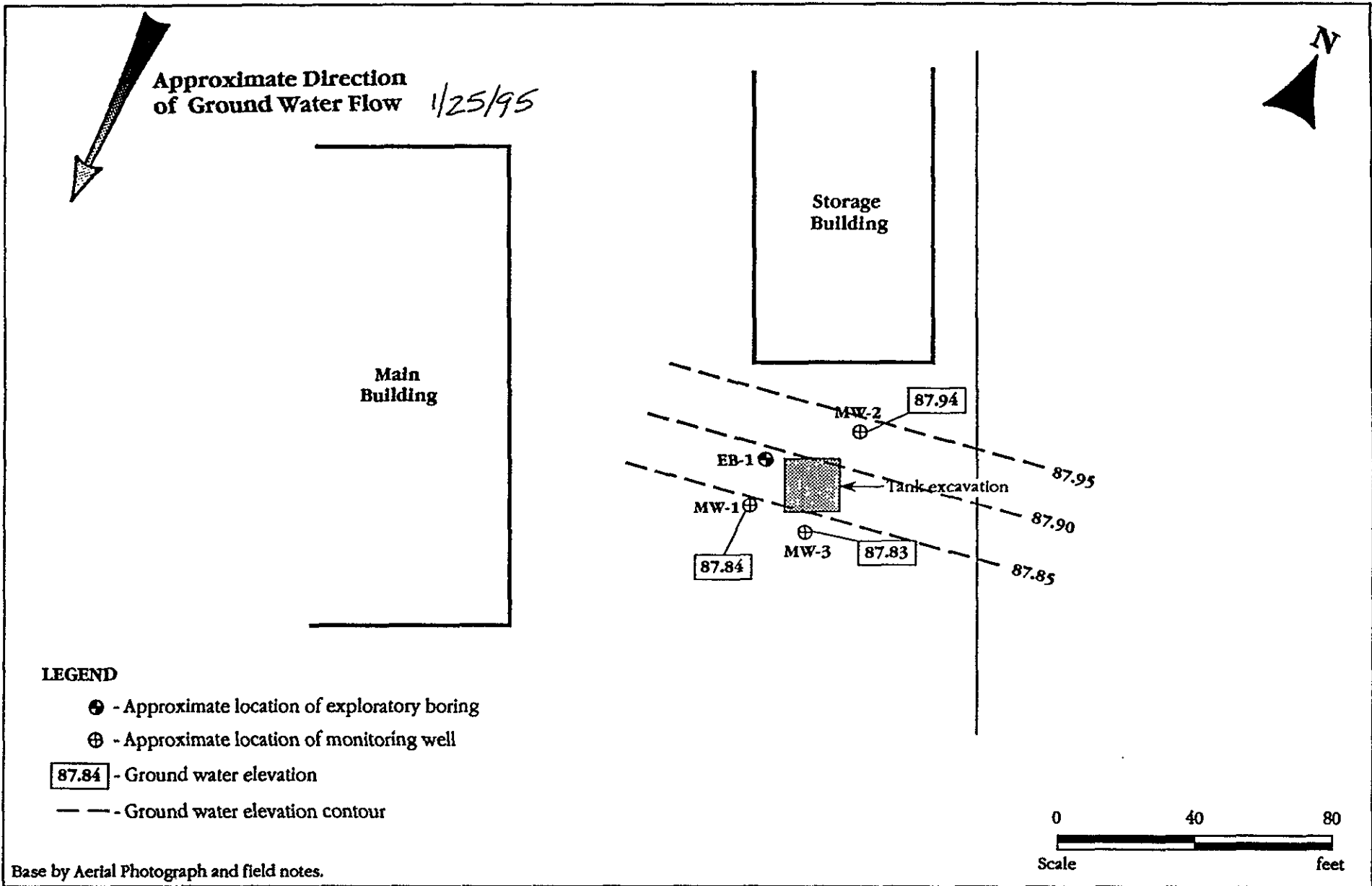
Benzene	mg/kg	15	4
Toluene	mg/kg	69	4
Xylenes	mg/kg	280	20
Ethyl Benzene	mg/kg	44	5



1063-1, 11/30 BAF'EB

ANALYTICAL RESULTS FOR SOIL SAMPLES

S & S BUILDING SUPPLY
San Leandro, California



Base by Aerial Photograph and field notes.

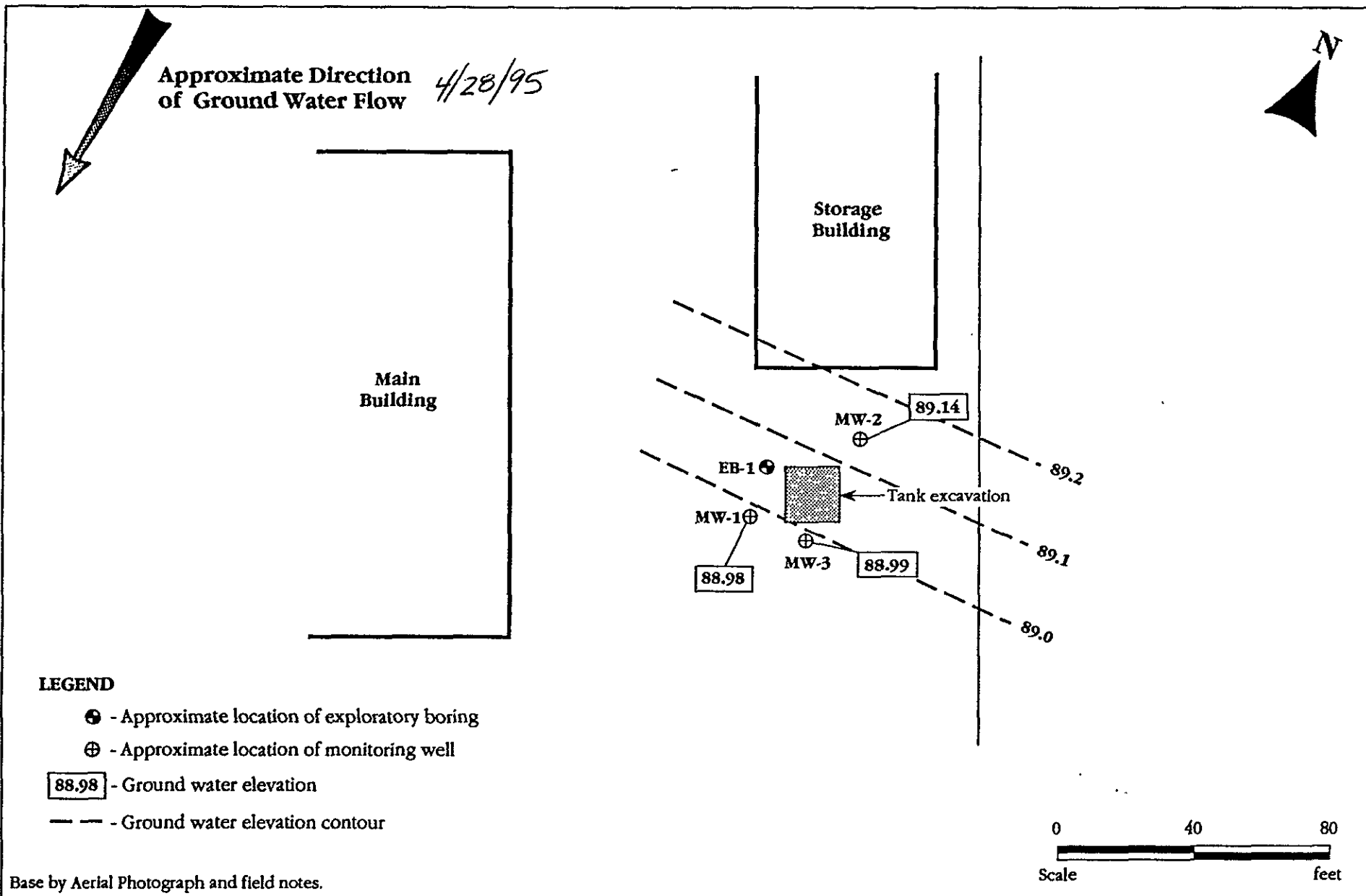
1063-1, 2/27 BAF'EB

GROUND WATER ELEVATION MAP

S & S BUILDING SUPPLY
San Leandro, California

LOVNEY ASSOCIATES
Environmental/Geotechnical/Engineering Services

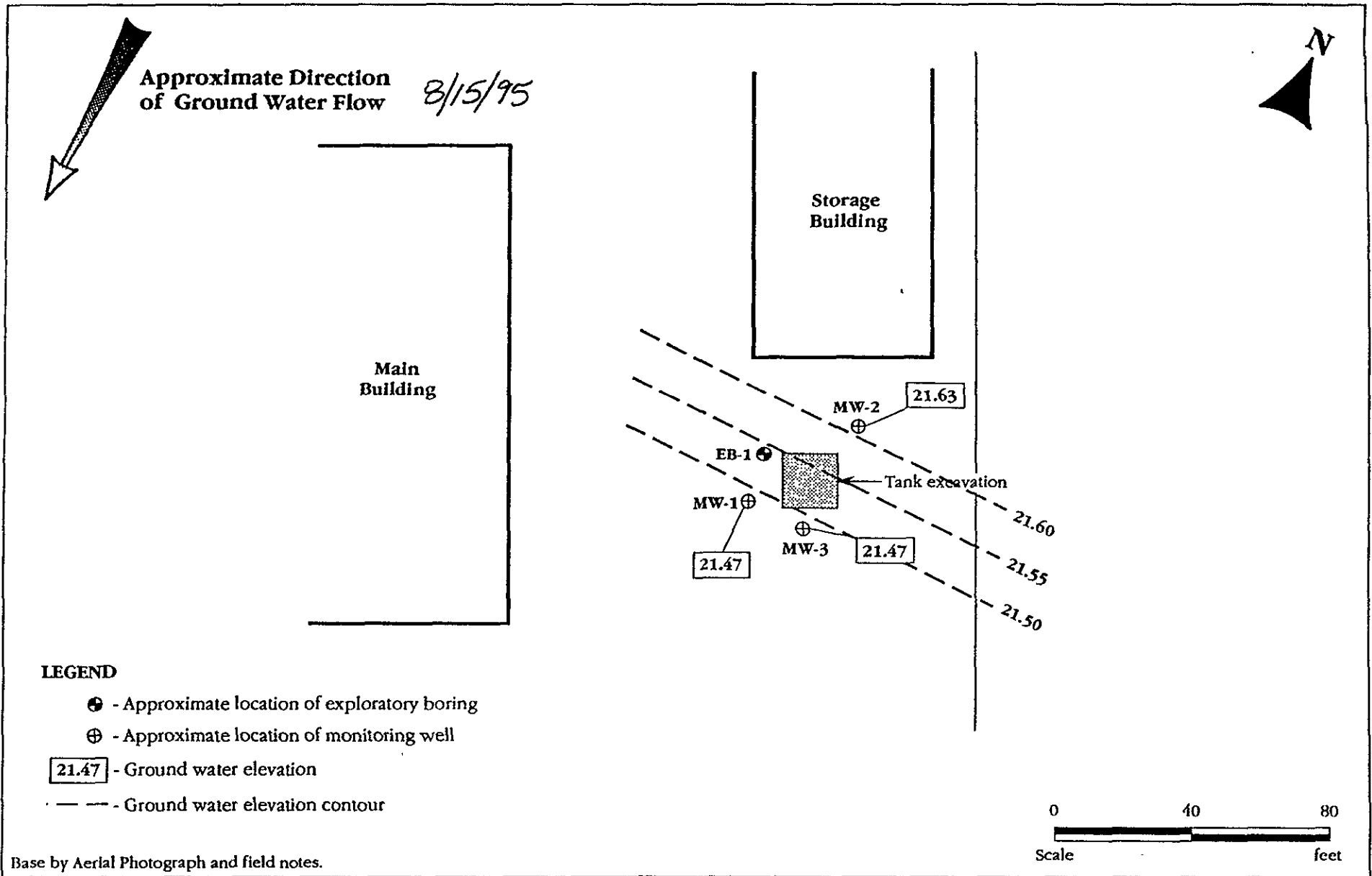
FIGURE 3
1063-1, February 1995



1063-1, 5/95 BAF'EB

GROUND WATER ELEVATION MAP

S & S BUILDING SUPPLY
San Leandro, California



Base by Aerial Photograph and field notes.

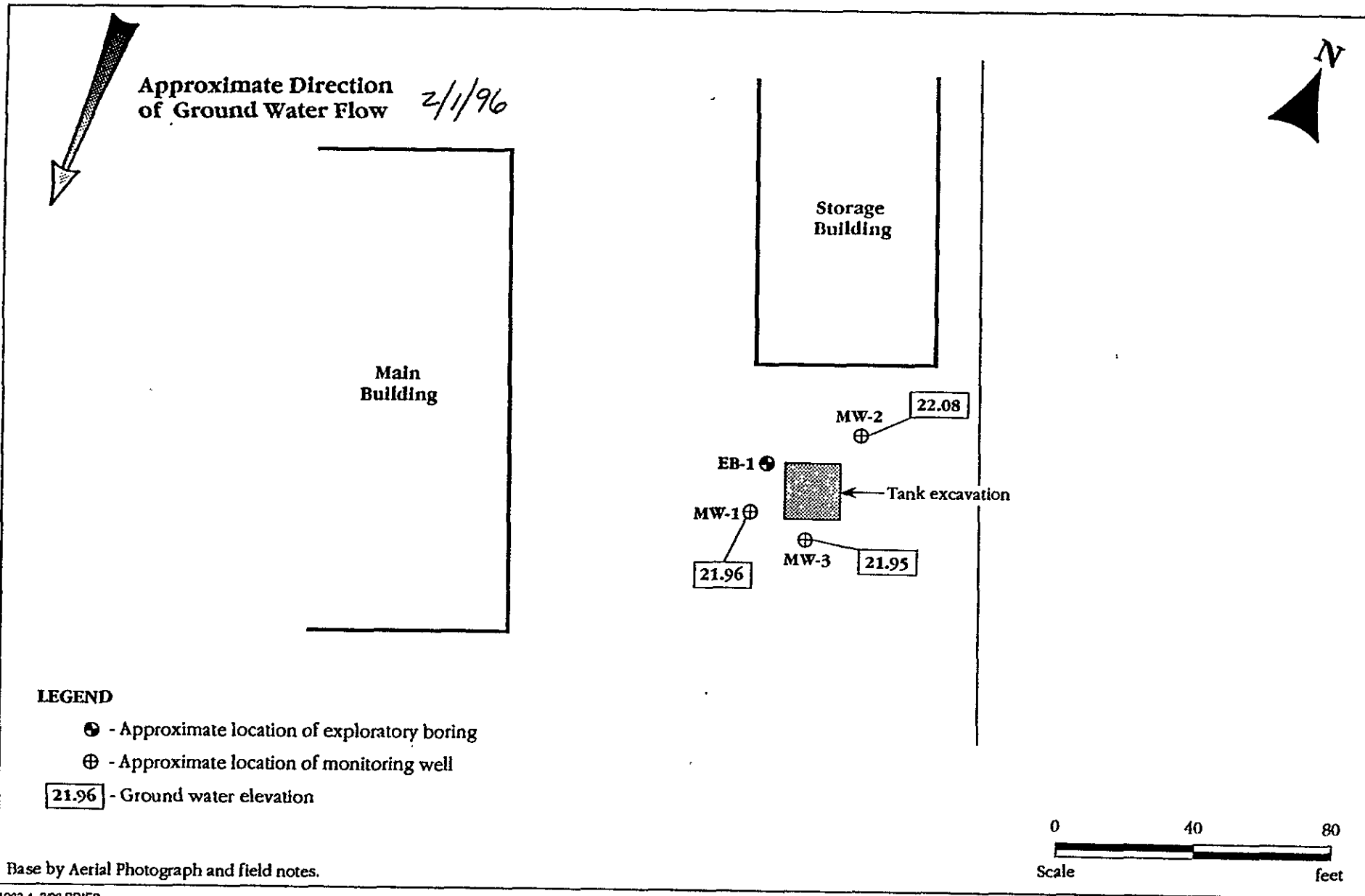
1063-1, 9/95 BAF*EB

GROUND WATER ELEVATION MAP

S & S BUILDING SUPPLY
San Leandro, California

LOVNEY ASSOCIATES
Environmental/Geotechnical/Engineering Services

FIGURE 3.5
1063-1



GROUND WATER ELEVATION MAP

S & S BUILDING SUPPLY
San Leandro, California

TABLE 1. Analytical Results for Soil Samples
(concentrations in ppm)

October 1994

Sample ID	Gasoline Range Hydrocarbons	Benzene	Toluene	Ethylbenzene	Xylenes
MW-1					
@ 5.0-5.5 ft.	<1.0	<0.005	<0.005	<0.005	0.012
@ 10.0-10.5 ft.	8.4	0.017	<0.005	0.14	0.50
@ 15.0-15.5 ft.	360	0.87	1.2	3.5	17
MW-2					
@ 15.0-15.5 ft.	<1.0	<0.005	<0.005	<0.005	0.0064
MW-3					
@ 5.0-5.5 ft.	<1.0	<0.005	<0.005	<0.005	<0.005
@ 10.0-10.5 ft.	8.6	<0.005	<0.005	0.05	0.11
@ 15.0-15.5 ft.	19	0.021	0.088	0.11	0.17
EB-1					
@ 5.0-5.5 ft.	<1.0	<0.005	<0.005	<0.005	<0.005
@ 10.0-10.5 ft.	2.9	<0.005	<0.005	0.0053	<0.005
@ 14.0-14.5 ft.	27	0.010	0.10	0.099	<0.010

< Compound not detected above the specified laboratory detection limit.

TABLE 2. Analytical Results for Ground Water Samples
(concentrations in parts per billion)

Well Number	Date Sampled	TPHg	Benzene	Toluene	Ethylbenzene	Xylenes
MW-1	11/03/94	35,000	<25	<25	140	430
	01/25/95	4,100	22	9.4	25	71
	04/21/95	3,600	9.6	7.0	39	120
	08/15/95	1,300	15	<5.0	46	90
	02/01/96	1,300	16	<5.0	33	76
MW-2	11/03/94	1,200	<2.5	<2.5	<2.5	<2.5
	01/25/95	330	<0.50	<0.50	<0.50	<0.50
	04/28/95	220	1.8	<0.50	0.58	4.2
	08/15/95	69	<0.50	<0.50	<0.50	<0.50
	02/01/96	<50	<0.50	<0.50	<0.50	<0.50
MW-3	11/03/94	2,400	4.2	<2.0	40	43
	11/03/94*	3,000	5.6	<2.0	39	44
	01/25/95	2,800	27	<5.0	110	150
	04/28/95	6,500	12	11	300	410
	08/15/95	2,000	9.9	<5.0	64	45
	02/01/96	2,600	23	7	89	110
Drinking Water Standards*		NE	1.0	1,000	680	1,750

- * -U.S. Environmental Protection Agency, "Drinking Water Standards and Health Advisory Table", August 1991
- < -Compound not detected above the specified laboratory detection limit.
- * -Split Sample
- NE -Not Established

RILL RIG: Mobile B-40

SURFACE ELEVATION: --

LOGGED BY: BAF

DEPTH TO GROUND WATER: 15.5 feet

BORING DIAMETER: 8 inches

DATE DRILLED: 10/27/94

DESCRIPTION AND REMARKS	SYMBOL	LEGEND	CONSISTENCY	SOIL TYPE	DEPTH (FEET)	SAMPLER	WATER CONTENT (%)	PENETRATION RESISTANCE (BLOWS/FT.)	SHEAR STRENGTH BY TORVANE (KSF)	ORGANIC VAPOR METER (ppm)
Asphalt										
SILTY CLAY, Black, slightly moist, low to moderate plasticity	A		Hard	CL						
SILTY CLAY, Dark brown, slightly moist, low plasticity	A		Hard	CL						
					5			79		0
SILTY SAND, Brown, slightly moist	B		Medium dense	SM						
SILTY CLAY, Greenish brown, slightly moist, low to moderate plasticity	C		Very stiff	CL	10			21		134
Minor medium sand										
								37		82
SANDY GRAVEL, Gray, moist, well-graded	D		Very dense	GW	15			52		2164
Bottom of Boring = 16.5 feet.										
					20					
					25					
					30					

NOTE: The stratification lines represent the approximate boundary between the soil types. The transition may be gradual.

1063-1, 11/30 BAF'EB

EXPLORATORY BORING LOG - EB-1

S & S BUILDING SUPPLY
San Leandro, California

LOWNEY ASSOCIATES
Environmental/Geotechnical/Engineering Services

EB-1
1063-1, December 1994

Appendix B

RILL RIG, Mobile B-40

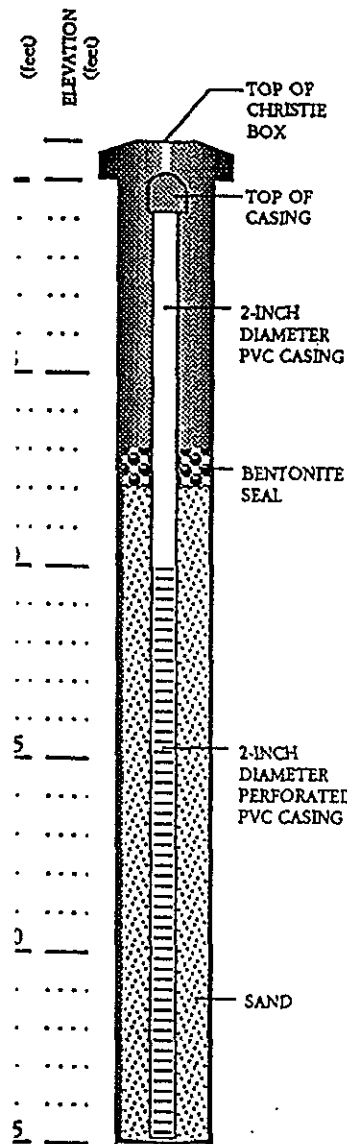
SURFACE ELEVATION: -

LOGGED BY: BAF

DEPTH TO GROUND WATER: 18.0 feet
(From Surface Elevation)

BORING DIAMETER: 8 inches

DATE DRILLED: 10/27/94



DESCRIPTION	SYMBOL	CONSISTENCY	SOIL TYPE	LEGEND	DEPTH (feet)	SAMPLER	WATER CONTENT (%)	PENETRATION RESISTANCE (BLOWS/FT.)	ORGANIC VAPORS (ppm)
Asphalt									
SILTY CLAY, Black, slightly moist, low to moderate plasticity	A	Hard	CL						
SILTY CLAY, Dark brown, slightly moist, low plasticity	A	Hard	CL						
					5		80	56	
SILTY SAND, Greenish gray, slightly moist, slight petroleum odor	B	Medium dense	SM						
					10		21	620	1699
SANDY CLAY, Greenish gray, slightly moist, moderate plasticity, petroleum odor	C	Very stiff	CL						
SANDY GRAVEL, Gray moist, well-graded, petroleum odor	D	Dense	GW						
					15		Final 62	2228	
SILTY SAND, Grayish brown, moist	D	Very dense	SM				Initial		
SAND, Brown, saturated, well-graded	D	Very loose	SW						
					20				
SANDY CLAY, Gray, moist, moderate to high plasticity	E	Very stiff	CL				22	21	
SANDY CLAY, Brown, slightly moist, moderate to high plasticity	E	Very stiff	CL						
SANDY CLAY, Dark brown, slightly moist, moderate plasticity	C	Hard	CL					8	
					25				
Bottom of Well = 25.0 feet									
					30				

1063-1, 11/30 BAF'EB

MONITORING WELL LOG - MW-1

S & S BUILDING SUPPLY
San Leandro, California

DRILL RIG: Mobile B-40

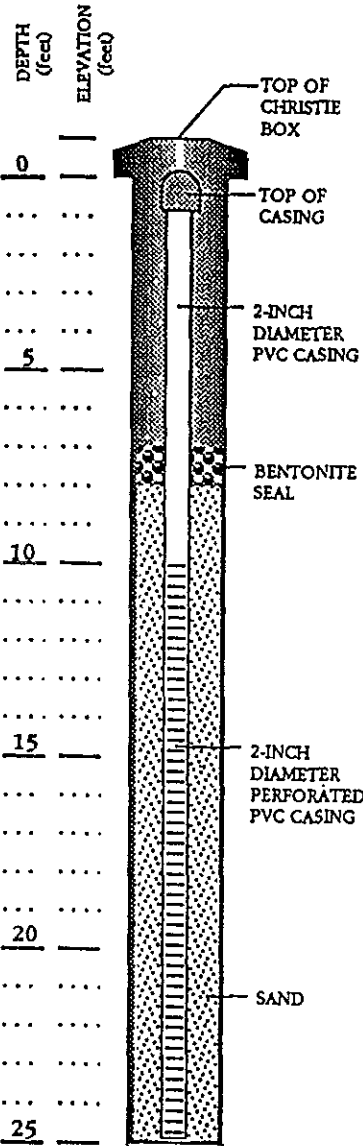
SURFACE ELEVATION: --

LOGGED BY: BAF

DEPTH TO GROUND WATER: 17.0 feet
(From Surface Elevation)

BORING DIAMETER: 8 inches

DATE DRILLED: 10/27/94



DEPTH (feet)	ELEVATION (feet)	DESCRIPTION	SYMBOL	CONSISTENCY	SOIL TYPE	LEGEND	DEPTH (feet)	SAMPLER	WATER CONTENT (%)	PENETRATION RESISTANCE (BLOWS/FT.)	ORGANIC VAPORS (ppm)
0		Asphalt									
1		SILTY CLAY, Black, slightly moist, low to moderate plasticity	A	Hard	CL	[Hatched]					
5		SILTY CLAY, Dark brown, slightly moist, low plasticity	A	Hard	CL	[Hatched]	5	[Sample]	69		8
10		SILTY SAND, Brown, slightly moist	B	Medium dense	SM	[Dotted]	10	[Sample]	23		20 88
15		SANDY CLAY, Brown with gray streaks, moist, moderate to high plasticity	C	Very stiff	CL	[Hatched]	15	[Sample]	Final 25		10
17		CLAYEY SAND, Gray, moist	D	Medium dense	SC	[Dotted]		[Sample]	Initial		
20		CLAYEY SAND, Brown, saturated	D	Medium dense	SC	[Dotted]		[Sample]			
20		SANDY CLAY, Brown, slightly moist, moderate to high plasticity	E	Very stiff	CL	[Hatched]	20	[Sample]	23		0
25		SANDY CLAY, Dark brown, slightly moist, moderate plasticity	E	Hard	CL	[Hatched]	25	[Sample]	36		0
25.0		Bottom of Well = 25.0 feet									
30		NOTE: The stratification lines represent the approximate boundary between the soil types. The transition may be gradual.					30				

1063-1, 11/30 BAF*EB

MONITORING WELL LOG - MW-2

S & S BUILDING SUPPLY
San Leandro, California

DRILL RIG: Mobile B-40

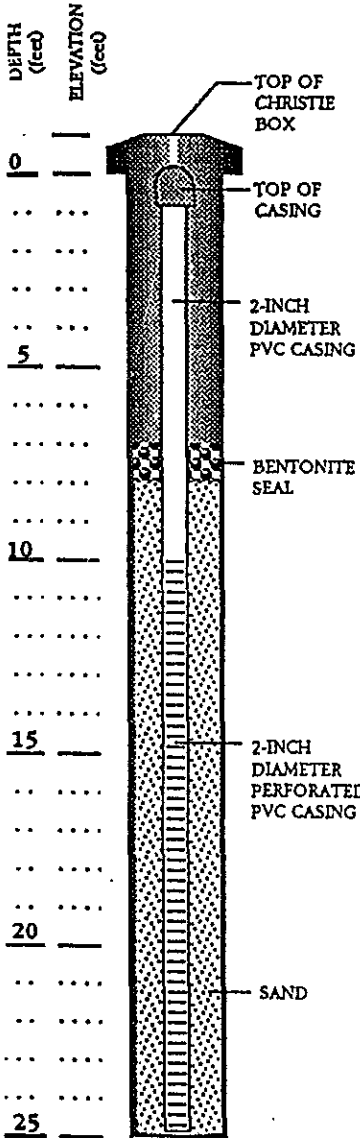
SURFACE ELEVATION: --

LOGGED BY: BAF

DEPTH TO GROUND WATER: 17.0 feet
(From Surface Elevation)

BORING DIAMETER: 8 inches

DATE DRILLED: 10/27/94



DEPTH (feet)	ELEVATION (feet)	DESCRIPTION	SYMBOL	CONSISTENCY	SOIL TYPE	LEGEND	DEPTH (feet)	SAMPLER	WATER CONTENT (%)	PENETRATION RESISTANCE (BLOWS/FT)	ORGANIC VAPOURS (ppm)
0		Asphalt									
0		SILTY CLAY, Black, slightly moist, low to moderate plasticity	A	Hard	CL	[Hatched]					
5		SILTY CLAY, Dark brown, slightly moist, low plasticity	A	Hard	CL	[Hatched]	5		47		
10		SILTY SAND, Brown, slightly moist, slight petroleum odor	B	Medium dense	SM	[Dotted]	10		30	901	
15		SANDY CLAY, Brown with gray streaks, moist, moderate to high plasticity, petroleum odor	C	Very stiff	CL	[Hatched]	15		Final 23	268	
17		SANDY CLAY, Brown, saturated	E	Very stiff	CL	[Hatched]	17		Initial		
20		SAND					20		19	0	
25		SANDY CLAY, Dark brown, slightly moist, moderate plasticity	E	Hard	CL	[Hatched]	25		44	0	
25		Bottom of Well = 25.0 feet									
30		NOTE: The stratification lines represent the approximate boundary between the soil types. The transition may be gradual.					30				

1063-1, 11/30 BAF*EB

MONITORING WELL LOG - MW-3

S & S BUILDING SUPPLY
San Leandro, California