

ALAMEDA COUNTY  
**HEALTH CARE SERVICES**

AGENCY  
DAVID J. KEARS, Agency Director



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

August 20, 1997

Mr. Robert Lorentzen  
P.O. Box 21926  
Seattle, Washington 98111-3926

**RE: Remedial Action Completion Certification for STID # 1849 Loomis Armored, Inc.  
936 Brockhurst Street, Oakland, California 94608**

Dear Mr. Lorentzen:

Per your request, this office has revised the Remedial Action Completion Certification for the subject property. Enclosed is a copy of the new Remedial Action Completion Certification which is addressed to the Loomis Oakland, Revocable Trust, the fee owner of the subject property.

Please contact me at (510) 567-6780 regarding any questions you may have concerning this letter or the subject site.

Sincerely,

Susan L. Hugo  
Hazardous Materials Specialist

enclosure

c: Mee Ling Tung, Director, Environmental Health  
Gordon Coleman, Chief, Environmental Protection Division  
Kevin Graves, San Francisco Bay RWQCB  
Dave Deaner, SWRCB, UST Cleanup Fund Program  
Leroy Griffin, Oakland Fire Department  
SH / files

ALAMEDA COUNTY  
HEALTH CARE SERVICES

AGENCY  
DAVID J. KEARS, Agency Director



July 7, 1997

Mr. Tommy Harden  
Loomis Armored, Inc.  
P.O. Box 561367  
Dallas, Texas 75356-1367

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

**RE: Fuel Leak Site Case Closure - Loomis Armored, Inc. (STID # 1849)**  
**936 Brockhurst Street, Oakland, California 94608**

Dear Mr. Harden:

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 Health Services, Local Oversight Program 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 condition exists at the site:

- \* Four hundred sixty parts per billion (ppb) Total Petroleum Hydrocarbon as Diesel remain in the groundwater beneath the site.

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

Sincerely,

Susan L. Hugo  
Senior Hazardous Materials Specialist

**Enclosures:**

1. Case Closure Letter
2. Case Closure Summary

c: Gordon Coleman, Chief, Environmental Protection Division  
Leroy Griffin, Oakland Fire Department  
SH ( 3 copies of letter only)

*To Susan Hugo -  
Please handle*

AUG 8 1997

Director of Environmental Health

Robert H. Lorentzen  
Attorney at Law  
(206) 628-6624  
lorentrh@wkg.com

Two Union Square  
601 Union Street, Suite 4100  
Seattle, Washington 98101-2380  
P.O. Box 21926  
Seattle, Washington 98111-3926  
Telephone (206) 628-6600  
FAX (206) 628-6611

August 6, 1997

Environmental Health Services  
Environmental Protection (LOP)  
1131 Harbor Bay Parkway, Suite 250  
Alameda, CA 94502-6577

Attention: Mee Ling Tung, Director

Re: STID #1849 Loomis Armored, Inc.  
936 Brockhurst Street, Oakland, CA 94608

We have been provided copy of Remedial Action Completion Certification concerning the above property, dated July 7, 1997, addressed to Mr. Tommy Harden, Loomis Armored, Inc. A copy is enclosed for your convenience and reference.

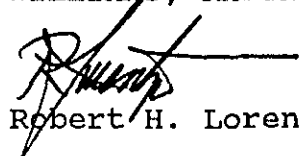
We are attorneys for the Loomis Oakland Revocable Trust, fee owner of the subject property. A Remedial Action Completion Certification addressed to the Trust is requested. The Trust address is:

Loomis Oakland Revocable Trust  
P.O. Box 21926  
Seattle, WA 98111-3926  
Attention: Charles W. Loomis, Trustee

Thank you for your attention with respect to this request.

Very truly yours,

WILLIAMS, KASTNER & GIBBS LLP



Robert H. Lorentzen

RHL:nbo

Enclosure

cc: Tommy Harden, Loomis Armored, Inc.  
Charles W. Loomis, Trustee



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

**REMEDIAL ACTION COMPLETION CERTIFICATION**

July 7, 1997

Loomis Armored Revocable Trust  
Attention : Charles W. Loomis, Trustee  
P.O. Box 21926  
Seattle, WA 98111-3926

**RE: STID # 1849 Loomis Armored, Inc.**  
**936 Brockhurst Street, Oakland, California 94608**

Dear Mr. Loomis:

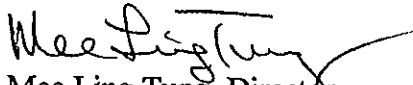
This letter confirms the completion of a site investigation and remedial action for the underground storage tanks formerly located at the above-described location. Thank you for your cooperation throughout this investigation. Your willingness and promptness in responding to our inquiries concerning the former underground storage 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 Section 2721 (e) of Title 23 of the California Code of Regulations.

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

Sincerely,

  
Mee Ling Tung, Director

c: Gordon Coleman, Chief, Environmental Protection Division  
Kevin Graves, San Francisco Bay RWQCB  
Dave Deaner, SWRCB, UST Cleanup Fund Program (with enclosure)  
Leroy Griffin, Oakland Fire Department  
Susan Hugo (3 copies of letter only)

**CASE CLOSURE SUMMARY**  
**Leaking Underground Fuel Storage Tank Program**

**I. AGENCY INFORMATION**

**Date:** December 10, 1996

Agency name: **Alameda County-HazMat** Address: **1131 Harbor Bay Pkwy**  
City/State/Zip: **Alameda, CA 94502** Phone: **(510) 567-6700**  
Responsible staff person: **Susan Hugo** Title: **Sr. Hazardous Mat'ls Spec.**

**II. CASE INFORMATION**

Site facility name: **Loomis Armored Inc**  
Site facility address: **936 Brockhurst St, Oakland, CA 94608**  
RB LUSTIS Case No: **N/A** Local Case No./LOP Case No.: **1849**  
URF filing date: **5/9/90** SWEEPS No: **N/A**

**Responsible Parties:                      Addresses:                      Phone Numbers:**

1. **Loomis Armored, Inc**                      **P.O. Box 561367**  
**c/o Tommy Harden**                      **Dallas, TX 75356-1367**

<b><u>Tank No:</u></b>	<b><u>Size in gal.:</u></b>	<b><u>Contents:</u></b>	<b><u>Closed in-place or removed?:</u></b>	<b><u>Date:</u></b>
1	6,000	Gasoline	Removed	3/9/90
2	1,000	Diesel	Removed	3/9/90

**III. RELEASE AND SITE CHARACTERIZATION INFORMATION**

Cause and type of release: **Unknown**  
Site characterization complete? **YES**  
Date approved by oversight agency: **11/20/96**  
Monitoring Wells installed? **Yes** Number: **4**  
Proper screened interval? **Yes?**  
Highest GW depth below ground surface: **9.05'** Lowest depth: **15.65'** in **MW-1**  
Flow direction: **West, southwest at 0.055 ft/ft**  
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:**

<u>Material</u>	<u>Amount</u> (include units)	<u>Action (Treatment</u> <u>or Disposal w/destination)</u>	<u>Date</u>
Tank & Piping	2 USTs	H & H to Levin Metals	3/14/90
Soil	50+ cy	Unknown	

**Maximum Documented Contaminant Concentrations - - Before and After Cleanup**

Contaminant	Soil (ppm)		Water (ppb)	
	Before <sup>1</sup>	After	Before <sup>2</sup>	After
TPH (Gas)	230	6.9	640	ND
TPH (Diesel)	1,800	ND	74,000	1,700
Benzene	ND	ND	83	ND
Toluene	ND	ND	25	ND
Ethylbenzene	ND	ND	6.5	ND
Xylenes	ND	ND	15	ND
MTBE				ND
Heavy metals	Organic Pb	NA		ND <sup>4</sup>
Other				

- NOTE: 1 soil sample from gasoline tank excavation (3/9/90)  
 2 grab water sample from gasoline tank pit (3/9/90)  
 3 Pb analysis performed only on stockpiled soil  
 4 total lead

**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? **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 site closure**  
 Number Decommissioned: **0** Number Retained: **4**  
 List enforcement actions taken: **None**  
 List enforcement actions rescinded: **NA**

**V. LOCAL AGENCY REPRESENTATIVE DATA**

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

Signature: *Eva Chu* Date: *12/31/96*

**Reviewed by**

Name: **Susan Hugo** Title: **Haz Mat Specialist**

Signature: *Susan L. Hugo* Date: *12/10/96*

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

Signature: *Thomas Peacock* Date: *12/31/96*

**VI. RWQCB NOTIFICATION**

Date Submitted to RB: *1/2/96* RB Response: *Approved*

RWQCB Staff Name: **Kevin Graves** Title: **AWRCE**

Signature: *Kevin Graves* Date: *1-7-97*

**VII. ADDITIONAL COMMENTS, DATA, ETC.**

Two USTs (1-6K gallon gasoline, 1-1K gallon diesel) in separate pits were removed on March 9, 1990. Water was observed in the pits. Sidewall soil samples (T1-8 and T2-8) were collected from the gasoline pit at ~8' bgs. And, sidewall soil samples (T3-7 and T4-7) were collected from the diesel tank excavation at ~7' bgs. A grab groundwater sample was also collected from the gasoline tank pit. All samples were analyzed for TPHg, TPHd and BTEX. Only soil sample T1-8 contained detectable amounts of petroleum hydrocarbons (up to 1,800 ppm TPHd, 230 ppm TPHg and non detectable levels of BTEX). The water sample also exhibited elevated levels of hydrocarbon contamination (up to 640 ppb TPHg, 74,000 ppb TPHd, and 83 ppb benzene). (See Figs 1 and 2, Table 1)

The remote fill pipes were removed the following day. The gasoline pit was also overexcavated, extending the south wall to the sidewalk. Approximately 50 cy of soil were removed. Three soil samples (T5-6, T6-6, T7-6) were collected from the south end of the final excavation at 6' bgs and a soil sample (P1-3) was collected from under the remote fill line at 3' bgs. Only soil below the remote fill line contained detectable levels of hydrocarbons. However, this soil was removed when the tank pit was overexcavated. (See Fig 3, Table 2)

In August 1990 three groundwater monitoring wells (MW-1 through MW-3) were installed around the former location of the gasoline tank excavation to a depth of 35' bgs. Initially it was anticipated that groundwater would be encountered at 9' bgs. The first boring was drilled to 24' bgs and the

augers were removed. After an hour, water was not detected in the bore hole. The boring was advanced to 29' bgs where groundwater was encountered. Water rose in the borehole to 16' bgs within two hours, suggesting that groundwater is under confined conditions. (See Fig 4 and Boring Logs)

To verify that the water encountered during tank removal activities was not perched, well MW-2 was constructed as a nested well, consisting of a 4" diameter well and a 1.5" diameter vadose zone well (see well MW-2 boring log). During subsequent site visits, the shallow vadose well (screened from 8' to 17' bgs) was found to be dry. Therefore, it can be concluded that perched water does not exist at the site. Water found in the former tank pit excavation may be due to the infiltration of surface water through cracks in the asphalt and/or ruptured sewer line.

Initial groundwater monitoring in August 1990 suggested that groundwater flowed to the south. Therefore, an additional monitoring well (MW-4) was installed in June 1994, south of the former tank excavation. Groundwater has been sampled for 8 consecutive quarters (from 6/94 to 3/96). Low to non-detectable levels of TPHg and BTEX have been identified in wells MW-1, MW-3 and MW-4. Higher levels of TPHd has been identified in all groundwater monitoring wells. However, laboratory data sheets indicate "concentrations reported as diesel are due to the presence of diesel and heavier hydrocarbons in the C18 to C36 range, possible motor oil". Loomis Armored, Inc. has no record that a motor oil or used oil UST exists or existed at this site. The source of the heavier HC contamination is not known. (See Fig 5, Table 3)

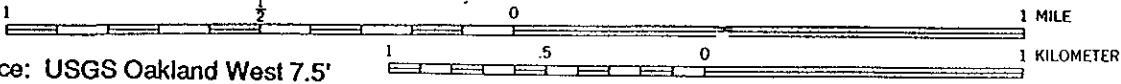
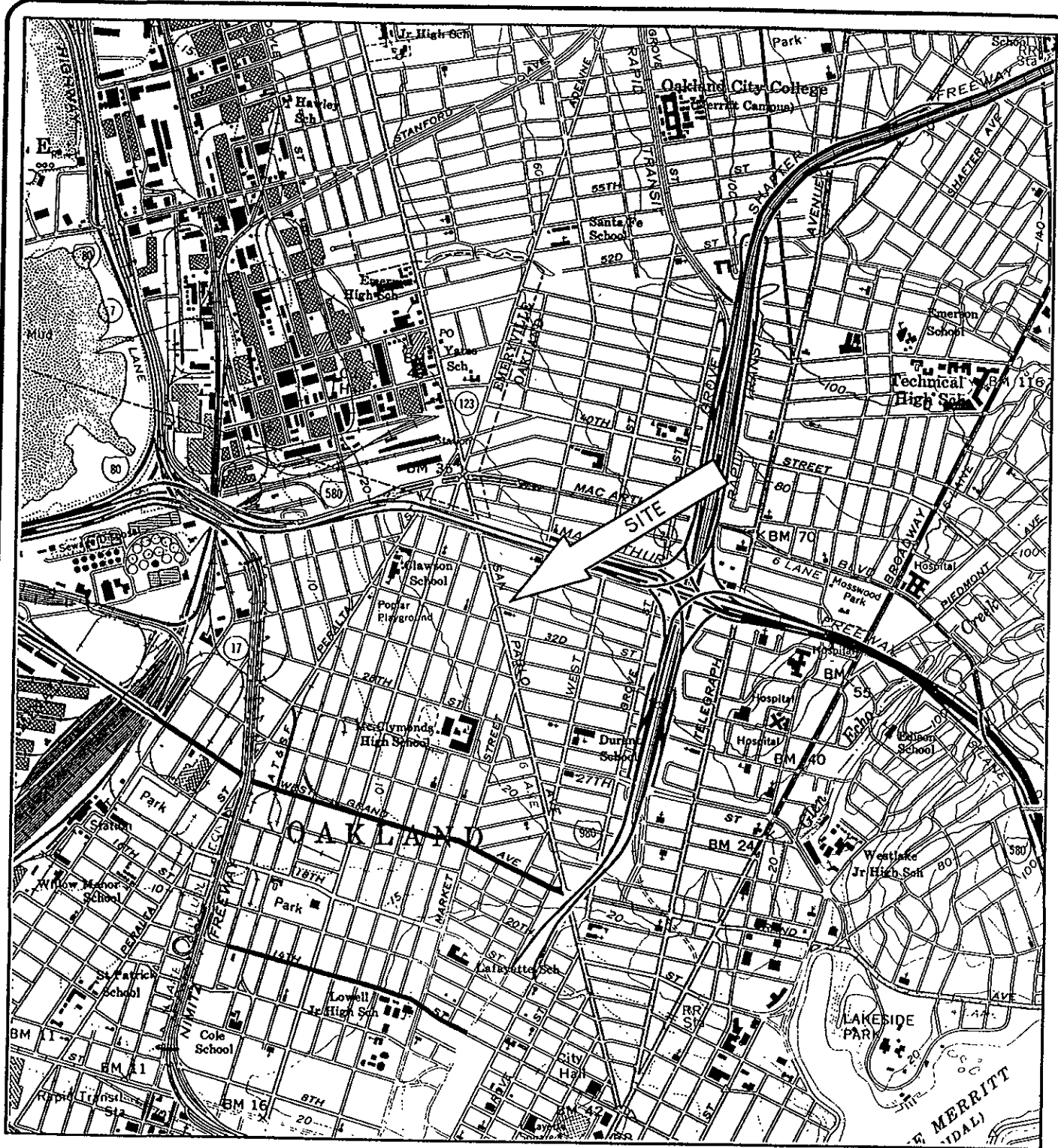
Well MW-1, MW-2 and MW-4 are screened in the confined aquifer (from 30 to 34.5' bgs in well MW-2; from 29 to 35' bgs in MW-1; and from 30 to 36' bgs in MW-4). Soil samples collected from the well borings at 10, 15, 20, and/or 25' bgs did not contain TPHd, TPHg or BTEX (see Table 4 and 5). Yet, TPHd has been detected in groundwater from these wells. It does not appear that TPHd migrated through the low permeable silts and clays to impact groundwater at 29' bgs. Rather, the low levels of hydrocarbons identified are from an offsite source.

In summary, case closure is recommended because:

- o the leak and ongoing sources have been removed;
- o the site has been adequately characterized;
- o no water wells, surface water, or other sensitive receptors are likely to be impacted; and,
- o the site presents no significant risk to human health or the environment.

*Although residual TPHd is still in groundwater, the chemicals of concern, BTEX, have not been detected.*





Reference: USGS Oakland West 7.5'  
 Quadrangle Map  
 Scale: 1:24,000

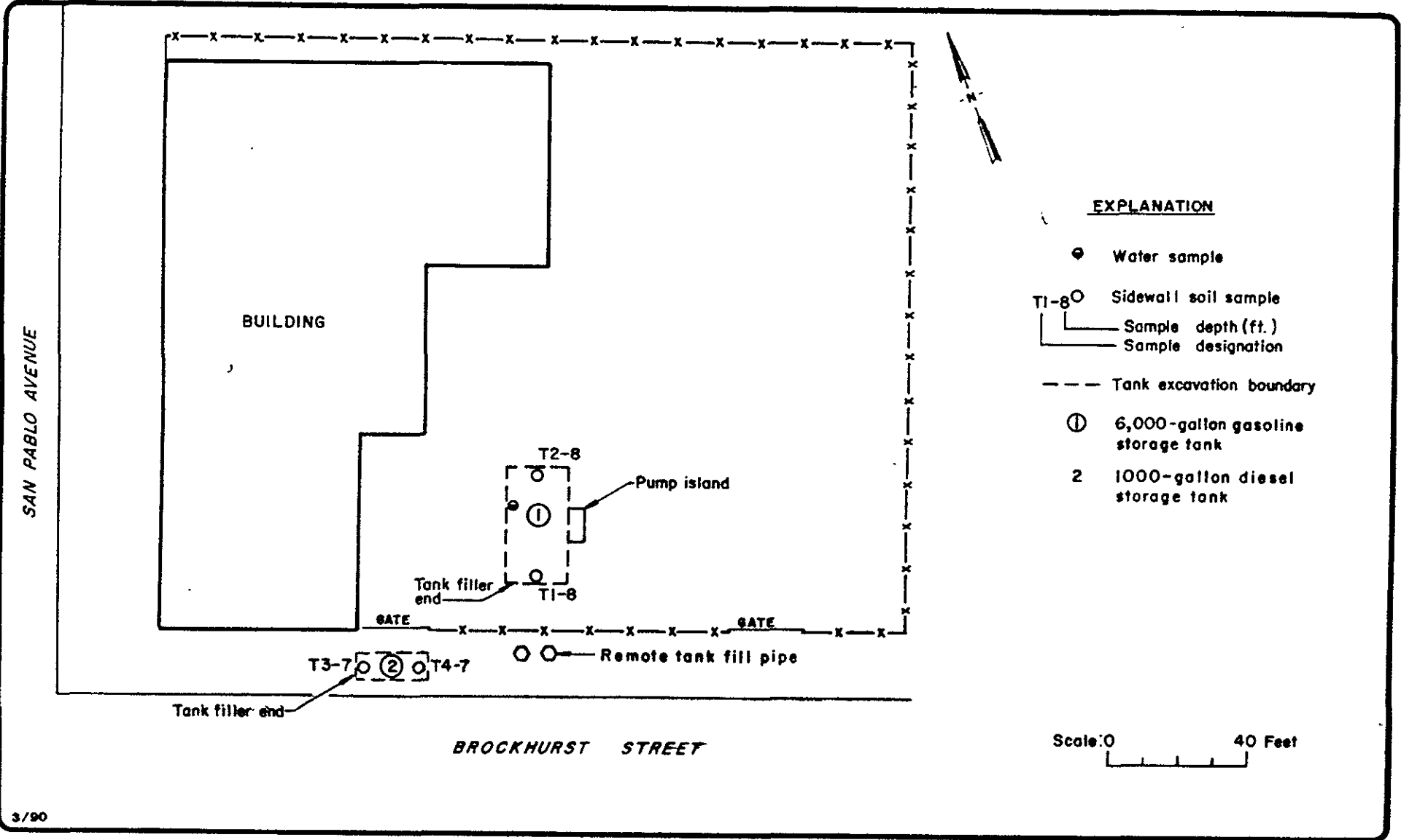
CONTOUR INTERVAL 20 FEET  
 DOTTED LINES REPRESENT 5-FOOT CONTOURS  
 NATIONAL GEODETIC VERTICAL DATUM OF 1929



**SITE LOCATION MAP**  
**LOOMIS ARMORED, INC.**  
 936 Brockhurst Street  
 Oakland, California

FIGURE  
**1**

Proj. No. CC13401



**EMCON**  
Associates

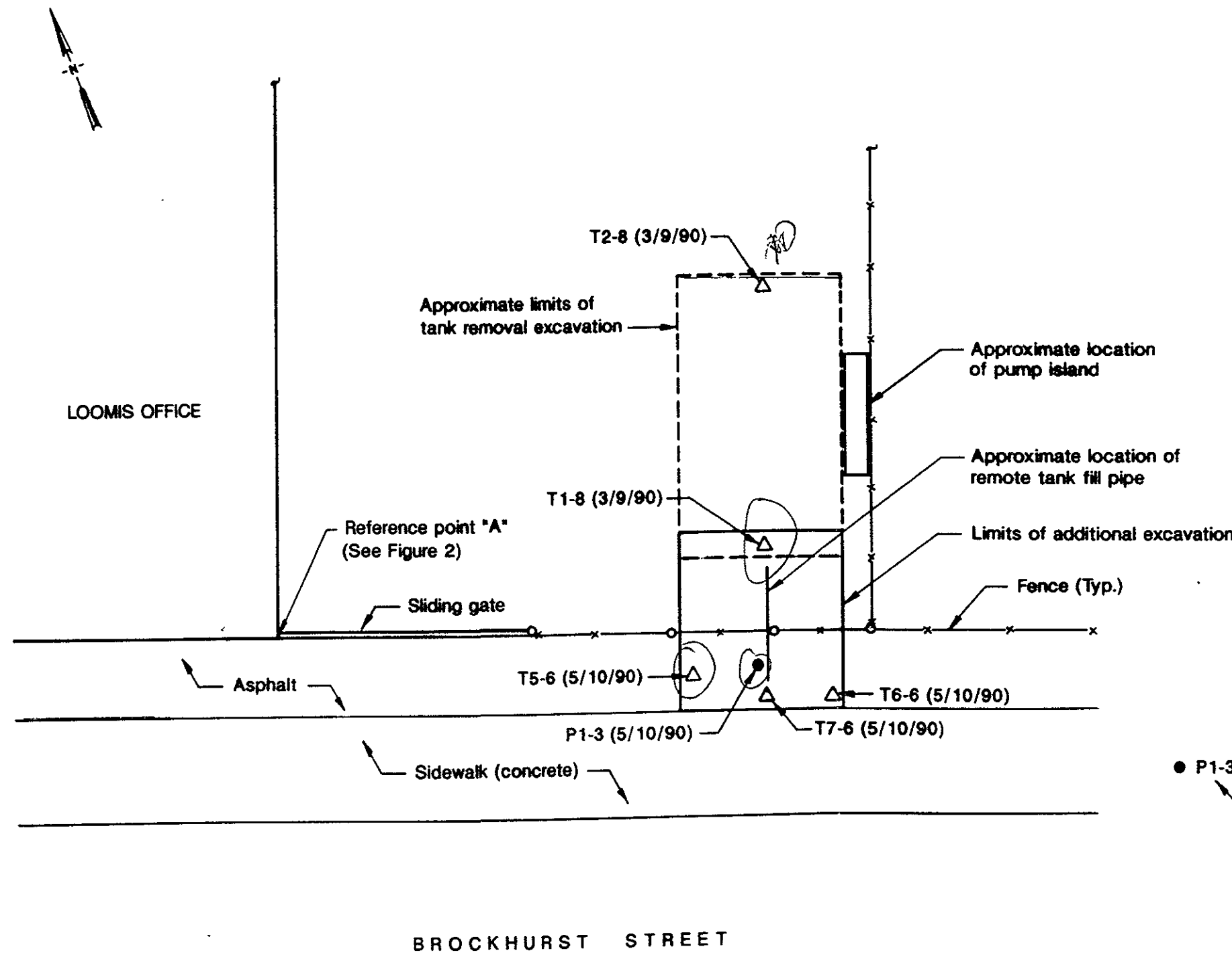
LOOMIS ARMORED INC.  
UNDERGROUND STORAGE TANK REMOVAL  
936 BROCKHURST STREET  
OAKLAND, CALIFORNIA

FACILITY LAYOUT MAP

FIGURE

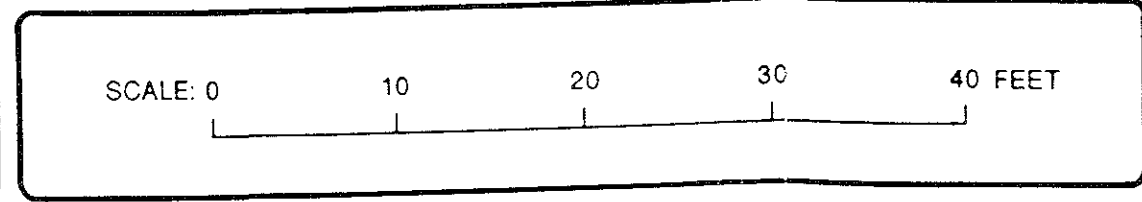
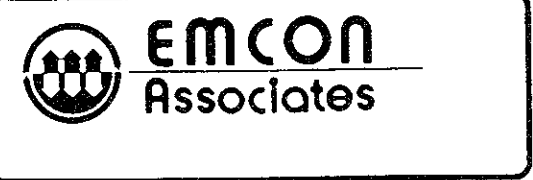
**2**

PROJECT NO.  
999-31.02



LEGEND

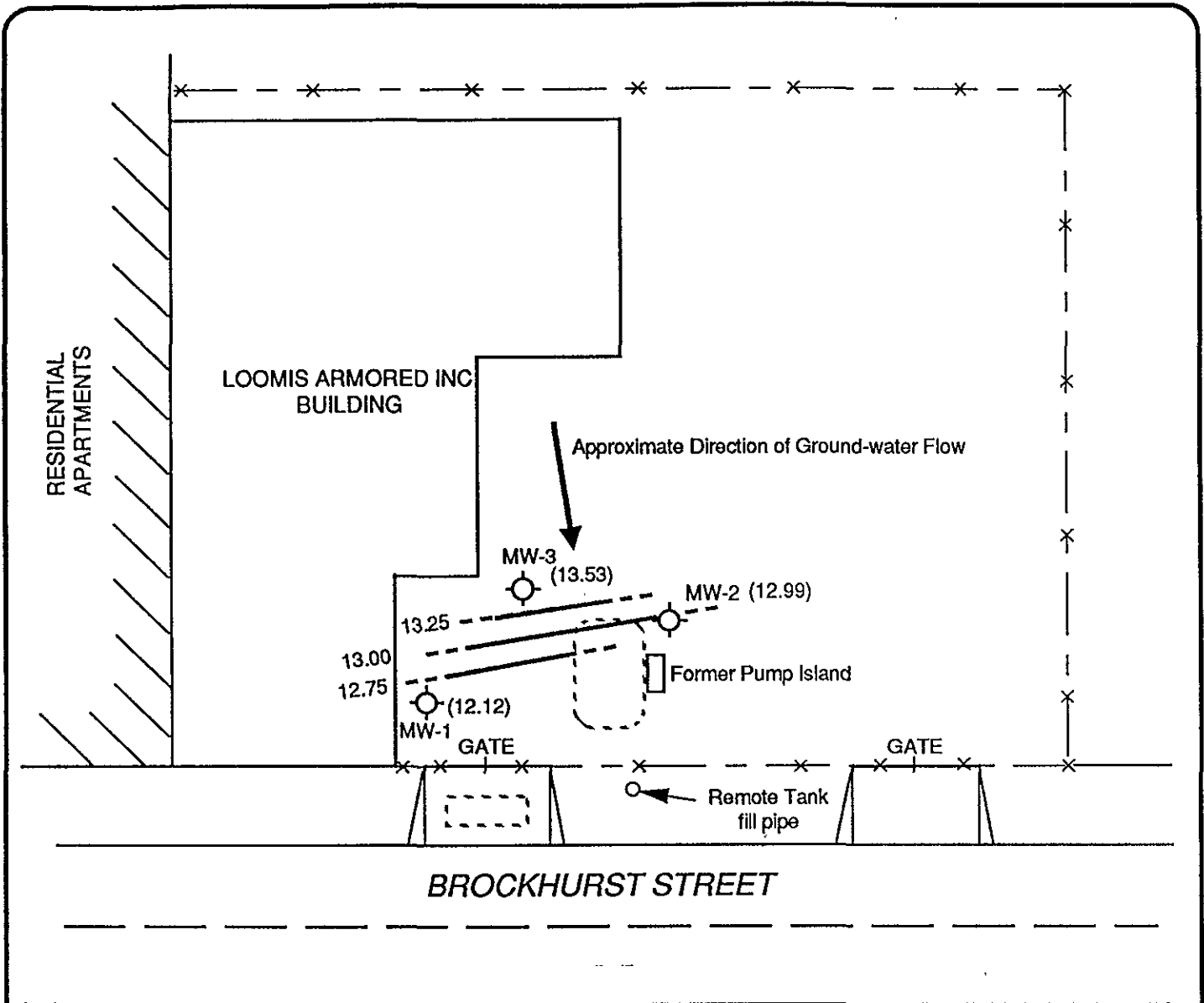
- P1-3 (5/10/90) Soil sample location
- Date sampled
- Sample depth (feet)
- Sample location
- △ Sidewalk soil sample location
- Fence Post







LOOMIS ARMORED, INC  
 PIPING REMOVAL AND ADDITIONAL SOIL EXCAVATION  
 936 BROCKHURST STREET  
 OAKLAND, CALIFORNIA

ADDITIONAL SOIL EXCAVATION LIMITS AND SOIL SAMPLE LOCATION MAP

FIGURE  
**3**  
 PROJECT NO  
 E18-03 01



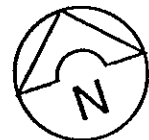
**LEGEND**

-  Approximate former location of 1,000 gallon underground diesel storage tank
-  Approximate area of former 6,000 gallon underground gasoline storage tank excavation
-  MW-3 Location of monitor well.
-  Ground-Water contour (dashed where inferred)

0 Scale in feet 30



contour interval = .25'



Reference: EMCON ASSOCIATES



Proj. No. CC13401

**GROUND-WATER FLOW MAP**

8/20/90

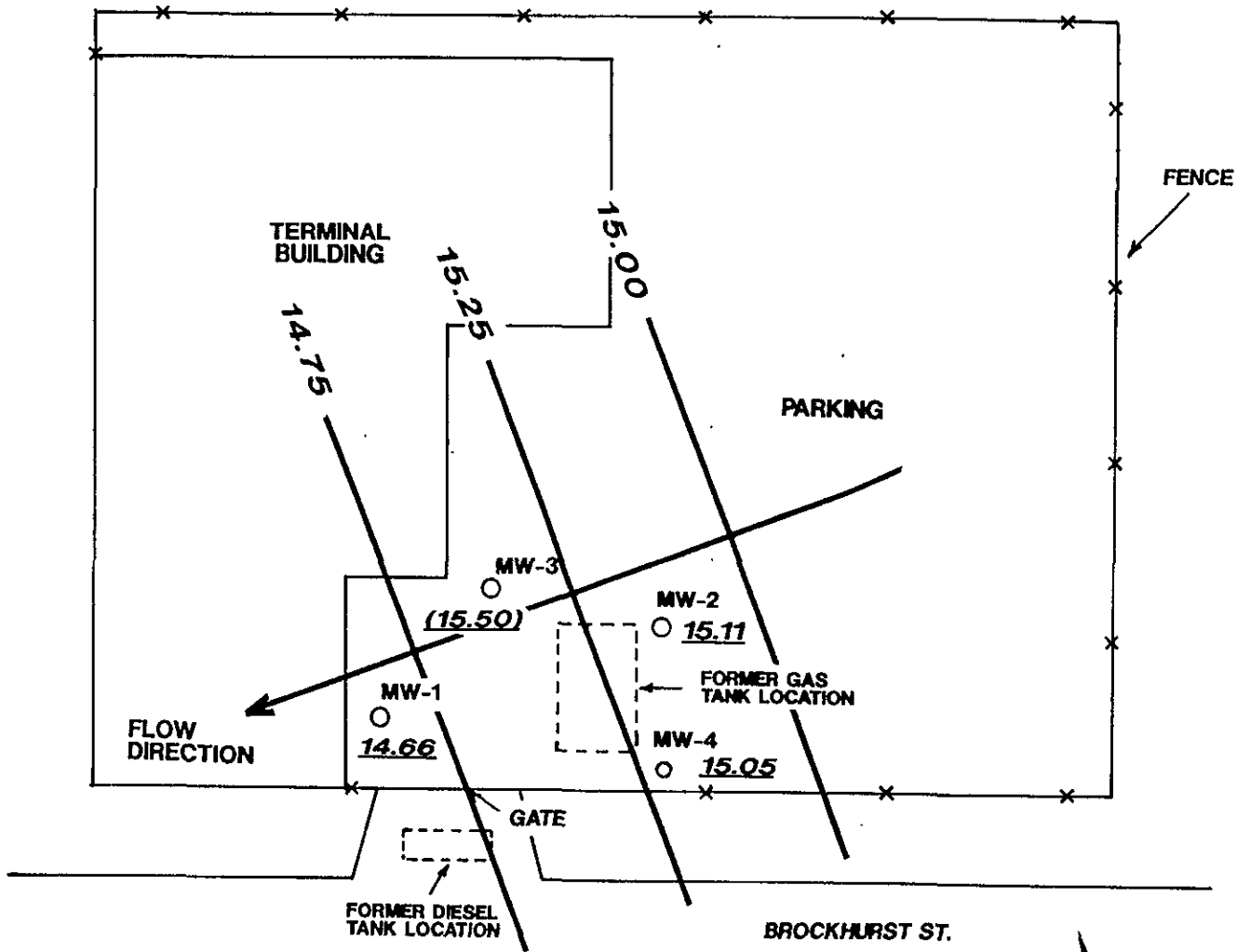
LOOMIS ARMORED INC.

936 Brockhurst Street

Oakland, California

FIGURE

**4**



**Legend**

- MW-1 Existing Monitor Well  
14.66 With Ground Water Elevation
- 14.75 Ground Water Elevation Contour

**NOTE :** Ground water gradient based on "like-constructed" wells MW-1 MW-2 MW-4 only.



<b>Figure 5</b>		
<b>SITE MAP WITH GROUND WATER ELEVATION DATA - 6/16/94</b>		
<b>LOOMIS ARMORED INC. OAKLAND, CALIFORNIA</b>		
<b>ROBERT B. KITCHEN ASSOCIATES CORPUS CHRISTI, TEXAS</b>		
DRAWN BY: DB	CHECKED BY: RSK	APPROVED BY: RA

Table 1  
Tank Removal  
Soil and Ground-water Sample Analytical Results

Sample Identification	Depth (feet)	Parameter (mg/kg, unless otherwise noted) <sup>1</sup>					
		TPH <sup>2</sup> as Gasoline	TPH as Diesel	Benzene	Toluene	Ethylbenzene	Xylenes
<b>Gasoline Tank Excavation</b>							
T1-8	8	230	1,800	ND <sup>3</sup>	ND	ND	ND
T2-8	8	ND	ND	ND	ND	ND	ND
W-1 (µg/l) <sup>4</sup>	8.5	640	74,000	83	25	6.5	15
<b>Diesel Tank Excavation</b>							
T3-7	7	ND	ND	ND	ND	ND	ND
T4-7	7	ND	ND	ND	ND	ND	ND

<sup>1</sup> Milligrams per kilogram.  
<sup>2</sup> Total petroleum hydrocarbons.  
<sup>3</sup> Not detected. See the certified analytical report for the detection limit.  
<sup>4</sup> Micrograms per liter.

Table 2  
Piping and Soil Removal  
Soil Sample Analytical Results

Sample Designation	Sample Depth Below Grade (feet)	Parameters (mg/kg)						Organic Lead
		Diesel <sup>1</sup>	Gasoline <sup>2</sup>	Benzene	Toluene	Ethyl-benzene	Xylenes	
P1-3	3	ND <sup>3</sup>	580	1.1	2.3	11	69	NA <sup>4</sup>
T5-6	6	ND	<del>130</del> <i>2.7 ppm ND</i>	<del>0.2</del> <i>0.2 Laj ND</i>	ND	<del>3.6</del> <i>ND</i>	<del>8.1</del> <i>ND</i>	NA
T6-6	6	ND	ND	ND	ND	ND	ND	NA
T7-6	6	ND	6.9	ND	ND	ND	ND	NA
ST-1(A-D)	--	ND	110	ND	0.7	1.2	7.2	ND
ST-2(A-D)	--	ND	1.6	ND	ND	ND	ND	ND

<sup>1</sup> Total petroleum hydrocarbons as diesel.  
<sup>2</sup> Total petroleum hydrocarbons as gasoline.  
<sup>3</sup> Not detected. See the certified analytical report for the detection limit.  
<sup>4</sup> Not analyzed.

**TABLE 3**  
**GROUND WATER ANALYTICAL DATA SUMMARY**  
**LOOMIS ARMORED INC.**  
**OAKLAND, CALIFORNIA**

SAMPLE	DATE	BENZENE	TOLUENE	ETHYLBENZENE	XYLENES	TPHG	TPHD	TOT. LEAD	MTBE
MW-1	08/27/90	<0.3	<0.3	<0.3	<0.3	<5.0	<5.0	<50	-
	06/14/94	<0.50	<0.50	<0.50	<0.50	<50	<50	-	-
	09/15/94	<0.50	<0.50	<0.50	<0.50	<50	65	-	-
	12/13/94	<0.50	<0.50	<0.50	<0.50	<50	<50	-	-
	03/17/95	<0.50	<0.50	<0.50	<0.50	250	3900	-	-
	06/20/95	<0.50	<0.50	<0.50	<0.50	200	2700	-	-
	09/13/95	<0.50	<0.50	<0.50	<0.50	<50	590	-	-
	12/07/95	<0.50	<0.50	<0.50	<0.50	<50	140	-	<5.0
	03/12/96	<0.50	<0.50	<0.50	<0.50	<50	160	-	<5.0
	MW-2	08/27/90	<0.3	<0.3	<0.3	<0.3	<5.0	<5.0	<50
06/14/94		<0.50	<0.50	<0.50	<0.50	<50	160	-	-
09/15/94		<0.50	<0.50	<0.50	<0.50	<50	3000	-	-
12/13/94		<0.50	<0.50	<0.50	<0.50	<50	250	-	-
03/17/95		<0.50	<0.50	<0.50	<0.50	<50	1500	-	-
06/20/95		<0.50	<0.50	<0.50	<0.50	<50	2900	-	-
09/13/95		<0.50	<0.50	<0.50	<0.50	<50	1800	-	-
12/07/95		<0.50	<0.50	<0.50	<0.50	<50	730	-	<5.0
03/12/96		<0.50	<0.50	<0.50	<0.50	<50	460	-	<5.0
MW-2P		09/15/94	<0.50	<0.50	<0.50	<0.50	<50	-	-
MW-3	08/27/90	<0.3	<0.3	<0.3	<0.3	<5.0	<5.0	<50	-
	06/14/94	<0.50	<0.50	<0.50	<0.50	<50	<50	-	-
	09/15/94	<0.50	<0.50	<0.50	<0.50	<50	550	-	-
	12/13/94	<0.50	<0.50	<0.50	<0.50	<50	660	-	-
	03/17/95	<0.50	<0.50	<0.50	<0.50	77	990	-	-
	06/20/95	<0.50	<0.50	<0.50	<0.50	<50	1200	-	-
	09/13/95	<0.50	<0.50	<0.50	<0.50	<50	490	-	-
	12/07/95	<0.50	<0.50	<0.50	<0.50	<50	1700	-	<5.0
	03/12/96	<0.50	<0.50	<0.50	<0.50	<50	360	-	<5.0
	MW-4	06/14/94	<0.50	<0.50	<0.50	<0.50	150	320	-
09/15/94		<0.50	<0.50	<0.50	<0.50	<50	120	-	-
12/13/94		<0.50	<0.50	<0.50	<0.50	<50	600	-	-
03/17/95		<0.50	0.73	1.5	8.9	88	600	-	-
06/20/95		1.4	<0.50	<0.50	1.5	740	11000	-	-
09/13/95		<0.50	<0.50	<0.50	<0.50	<50	1400	-	-
12/07/95		<0.50	<0.50	<0.50	<0.50	<50	370	-	<5.0
03/12/96		<0.50	<0.50	<0.50	<0.50	<50	330	-	<5.0
TRIP	06/14/94	<0.50	<0.50	<0.50	<0.50	<50	-	-	-
	09/15/94	<0.50	<0.50	<0.50	<0.50	<50	-	-	-
	12/13/94	<0.50	<0.50	<0.50	<0.50	<50	<50	-	-
	03/17/95	<0.50	<0.50	<0.50	<0.50	<50	<50	-	-
	06/20/95	<0.50	<0.50	<0.50	<0.50	<50	-	-	-
	09/13/95	<0.50	<0.50	<0.50	<0.50	<50	-	-	-
	12/07/95	<0.50	<0.50	<0.50	<0.50	-	-	-	<5.0
	03/12/96	<0.50	<0.50	<0.50	<0.50	<50	-	-	<5.0

Note: Concentrations in micrograms per liter  
- = Not analyzed  
TPHD = Total petroleum hydrocarbons as diesel fuel  
TPHG = Total Petroleum hydrocarbons as gasoline  
MTBE = methyl tertiary butyl ether  
TRIP = Trip blank  
MW-2P is a piezometer and not a monitor well



**TABLE 4**  
**SOIL ANALYTICAL DATA SUMMARY**  
**LOOMIS ARMORED INC.**  
**OAKLAND, CALIFORNIA**

SAMPLE ID	BENZENE	TOLUENE	ETHYLBENZENE	XYLENES	TPHG	TPHD
T1-8'*	<0.1	<0.1	<0.1	<0.1	230	1800
T2-8'	<0.1	<0.1	<0.1	<0.1	<1.0	<5
T3-7'	<0.1	<0.1	<0.1	<0.1	<1.0	<5
T4-7'	<0.1	<0.1	<0.1	<0.1	<1.0	<5
P1-3'*	1.1	2.3	11	69	580	<5.0
T5-6'	<0.1	<0.1	<0.1	<0.1	<1.0	<5.0
T6-6'	<0.1	<0.1	<0.1	<0.1	<1.0	<5.0
T7-6'	<0.1	<0.1	<0.1	<0.1	6.9	<5.0
MW1-10'	<.003	<.003	<.003	<.003	<1.0	<10
MW1-20'	<.003	<.003	<.003	.007	<1.0	<10
MW1-30'	<.003	<.003	<.003	<.003	<1.0	<10
MW2-10'	<.003	<.003	<.003	<.003	<1.0	<10
MW2-15'	<.003	<.003	<.003	<.003	<1.0	<10
MW2-25'	<.003	<.003	<.003	<.003	<1.0	<10
MW3-10'	<.003	<.003	<.003	<.003	<1.0	<10
MW3-15'	<.003	<.003	<.003	<.003	<1.0	<10
MW3-25'	<.003	<.003	<.003	<.003	<1.0	<10

Note: TPHG = Total petroleum hydrocarbons as gasoline.  
 TPHD = Total petroleum hydrocarbons as diesel.  
 \* = Soil excavated and removed from site.  
 Concentrations in milligrams per kilogram.

Organic Analysis Data Sheet  
 Total Petroleum Hydrocarbons as Gasoline with BTEX  
 ITS - Anametrix Laboratories - (408)432-8192

Lab Workorder : 9406160  
 Matrix : SOIL

*Table 5*

Client Project ID : LAI-OAKLAND  
 Units : mg/Kg

Compound Name	Method Reporting Limit*	Client ID	Client ID	Client ID	Client ID	Client ID
		DRILLCUT	MW-431.5			
		Lab ID	Lab ID	Lab ID	Lab ID	Lab ID
		9406160-05	9406160-06	METHOD BLANK	METHOD BLANK	
Benzene	0.0050	ND	ND	ND	ND	
Toluene	0.0050	ND	ND	ND	ND	
Ethylbenzene	0.0050	ND	ND	ND	ND	
Total Xylenes	0.0050	ND	ND	ND	ND	
TPH as Gasoline	0.50	1.0	ND	ND	ND	
Surrogate Recovery		109%	120%	111%	101%	
Instrument ID		HP12	HP12	HP12	HP12	
Date Sampled		06/14/94	06/14/94	N/A	N/A	
Date Analyzed		06/27/94	06/22/94	06/22/94	06/27/94	
RLMF		1	1	1	1	
Filename Reference		FPU16005.D	FPU16006.D	BU2201E1.D	BU2701E1.D	

\* The Method Reporting Limit must be multiplied by the Reporting Limit Multiplication Factor (RLMF) to achieve the compound's reporting limit in the analysis.

ND : Not detected at or above the reporting limit for the analysis as performed.

TPHg : Determined by GC/FID following sample purge & trap by EPA Method 5030.

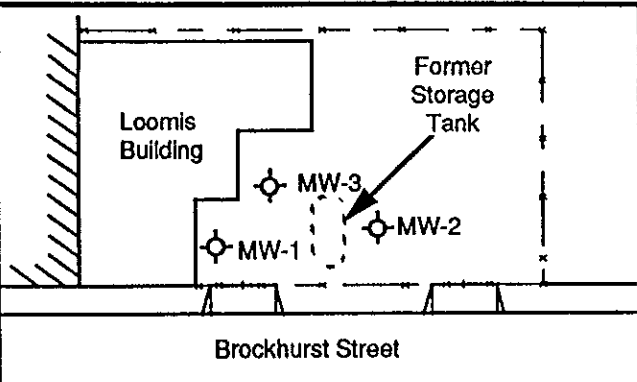
BTEX : Determined by modified EPA Method 8020 following sample purge & trap by EPA Method 5030.

Lab Control Limits for surrogate compound p-Bromofluorobenzene are 53-147%.

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

Reggie Dawson 7/1/94  
 Analyst Date

Cheryl Balmer 6/24/94  
 Supervisor Date



# LOG OF BORING MW-1 LOOMIS ARMORED, INC. 936 Brockhurst Street Oakland, California

Project No.: CC134.01      Date Drilled: August 18, 1990  
 Logged By: Daniel Becraft      Drilling Method: 10" Hollow Stem Auger  
 Drilling Co.: Baylands      Sampling Method: 2" Split spoon  
 Driller: Tom Schmidt      Inclination: Vertical

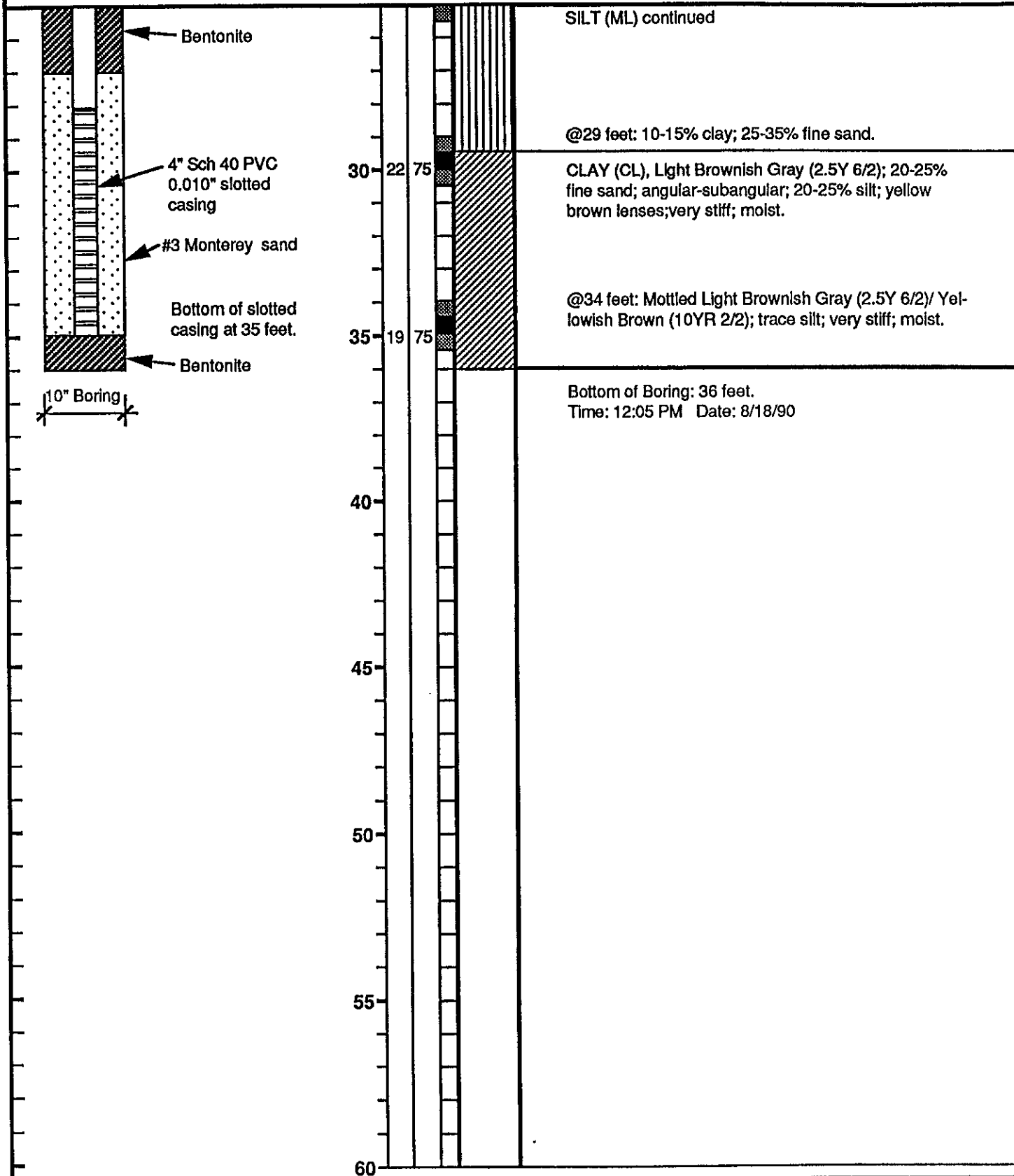
WELL CONSTRUCTION	Depth (ft.)	Blows/ft.	Gastech (ppm)	Samples	Graphic	DESCRIPTION
10" Boring	0					Surface Elevation: 28.21 feet Casing Elevation: 27.77 feet
Traffic Rated Utility Box						Concrete
Locking water-tight cap						
Concrete						CLAY WITH SAND (CL), Dark Yellowish Brown (10 YR4/4); 20-25% fine-medium sand; angular- subangular; moist.
Neat Cement	5	24	70			CLAYEY GRAVEL WITH SAND (GC), Dark Yellowish Brown (10 YR 4/6); gravel to 2 inches; well graded; angular- subangular; 20-25% fine to medium sand; 10-15% coarse sand; angular- subangular; medium dense; moist.
4" Sch 40 PVC Blank casing	10	18	80			CLAY (CL), Very Dark Grayish Brown (10YR 3/2); 20-25% gravel; angular- subangular; 15-20% well graded sand; angular- subrounded; moist. @ 9.5 feet: Grayish Brown (2.5Y 5/2); 30-35% silt; 20-25% fine-medium sand; angular- subrounded; trace of gravel; stiff; moist.  @ 14 feet: Olive Gray (5Y 5/2); 10-15% fine grained sand; trace of gravel; hard; moist.
	15	40	100			▼ 15.65 feet      Date: 8/20/90
	20	38	250			@ 19 feet: Brown (10YR 4/3); 30-35% fine-medium sand; angular- subangular; 5-10% coarse sand; trace of gravel; hard; moist.
	25	20	70			SILT (ML), Yellowish Brown (10YR 5/6), 15-20% clay; 20-25% fine grained sand; angular- subangular; gray mottling; very stiff; moist.

**LOG OF BORING MW-1  
(continued)**

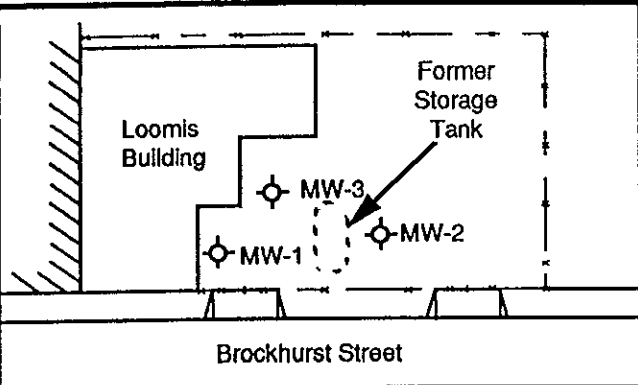
**WELL CONSTRUCTION**

Depth (ft.)  
Blows/ft.  
Castech  
(ppm)  
Samples  
Graphic

**DESCRIPTION**



**LOG OF BORING MW-2  
LOOMIS ARMORED, INC.  
936 Brockhurst St.  
Oakland, California**



Project No.: CC134.01  
Logged By: Andy Bunten  
Drilling Co.: Baylands  
Driller: Tom Schmidt

Date Drilled: August 14, 1990  
Drilling Method: 10" Hollow Stem Auger  
Sampling Method: 2" Split spoon  
Inclination: Vertical

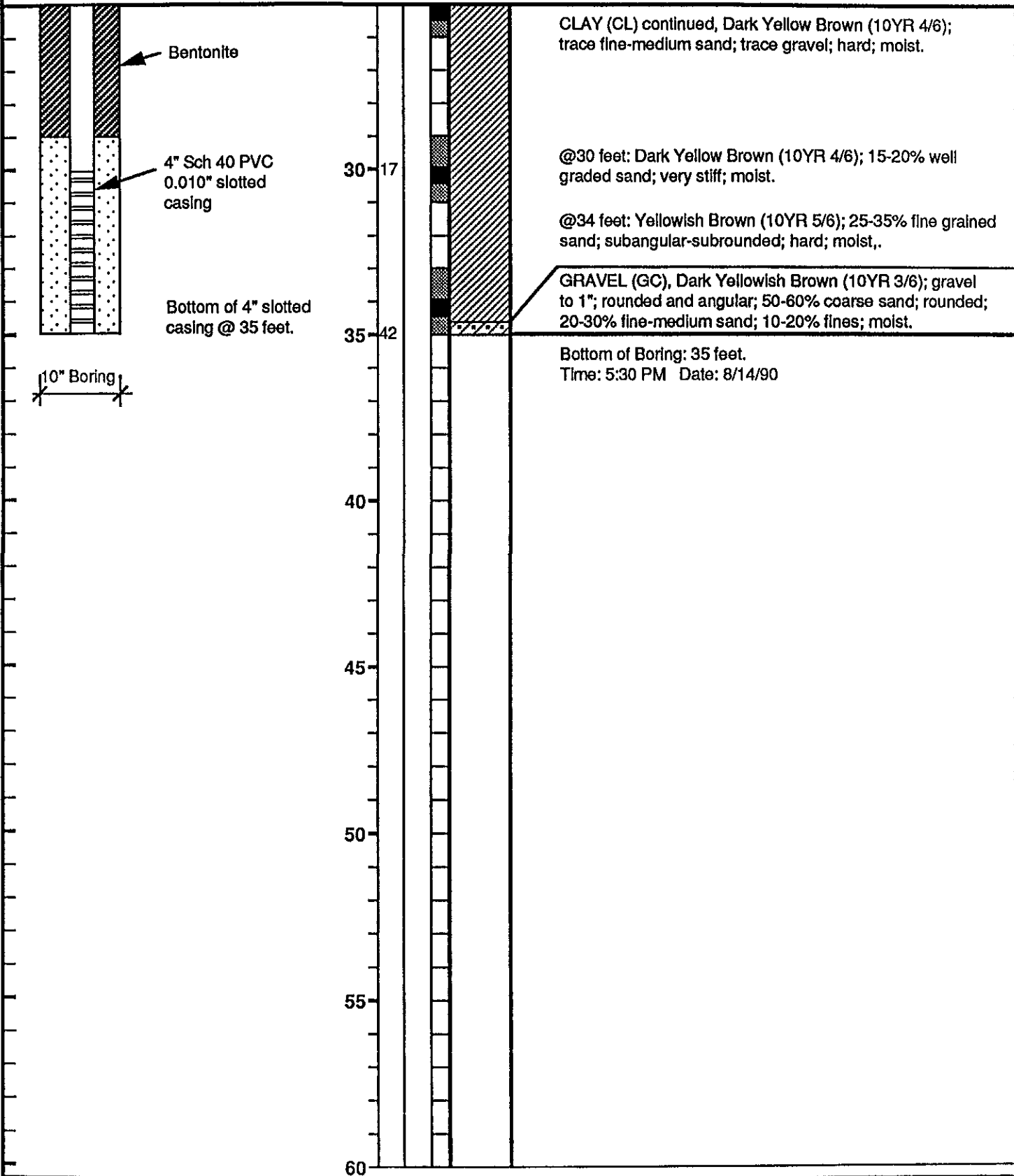
WELL CONSTRUCTION	Depth (ft.)	Blows/ft.	Gastech (ppm)	Samples	Graphic	DESCRIPTION
10" Boring	0					Surface Elevation: 28.81 feet Casing Elevation: 28.29 feet
Traffic Rated Utility Box						Asphaltic Concrete
Locking water-tight caps						CLAY (CL), Yellowish Brown (10YR 5/6); 5-10% well graded sand; moist.
Concrete						CLAYEY SILT (ML), Black (2.5YN 2/0); trace coarse sand; 30-35% clay; moist.
Neat Cement						CLAYEY GRAVEL (GC), Yellowish Brown (10YR 5/6); 1/4"- 3/8"; subrounded; 15-20% well graded sand; medium dense; very stiff; moist.
Bentonite	5	26				CLAY (CL), Very Dark Grayish Brown (2.5YN 3/2); 10-15% well graded sand; moist.
1.5" Sch 40 PVC blank casing						CLAYEY GRAVEL (GC), Yellowish Brown (10YR 5/6); 1/8"-1/2"; 20-25% well graded sand; 25-30% clay; medium dense; moist.
1.5" Sch 40 PVC 0.010" slotted casing	10	12				SILT (ML), Olive Yellow (2.5Y 6/8); 25-30% fine-medium sand; 15-20% clay; moist. @14 feet: Black (5Y 2.5/1); 10-15% well graded sand; 30-35% clay; moist.
4" Sch 40 PVC blank casing						CLAY (CL), Light Olive Brown (2.5Y 5/6); 45-50% well graded sand; very stiff; moist. ▼ 15.30 feet Date: 8/20/90
# 3 Monterey Sand	15	21				@16 feet: Light Brownish Gray (2.5Y 6/2), 20-25% gravel; 1/8"-1/4"; 5-10% medium-coarse sand; moist.
Bottom of 1.5" slotted casing @ 17.3'						@19 feet: Olive Yellow (2.5Y 5/6); 20-25% well graded sand; moist.
Bentonite	20	33				@20 feet: Dark Yellowish Brown (10YR 4/6); 25-30% 1/8-3/8" gravel; 10-15% well graded sand; hard; moist.
	25	32				@24 feet: Black (10YR 2/1), 10-15% well graded sand; moist.

# LOG OF BORING MW-2 (continued)

## WELL CONSTRUCTION

Depth (ft.)  
Blowrt.  
Gastech  
(ppm)  
Samples  
Graphic

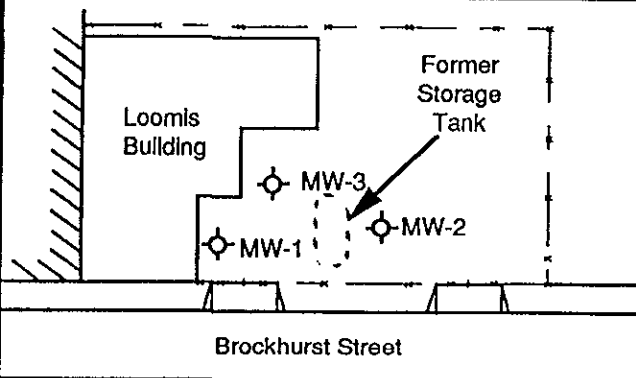
## DESCRIPTION



# LOG OF BORING MW-3 LOOMIS ARMORED, INC. 936 Brockhurst St. Oakland, California

Project No.: CC134.01  
 Logged By: Andy Bunten  
 Drilling Co.: Baylands  
 Driller: Tom Schmidt

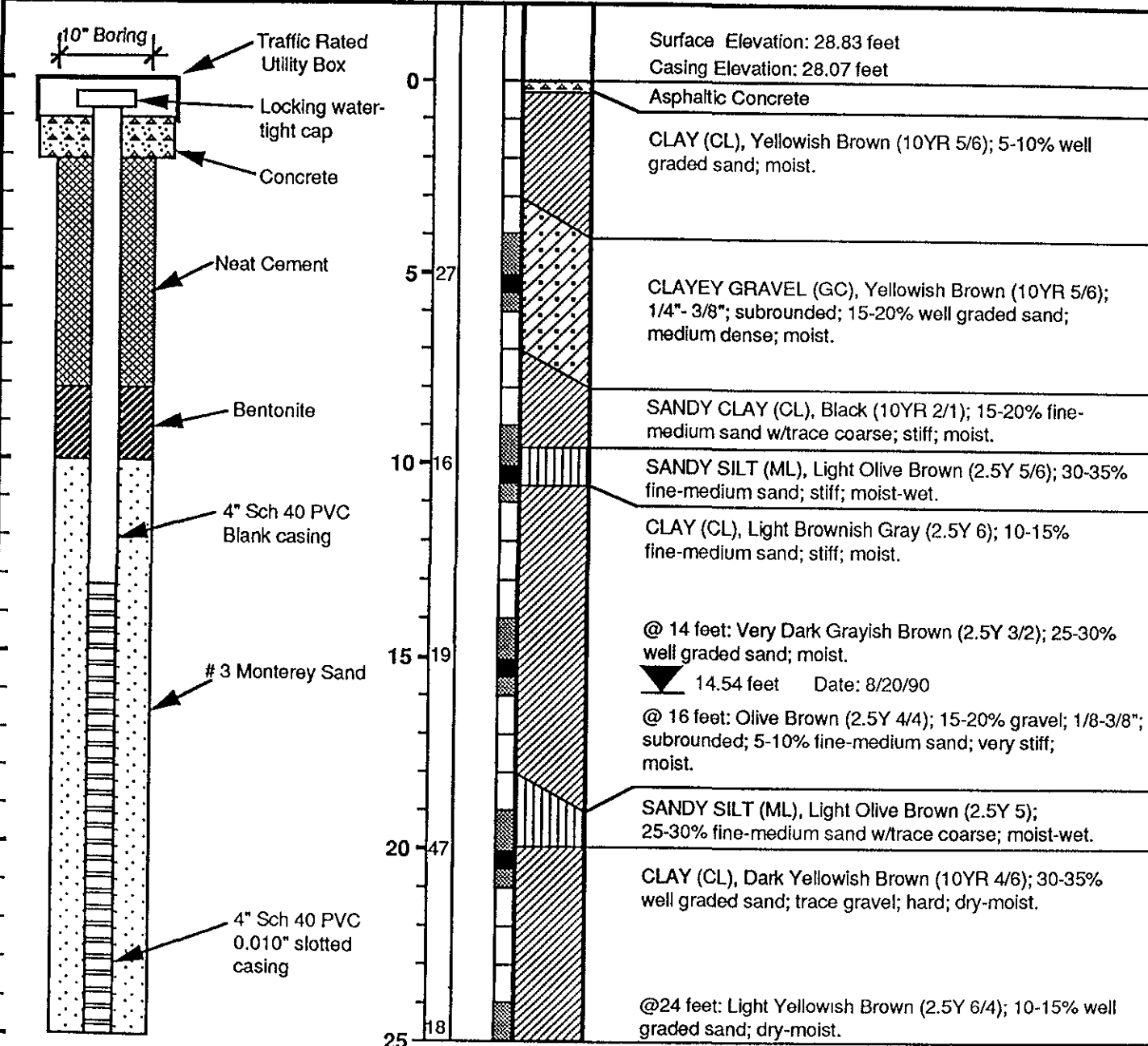
Date Drilled: August 14, 1990  
 Drilling Method: 10" Hollow Stem Auger  
 Sampling Method: 2" Split spoon  
 Inclination: Vertical



## WELL CONSTRUCTION

Depth (ft.)  
 Blows/ft.  
 Gasech (ppm)  
 Samples  
 Graphic

## DESCRIPTION

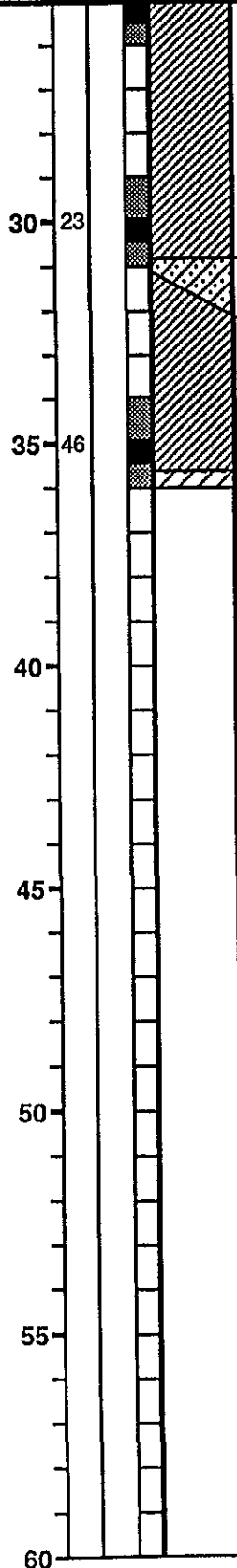
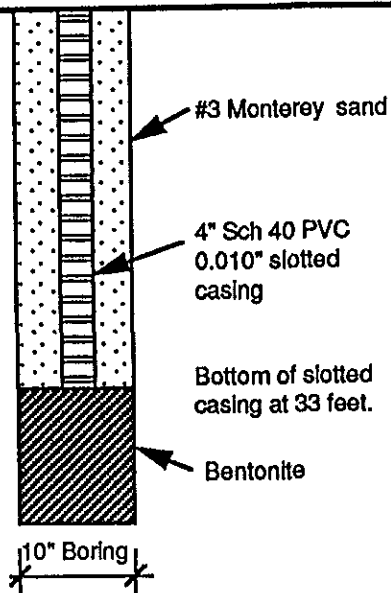


# LOG OF BORING MW-3 (continued)

## WELL CONSTRUCTION

## DESCRIPTION

Depth (ft.)  
 Blows/ft.  
 GASTECH  
 (ppm)  
 Samples  
 Graphic



CLAY (CL) continued, Light Olive Brown (2.5Y 5/6); trace fine-medium sand; very stiff; moist.

@30 feet: Yellowish Brown (10YR 5/6); 10-15% gravel; 1/8-1/4"; 15-20% well graded sand; stiff; moist.

CLAYEY SAND (SC), Yellowish Brown (10YR 5/6); medium fine; 25-30% clay; moist

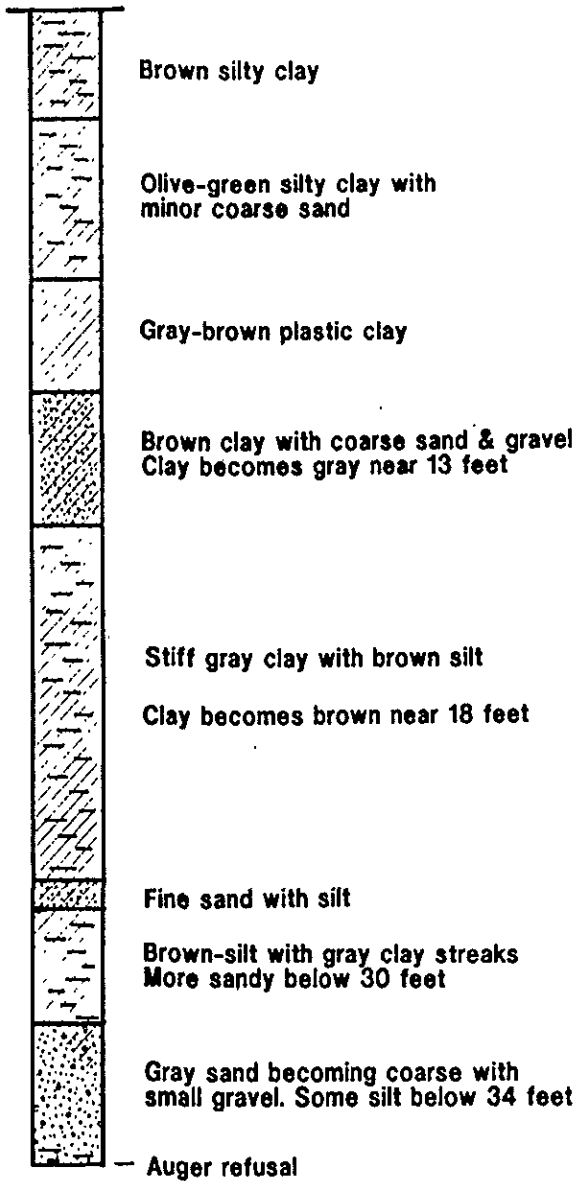
CLAY (CL), Grayish Brown (2.5Y 5/2); 10-15% well graded sand; trace 1/8" gravel; hard; moist.

CLAYEY GRAVEL (GC), Yellowish Brown (10YR 5/6); 1/8-3/8"; 10-15% well graded sand; 20-25% clay; moist.

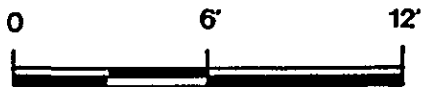
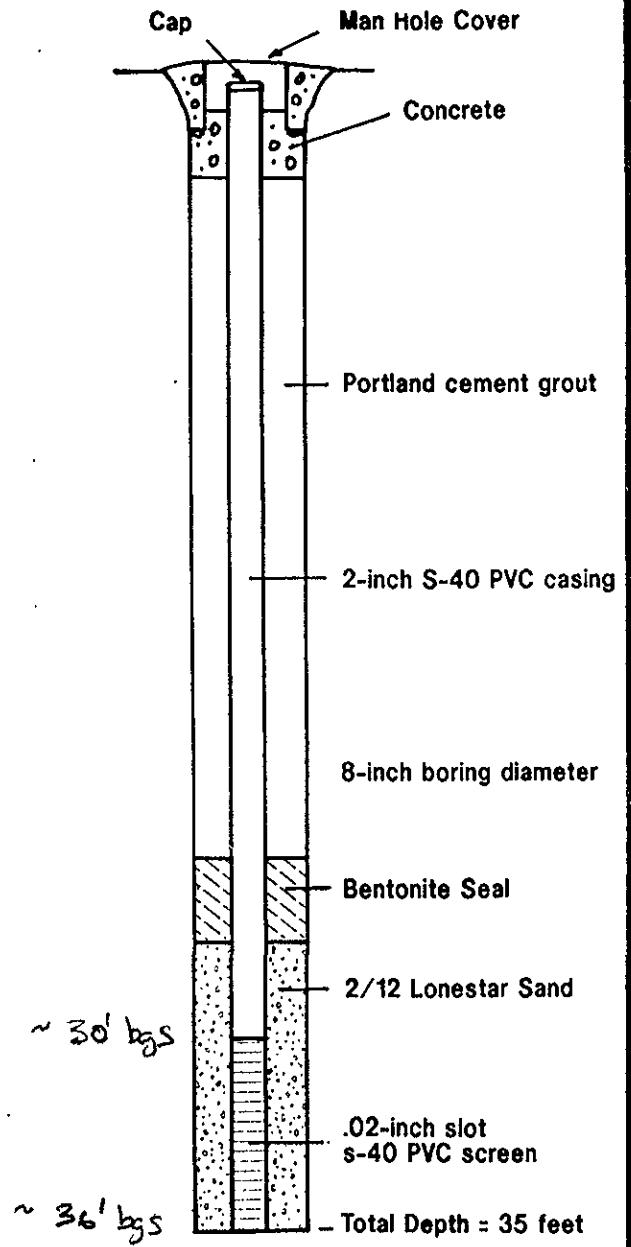
Bottom of Boring: 36 feet.  
Time: 2:00 PM Date: 8/14/90



**BORING LOG**



**WELL DIAGRAM**



Vertical Scale : 1" = 6'  
 No Horizontal Scale

**Figure 3**

**MONITOR WELL 4  
 INSTALLATION LOG**

**LOOMIS ARMORED INC.  
 OAKLAND, CALIFORNIA**

**ROBERT B. KITCHEN ASSOCIATES  
 CORPUS CHRISTI, TEXAS**

DRAWN BY	DB	CHECKED BY
		RBK
		APPROVED BY
		RD