CASE CLOSURE SUMMARY
Leaking Underground Fuel Storage Tank Program

I. AGENCY INFORMATION

Date: October 5, 2000

Agency Name: **Alameda County-HazMat**
Address: **1131 Harbor Bay Parkway**
City/State/ Zip: **Alameda, CA 94502**
Phone: **(510) 567-6700**
Responsible Staff Person: **Susan L. Hugo**
Title: **Hazardous Materials Specialist**

II. CASE INFORMATION

Site Facility Name: **Union Pacific Railroad Co. (former Southern Pacific Transportation Co.)**
Site Facility Address: **1450 Sherwin Avenue #B, Emeryville, CA 94608**
RB LUSTIS Case No.: **N/A**
Local Case No./ LOP Case No. **5016**
URF Filing Date: **9/1/94**
SWEEPS No.: **N/A**

Responsible Parties:	Addresses:	Phone Numbers:
Union Pacific Railroad Co. **Attn: Mr. Mike Grant**	**49 Stevenson Street, 15th Floor** **San Francisco, California 94105**	

Tank No:	Size in gal.	Contents:	Closed in-place or removed?:	Date:
1	**6,500**	**Bunker C (Diesel #6)**	**Removed**	**8/3/94**
2	**6,500**	**Bunker C (Diesel #6)**	**Removed**	**8/3/94**
3	**6,500**	**Bunker C (Diesel #6)**	**Removed**	**8/3/94**
4	**6,500**	**Bunker C (Diesel #6)**	**Removed**	**8/3/94**
5	**270**	**Unknown**	**Removed**	**8/2/95**
6	**270**	**Unknown**	**Removed**	**8/2/95**

III. RELEASE AND SITE CHARACTERIZATION INFORMATION

Cause and type of release: **Unknown**
Site characterization complete: **YES**
Date approved by oversight agency: **8/95**
Monitoring wells installed ? **No (see comments)**
Number: **NA**
Proper screened interval ? **NA**
Highest GW depth below ground surface **NA**
Lowest depth: **NA**
Flow direction: **GW flow in the area is to the west**
Most sensitive current use: **Commercial / 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 (address / location): **Unknown**
Report (s) on file ? **YES**
Where is report (s) filed ? **Alameda County, 1131 Harbor Bay Parkway, Alameda, CA 94502**

Treatment and Disposal of Affected Materials:

Materials	Amount (Include Units)	Action (Treatment /or Disposal w/ Destination)	Date
Tank	**4- 6,500 gallon**	**Disposed at H & H Ship Service, San Francisco, CA**	**8/3/94**
	2- 270 gallon	**Disposed at Erickson, Richmond, CA**	**8/2/95**
Soil	**250 cubic yards**	**Disposed at East Carbon Disposal Corp., (ECDC), Utah**	**10/25/94**
	9 cubic yards	**Disposed at Altamont Landfill, Livermore, CA**	**9/25/95**
Bunker C	**30,450 gallons**	**Recycled at Enviropur West Corp., Patterson, CA**	**7/25-27/94**

Maximum Documented Contaminant Concentrations - - Before and After Cleanup

Contaminant	Soil (ppm)		Water (ppb)	
	Before	After*	Before***	After****
TPH Gasoline	-	18	150	-
TPH Diesel	-	4,400	3,200	680
TPH Bunker C	-	28,000	6,100	-
TPH Motor Oil	-	(1,700)**	-	<500
TPH Kerosene	-	(530)**	-	-
Oil & Grease	-	7,700	ND	-
Benzene	-	ND	1.2	-
Toluene	-	ND	0.8	-
Ethylbenzene	-	ND	ND	-
Xylene	-	ND	2.4	
MTBE	-	-	-	ND
PNA's	-	See Table 3	See Comments	
Metals	-	See Table 6	See Comments	

*** Soil sample (T1T3) collected from the sidewall at 7 feet bgs following the removal of the four tanks in 8/94.**
**** Soil sample collected from the floor of the excavation following the removal of two torpedo tanks in 8/95.**
***** Grab water sample (composite) collected from the excavation pit of the four tanks removed in 8/94.**
****** Sampling results from groundwater monitoring wells (LF-11 in 1997); MTBE was not detected in any of the 5 referenced wells.**
Comments (Depth of Remediation, etc.): See "Additional Comments" section.

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: **Deed Restriction is required and an acceptable Risk Management Plan must be recorded for the subject property.**

Should corrective action be reviewed if land use changes ? **YES**

Monitoring wells Decommissioned : **NA**

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: **Hazardous Materials Specialist**
Signature: Date:

Reviewed by:

Name: **Don Hwang** Title: **Hazardous Materials Specialist**
Signature: Date:

Name: **Thomas Peacock** Title: **Manager, LOP Program**
Signature: Date:

VI. RWQCB NOTIFICATION

Date Submitted to RB: RB Response:

RWQCB Staff Name: **Chuck Headlee** Title: **Associate EngineeringGeologist**
Signature: Date:

VII. ADDITIONAL COMMENTS, DATA, ETC.

The subject site is located in an industrial area of Emeryville. In July 1994, four underground storage tanks (USTs) were uncovered at the Southern Pacific Transportation Company (SPTCo) right-of-way, adjacent to Sherwin Williams Company located at 1450 Sherwin Street. Sherwin Williams facility has been in operation since the early 1900s manufacturing various types of coating products and lead-arsenate pesticide. Soil and groundwater investigations related to releases associated with manufacturing operations at the Sherwin Williams facility are currently on-going at the site under RWQCB's regulatory oversight.

The former tanks were discovered when a vertical pipe containing petroleum substance was encountered during access road improvements conducted by Sherwin Williams. SPTCo. was notified. According to SptCo records, a fuel and water station was constructed at the subject site in 1930 to service steam locomotives. Maps of the area from SPTCo. showed four USTs which contained Bunker C fuel where the vertical pipe containing petroleum substance was encountered. Bunker C (diesel #6) was used in the early 1900's to fuel locomotives. Subsequent excavation of the tank area revealed four 6,500 gallon, steel railcar tankers. The tankers were converted to USTs and interconnected with piping that was routed to the vertical pipe.

On August 3, 1994, the four tankers converted to USTs were removed at the site. Approximately 30,450 gallons of Bunker C and water was pumped out prior to the UST removals. Eight confirmation sidewall samples were collected. Two grab water samples were collected from the south end of the excavation. Results of soil and groundwater samples showed petroleum hydrocarbon contamination (see Tables 1, 2 and 3). Metals were also detected in soil and groundwater. Due to physical constraints (six active railroad tracks and slurry wall) over -excavation of residual bunker C impacted soil was not feasible.

In July 1995, two USTs (approximately 200 gallons) were uncovered during remedial activities by capping / grading work at the Sherwin Wiliams property. The tanks which appeared like torpedo were located north of the four USTs removed in 1994 and contained heavy /viscous petroleum hydrocarbon. Sample collected from the tank indicated the presence of unknown hydrocarbon in the motor oil range. Approximately 540 gallons of product was removed from the

tanks. The two USTs were removed on August 2, 1995. Over excavation of contaminated soil was limited at the site due to SPTCo. eastment to the west and a slurry cut-off wall to the east. Confirmation soil samples were collected from three sidewalls (north, south and west) and bottom floor of the excavation at 5 feet bgs. Results showed the presence of heavy petroleum hydrocarbon in soil (see Table 6). In addition to the discovery of the USTs, a heavy black petroleum product was observed in a trench to the northeast of the USTs inside the slurry wall. Results of the product sample collected from the trench showed longer chain petroleum hydrocarbons similar to the product found in the torpedo tanks.

Soil lithology at the site consists of 1.5 to 4.5 feet of artificial fill overlying native bay sediments. Site topography appears to be generally flat with surface drainage to the west into the San Francisco Bay. Based on the on-going investigation at the Sherwin Williams facility, two groundwater zones were encountered beneath the site. A shallow zone (A-zone) was encountered at a depth of 6 to 12 feet below ground surface (bgs) and a deeper ground water zone (B-zone) at a depth of 28 to 38 feet bgs. More than 50 groundwater monitoring wells (deep and shallow) are present on and off-site at the Sherwin Williams facility. Some of these wells are extraction wells which are part of the active investigation / remediation at the site.

Shallow monitoring wells (LF-11, LF-20, LF-21, LF-23, LF-24 and LF-25) at the Sherwin Williams site were used to evaluate impact of releases associated with the former tanks to groundwater beneath the site. The wells were chosen based on their proximity to the former tanks The apparent groundwater flow direction has varied slightly from the north-northeast in April 1996 to northeast in November 1996 and likely due to the readjustment of the shallow (A-zone) aquifer to the placement of bentonite-slurry cutoff wall and /or seasonal variations. Sampling conducted in April 1996 and November 1996 showed depth to groundwater ranging from 3.65 to 7.90 feet bgs. Hydrocarbons in the diesel range were detected in the groundwater ranging from 88 ppb to 1,800 ppb (see Table 4). With the silica gel cleanup , total petroleum hydrocarbon as diesel detected in groundwater substantially decrease (<50 to 180 ppb). Treatment of samples using the silica gel cleanup prior to analysis removes the polar biogenic compounds being detected as dissolved petroleum hydrocarbons.

Monitoring wells (LF-11, LF-20, LF-21, LF-23, LF-24 and LF-25) at the Sherwin Williams site are currently being monitored for TPH diesel, TPH gasoline and MTBE as part of the continuing investigation / remediation at the site. MTBE has not been detected in any of the referenced wells. Low levels of TPH diesel are still detected in the wells ranging from 48 ppb to 980 ppb. Low levels of metals were detected in soil at what appeared to be background levels. Low levels of metals were also detected in the shallow groundwater.

This site is recommended for case closure as a low risk soil/groundwater case for the following rationale:

1) Aggressive source removal has occurred at the site. The USTs were removed in 1994 (4 tanks) and 1995 (2 tanks). Soil sample (T1T3) collected at 7 feet below ground surface following the removal of the four Bunker C tanks, showed residual TPH diesel (up to 4400 ppm), TPH bunker C (up to 28,000 ppm) and oil & grease (up to 7700 ppm). This hot spot can not be overexcavated due to the close proximity to the slurry wall cap at the Sherwin Willams site.

2) The site has been adequately characterized. Limited overexcavation was conducted at the site. Confirmation soil samples were collected and showed residual contamination remains in soil at this site. Groundwater monitoring wells LF-11, LF-20, LF-21, LF-23, LF-24 and LF-25 (currently being monitored by Sherwin Williams as part of the investigation / remediation at the site) showed low levels of dissolved heavy petroleum hydrocarbons. Volatile organic compounds (benzene, ethyl benzene, toluene and xylene) and MTBE were not detected in the groundwater. The extent of soil and groundwater contamination appeared to be adequately defined.

3) The dissolved petroleum hydrocarbon plume appears to be stable. The tanks were removed in 1994 and 1995. Soil and groundwater samples were collected at the site. Groundwater beneath the site has been sampled since 1991 as part of the Sherwin Williams investigation / remediation. Although residual TPH remains in soil at the site, groundwater does not seem to be significantly impacted from the release associated with the former tanks.

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

5) The site does not appear to present a significant risk to human health and the environment. Soil samples collected following the removal of the tanks showed no detectable level of benzene, toluene, ethyl benzene and xylene. Polynuclear aromatic hydrocarbons were detected at very low concentrations, below the Risk Based Screening Levels (RBSLs) recommended by the San Francisco Bay Regional Water Quality Control Board (Interim final - August 2000) for industrial /commercial land use. MTBE was not detected in the groundwater. In addition, active investigation /remediation is currently conducted a the Sherwin Williams site. Under the current land use scenario (commercial / industrial), the site does not appear to present a significant risk.

6) Deed restriction and risk management plans are required for site closure. ?

TABLE 1
SUMMARY OF ORGANIC ANALYTICAL RESULTS - CONFIRMATION SOIL SAMPLES

			8015	8020				8015	8015	5520
Sample Location[a]	Sample ID Number	Date Sampled	TPH-G (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylenes (mg/kg)	TPH-D (mg/kg)	TPH-B (mg/kg)	Oil & Grease (mg/kg)
T2 - Sidewall @ 7'	28210	08/03/94	ND	ND	ND	ND	ND	ND	8.4	ND
T2T4 - Sidewall @ 7'	28205	08/03/94	ND	ND	ND	ND	ND	ND	37	110
T4 - Sidewall @ 7'	28208	08/03/94	1.4	ND	ND	ND	ND	230	780[b]	83
T3T4 - Sidewall @ 7'	28207	08/03/94	ND	ND	ND	ND	ND	30	230	67
T3 - Sidewall @ 7'	28209	08/03/94	2.5	ND	ND	ND	ND	540	1800[b]	880
T1T3 - Sidewall @ 7'	28203	08/03/94	18	ND	ND	ND	ND	4400[c]	28000[d]	7700
T1 - Sidewall @ 7'	28204	08/03/94	4.3	ND	ND	ND	ND	1700[e]	7400[f]	2800
T1T2 - Sidewall @ 7'	28201	08/03/94	ND	ND	ND	ND	ND	ND	40	13
Method Detection Limit			1	0.005	0.005	0.005	0.005	5	8.3	50

a See Figure 2 for sample locations.

b Method detection limit (MDL) of 83 mg/kg.

c MDL of 120 mg/kg.

d MDL of 1050 mg/kg.

e MDL of 100 mg/kg.

f MDL of 420 mg/kg.

TPH-B Total petroleum hydrocarbons as bunker-C fuel

TPH-D Total petroleum hydrocarbons as diesel

TPH-G Total petroleum hydrocarbons as gasoline

mg/kg Milligrams per kilogram

ND Not detected at or above the method detection limit.

TABLE 2
SUMMARY OF EXTRACTABLE ORGANIC ANALYTICAL RESULTS - CONFIRMATION SOIL SAMPLES

Sample Location[a]	Sample ID Number	Date Sampled	Acenaphthene (µg/L)	Fluorene (µg/L)	Phenanthrene (µg/L)	Anthracene (µg/L)	Fluoranthene (µg/L)	Pyrene (µg/L)
T2 - Sidewall @ 7'	28210	08/03/94	<330	<330	<330	<330	<330	<330
T2T4 - Sidewall @ 7'	28205	08/03/94	<330	<330	<330	<330	<330	<330
	28205[b]	08/03/94	<17	<17	<17	<17	<17	<17
T4 - Sidewall @ 7'	28208	08/03/94	540	430	1400	370	990	750
T3T4 - Sidewall @ 7'	28207	08/03/94	<330	<330	<330	<330	<330	<330
T3 - Sidewall @ 7'	28209	08/03/94	<1,600	<1,600	<1,600	<1,600	<1,600	<1,600
T1T3 - Sidewall @ 7'	28203	08/03/94	<33,000	<33,000	<33,000	<33,000	<33,000	<33,000
	28203[b]	08/03/94	<17	<17	<17	<17	<17	<17
T1 - Sidewall @ 7'	28204	08/03/94	<1,600	<1,600	<1,600	<1,600	<1,600	<1,600
T1T2 - Sidewall @ 7'	28201	08/03/94	<330	<330	<330	<330	<330	<330

a See Figure 2 for sample locations.

b Sample was also extracted with deionized water using the California Waste Extraction Test (WET) method and analyzed by EPA Method 8270. Chemical constituents analyzed by this method were not detected at or above the method detection limit (MDL). See Appendix C for the complete analytical report.

<330 Chemical analyte not detected at or above the method detection limit of 330 µg/L.

µg/L Micrograms per liter

Note: Method detection limits vary in relation to TPH concentrations in sample. The laboratory testing procedure require the above noted varations in MDLs.

TABLE 3
SUMMARY OF ORGANIC ANALYTICAL RESULTS - WATER SAMPLE

Sample Location[a]	Sample ID Number	Date Sampled	TPH-G (mg/L)	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Xylenes (mg/L)	TPH-D (mg/L)	TPH-B (mg/L)	Oil & Grease (mg/L)	Acenaphthene[b] (mg/L)
South end of pit	28215 & 28216	08/03/94	0.150	0.0012	0.0008	ND	0.0024	3.2	6.1	ND	0.015
Method Detection Limit			0.005	0.005	0.005	0.005	0.005	0.05	0.25	5.0	0.010

a See Figure 2 for sample locations.

b Other extractable organic constituents analyzed by EPA Method 8270 and halogenated volatile organic constituents analyzed by EPA Method 8010 were not detected at or above the method detection limit (MDL). See Appendix C for complete laboratory report.

TPH-B Total petroleum hydrocarbons as Bunker-C fuel

TPH-D Total petroleum hydrocarbons as diesel

TPH-G Total petroleum hydrocarbons as gasoline

mg/L Milligrams per liter

ND Not detected at or above the method detection limit.

TABLE 3 continuation
SUMMARY OF INORGANIC ANALYTICAL RESULTS - WATER SAMPLE

Sample Location	Sample ID Number	Date Sampled	Arsenic (mg/L)	Barium (mg/L)	Cadmium (mg/L)	Chromium (mg/L)	Lead (mg/L)	Mercury (mg/L)	Selenium (mg/L)	Silver (mg/L)
South end of pit	28215 & 28216	08/03/94	0.005	0.16	ND	ND	0.028	ND	ND	ND
Method Detection Limit			0.005	0.01	0.005	0.01	0.001	0.0002	0.005	0.01

a See Figure 2 for sample locations.

mg/L Milligrams per liter

ND Not detected at or above the method detection limit.

TABLE 4
SUMMARY OF INORGANIC ANALYTICAL RESULTS - COMPOSITE SOIL SAMPLE

Sample Location[a]	Sample ID Number	Date Sampled	Arsenic (mg/kg)	Barium (mg/kg)	Cadmium (mg/kg)	Chromium (mg/kg)	Lead (mg/kg)	Mercury (mg/kg)	Selenium (mg/kg)	Silver (mg/kg)
T1T2, T1T3, T2T4, T3T4 - Sidewall @ 7'	28201, 28203, 28205, 28207	08/03/94	3.9	82	ND	33	6.7	0.05	ND	ND
Method Detection Limit			0.5	1	1	1	0.5	0.02	0.5	1

a See Figure 2 for sample locations.

mg/L Milligrams per liter

ND Not detected at or above the method detection limit.

TABLE 5
SUMMARY OF INORGANIC ANALYTICAL RESULTS - COMPOSITE STOCKPILE

Sample Location[a]	Sample ID Number	Date Sampled	Arsenic[b] (mg/L)	Lead[b] (mg/L)
Stockpile	28213, 28214, & 28299	08/04/94	0.006	1.1
Method Detection Limit			0.005	0.001

a See Figure 2 for sample locations

b Metals extracted using Toxic Characteristic Leaching Procedure (TCLP) and analyzed by EPA Method 7000 Series.

mg/L Milligrams per liter

Table 6
Soil Sampling Analytical Results
Sherwin-Williams
Emeryville, California

All results expressed in mg/kg

Sample ID	Sample Date	Kerosene	Diesel	Motor Oil
Floor	3-Aug-95	150	400	1400
South	3-Aug-95	NA	NA	1000
North	3-Aug-95	NA	NA	810
West	3-Aug-95	NA	NA	1200
STKPL-N	3-Aug-95	NA	NA	1000
STKPL-O	3-Aug-95	NA	NA	870
North-OE	11-Aug-95	110	170	910
South-OE	11-Aug-95	150	280	940
West-OE	11-Aug-95	530	760	1700

Data entered by CTH 18-Oct-95. Proofed by SRF. QA/QC by mjc

Notes

Sample Floor also tested for presence of SVOCs and metals. All were non-detect, except for metals, which were not detected above regulatory thresholds. For test results, refer to Appendix A.

Sample Floor-OE tested for TPHe by the California WET test using deionized water. Sample results were non-detect.

NA = Not Analyzed

Table 7
Product Sampling Analytical Results
Sherwin-Williams
Emeryville, California

Sample ID	Sample Date	Unit of Measure	Kerosene	Diesel	Motor Oil
(North Tank) 1	13-Jul-95	mg/kg	<600	<600	<6000[1]
(South Tank) 2	13-Jul-95	ug/l	<5000	<5000	370,000

Data entered by CTH 18-Oct-95. Proofed by SRF. QA/QC by mjc

Notes

[1]Unknown hydrocarbons in the motor oil range of 34,000 mg/kg reported by Chromalab.

Also tested for presence of PCBs, VOCs, and metals. PCBs were non-detect. Metals were not detected above regulatory thresholds. VOCs were non-detect except the North Tank which had low levels of benzene (0.22 mg/kg), toluene (0.26 mg/kg) and total xylenes (1.7 mg/kg). For test results, refer to Appendix A.

TABLE 3
GROUND WATER ELEVATION DATA

Monitoring Well[a]	Date Measured	Top of Casing Elevation[b] (feet MSL)	Depth to Ground Water (feet TOC)	Ground Water Elevation (feet MSL)
LF-11	03/18/97	10.05	4.67	5.38
	06/11/97		4.63	5.42
LF-20	04/24/96	11.77	7.55	4.22
	11/21/96		7.90	3.87
	03/18/97		7.83	3.94
	06/11/97		7.83	3.94
LF-21	04/24/96	10.37	3.65	6.72
	11/21/96		5.33	5.04
	03/18/97		5.49	4.88
	06/11/97		5.44	4.93
LF-23	04/24/96	10.64	4.08	6.56
	11/21/96		4.54	6.10
	03/18/97		5.24	5.40
	06/11/97		5.68	4.96
LF-24	04/24/96	10.22	4.40	5.82
	11/21/96		5.35	4.87
	03/18/97		5.18	5.04
	06/11/97		5.70	4.52
LF-25	04/24/96	11.31	7.15	4.16
	11/21/96		7.29	4.02
	03/18/97		7.84	3.47
	06/11/97		7.91	3.40

a See Figure 2 for approximate location of monitoring wells installed by Levine-Fricke.
b Top of casing elevation is a surveyed point marked on the top of the well casing.
MSL Mean sea level
TOC Top of casing

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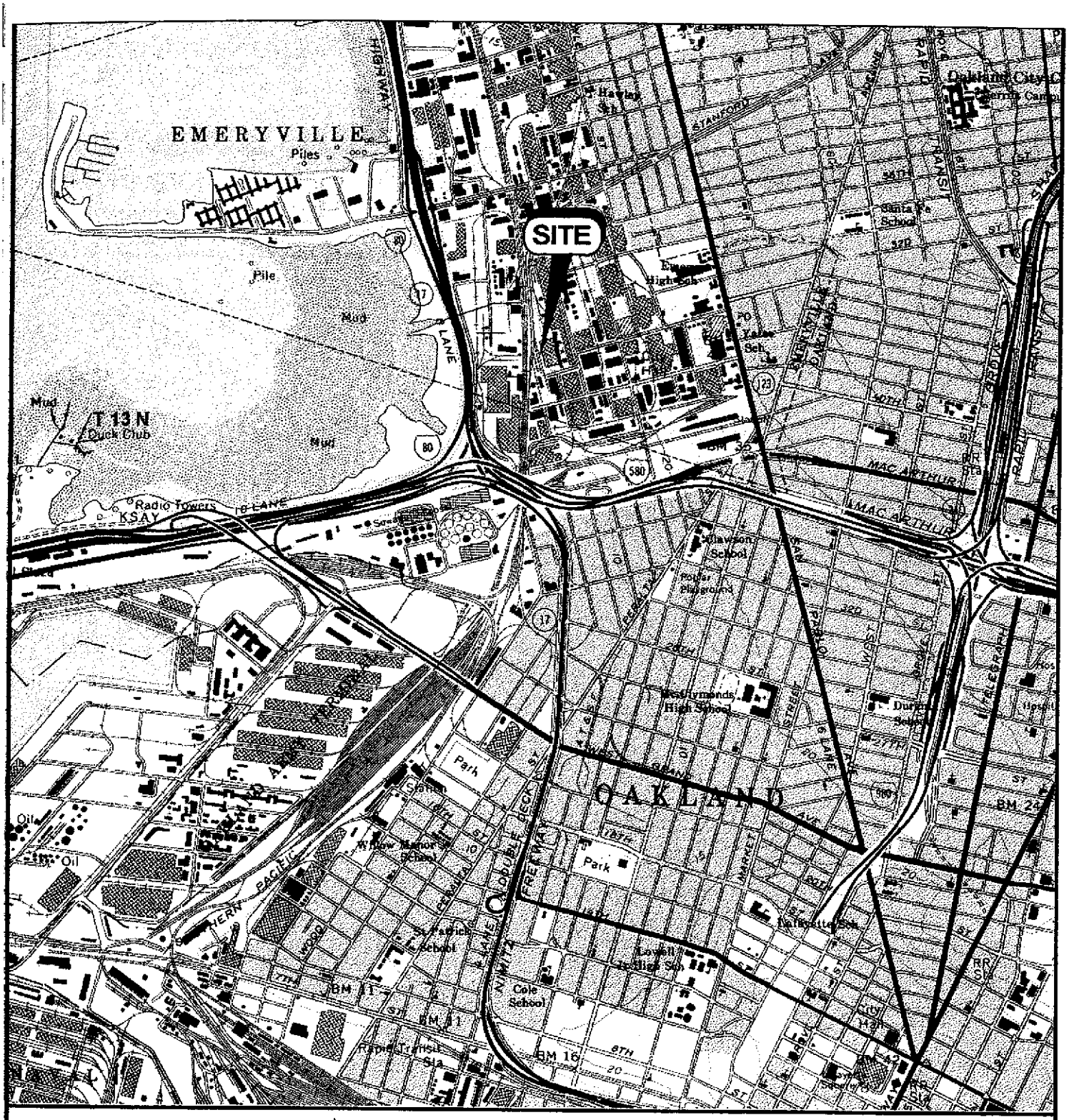
TABLE 4
GROUND WATER ANALYTICAL RESULTS

Monitoring Well[a]	Date Sampled	Total Petroleum Hydrocarbons (µg/L)		
		Diesel C10 - C24	Motor Oil 7 C24	Diesel w/ Silica Gel Cleanup C9 C13
EPA Method		8015M		8015M/3630 Modified
LF-11	03/18/97	290[b] (1,900)	<500	ND
	06/11/97	✓ 680[b] (410)	<500	180[b]
LF-20	04/12/96	1,000[c] (940)	NQ	82
	11/21/96	1,800 (3,700)	<540	NA
	03/18/97	240[b] (610)	<500	ND[d]
	06/11/97	600[b] (540)	<500	62[b]
LF-21	04/10/96	910[c] (2,800)	NQ	<50
	11/21/96	1,100 (2,400)	<590	NA
	03/18/97	360[b] (1,700)	<500	ND
	06/11/97	660[b] (830)	<500	100[b]
LF-23	04/10/96	340[c] (1,700)	NQ	<50
	11/21/96	420 (1,300)	<540	NA
	03/18/97	1,200[b] (1,500)	<500	ND
	06/11/97	400 (410)	<500	<50
LF-24	04/12/96	<50 (90)	<50	NA
	11/21/96	<50 (140)	<530	NA
	03/18/97	<50 (< [illegible])	<500	NA
	06/11/97	<50 (60)	<500	NA
LF-25	04/12/96	88[c] (180)	NQ	<50
	11/21/96	<53 (310)	<530	NA
	03/18/97	<50 (110)	<500	NA
	06/11/97	<50 (110)	<500	NA

↳ SHERWIN WILLIAMS RESULTS

a	Refer to Figure 2
b	Reported hydrocarbons in the diesel range do not match chromatographic diesel pattern.
c	Unknown hydrocarbon mixture atypical of diesel fuel in the carbon range of C_{10}-C_{32}. Hydrocarbons from C_{10}-C_{24} were quantified based on comparison with a diesel standard.
d	Due to laboratory contamination during the 8015 analysis with silica gel cleanup of sample LF-20, the removal of hydrocarbons in the C_{10}-C_{13} range by silica gel cleanup cannot be verifed (see explanation within laboratory reports of Appendix B).
µg/L	Micrograms per liter, equivalent to parts per billion (ppb).
<	Indicates the constituent was not detected at or above reporting limit as listed.
ND	Not Detected.
NA	Not analyzed
NQ	Hydrocarbons in the motor oil range ($>C_{24}$) were not quantified.



Reference:
U.S.G.S. 7.5 Minute Series (Topographic)
Oakland West Quadrangle
California
Dated: 1959, photorevised 1980

N

1/2 0 1 MILE

APPROXIMATE SCALE (MILES)

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

APPROXIMATE SCALE (FEET)

Project No.: 05100680	Figure No: 1
Scale: As Above	Page No.:
File No.: 680SM	Drawn By: Patti Decker
Date: 05/22/97	Approved By: James Ackerman

Terranext

SITE LOCATION MAP FIGURE 1
UNION PACIFIC RAILROAD COMPANY
1450 SHERWIN STREET
EMERYVILLE, CALIFORNIA

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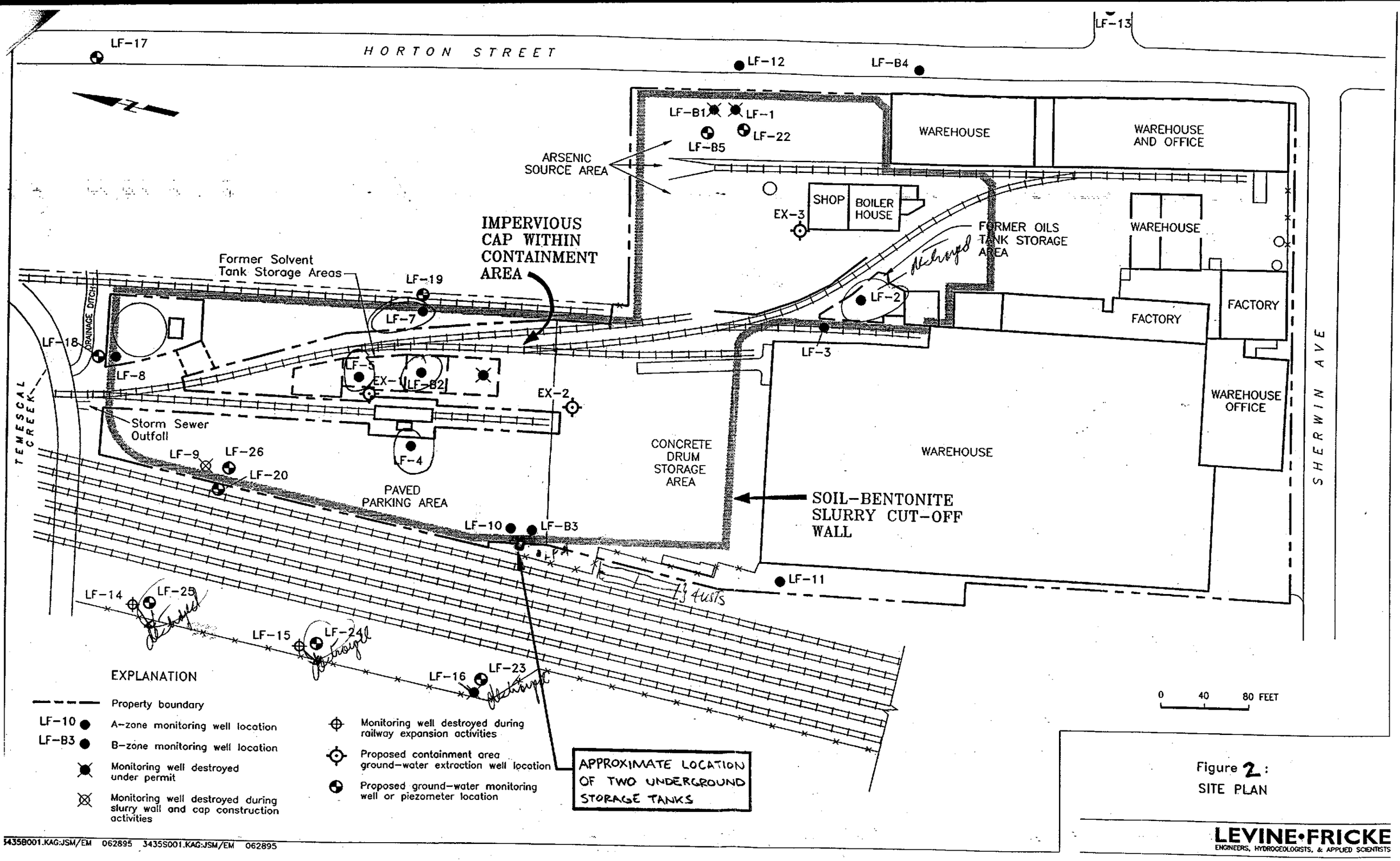
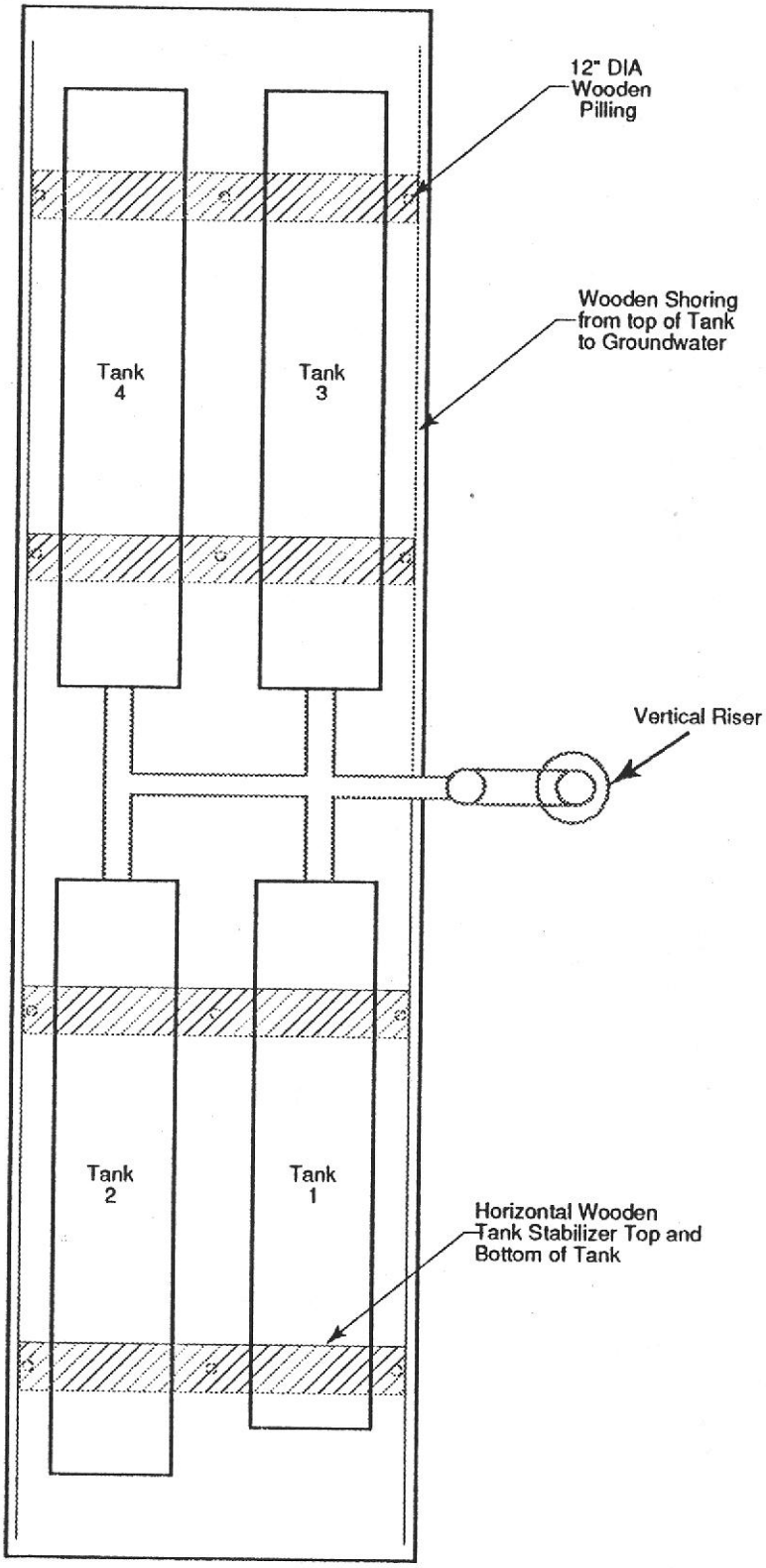


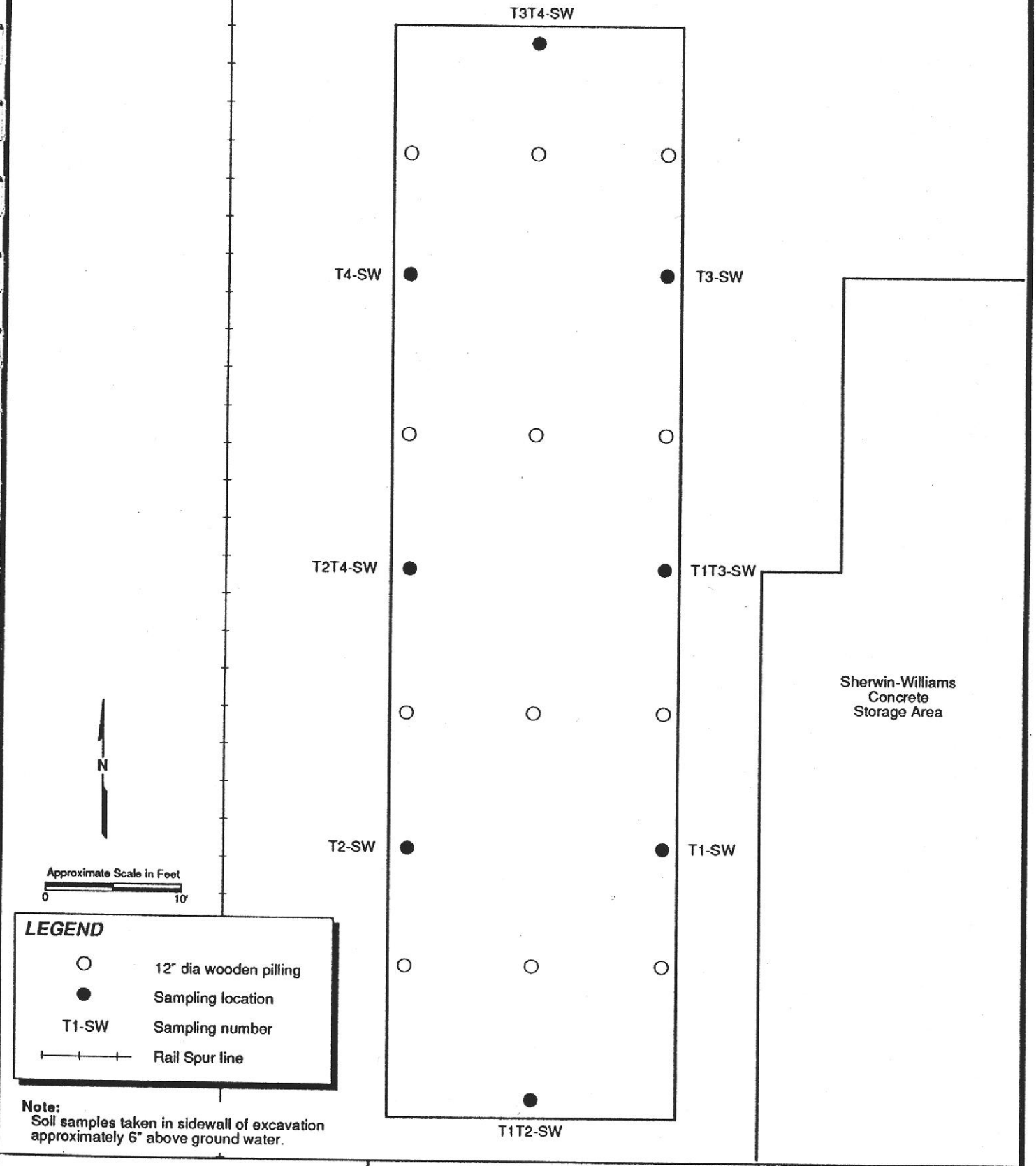
Figure 2:
SITE PLAN

LEVINE•FRICKE
ENGINEERS, HYDROGEOLOGISTS, & APPLIED SCIENTISTS

3435S001.KAG:JSM/EM 062895 3435S001.KAG:JSM/EM 062895



Industrial Compliance A Subsidiary of SP Environmental Systems, Inc.		SITE LOCATION MAP SOUTHERN PACIFIC TRANSPORTATION COMPANY EMERYVILLE-SHERWIN-WILLIAMS 4 UST REMOVAL EMERYVILLE, CALIFORNIA	Figure: 3 Page No.: 8 Scale: as shown
Project No.: 05100680	Date: 08/12/94		
Drawn By: Patti Decker	Checked By: Steve Towle		



Note:
Soil samples taken in sidewall of excavation approximately 6" above ground water.

Industrial Compliance
A Subsidiary of SP Environmental Systems, Inc.

Project No.: 05100680	Date: 08/12/94
Drawn By: Patti Decker	Checked By: Steve Towle

SOIL SAMPLE LOCATION MAP
SOUTHERN PACIFIC TRANSPORTATION COMPANY
EMERYVILLE-SHERWIN-WILLIAMS
4 UST REMOVAL
EMERYVILLE, CALIFORNIA

Figure: 4
Page No.: 10
Scale: as shown

EmVI-680/TR.0894/F.04 #100

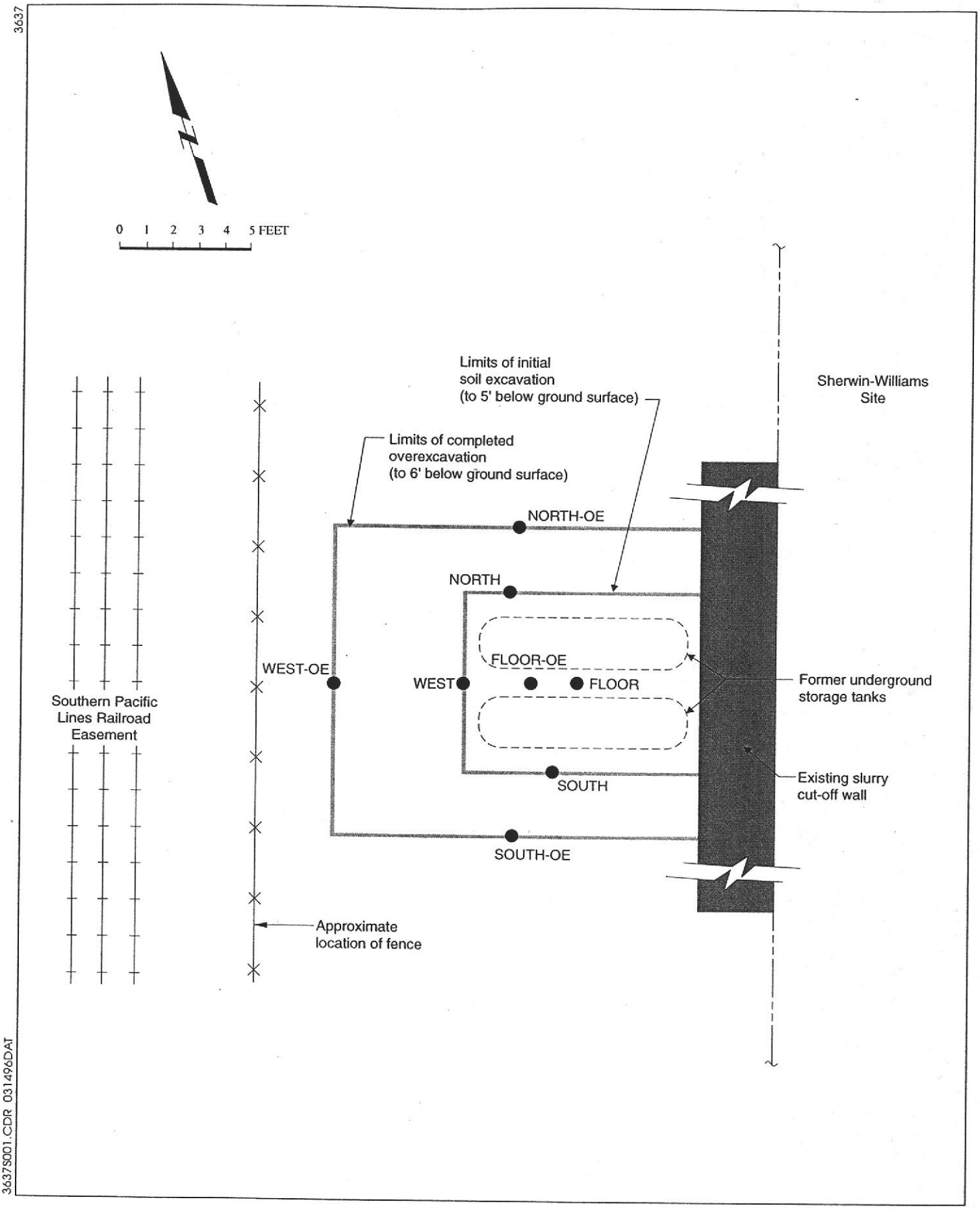


Figure 5: EXCAVATION OF USTS AND SOIL SAMPLING LOCATIONS

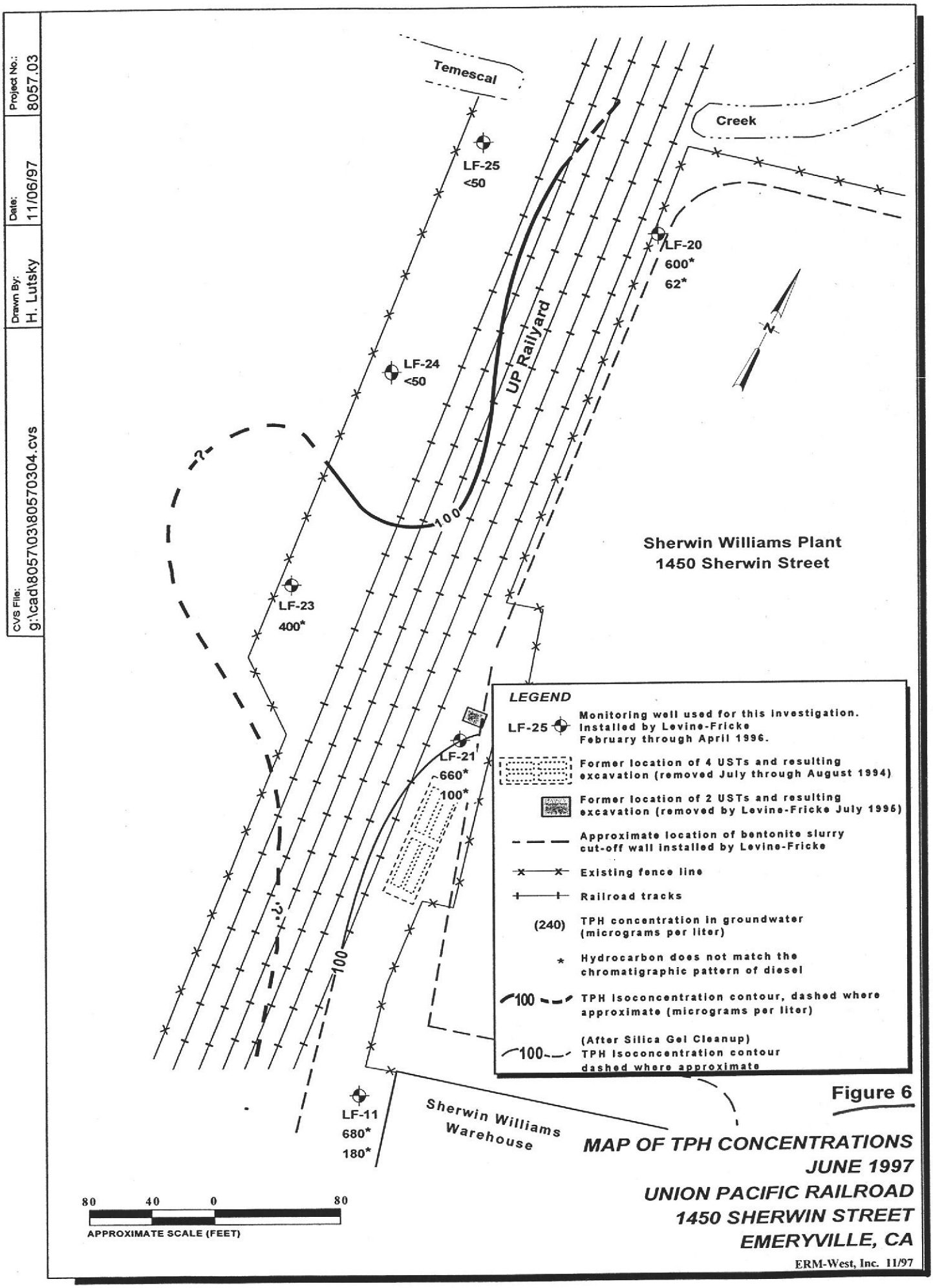


Figure 6

MAP OF TPH CONCENTRATIONS
JUNE 1997
UNION PACIFIC RAILROAD
1450 SHERWIN STREET
EMERYVILLE, CA

ERM-West, Inc. 11/97

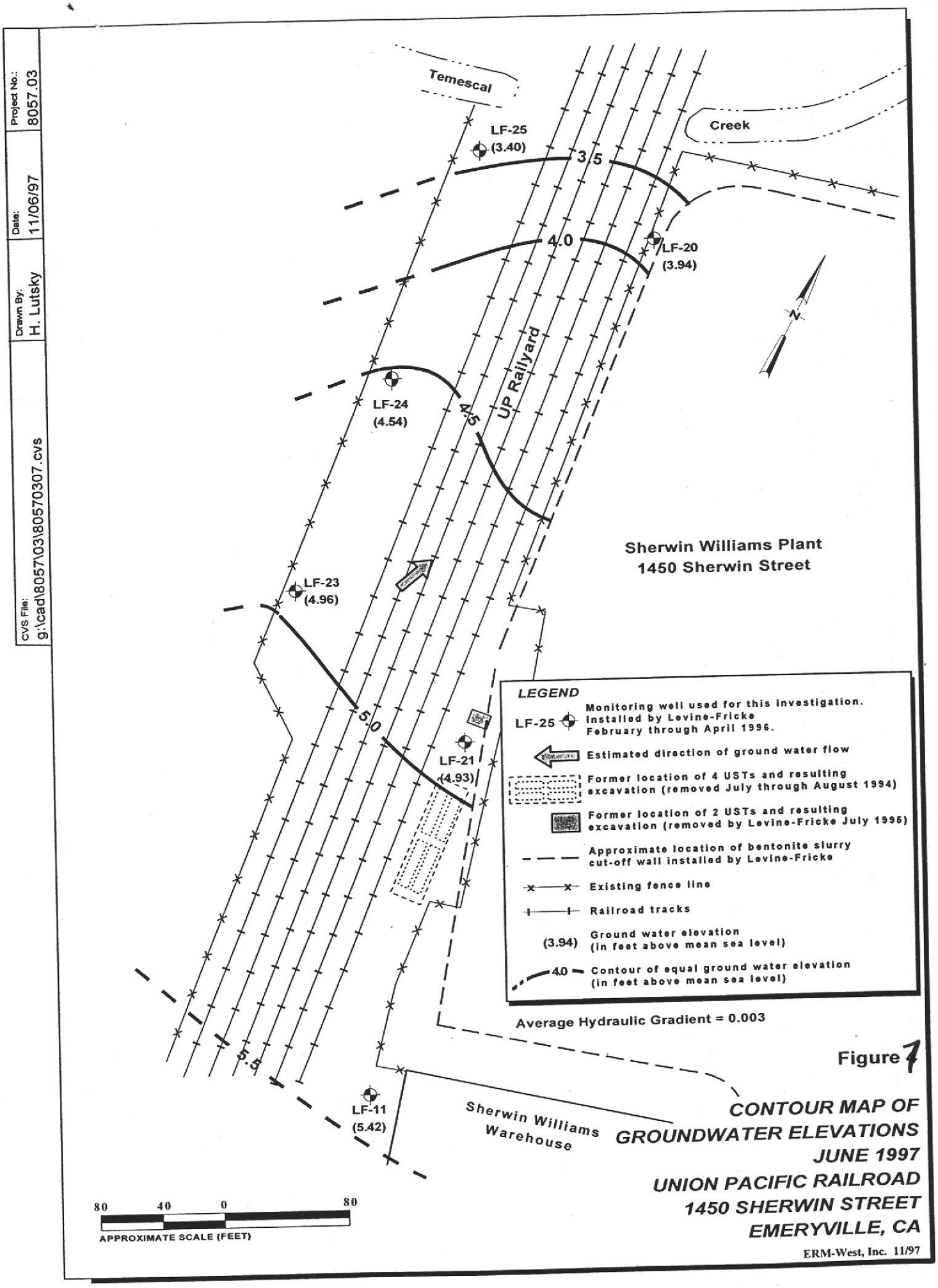


Figure 7

CONTOUR MAP OF GROUNDWATER ELEVATIONS JUNE 1997 UNION PACIFIC RAILROAD 1450 SHERWIN STREET EMERYVILLE, CA

ERM-West, Inc. 11/97

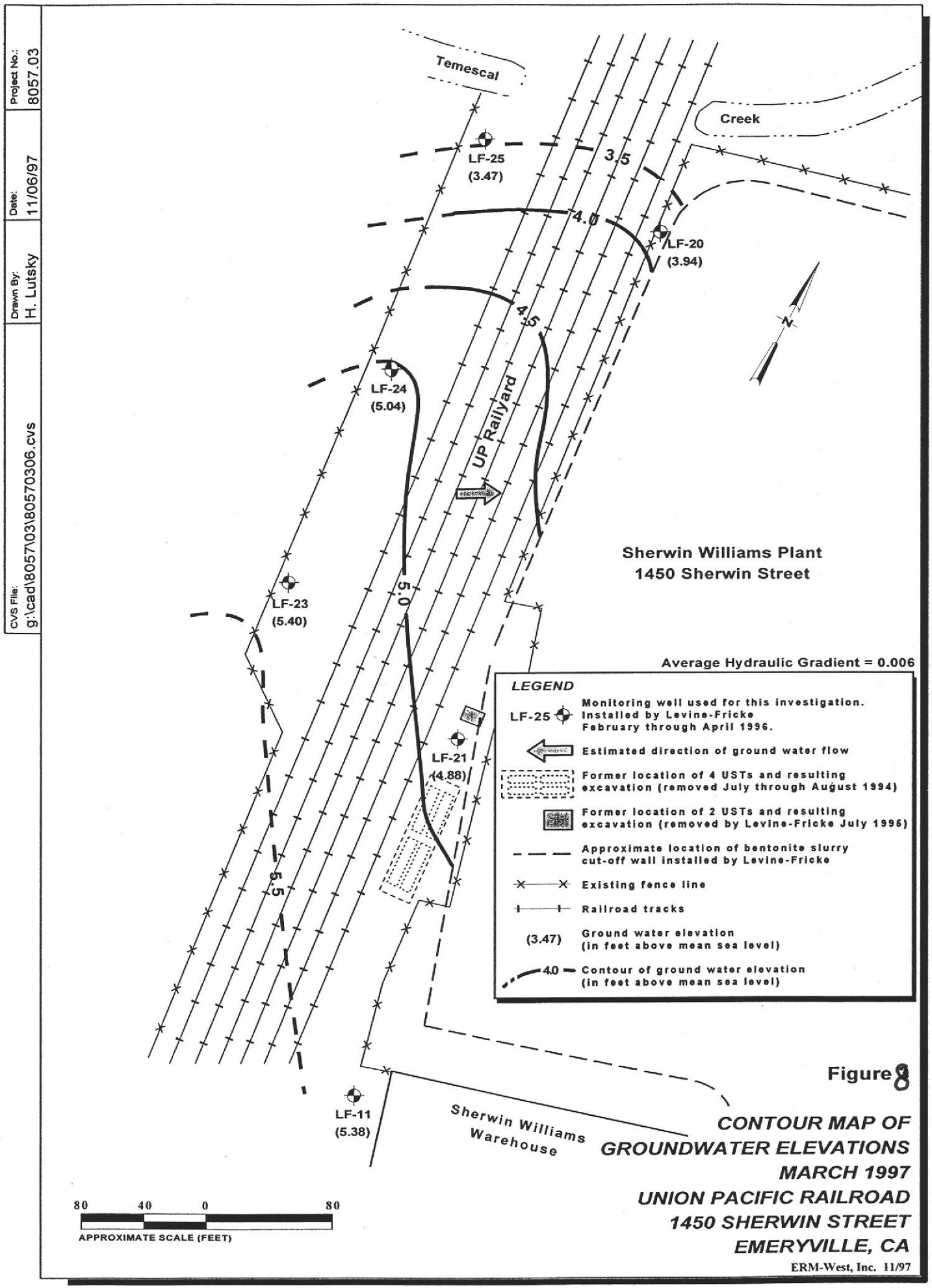
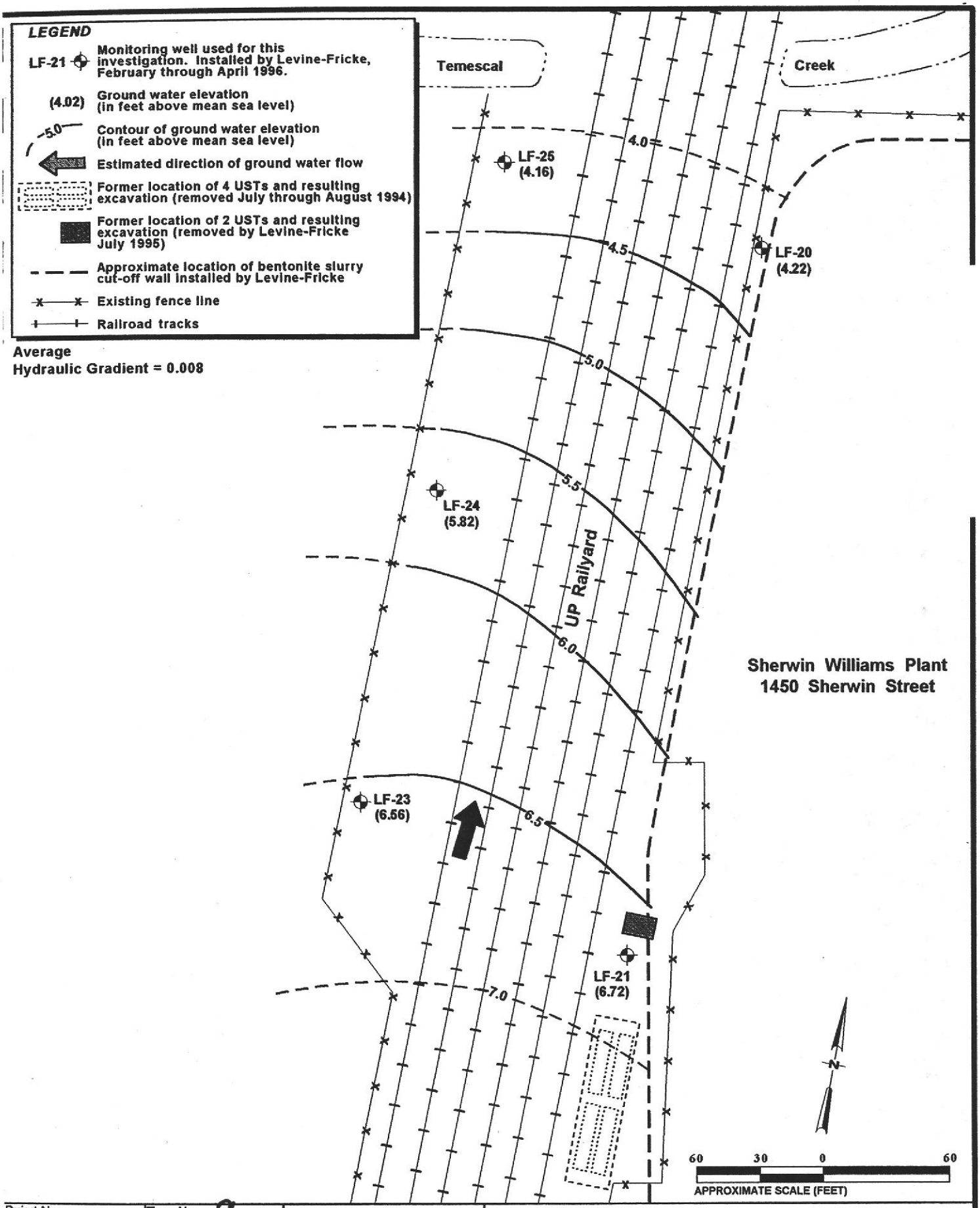


Figure 8

CONTOUR MAP OF GROUNDWATER ELEVATIONS MARCH 1997 UNION PACIFIC RAILROAD 1450 SHERWIN STREET EMERYVILLE, CA

ERM-West, Inc. 11/97

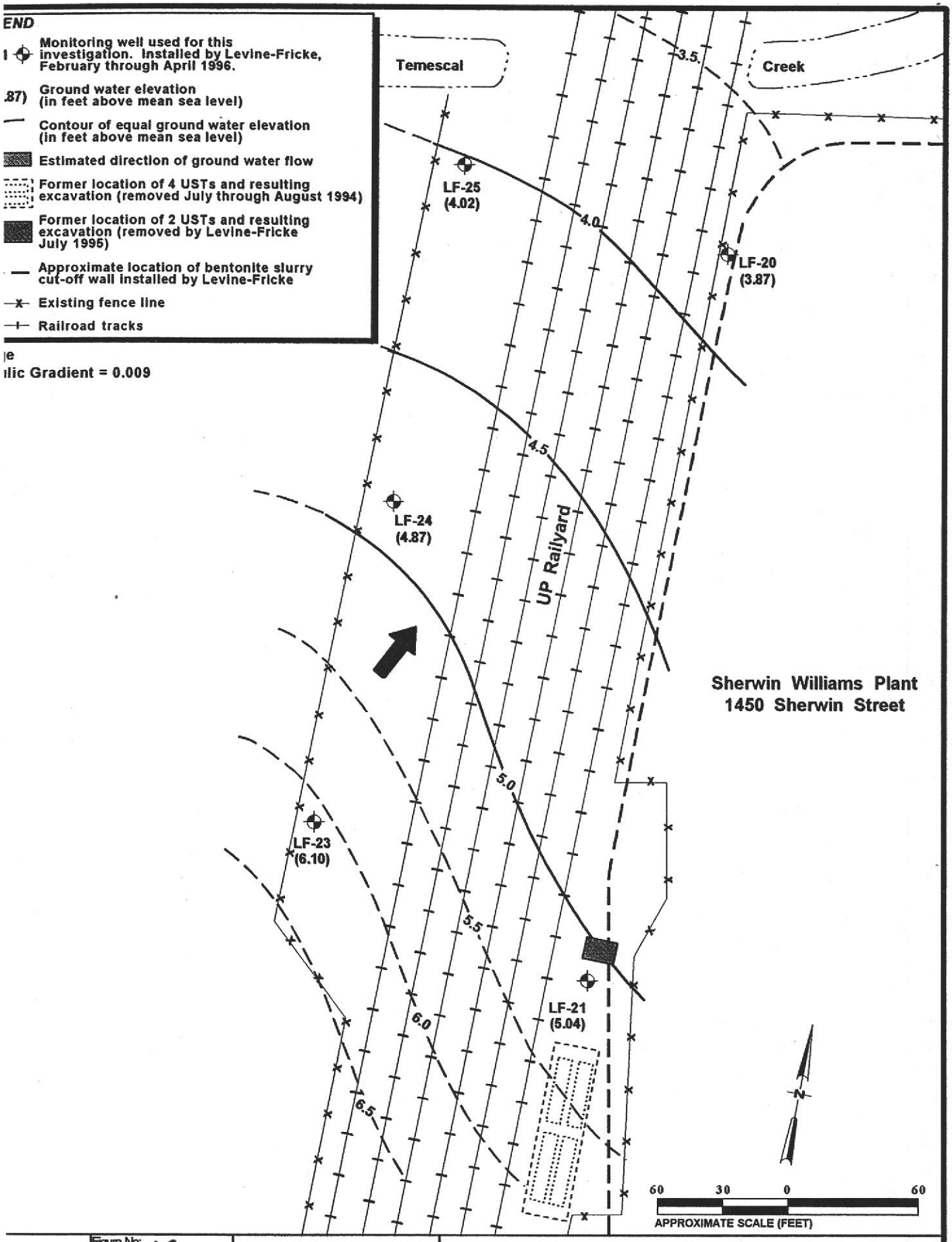


Project No.: 05100680	Figure No.: 9
Scale: 1" = 60'	Page No.: -
File No.: D5001185	Drawn By: Janelle Hurtado
Date: 03/03/97	Approved By: James Ackerman

Terranext

CONTOUR MAP OF GROUND WATER ELEVATIONS
APRIL 1996

UNION PACIFIC RAILROAD COMPANY
1450 SHERWIN STREET
EMERYVILLE, CALIFORNIA

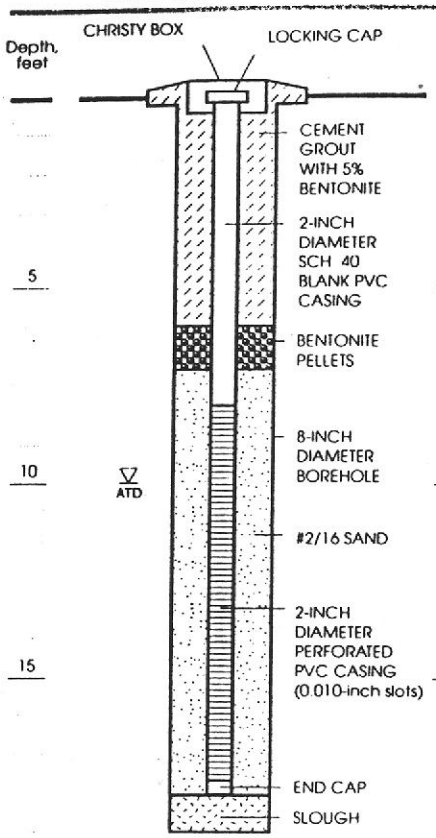


100680	Figure No: 10	
" = 60'	Page No.: -	
5001187	Drawn By: Janelle Hurtado	
3/97	Approved By: James Ackerman	

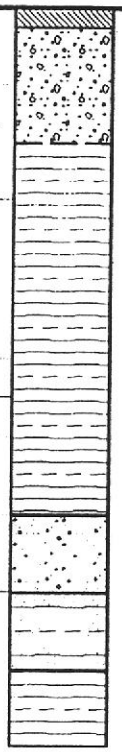
Terranext

CONTOUR MAP OF GROUND WATER ELEVATIONS
NOVEMBER 1996
UNION PACIFIC RAILROAD COMPANY
1450 SHERWIN STREET
EMERYVILLE, CALIFORNIA

WELL CONSTRUCTION



LITHOLOGY



Description

ASPHALT.

GRAVELLY FILL (GW/GM), dark brown (10YR 3/3), slightly moist, loose, clasts 1-3 centimeter, 40% loose sand and silt.

SILTY CLAY (CL/ML), dark bluish gray (5B 4/1), moist, soft, low to medium plasticity.

Very moist.

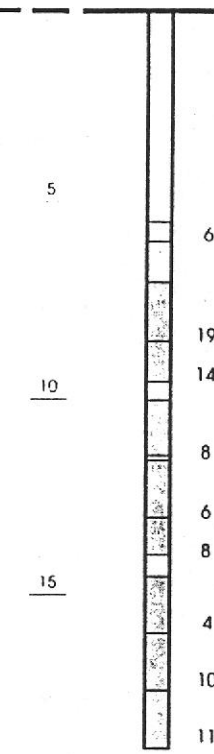
SAND with Gravel (SP), dark bluish gray (5B 4/1), saturated, cohesive.

CLAYEY SILTY SAND (SM), dark bluish gray (5B 4/1), saturated, very cohesive, 5% gravel.

SILTY CLAY (CL/ML), dark bluish gray (5B 4/1), moist, medium stiff, medium plasticity.

BOTTOM OF BORING AT 19 FEET.

SAMPLE DATA



Well Permit No.: 96048
Date well drilled: February 5, 1996
Drilling company: Gregg Drilling
Sampling Method: Modified California Sampler
Drillind method: Hollow-stem auger
LF Geologist: James P. Schwartz

EXPLANATION

- Clay
- Silt
- Sand
- Gravel
- Interval sampled using Modified California Sampler
- ATD Water level at time of drilling

Approved by: MBM

WELL CONSTRUCTION AND LITHOLOGY FOR WELL LF-20

Project No. 3435

LEVINE•FRICKE
ENGINEERS, HYDROGEOLOGISTS & APPLIED SCIENTISTS

3435L009.CDR 070296RYL:KAG

WELL CONSTRUCTION	LITHOLOGY		SAMPLE DATA	
	Graphic Log	Description	Sample No. and Interval	Penetration Rate (Blows/ft.)
RISTY BOX LOCKING CAP CEMENT GROUT WITH 5% BENTONITE BENTONITE PELLETS ▽ ATD 2-INCH DIAMETER SCH. 40 BLANK PVC CASING #2/16 SAND 8-INCH DIAMETER BOREHOLE 2-INCH DIAMETER PERFORATED PVC CASING (0.010-inch slots) END CAP		ASPHALT. GRAVELLY FILL (GW/GM), dark brown (10YR 3/3), slightly moist, poorly sorted, clasts up to 3 centimeter, 30-40% sand and silt. SILTY CLAY (CL/ML), dark greenish gray (5G 4/1), very moist, soft, medium plasticity. CLAYEY GRAVEL (GC), dark greenish gray (5G 4/1), saturated, loose, clasts up to 2 centimeter, 30% clay. SILTY CLAY (CL/ML), dark greenish gray (5G 4/1), very moist, soft, medium plasticity. CLAYEY GRAVEL (GC), dark greenish gray (5G 4/1), saturated, loose, clasts up to 2 centimeter, 30% clay. SILTY CLAY (CL/ML), medium brown (10YR 5/3), moist, medium stiffness, medium plasticity. BOTTOM OF BORING AT 15 FEET.	5 10 15	6 15 13 10 5 7 8

Well Permit No.: 96048
)ate well drilled: February 5, 1996
rilling company: Gregg Drilling
mpling Method: Modified California Sampler
Drillind method: Hollow-stem auger
LF Geologist: James P. Schwartz

EXPLANATION

- Clay
- Silt
- Sand
- Gravel
- Interval sampled using Modified California Sampler
- ▽ ATD — Water level at time of drilling

)ved by: MPBM

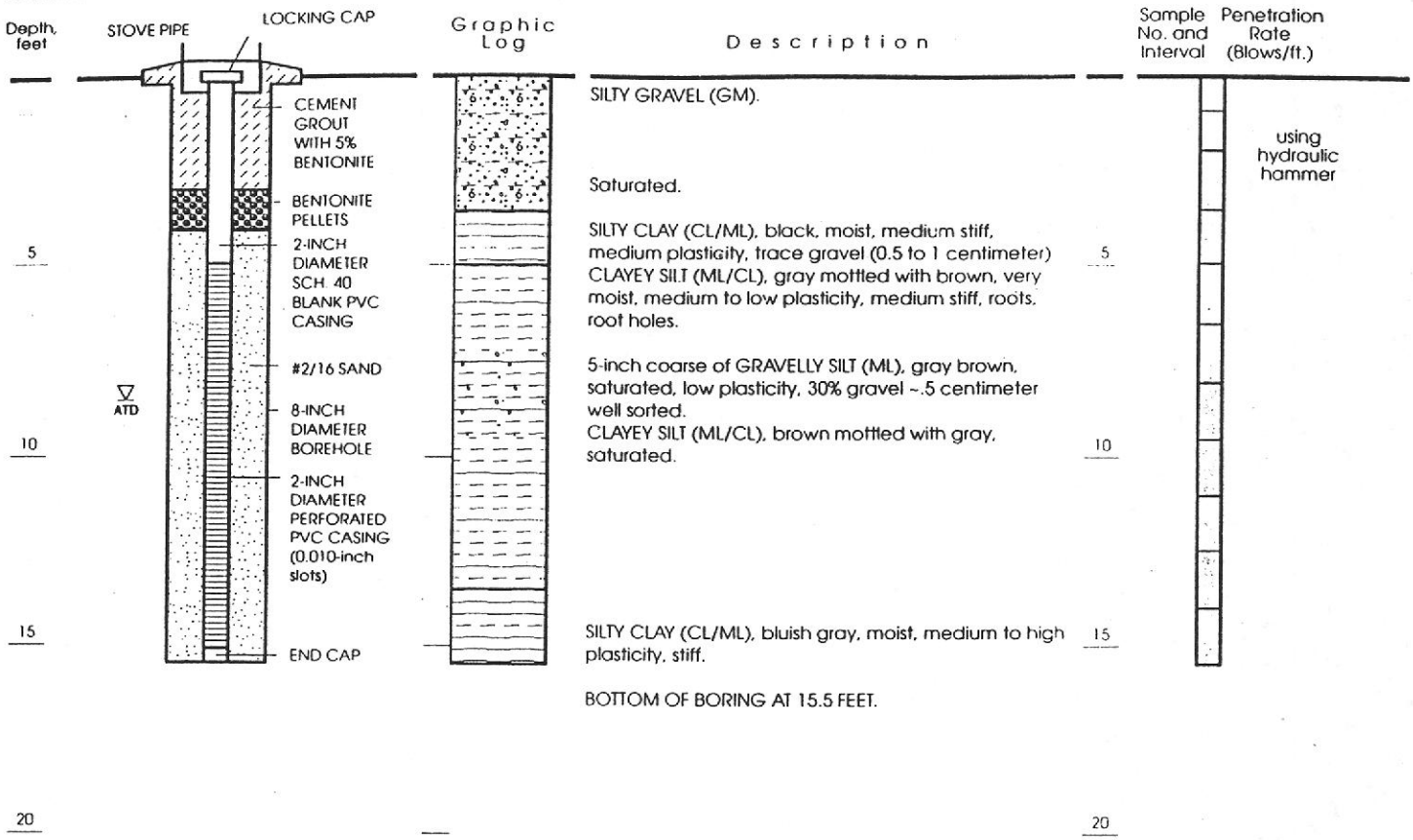
WELL CONSTRUCTION AND LITHOLOGY FOR WELL LF-21

:t No. 3435

LEVINE•FRICKE
ENGINEERS, HYDROGEOLOGISTS & APPLIED SCIENTISTS

0.CDR 070296RYL:KAG

Appendix E
Appendix B
Appendix C
Appendix D



Well Permit No.: 96048
Date well drilled: April 5, 1996
Drilling company: Gregg Drilling
Sampling Method: Modified California Sampler
Drillind method: Hollow-stem auger
LF Geologist: Robin W. Barber

EXPLANATION

- Clay
- Silt
- Sand
- Gravel
- Interval sampled using Modified California Sampler
- ATD Water level at time of drilling

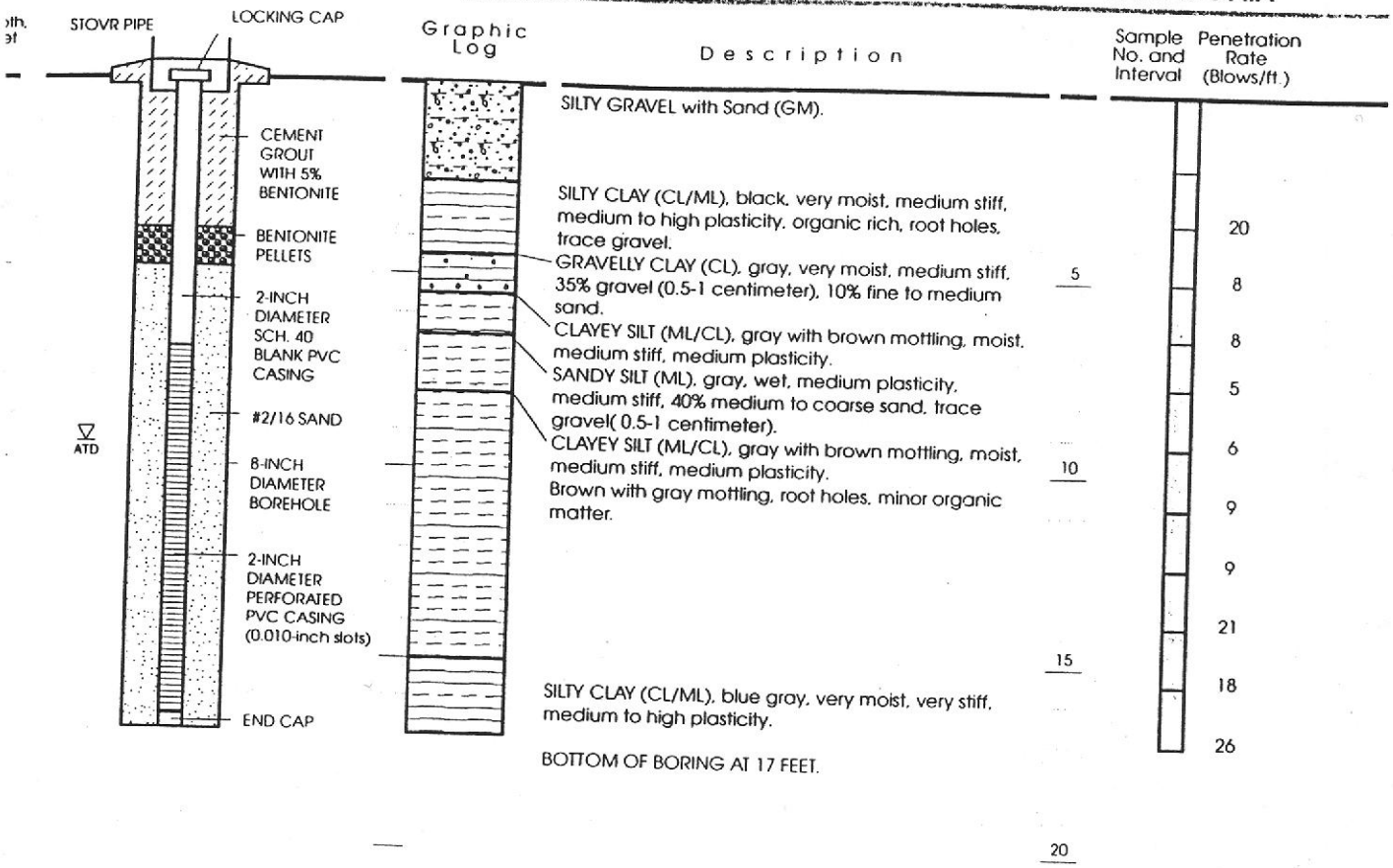
Approved by: MBM

WELL CONSTRUCTION AND LITHOLOGY FOR WELL LF-23

Project No. 3435

LEVINE•FRICKE
ENGINEERS, HYDROGEOLOGISTS & APPLIED SCIENTISTS

3435L011.CDR 070296RYL:KAG



Well Permit No.: 96048
Date well drilled: April 4, 1996
Drilling company: Gregg Drilling
Sampling Method: Modified California Sampler
Drillind method: Hollow-stem auger
LF Geologist: Robin W. Barber

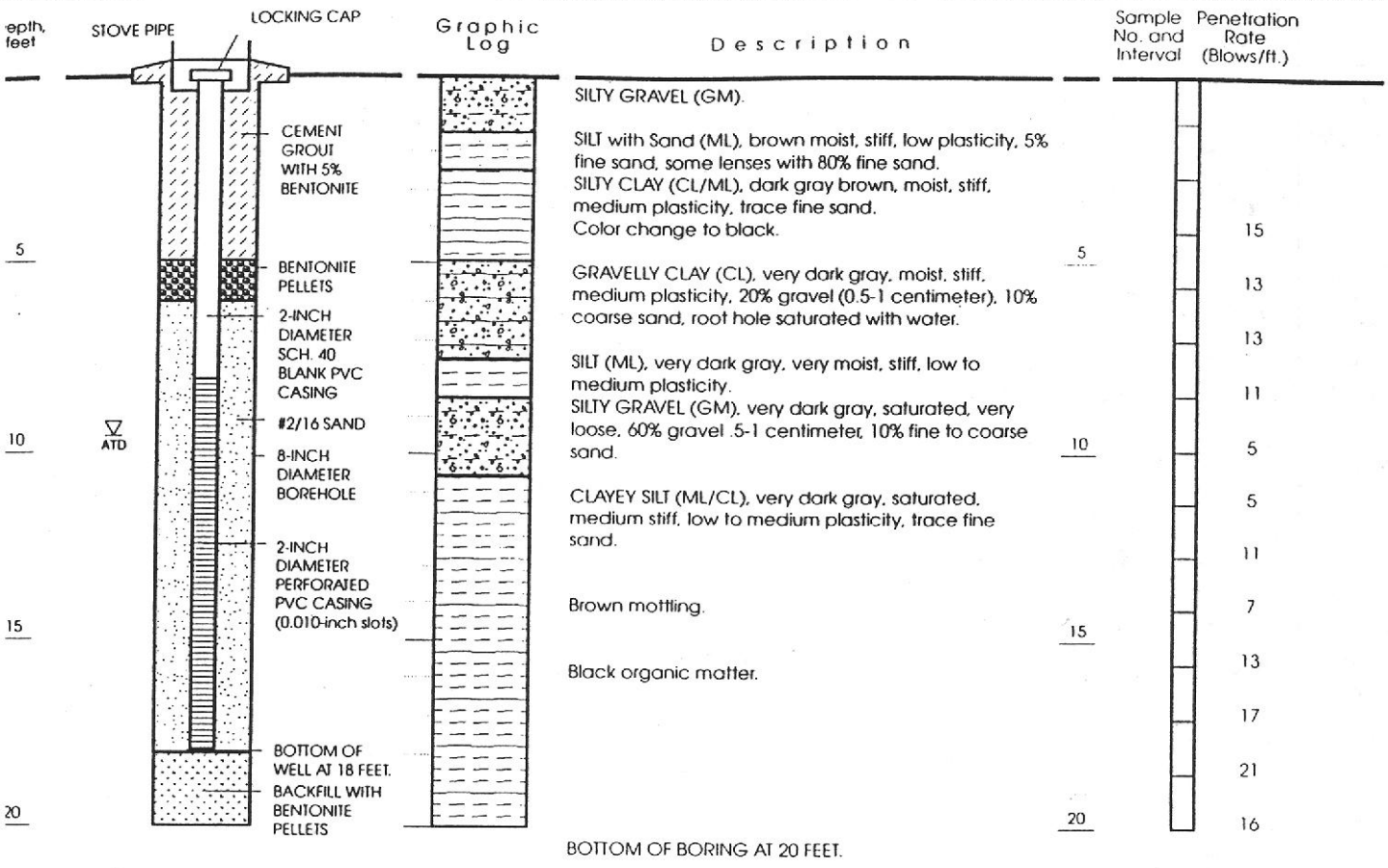
EXPLANATION

- Clay
- Silt
- Sand
- Gravel
- Interval sampled using Modified California Sampler
- ATD Water level at time of drilling

Approved by: MRBM

WELL CONSTRUCTION AND LITHOLOGY FOR WELL LF-24

Project No. 3435



Well Permit No.: 96048
Date well drilled: April 4, 1996
Drilling company: Gregg Drilling
Sampling Method: Modified California Sampler
Drillind method: Hollow-stem auger
LF Geologist: Robin W. Barber

EXPLANATION

- Clay
- Silt
- Sand
- Gravel
- Interval sampled using Modified California Sampler
- ATD Water level at time of drilling

Approved by: MBM

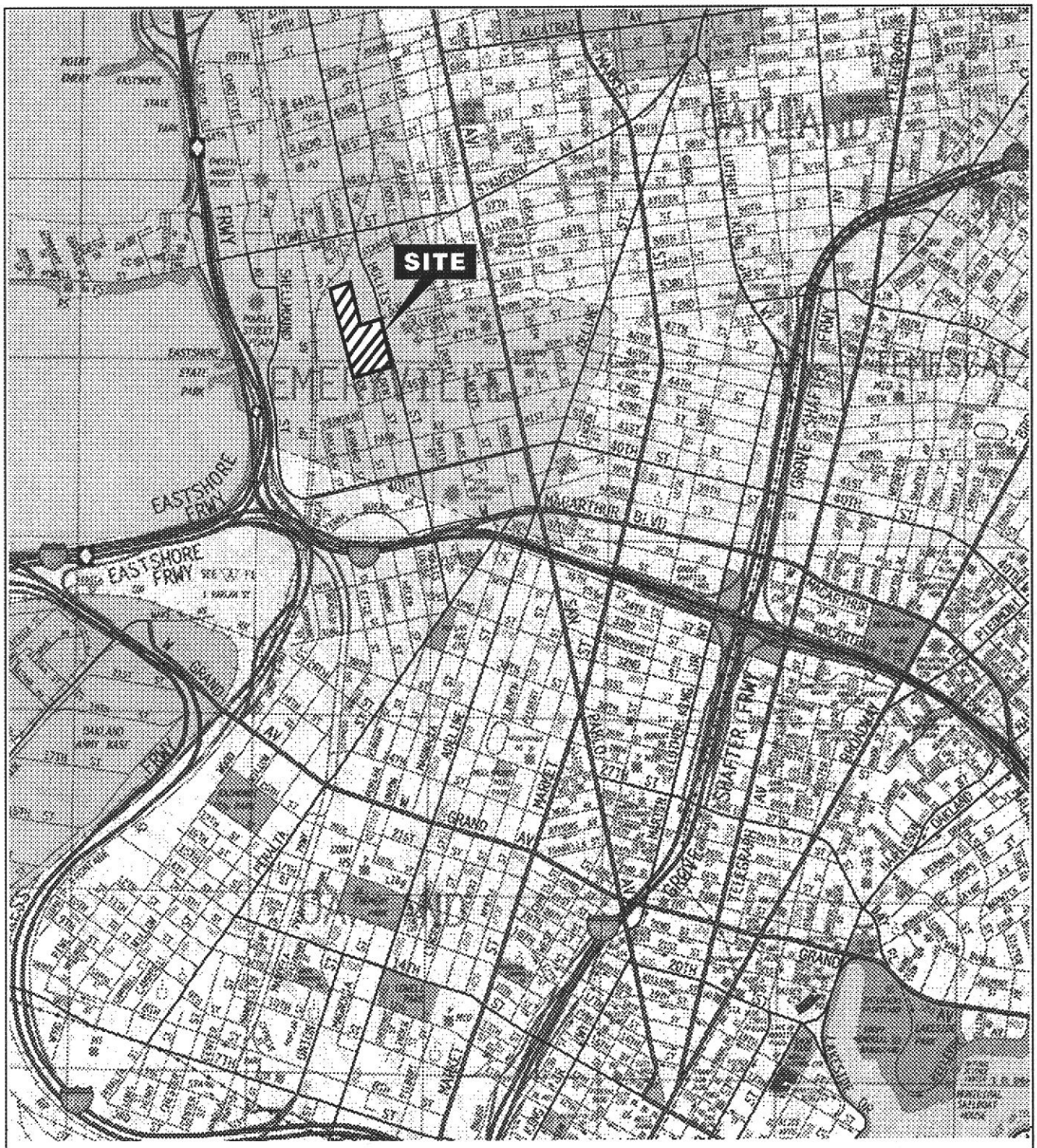
WELL CONSTRUCTION AND LITHOLOGY FOR WELL LF-25

Project No. 3435

LEVINE•FRICKE
ENGINEERS, HYDROGEOLOGISTS & APPLIED SCIENTISTS

435L013.CDR 070296RYL:KAG

SHERWIN WILLIAMS SITE



G:\1659\1659SV02.CDR 1/19/00

Site Location Map

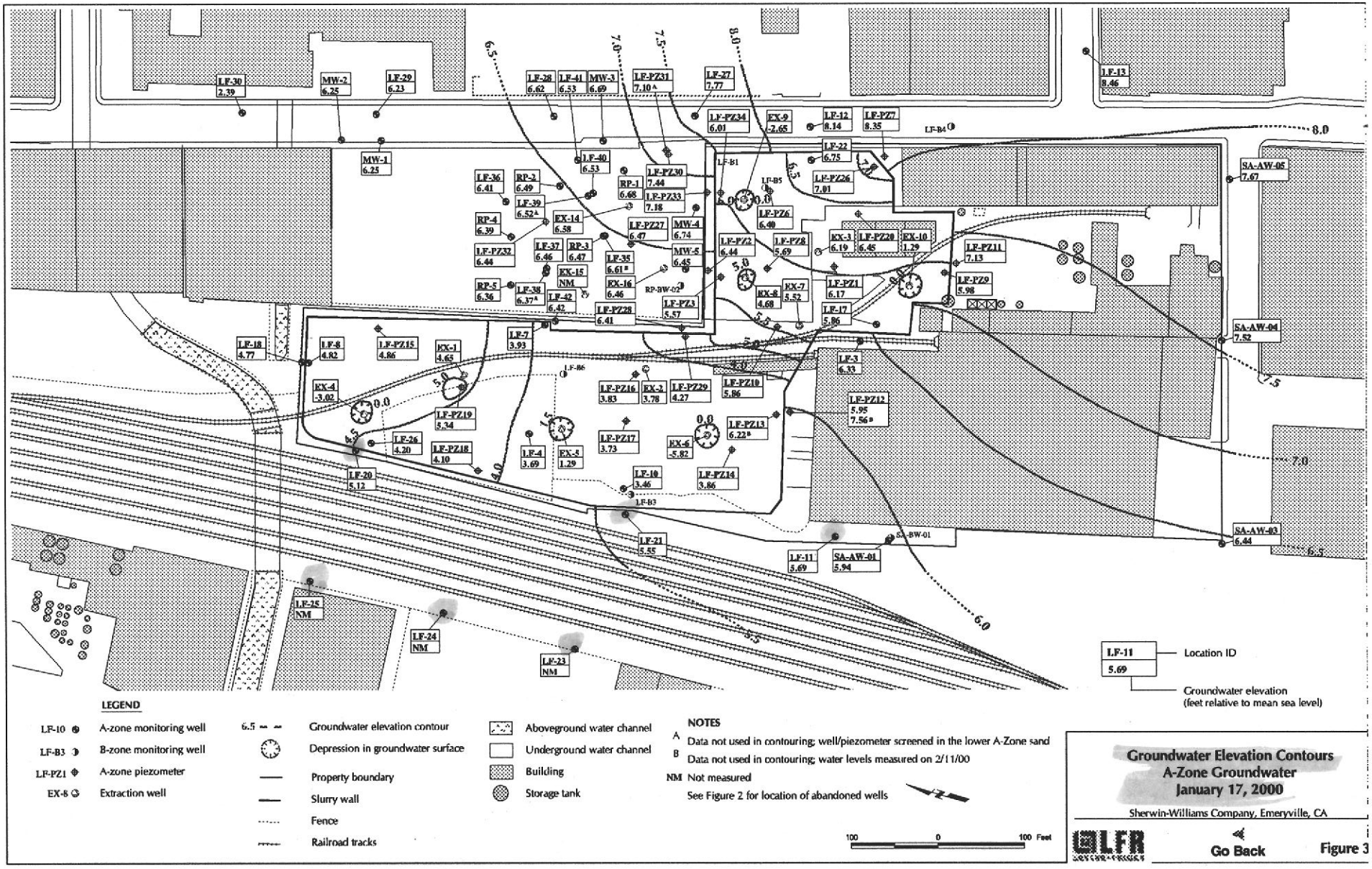
SHERWIN-WILLIAMS COMPANY, EMERYVILLE, CALIFORNIA

LFR LEVINE-FRICKE

Go Back

Figure 1

GROUNDWATER DATA WAS used from this site.



Groundwater Elevation Contours
A-Zone Groundwater
January 17, 2000

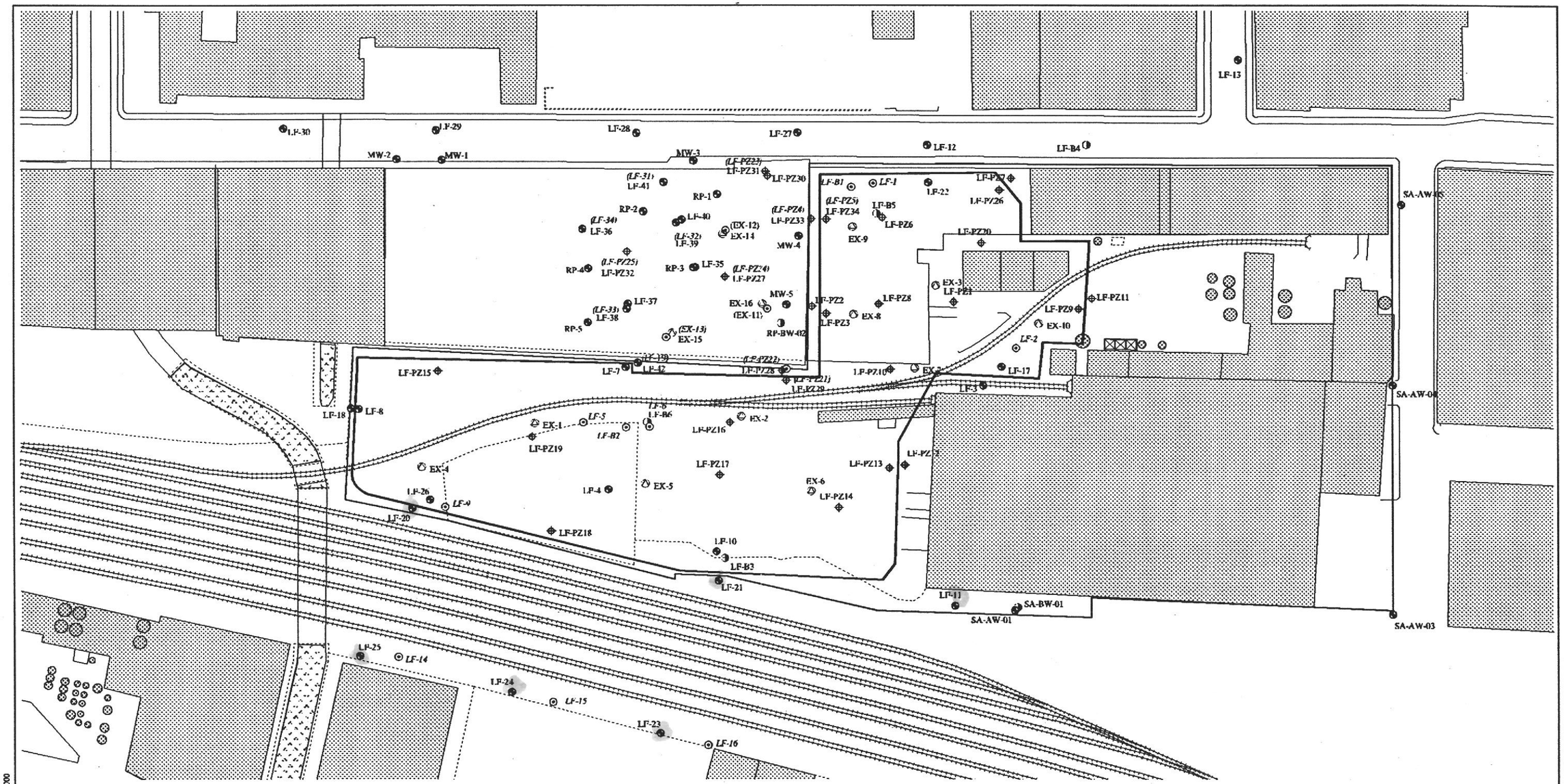
Sherwin-Williams Company, Emeryville, CA

LFR

Go Back

Figure 3

U:\Sherwin\GIS_SW\1Core_APR\arm00a1.apr 04/26/2000



LEGEND

LF-10	A-zone monitoring well	Property boundary	Aboveground water channel
LF-B3	B-zone monitoring well	Slurry wall	Underground water channel
LF-PZ1	A-zone piezometer	Fence	Building
EX-8	Extraction well	Railroad tracks	Storage tank
LF-14	Abandoned monitoring well		
(LF-32)	Abandoned monitoring well		

100 0 100 Feet

Site Plan

Sherwin-Williams Company, Emeryville, CA

Table 5

Summary of Historical Total Petroleum Hydrocarbons as Diesel and Gasoline in Groundwater Monitoring Wells
The Sherwin-Williams Company, Emeryville, California

Concentrations reported in milligrams per liter (mg/l)

Well Number	Notes	Date Sampled	Total Petroleum Hydrocarbons As Diesel	Total Petroleum Hydrocarbons As Gasoline	MTBE
LF-10		15-Jan-99	2.4	0.45	<0.002
LF-10		18-Jan-00	1.1 J	0.95 J,d	<0.0005
LF-11		21-Jun-91	0.13	na	na
LF-11		17-Dec-91	0.410	na	na
LF-11		09-Jul-92	0.26	<0.05	na
LF-11		31-Dec-92	0.31	0.058	na
LF-11		09-Jun-93	0.27	<0.05	na
LF-11		05-Jan-94	0.8	0.06	na
LF-11		16-Apr-96	0.93	<0.05	na
LF-11		31-Jul-96	0.58	<0.05	na
LF-11		20-Nov-96	1.5	<0.05	na
LF-11		18-Mar-97	1.9	0.19	na
LF-11		11-Jun-97	0.41	0.17	na
LF-11		19-Aug-97	0.47	0.16	na
LF-11		17-Dec-97	<0.05	0.22	na
LF-11		02-Mar-98	0.64	2.2	<0.002
LF-11		10-Apr-98	<0.25	2.6	<0.02
LF-11		16-Jul-98	<0.05	<0.05	<0.002
LF-11		23-Oct-98	<0.05	<0.05	<0.002
LF-11		14-Jan-99	0.66	0.15	<0.002
LF-11		22-Apr-99	0.76	<0.05	<0.002
DUP		22-Apr-99	0.71	<0.05	<0.002
LF-11		16-Jul-99	1.1 e	0.12	<0.0005
LF-11		12-Oct-99	0.74 e	0.095 d	<0.0005
DUP		12-Oct-99	0.67 e	0.11 d	<0.0005
LF-11		20-Jan-00	0.51 J	<0.05	<0.0005
LF-12		19-Jun-91	<0.05	na	na
LF-12		16-Dec-91	<0.050	na	na
LF-12		08-Jul-92	<0.05	<0.05	na
LF-12		30-Dec-92	<0.05	<0.05	na
LF-12		08-Jun-93	0.099	<0.05	na
LF-12		06-Jan-94	<0.05	<0.05	na
LF-12		16-Apr-96	<0.05	<0.05	na
LF-12		30-Jul-96	<0.05	<0.05	na
LF-12		20-Nov-96	<0.05	<0.05	na
LF-12		17-Mar-97	<0.05	<0.05	na
LF-12		01-Jul-97	<0.05	<0.05	na
LF-12		20-Aug-97	<0.05	<0.05	na
LF-12		18-Dec-97	<0.05	<0.05	na

Notes: All notes are listed at the end of this table - see last page.

Table 5

Summary of Historical Total Petroleum Hydrocarbons as Diesel and Gasoline in Groundwater Monitoring Wells
The Sherwin-Williams Company, Emeryville, California
Concentrations reported in milligrams per liter (mg/l)

Well Number	Notes	Date Sampled	Total Petroleum Hydrocarbons As Diesel	Total Petroleum Hydrocarbons As Gasoline	MTBE
LF-19		27-Feb-98	0.69	0.19	<0.002
LF-19		08-Apr-98	<0.05	<0.05	<0.002
LF-19		15-Jul-98	<0.05	<0.05	<0.002
LF-19		23-Oct-98	<0.05	<0.05	<0.002
DUP		23-Oct-98	<0.05	<0.05	<0.002
LF-19		13-Jan-99	2.2	0.17	<0.002
LF-19		20-Apr-99	3.3	0.16	<0.002
LF-19		14-Jul-99	2.7 cei	0.2	<0.0005
LF-19		15-Oct-99	2.1 c,e	0.17 d	<0.0005
LF-20		11-Apr-96	0.96	0.23	na
LF-20		30-Jul-96	0.56	0.2	na
LF-20		21-Nov-96	3.2	0.25	na
LF-20		18-Mar-97	0.61	0.2	na
LF-20		11-Jun-97	0.54	0.2	na
LF-20		19-Aug-97	0.67	0.22	na
LF-20		18-Dec-97	0.79	<0.05	na
LF-20		27-Feb-98	0.74	0.43	<0.002
LF-20		09-Apr-98	<0.05	<0.05	<0.002
LF-20		16-Jul-98	<0.05	0.51	<0.002
LF-20		23-Oct-98	<0.05	<0.05	<0.002
LF-20		13-Jan-99	1.7	0.51	<0.002
DUP		13-Jan-99	1.7	0.53	<0.002
LF-20		21-Apr-99	1.8	0.5	<0.002
LF-20		15-Jul-99	1.5	0.45	<0.0005
LF-20		14-Oct-99	1.2	0.44 d	<0.0005
LF-20		20-Jan-00	0.98 J	0.53 Jd	<0.0005 UJ
LF-21		10-Apr-96	2.8	<0.05	na
LF-21		31-Jul-96	1.4	0.06	na
LF-21		21-Nov-96	2.4	0.06	na
LF-21		18-Mar-97	1.7	<0.05	na
LF-21		11-Jun-97	0.83	<0.05	na
LF-21		19-Aug-97	0.78	<0.05	na
LF-21		17-Dec-97	1	<0.05	na
LF-21		02-Mar-98	3.2	<0.05	<0.002
LF-21		09-Apr-98	<0.05	<0.05	<0.002
LF-21		16-Jul-98	<0.05	<0.05 UJ3	<0.002
LF-21		23-Oct-98	<0.05	<0.05	<0.002
LF-21		14-Jan-99	1.4	<0.05	<0.002
LF-21		22-Apr-99	11	<0.05	<0.002

Notes: All notes are listed at the end of this table - see last page.

Table 5

Summary of Historical Total Petroleum Hydrocarbons as Diesel and Gasoline in Groundwater Monitoring Wells
The Sherwin-Williams Company, Emeryville, California
Concentrations reported in milligrams per liter (mg/l)

Well Number	Notes	Date Sampled	Total Petroleum Hydrocarbons As Diesel	Total Petroleum Hydrocarbons As Gasoline	MTBE
LF-21		15-Jul-99	6.1 c,e	<0.05	<0.0005
DUP		15-Jul-99	5 c,e	<0.05	<0.0005
LF-21		12-Oct-99	1.9 c,e	<0.05	<0.0005
LF-21		20-Jan-00	0.47 J	<0.05	<0.0005
LF-22		02-Mar-98	0.06	<0.05	<0.002
LF-22		10-Apr-98	<0.05	<0.05	<0.002
LF-22		15-Jan-99	<0.048	<0.05	<0.002
LF-22		20-Jan-00	<0.05	<0.05	<0.0005
LF-23		10-Apr-96	1.7	<0.05	na
LF-23		02-Aug-96	5.6	<0.05	na
LF-23		21-Nov-96	1.3	<0.05	na
LF-23		18-Mar-97	1.5	<0.05	na
LF-23		11-Jun-97	0.41	<0.05	na
LF-23		20-Aug-97	0.29	<0.05	na
LF-23		18-Dec-97	0.3	<0.05	na
LF-23		26-Feb-98	0.56	<0.05	<0.002
LF-23		08-Apr-98	<0.05	<0.05	<0.002
LF-23		15-Jul-98	<0.05	<0.05	<0.002
LF-23		21-Oct-98	<0.05	<0.05	<0.002
LF-23		12-Jan-99	0.26	<0.05	<0.002
LF-23		21-Apr-99	0.42	<0.05	<0.002
LF-23		14-Jul-99	0.39 c,e	<0.05	<0.0005
LF-24		11-Apr-96	0.09	<0.05	na
LF-24		02-Aug-96	0.16	<0.05	na
LF-24		21-Nov-96	0.14	<0.05	na
LF-24		18-Mar-97	<0.05	<0.05	na
LF-24		11-Jun-97	0.06	<0.05	na
LF-24		20-Aug-97	0.06	<0.05	na
LF-24		18-Dec-97	0.06	<0.05	na
LF-24		26-Feb-98	0.05	<0.05	<0.002
LF-24		08-Apr-98	<0.05	<0.05	<0.002
LF-24		15-Jul-98	<0.05	<0.05	<0.002
LF-24		21-Oct-98	<0.05	<0.05	<0.002
LF-24		12-Jan-99	<0.047	<0.05	<0.002
LF-24		21-Apr-99	0.09	<0.05	<0.002
LF-24		14-Jul-99	<0.048	<0.05	<0.0005
LF-25		11-Apr-96	0.18	<0.05	na
LF-25		02-Aug-96	0.3	<0.05	na

Notes: All notes are listed at the end of this table - see last page.

Table 5

Summary of Historical Total Petroleum Hydrocarbons as Diesel and Gasoline in Groundwater Monitoring Wells
The Sherwin-Williams Company, Emeryville, California

Concentrations reported in milligrams per liter (mg/l)

Well Number	Notes	Date Sampled	Total Petroleum Hydrocarbons As Diesel	Total Petroleum Hydrocarbons As Gasoline	MTBE
LF-25		21-Nov-96	0.31	<0.05	na
LF-25		18-Mar-97	0.11	<0.05	na
LF-25		11-Jun-97	0.11	<0.05	na
LF-25		20-Aug-97	0.13	<0.05	na
LF-25		18-Dec-97	0.15	<0.05	na
LF-25		26-Feb-98	0.31	<0.05	<0.002
LF-25		08-Apr-98	<0.05	<0.05	<0.002
LF-25		15-Jul-98	<0.05	<0.05	<0.002
LF-25		21-Oct-98	<0.05	<0.05	<0.002
LF-25		12-Jan-99	0.14	0.054	<0.002
LF-25		21-Apr-99	0.2	0.071	<0.002
LF-25		14-Jul-99	0.11 c,e	0.091	<0.0005
LF-26		27-Feb-98	0.51	0.39	<0.002
LF-26		09-Apr-98	<0.05	<0.05	<0.002
LF-26		16-Jul-98	<0.05	0.29 J3	<0.002
LF-26		23-Oct-98	<0.05	<0.05	<0.002
LF-26		13-Jan-99	1.5	0.36	<0.002
LF-26		21-Apr-99	1.2	0.23	<0.002
DUP		15-Jul-99	1.2	0.22	<0.0005
LF-26		14-Oct-99	1	0.26 d	<0.0005
LF-26		20-Jan-00	1.1 J	0.3 Jd	<0.0005 UJ
DUP		20-Jan-00	1.2 J	0.28 Jd	<0.0005
LF-27		29-Dec-97	<0.05	<0.05	na
LF-27		26-Feb-98	<0.05	<0.05	<0.002
LF-27		08-Apr-98	<0.05	<0.05	<0.002
LF-27		14-Jul-98	<0.05	<0.05	<0.002
LF-27		21-Oct-98	<0.05	<0.05	<0.002
LF-27		12-Jan-99	<0.047	<0.05	<0.002
LF-27		20-Apr-99	<0.048	<0.05	<0.002
LF-27		14-Jul-99	<0.048	<0.05	<0.0005
DUP		14-Jul-99	<0.048	<0.05	<0.0005
LF-27		11-Oct-99	<0.048	<0.05	<0.0005
LF-27		17-Jan-00	<0.05	<0.05	<0.0005
DUP		17-Jan-00	<0.05	<0.05	<0.0005
LF-28		29-Dec-97	0.13	0.08	na
LF-28		26-Feb-98	<0.05	0.065	<0.002
LF-28		08-Apr-98	<0.25	<0.05	<0.002
LF-28		14-Jul-98	<0.25	<0.05	<0.002

Notes: All notes are listed at the end of this table - see last page.

Table 5

Summary of Historical Total Petroleum Hydrocarbons as Diesel and Gasoline in Groundwater Monitoring Wells
The Sherwin-Williams Company, Emeryville, California

Concentrations reported in milligrams per liter (mg/l)

Well Number	Notes	Date Sampled	Total Petroleum Hydrocarbons As Diesel	Total Petroleum Hydrocarbons As Gasoline	MTBE

Data QA/QC performed by JTS.

Notes

MTBE = methyl tertiary-butyl ether

< = Analyte was not detected at or greater than the detection limit reported

ND = Not detected (no associated detection limit was reported)

na = Not analyzed

a = Concentrations for LF-B1 may not represent B-zone water quality because LF-B1 is screened in the aquitard between the A and B zones.

b = Concentrations for LF-B5 may not represent B-zone water quality because LF-B5 is screened in the aquitard between the A and B zones.

Data qualifiers and notes for Total Petroleum Hydrocarbon data:

J= Concentration is estimated.

J1= Concentration is estimated because the concentration exceeded the calibration range of the analytical instrument.

J2 = Concentration is estimated because the sample was analyzed outside of holding time.

J3 = Concentration is estimated because surrogate recoveries were outside of control limits.

J4= Concentration is estimated because relative percent difference (RPD) wasoutside of control limit for the laboratory control sample.

U5 = Quantified as non-detect (U) based on field blank contamination evaluation.

c = Unknown hydrocarbon mixture with peak patterns atypical of diesel is quantified as diesel for a range of n-C10 to n-C24.

d = Unknown hydrocarbon mixture with peak patterns atypical of gasoline is quantified as gasoline for a range of n-C07 to n-C12.

e = The concentration reported for diesel is due primarily to the presence of a heavier petroleum product, possibly motor oil.

f = The concentration reported for diesel is due primarily to the presence of a lighter petroleum product (range C06-C12), possibly gasoline.

g = The concentration reported for gasoline is due to the presence of a discrete hydrocarbon peak not indicative of gasoline.

h = The concentration reported for gasoline is due primarily to the presence of a heavier hydrocarbon peak not indicative of gasoline.

i = The concentration reported for diesel is due to the presence of a discrete hydrocarbon peak not indicative of diesel.

U = Quantified as nondetect.