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

RAFAT A. SHAHID, Assistant Agency Director

DEPARTMENT OF ENVIRONMENTAL HEALTH
Hazardous Materials Division
80 Swan Way, Rm. 200
Oakland, CA 94621
(510) 271-4320

REMEDIAL ACTION COMPLETION CERTIFICATION

StID 4138 - 601 E. Vallecitos Rd, Livermore 94550

June 14, 1995

Mr. Jaime Rios
Zone 7 Water Agency
5997 Parkside Dr
Pleasanton, CA 94688

Dear Mr. Rios:

This letter confirms the completion of site investigation and remedial action for the former underground storage tank (2K diesel tank) removed from the above site on December 21, 1993.

Based upon the available information 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, Division 3, Chapter 16, Section 2721(e) of the California Code of Regulations. Please contact Ms. Eva Chu at (510) 567-6700 if you have any questions regarding this matter.

Very truly yours,

Rafat A. Shahid

Rafat A. Shahid, Director

cc: Chief, Division of Environmental Protection
Kevin Graves, RWQCB
Mike Harper, SWRCB (with attachment)
files (zone7.5)

01-7010

CASE CLOSURE SUMMARY
Leaking Underground Fuel Storage Tank Program

I. AGENCY INFORMATION **Date: May 24, 1995**

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

II. CASE INFORMATION

Site facility name: **Zone 7 Water Agency**
Site facility address: **601 E. Vallecitos Rd, Livermore 94550**
RB LUSTIS Case No: **N/A** Local Case No./LOP Case No.: **4138**
URF filing date: **1/21/94** SWEEPS No: **N/A**

Responsible Parties:	Addresses:	Phone Numbers:
Zone 7 Water Agency **Attn Jaime Rios**	**5997 Parkside Dr** **Pleasanton, CA 94688**	**510/484-2600**

Tank No:	Size in gal.:	Contents:	Closed in-place or removed?:	Date:
1	2,000	Diesel	Removed	12/21/93

III. RELEASE AND SITE CHARACTERIZATION INFORMATION

Cause and type of release: **Unknown**
Site characterization complete? **YES**
Date approved by oversight agency: **3/6/95**
Monitoring Wells installed? **No** Number:
Proper screened interval? **NA**
Highest GW depth below ground surface: Lowest depth:
Flow direction: **NA**
Most sensitive current use: **Water Treatment Plant**
Are drinking water wells affected? **No** Aquifer name:
Is surface water affected? **No** Nearest affected SW name:
Off-site beneficial use impacts (addresses/locations): **None**

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

Treatment and Disposal of Affected Material:

Material	Amount (include units)	Action (Treatment or Disposal w/destination)	Date
Tank	1 UST	Erickson, Richmond	12/21/93
Piping	40 feet	Erickson	12/21/93
Free Product	20 gallon	Gibson Oil, Redwood City	12/20/93
Soil	20 cy	Vasco Rd L.F. Livermore	1/28/94
Groundwater			
Barrels			

Maximum Documented Contaminant Concentrations - - Before and After Cleanup

Contaminant	Soil (ppm) Before	Soil (ppm) After	Water (ppb) Before*	Water (ppb) After
TPH (Gas)				
TPH (Diesel)	120	75	ND	
Benzene	ND	ND	ND	
Toluene	.027	ND	ND	
Ethylbenzene	ND	ND	ND	
Xylenes	ND	ND	ND	
Oil & Grease				
Heavy metals				
Other				

*** Grab groundwater sample from boring B-4 at 30'**

Comments (Depth of Remediation, etc.):

Initial soil samples collected at 9' depth detected 120 ppm TPH-D. Overexcavation to 16' depth still detected up to 75 ppm TPH-D.

IV. CLOSURE

Does completed corrective action protect existing beneficial uses per the Regional Board Basin Plan? **YES**
Does completed corrective action protect potential beneficial uses per the Regional Board Basin Plan? **YES**
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: **NA**
Number Decommissioned: **NA** Number Retained:
List enforcement actions taken: **None**

List enforcement actions rescinded: **NA**

V. LOCAL AGENCY REPRESENTATIVE DATA

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

Signature: [signature] Date: 5/26/95

Reviewed by

Name: **Amy Leech** Title: **Haz Mat Specialist**

Signature: [signature] Date: 5-25-95

Name: **Jennifer Eberle** Title: **Haz Mat Specialist**

Signature: [signature] Date: 5-24-95

VI. RWQCB NOTIFICATION

Date Submitted to RB: 5/26/95 RB Response: Approved

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

Signature: [signature] Date: 6/6/95

VII. ADDITIONAL COMMENTS, DATA, ETC.

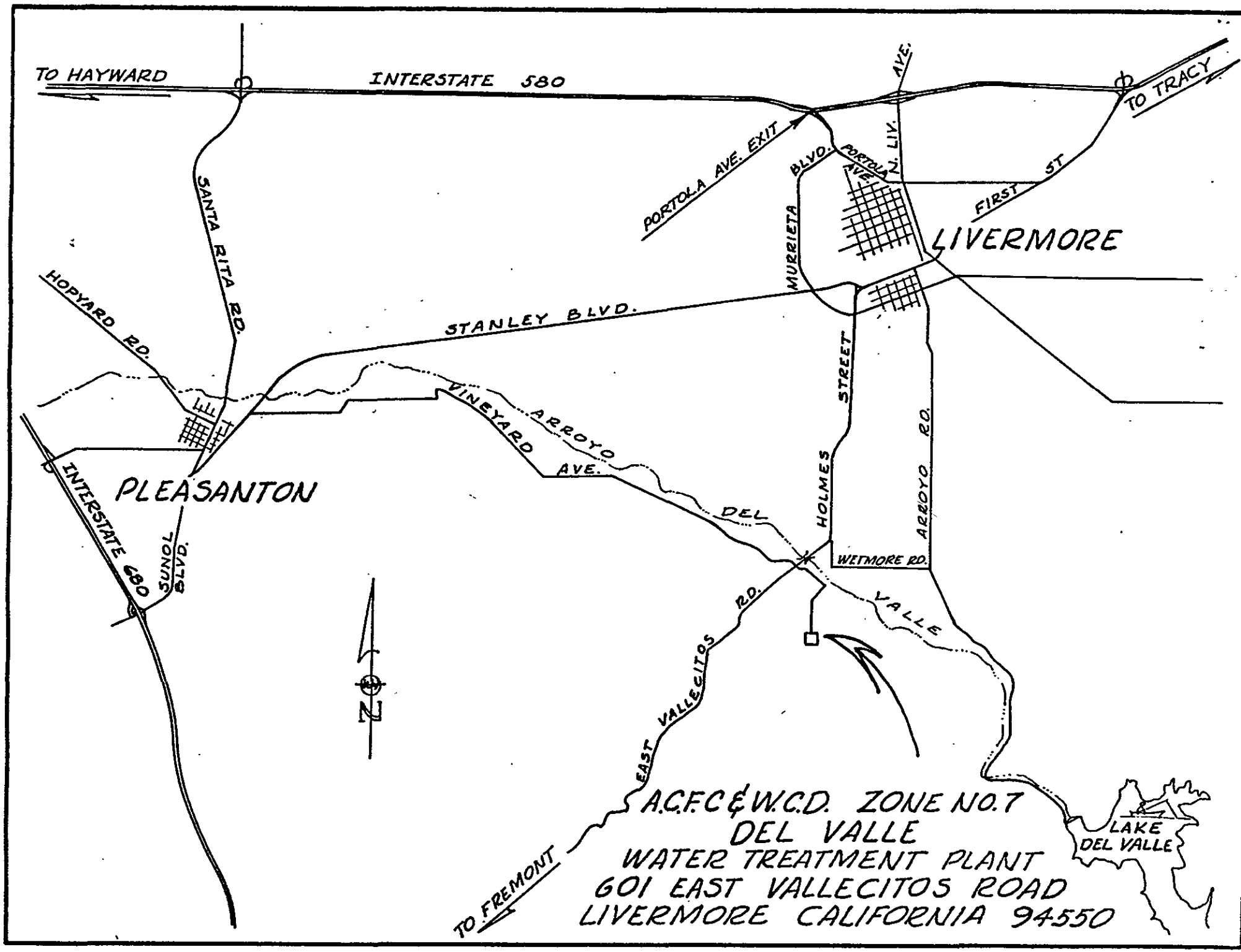
When a 2,000 gallon diesel UST was removed in December 21, 1993 soil samples collected at approximately 11' depth, next to the concrete slab, exhibited up to 120 ppm TPH-D. Trace levels of toluene were also detected. Moderate odor and some staining were noted in this half of the tank pit.

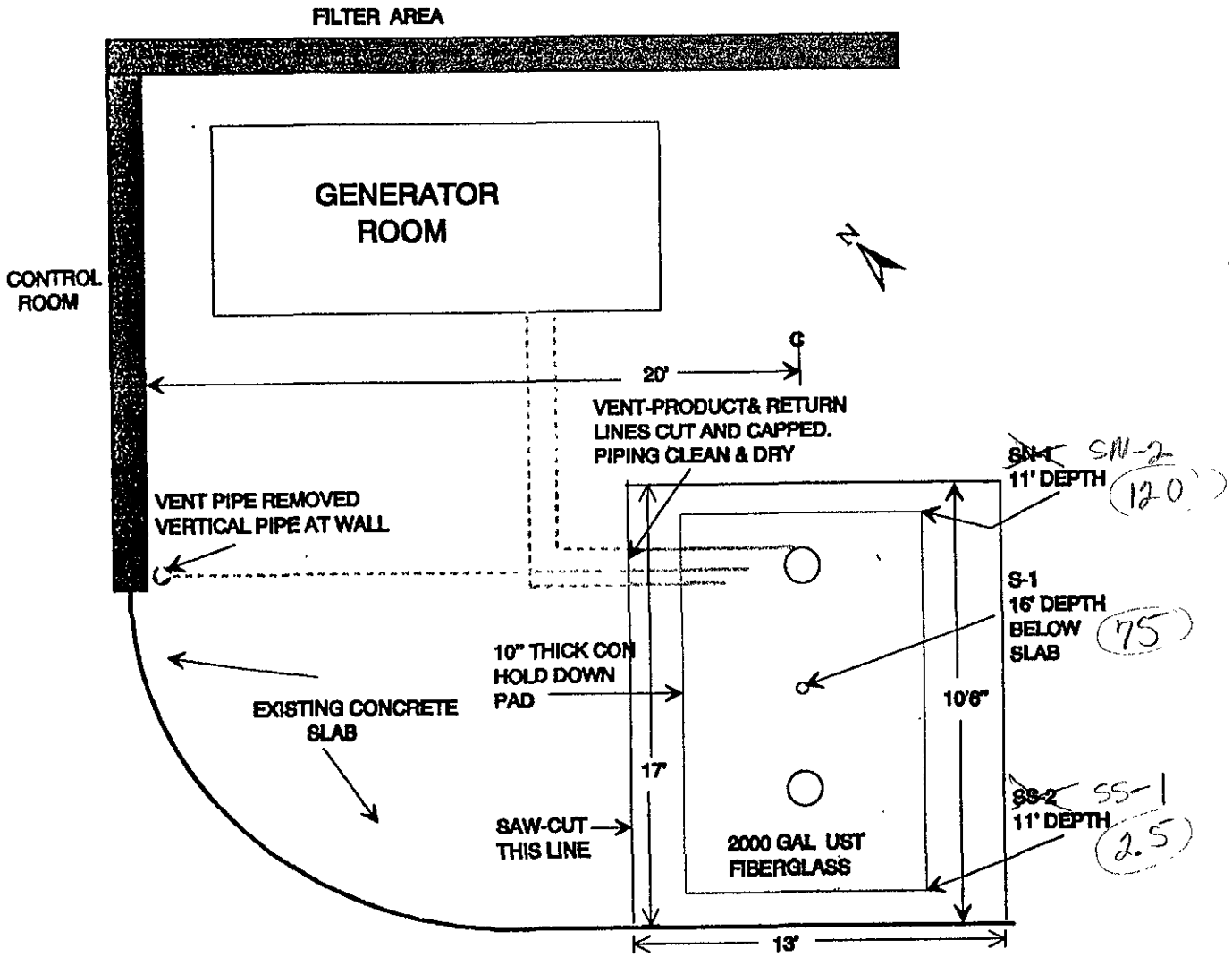
The concrete slab was removed and the pit overexcavated to 16' depth in January 1994. A soil sample collected at 16' bgs exhibited 75 ppm TPH-D, but no BTEX.

To further delineate the extent of soil and possible groundwater contamination, three soil borings were advanced around the former UST pit in October 1994. Boring B-4 encountered groundwater at 30' bgs. Soil samples collected at 5' intervals to 30' depth (from boring B-3, 4, and 5), and a grab groundwater sample collected from boring B-4 did not detect TPH-D (<200 ppb) or BTEX (<1 ppb).

It appears the diesel impacted soil was limited to the immediate vicinity of the UST. Overexcavation removed most of the contaminated soil. Residual diesel in soil does not appear to have impacted groundwater.

zone7.4


TO HAYWARD
INTERSTATE 580
TO TRACY
PORTOLA AVE. EXIT
PORTOLA AVE.
N. LIV. BLVD.
FIRST ST
LIVERMORE
MURRIETA
SANTA RITA RD.
HOPYARD RD.
STANLEY BLVD.
VINEYARD AVE.
ARROYO
HOLMES STREET
ARROYO RD.
WETMORE RD.
DEL VALLE RD.
EAST VALLECITOS
INTERSTATE 680
SUNOL BLVD.
PLEASANTON
N
TO FREMONT
A.C.F.C.&W.C.D. ZONE NO.7
DEL VALLE
WATER TREATMENT PLANT
601 EAST VALLECITOS ROAD
LIVERMORE CALIFORNIA 94550
LAKE DEL VALLE



ZONE 7 WATER AGENCY

PROJECT LAYOUT & SOIL SAMPLING LOCATIONS

PROJECT # 35458 601 EAST VALLECITOS ROAD
LIVERMORE, CALIF. 94550

TPH-d (ppm)

NOTE ; FINAL EXCAVATION DIMENTIONS 13' W / 17' L /15' D

The soil sample (S-1) was obtained from the backhoe bucket, properly packaged, placed on ice and transported to Chromalab Inc. for analysis under a Chain-of-Custody (see Appendix B for copy).

On January 10, 1994 the excavation was backfilled with imported Class II Aggregate Base material. The backfill material was placed in 12" lifts and mechanically compacted to a relative 95%.

SOIL AND GROUNDWATER SAMPLING

There was no groundwater sampling conducted, as no groundwater was encountered.

The soil sample Chains-of-Custody and Laboratory Results Sheets are attached to this Report in Appendix B.

A summary of the soil sample analysis results follows in Table 1.

TABLE 1

Soil sample	STP-1	STP-2	SS-1	SN-2	S-1
location	**stock pile**	**stock pile**	**South end of tank**	**North end of tank**	**North end of tank**
depth	**6"**	**6"**	**11'bgs**	**11'bgs**	**16'bgs**
TPH D	**5.3ppm**	**6.3ppm**	**2.5ppm**	**120ppm**	**75ppm**
Benzene	**N.D.**	**N.D.**	**N.D.**	**N.D.**	**N.D.**
Toluene	**11ppb**	**N.D.**	**N.D.**	**27ppb**	**N.D.**
Ethyl Benzene	**N.D.**	**N.D.**	**N.D.**	**N.D.**	**N.D.**
Xylene	**N.D.**	**N.D.**	**N.D.**	**N.D.**	**N.D.**
method detect limit	**TPH D 1ppm BTEX 5ppb**	**TPH D 1ppm BTEX 5ppb**	**TPH D 1ppm BTEX 5ppb**	**TPH D 1ppm BTEX 5ppb**	**TPH D 1ppm BTEX 5ppb**
date of sampling	**12-21-93**	**12-21-93**	**12-21-93**	**12-21-93**	**01-03-94**
date of extract	**12-21-93**	**12-21-93**	**12-21-93**	**12-21-93**	**01-04-94**
date of analysis	**12-21-93**	**12-21-93**	**12-21-93**	**12-21-93**	**01-04-94**

N.D. = Non-detect

The soil samples were obtained by driving a clean, dry 2" x 3" brass tube into the soil with a mallet, until there was no observable head space in the tube. At this time the ends of the tube were sealed with teflon sheet, and a plastic cap. The sample was then labeled and the information entered on the Chain-of-Custody.

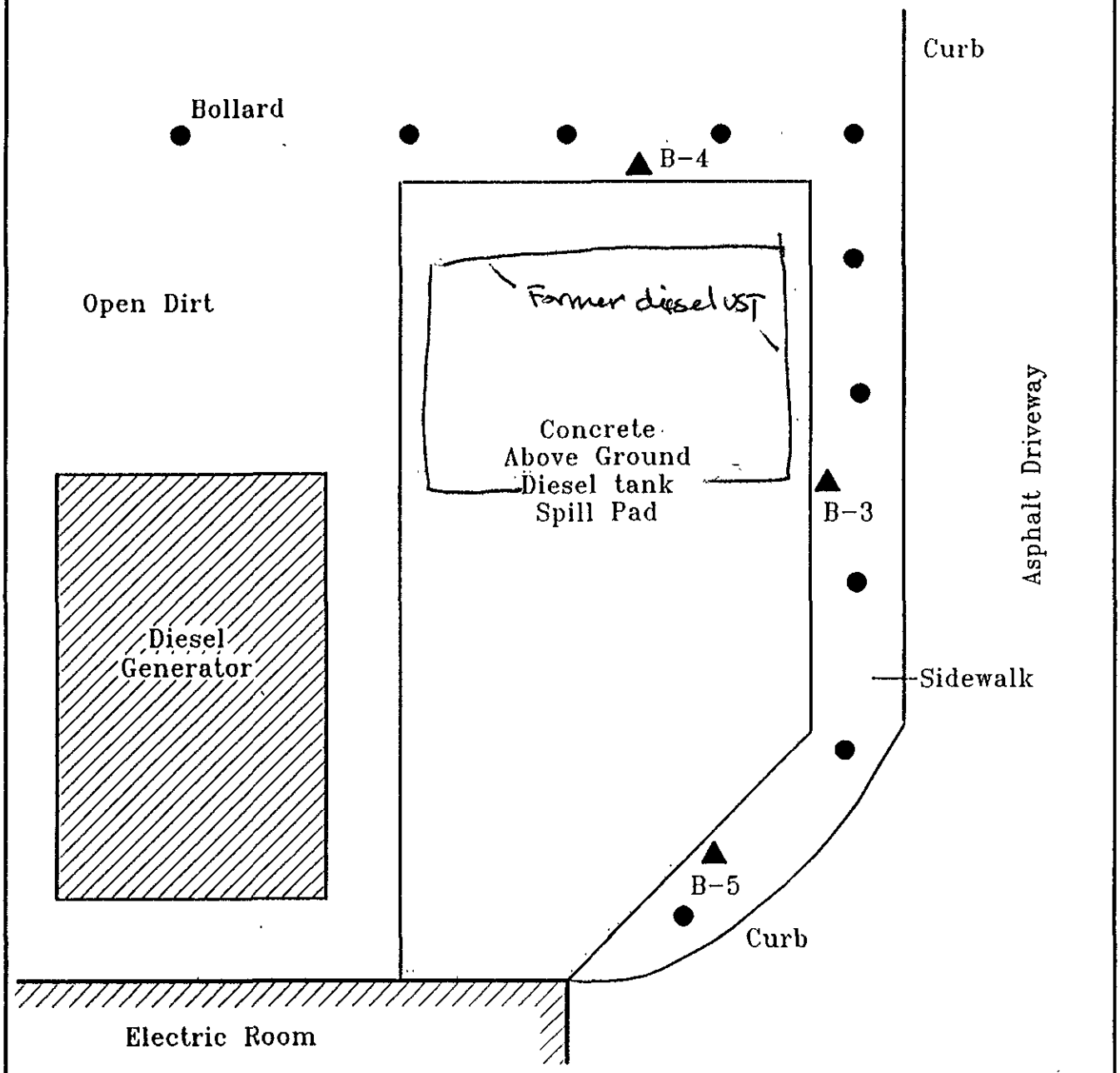
WEST & ASSOCIATES ENVIRONMENTAL ENGINEERS, INC.

PO Box 5891, Vacaville, California 95696

Project Name: Zone 7 Water Agency - Del Valle Plant | Date: Dec. 1994

Location: Former Underground Diesel Tank

Drawing By: BWW | Scale: 1" = 5'



LEGEND

▲ Soil Boring Locations

Figure 6

collected on 10-28-94

TABLE 2
SOIL SAMPLE SCHEDULE
DEL VALLE SITE INVESTIGATION

TPHd benz

SAMPLE ID	BORING NUMBER	SAMPLE DEPTH (feet)
B3-2	3	10 ✓ ND
B3-3	3	15
B3-4	3	20
B4-2	4	10
B4-3	4	15
B4-4	4	20
B4-6	4	30
B5-1	5	5
B5-2	5	10
B5-3	5	15
B5-4	5	20

ND

5.3 Conclusions

Total petroleum hydrocarbon concentrations at 11 feet BGS in the former tank pit were 120 PPM and at 16 feet BGS were 75 PPM. Thus, it appears contaminant concentrations were attenuating with depth within the area overexcavated.

No lateral or vertical barriers to contaminant migration were encountered during the drilling program. If significant diesel leakage had occurred, it would have migrated in a symmetrical pattern.

The absence of soil contamination in any of the three borings spaced around the former tank pit indicates there has been no lateral contaminant migration.

Based on the non-detectable groundwater sample analysis, it appears there has been no major impact to groundwater. Apparently contamination has not migrated through the 12 vertical feet of soil between the bottom of the overexcavation and the top of the saturated zone.

In summary, although there is some residual soil contamination in the former diesel tank vicinity it appears to be of minor extent and magnitude. There does not appear to have been any impact to groundwater nor does it appear that the remaining soil contamination poses a future threat to groundwater. It is recommended that the Del Valle Water Treatment Plant underground tank site be closed.

WEST & ASSOCIATES ENVIRONMENTAL ENGINEERS, INC.

PO Box 5891, Vacaville CA 95696

Project: Zone 7 Water Agency - Del Valle Water Plant	
Location: Former emergency generator diesel tank	Date: Dec. 1994
Boring Designation: B-4	Driller: Exploration Geoservices
Logged by: BWW	Base: San Jose
Boring Location: See Figure 6	Drill Equipment: Mobile B-40
Soils Classification System: USCS	Diameter & Type Well Casing: NA
Sample type: BRASS TUBE - SPLIT SPOON	
Soil Matrix: YES	Elevation & Datum: NA
Date Started: 10-28-94 Finished: 10-28-94	Completion Depth: 30 feet BGS
Number of Samples: Six	Depth to Groundwater: 28 feet BGS

Depth (feet)	Time	Sample Number	Lithology	Observations	Field Analysis
0	11:15	B4-		Open Dirt	
			CL	Dry uncosolidated, medium grained, brown sandy silt intermixed gravel with some larger cobbles	Clean - No odor
5		1	BC: 21/50		
			CL	Continued cobbly backfill Uncohesive, poorly graded	
10		2	BC: 23/38/26		PID = 0 PPM
	11:40		CL	Continued fill material slightly moister more cohesive	
15		3	BC: 21/50		
			CL	Native interface Harder drilling more and larger cobbles increasing clay	Clean - No odor
20		4	BC: 41/50		
			CL	Contiued clayey silt with poorly graded gravels and cobbles	
25		5	BC: 30/50	increasing moisture	PID = 0 PPM
			CL	increasing clay	Clean - No odor
30	12:30	6	BC: 50	water dripping from sampler	
				Standing water in auger to 28 feet BGS @ 12: 30 PM	

WEST & ASSOCIATES ENVIRONMENTAL ENGINEERS, INC.

PO Box 5891, Vacaville CA 95696

Project: Zone 7 Water Agency – Del Valle Water Plant	
Location: Former emergency generator diesel tank	Date: Dec. 1994
Boring Designation: B-3	Driller: Exploration Geoservices
Logged by: BWW	Base: San Jose
Boring Location: See Figure 6	Drill Equipment: Mobile B-40
Soils Classification System: USCS	Diameter & Type Well Casing: NA
Sample type: BRASS TUBE – SPLIT SPOON	
Soil Matrix: YES	Elevation & Datum: NA
Date Started: 10-28-94 Finished: 10-28-94	Completion Depth: 25 feet BGS
Number of Samples: Five	Depth to Groundwater: 25 feet BGS

Depth (feet)	Time	Sample Number	Lithology	Observations	Field Analysis
0	1:30	B3-	CL	Dry uncosolidated, medium grained, brown sandy silt intermixed gravel with some	Clean – No odor
5		1	BC:24/54/30	large cobbles	PID = 0 PPM
10		2	CL BC:22/30/50	Uncohesive, poorly graded fewer cobbles and gravel coarse grained sand in sample	PID = 0 PPM
15		3	CL BC: 31/50	increasing moisture increasing clay and cohesion	PID = 0 PPM
20		4	CL BC: 33/50	difficult drilling wet gravels	Clean – No odor
25	2:15 PM	5 EOB	CL BC: 50	Contiued clayey silt with poorly graded gravels and cobbles water dripping from sampler no recovery in sample 5	PID = 0 PPM
30				why no water sample collected?	