



Alameda County
Environmental Protection Division
1131 Harbor Bay Parkway, Room 250
Alameda CA 94502-6577

CC4580

REMEDIAL ACTION COMPLETION CERTIFICATION

StID 1971 - 1111 E. Stanley Blvd, Livermore 94550

June 1, 1995

Mr. Larry Melim
Valley Memorial Hospital
1111 E. Stanley Blvd
Livermore, CA 94550

Dear Mr. Melim:

This letter confirms the completion of site investigation and remedial action for the four former underground storage tanks (1-2,500, 1-750, and 1-550 gallon diesel, and 1-5,000 gallon gasoline tank) removed from the above site in September and October 1992, and in December 1994.

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, Director

cc: Chief, Division of Environmental Protection
Kevin Graves, RWQCB
Mike Harper, SWRCB (with attachment)
files (vmhospt1.5) ee

MAY 08 1995 KQ

QUALITY CONTROL BOARD

CASE CLOSURE SUMMARY
Leaking Underground Fuel Storage Tank Program

I. AGENCY INFORMATION

Date: May 2, 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: Valley Memorial Hospital
Site facility address: 1111 E. Stanley Blvd, Livermore
RB LUSTIS Case No: N/A Local Case No./LOP Case No.: 1971
URF filing date: 10/30/92 SWEEPS No: N/A

Responsible Parties: Addresses: Phone Numbers:

Valley Memorial Hospital 1111 E. Stanley Blvd
c/o Larry Melim Livermore, CA 94550

<u>Tank No:</u>	<u>Size in gal.:</u>	<u>Contents:</u>	<u>Closed in-place or removed?:</u>	<u>Date:</u>
1	2,500	Diesel	Removed	9/9/92
2	750	Diesel	Removed	9/11/92
3	550	Diesel	Removed	10/9/92
4	5,000	Gasoline	Removed	12/13/94

III. RELEASE AND SITE CHARACTERIZATION INFORMATION

Cause and type of release: Leaking diesel UST
Site characterization complete? YES
Date approved by oversight agency: 7/20/94
Monitoring Wells installed? No Number:
Proper screened interval? NA
Highest GW depth below ground surface: Unknown Lowest depth: Unknown
Flow direction: NA
Most sensitive current use: Hospital
Are drinking water wells affected? NO Aquifer name: Mocha Subbasin
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 (include units)</u>	<u>Action (Treatment or Disposal w/destination)</u>	<u>Date</u>
Tank	4 USTs	Disposed by Erickson on 9/9-11/92, 10/9/92, and 2/13/94	
Piping			
Free Product	700 gal rinsate	Gibson Oil, Redwood City	12/12/94
Soil	216 cy	Taken to Vasco Rd L.F.	9/24-10/2/92
Groundwater			
Barrels			

Maximum Documented Contaminant Concentrations - - Before and After Cleanup

Contaminant	Soil (ppm)		Water (ppb)	
	Before*	After	Before	After
TPH (Gas)	NA	NA	NA	NA
TPH (Diesel)	3,500	260	NA	NA
Benzene	.0059	ND	NA	NA
Toluene	ND	ND	NA	NA
Ethylbenzene	ND	ND	NA	NA
Xylenes	.011	ND	NA	NA
Oil & Grease	210	NA		
Heavy metals				
Other				

*From 750 gallon diesel UST

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? **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: **NA**
 List enforcement actions taken: **None**

List enforcement actions rescinded: **None**

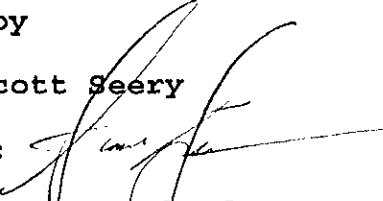
V. LOCAL AGENCY REPRESENTATIVE DATA

Name: Eva Chu Title: Haz Mat Specialist

Signature:  Date: 5/4/95

Reviewed by

Name: Scott Seery Title: Sr. Haz Mat Specialist


Signature:  Date: 5-3-95

Name: Jennifer Eberle Title: Haz Mat Specialist

Signature:  Date: 5-3-95

VI. RWQCB NOTIFICATION

Date Submitted to RB: 5/5/95

RB Response: 

RWQCB Staff Name: Kevin Graves

Title: AWRCE

Signature:  Date: 5/24/95

VII. ADDITIONAL COMMENTS, DATA, ETC.

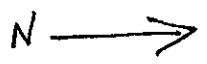
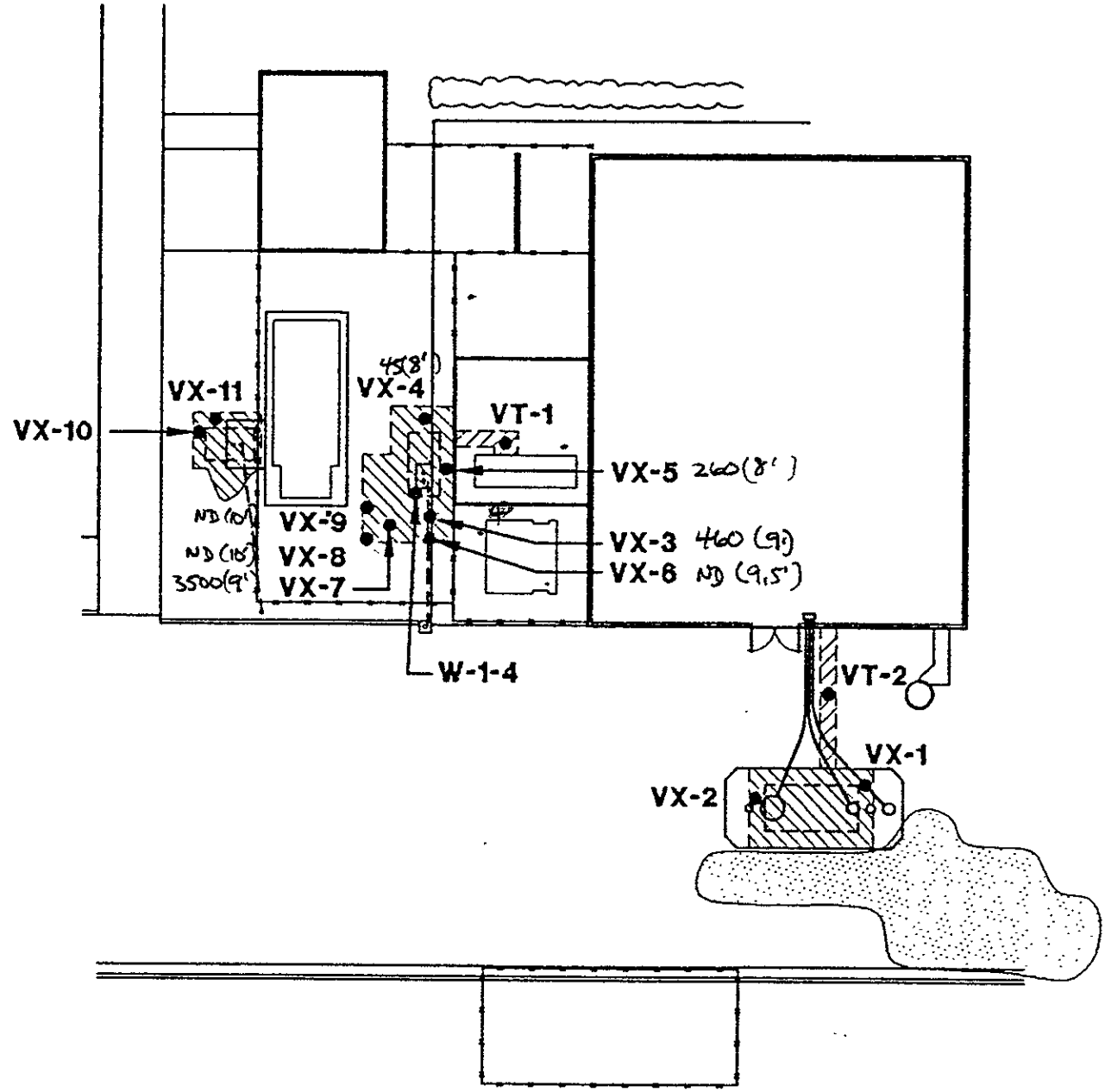
Three diesel USTs were removed in September and October 1992. Soil samples collected from beneath the 2,500 and 550 gallon USTs did not exhibit TPH-D or BTEX. A fourth UST, 5,000 gallon gasoline tank, was removed in December 1994. Soil samples collected beneath the tank, product lines, and dispenser did not detect TPH-G or BTEX.

However, the 750 gallon diesel UST, seated on a concrete slab, had numerous through holes. Three soil samples (VX3, VX4, and VX5) were collected in native soil beside the concrete slab at 7.5' depth. The north sidewalls of the pit exhibited 260 ppm TPH-D and no BTEX. The northeast sidewalls exhibited 460 ppm TPH-D, 210 ppm TOG, and .0059 ppm benzene. After the concrete slab was removed, the south and east ends of the pit were overexcavated laterally, and to a depth of 9.5'. Soil samples (VX7) still exhibited 3,500 ppm TPH-D, but no TOG or BTEX. This side was further excavated to 10' depth where soil samples (VX8 and VX9) collected did not exhibit TPH-D, TPH-oil or BTEX.

Per Clyde Gallantine, geologist with Gettler-Ryan, it appears the contamination moved off the concrete slab to the east, into native soil, then migrated horizontally towards the south. Very little vertical migration of contamination was visually noted in the soil. Overexcavation appears to have removed most of the contaminated soil east and southeast of the pit.

The north end of the pit could not be overexcavated due to the close proximity of the generator building. In April 1993 soil borings were advanced to delineate the extent of soil contamination. A boring advanced with a limited access rig (portable Powercore drill rig) to the north (inside the generator building), within 13' of the pit, did not detect the presence of hydrocarbons at 10 and 16' depths. Three other soil borings were also advanced west, east, and south, and within 10-20', of the final tank pit. TPH-D and BTEX were not detected from soil collected at 10 and 17.5' depth. It appears a small pocket of contaminated soil (up to 260 ppm TPH-D, but no BTEX) is left in place at the north end of the pit at 8' bgs, beneath the generator building (VX5). Borings were not advanced to groundwater which was anticipated to be at approximately 43' bgs at the time, based on groundwater data collected from 1122 E. Stanley Blvd on March 1, 1993. Limited space around the tank pit also prevented the use of a hollow-stem auger drill rig.

Although the Tri Regional Recommendations indicate the need to determine the site-specific depth to water before making determinations whether to require a groundwater investigation, such was not completed at this site. However, depth to water was extrapolated from a nearby site, 1334 1st St, located within 1,000 feet from the subject site, where recent data indicate depth to water at approximately 29' below grade. This information, in conjunction with the apparent limited extent of residual soil contamination, absence of aromatic compounds, and nature of underlying sediments (silts and clays from 10-16' depths, with local interbeds of varying thicknesses of silty sandy gravels, clayey gravels, and sandy gravels) suggests the low probability that such contaminants have affected underlying groundwater, or presented a risk to human health. Therefore, at this late stage, it appears that groundwater wells do not appear necessary to conclude this project.



Base Map: Field Observations performed on 6/9/92.

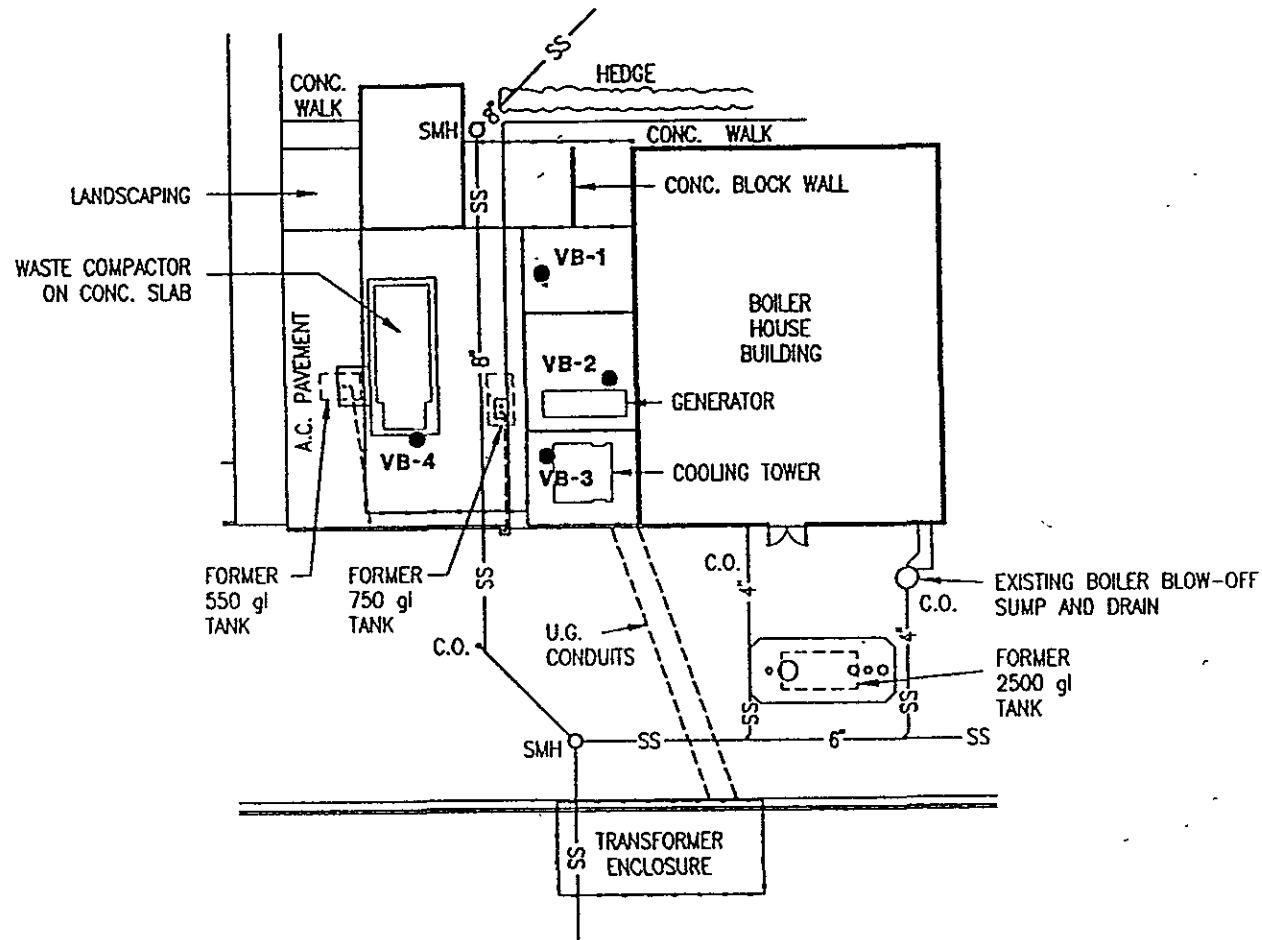


GeoStrategies Inc.

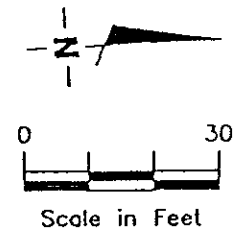
SOIL SAMPLE and STOCKPILE MA
Valley Memorial Hospital

EXPLANATION

● Soil boring



Base Map: Field Observations performed on 6/9/92.



GeoStrategies Inc.

SITE PLAN
 Valley Memorial Hospital
 1111 E. Stanley Boulevard
 Livermore, California

PLATE

29

JOB NUMBER
 606102-2

REVIEWED BY

DATE
 5/93

REVISED DATE

3 diesel USTs

TABLE #2

SOIL AND WATER ANALYTICAL DATA
EXCAVATIONS, TRENCHES

SAMPLE NO.	DEPTH FEET	SAMPLE DATE	ANALYSIS DATE	TPH-D TPH-G (PPM)	BENZENE (PPM)	TOLUENE (PPM)	ETHYLBENZENE (PPM)	XYLENES (PPM)	TPH-O (PPM)	O & G (PPM)
2500 UST [VX-1	10.5	09-Sep-92	10-Sep-92	<10	<.0050	<.0050	<.0050	<.0050	<10	---
VX-2	9.5	09-Sep-92	10-Sep-92	<10	<.0050	<.0050	<.0050	<.0050	<10	---
VX-3	9	14-Sep-92	15-Sep-92	460	.0059	<.0050	<.0050	.011	<10	210
VX-4	8	14-Sep-92	15-Sep-92	45 *	<.0050	<.0050	<.0050	<.0050	<10	<50
VX-5	8	14-Sep-92	15-Sep-92	260 *	<.0050	<.0050	<.0050	<.0050	<10	<50
750 gal [VX-6	9.5	22-Sep-92	23-Sep-92	<10	<.0050	<.0050	<.0050	<.0050	<10	---
VX-7	9	22-Sep-92	23-Sep-92	3500	<.050	<.050	<.050	<50*	<50	---
VX-8	10	25-Sep-92	28-Sep-92	<10	<.0050	<.0050	<.0050	<.0050	<10	---
VX-9	10	25-Sep-92	28-Sep-92	<10	<.0050	<.0050	<.0050	<.0050	<10	---
750 gal [VX-10	10	09-Oct-92	12-Oct-92	<10	<.0050	<.0050	<.0050	<.0050	<10	---
VX-11	10	09-Oct-92	12-Oct-92	<10	<.0050	<.0050	<.0050	<.0050	<10	---
W-1-3	8	14-Sep-92	15-Sep-92	---	.0021	.0051	.0081	.052	---	---
W-4	8	14-Sep-92	15-Sep-92	65.000	---	---	---	---	<.600*	---
VT-1	1	14-Sep-92	15-Sep-92	<10	<.0050	<.0050	<.0050	<.0050	<10	<50
VT-2	1	14-Sep-92	15-Sep-92	<10	<.0050	<.0050	<.0050	<.0050	<10	<50

TPH-D = Total Petroleum Hydrocarbons Calculated as Diesel.

TPH-O = Total Petroleum Hydrocarbons Calculated as Oil.

O & G = Oil and Grease.

PPM = Parts Per Million.

VX = Excavation Sample

VT = Trench Sample

W = Water Sample

* = Diesel interferes with Quantification.

* concs remaining in place

TABLE 1
SOIL ANALYTICAL DATA
 Valley Memorial Hospital
 1111 East Stanley Boulevard
 Livermore, California

SAMPLE I.D.	SAMPLE DEPTH (FT)	SAMPLE DATE	TPH _d (PPM)	BENZENE (PPM)	TOLUENE (PPM)	ETHYL BENZENE (PPM)	XYLENES (PPM)	Total Lead (PPM)
TP1-S-12	12	13-Dec-94	<0.5	<0.0050	<0.0050	<0.0050	<0.0050	6.0
TP2-S-12	12	13-Dec-94	<0.5	<0.0050	<0.0050	<0.0050	<0.0050	5.3
PL1-S-3	3	13-Dec-94	<0.5	<0.0050	<0.0050	<0.0050	<0.0050	<4.0
PL2-S-3	3	13-Dec-94	<0.5	<0.0050	<0.0050	<0.0050	<0.0050	4.2
PL3-S-3	3	13-Dec-94	<0.5	<0.0050	<0.0050	<0.0050	<0.0050	5.0
SP-ABCD	---	13-Dec-94	<0.5	<0.0050	<0.0050	<0.0050	<0.0050	<4.0

- = Total petroleum hydrocarbons calculated as gasoline.
- = Feet.
- = Parts Per Million.

1. All data shown as <x are reported as ND (none detected).
2. Laboratory values are reported in units of mg/kg which are generally synonymous with parts per million (ppm).

Gasoline UST

Field location of boring (See Plate 2)		Project No. 606102		Date 4/14/93		Boring No. VB-1			
		Client: Valley Memorial Hospital							
		Location: 1111 E Stanley Boulevard				Sheet: 1			
		City: Livermore		Driller: Powercore		of 1			
		Logged by: CJG		Casing installation date:					
Drilling method: Powercore		Top of Box Elevation:		Datum:					
Hole diameter: 2 inches									
No (ft)	Blow/N or Pressure (psi)	Type of Sample	Sample Number	Depth (ft)	Sample	Well Depth	Soil Group Symbol (USCS)	Water Level	
								Time	Date
								Description	
				1				PAVEMENT SECTION - Concrete 6 inches	
				2				CLAY with SILT (CL) - very dark gray (10YR 3/1); slightly plastic, moist, soft; 95% clay, 5% silt, trace gravel.	
				3					
				4					
			VB-1	5				SILT with CLAY (ML) - dark brown (10YR 4/3); slightly plastic, moist, medium stiff; 75% silt, 20-25% clay, trace-5% gravel.	
	0		5.0	6					
				7					
				8				SILT (ML) - brown (10YR 5/3); slightly plastic, moist, stiff; 75% silt, 15-20% clay, 5% fine sand, 0-5% gravel.	
				9					
			VB-1	10					
	0		10.0	11					
				12				CLAY (CL) - brown (10YR 5/3); plastic, moist, very stiff; 90% clay, 10% silt, trace gravel; mottling.	
				13					
				14					
			VB-1	15					
	0		15.0	16					
				17				Gravel lens approx. 4-6"	
				18					
				19				Increasing gravels to 10%	
			VB-1	20				Bottom of boring 20.0 ft.	
	0		20.0						
Remarks: 10 ft. mast.									

PH-D/Biot

ND/ND

not analyzed

ND/ND

Field location of boring (See Plate 2)	Project No	606102	Date	4/14/93	Boring No VB-2
	Client	Valley Memorial Hospital			
	Location	1111 E Stanley Boulevard			Sheet 1 of 1
	City	Livermore			
	Logged by	CJG	Driller	Powercore	
Casing installation data					

Drilling method	Powercore	Top of Box Elevation	Datum
Hole diameter	2 inches		

No (ft)	Blowfall or Pressure (psf)	Type of Sample	Sample Number	Depth (ft)	Sample	Void Disturb	Soil Group Symbol (USCS)	Water Level			Description
								Time	Date		
				1							PAVEMENT SECTION - Concrete
				2							CLAY (CL) - very dark gray (10YR 3/1); slightly plastic, wet, soft; 95% clay, 5% silt, trace gravel.
				3							
				4							
			VB-2	5							95% clay, 3% coarse sand, 2% silt, trace gravel.
0			5.0	6							
				7							Color change to dark brown (10YR 3/3).
				8							Silty GRAVEL with SAND (SW) - light brownish-gray (10YR 6/2); very loose, poorly sorted, well graded; 85% gravel, 10% sand, 5% silt and sand.
			VB-2	9							
0			10.0	10							SILT (ML) - yellowish brown (10YR 5/4); slightly plastic, moist, medium stiff; 75% silt, 25% clay, trace gravel.
				11							
				12							
				13							CLAY (CL) - dark yellowish brown (10YR 4/4); very plastic, moist, very stiff; 85% clay, 15% silt, trace gravel.
				14							
			VB-2	15							
0			15.0	16							
			VB-2	17							Sample refusal
0			16.0	18							Bottom of boring 16.0 ft.
				19							
				20							

Remarks: Used short (8 foot) mast due to low roof in building.

TPH-D/STX

ND/ND

ND/ND

FIELD RECORD OF BORING		PROJECT NO. 606102		DATE 4/14/93		BORING NO.	
(See Plate 2)		CLIENT: Valley Memorial Hospital		VB-3		LOCATION: 1111 E. Stanley Boulevard	
		CITY: Livermore				SHEET 1	
DRILLING METHOD: Powercore		LOGGED BY: CJG		DRIVER: Powercore		OF 1	
BORE DIAMETER: 2 inches		CASING INSTALLATION DATA:		TOP OF BOX ELEVATION:		DARIUM:	
WATER LEVEL:		TIME:		DATE:		DESCRIPTION:	
NO		FLOW/FT. OR PRESSURE (PSI)		TYPE OF SAMPLE		SAMPLE NUMBER	
DEPTH (FT.)		SAMPLE		WEIR		SOIL GROUP SYMBOL (USCS)	
1						PAVMENT SECTION - concrete 6 inches	
2						CLAY (CL) - Very dark gray (10YR 3/1); slightly plastic, wet, soft to medium stiff; 80% clay, 16% silt, 4% fine sand, trace gravel.	
3							
4							
5				VB-3			
0				5.0			
6							
7						Change in color to very dark grayish brown (10YR 3/2).	
8							
9						Silty GRAVEL with SAND (SW) - light brownish gray (10YR 6/2); very loose, damp, poorly sorted, well graded; 90% gravel, 5% fine sand, 5% clay, trace silt.	
10				VB-3			
0				10.0			
11						CLAY (CL) - brown (10YR 4/3); very plastic, moist, stiff to very stiff; 75% clay, 25% silt, trace gravel.	
12							
13							
14						Color change to brown (10YR 5/3)	
15				VB-3		Increase in gravel to 5%	
0				15.0			
16							
17						Sample refusal	
18				VB-3		Bottom of boring 17.5 ft.	
0				17.5			
19							
20							
REMARKS: 10 ft. mast							

TOP-D/BTC

ND/ND

ND/ND

Field location of boring: (See Plate 2)	Project No.: 606102	Date: 4/14/93	Boring No:
	Client: Valley Memorial Hospital		VB-4
	Location: 1111 E. Stanley Boulevard		Sheet 1
	City: Livermore		of 1
	Logged by: CJG	Driller: Powecore	
Casing installation data:			

Drilling method: Powercore	Top of Box Elevation:	Datum:
Hole diameter: 2 inches		

PC (ppm)	Blows/ft. * or Pressure (psf)	Type of Sample	Sample Number	Depth (ft.)	Sample	Well Detail	Soil Group Symbol (USCS)	Description
				1				PAVEMENT SECTION - Asphalt
				2				CLAY (CL) - very dark gray (10YR 3/1); slightly plastic, moist, medium stiff; 75% clay, 25% silt, trace gravel.
				3				
				4				
			VB-4	5				Sandy CLAY (CL) - brown (10YR 4/3); very plastic, moist, stiff; 70% clay, 30% silt, trace gravel.
0			5.0	6				
				7				
				8				Silty GRAVEL with SAND (GM) - brown (10YR 5/3); very loose, damp, well sorted, poorly graded; 90% gravel, 7% silt, 3% sand.
				9				
			VB-4	10				Sandy CLAY (CL) - dark yellowish brown (10YR 4/4); plastic, moist stiff; 75% clay, 30% silt, trace gravel.
2			10.0	11				
				12				Clayey GRAVEL (GC) - brown (10YR 4/3); medium dense, moist, poorly sorted, well graded; 60-85% gravel, 10-30% clay, 5-10% sand.
				13				
			VB-4	14				CLAY (CL) - dark yellowish brown (10YR 4/4); very plastic, moist, very stiff; 80% clay, 15% silt, 5% fine sand, trace gravel.
0			15.0	15				Clayey GRAVEL (GC) - brown (10YR 4/3); medium dense, moist, poorly sorted, well graded; 70-85% gravel, 15-25% clay, 0-5% fine sand.
				16				
			VB-4	17				CLAY (CL) - dark yellowish-brown (10YR 4/4); very plastic, moist, very stiff; 80% clay, 15% silt, 5% fine sand, trace gravel.
0			17.0	18				
				19				
				20				Sample refusal Bottom of boring 17.5 ft.

PHG/BRE

ND/ND

ND/ND

Remarks: 10 ft. mast

MURRIETA BOULEVARD

EAST STANLEY BOULEVARD

EXPLANATION

● Sample location

FIGURE

2

SITE PLAN

Valley Memorial Hospital
1111 East Stanley Boulevard
Livermore, California

REVISD DATE

DATE
3/95

GeoStrategies



REVIEWED BY

JOB NUMBER
4541.701

Base Map: Facilities Plan furnished by
Valley Memorial Hospital

PARKING

BUILDING A

MAIN BUILDING

PARKING

PLANTER

BUILDING D

550 diesel UST

750 diesel UST

FORMER UST EXCAVATION

2,500 diesel UST

TP2-S-12

TP1-S-12

SOIL STOCKPILE

PLANTER

5,000 gasoline UST

GAMEFIELD WALKING COURSE

PLANTER

FORMER PRODUCT LINE

BLDG. C

BLDG. B

POHS LIBRARY

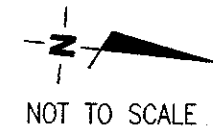
ROOM 117

GASOLINE DISPENSER EXCAVATION
PL3-S-3

PRODUCT LINE EXCAVATION
PL1-S-3

PRODUCT LINE EXCAVATION
PL2-S-3

SOUTH S ST.



450'

74'