#### ALAMEDA COUNTY

### **HEALTH CARE SERVICES**

AGENCY



DAVID J. KEARS, Agency Director

September 19, 2008

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

Mr. James Gotcher City of Pleasanton Public Works P.O. Box 520 Pleasanton, CA 94566-0802

Subject: Fuel Leak Case No. RO0002923 and Geotracker Global ID T06019727284, City of Pleasanton Fire Station #1, 4444 Railroad Avenue, Pleasanton, CA 94566 – Case Closure

Dear Mr. Gotcher:

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 (ACEH) 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. This case closure letter and the case closure summary can also be viewed on the State Water Resources Control Board's Geotracker website (<a href="http://geotracker.swrcb.ca.gov">http://geotracker.swrcb.ca.gov</a>) and the Alameda County Environmental Health website (<a href="http://geotracker.swrcb.ca.gov">http://geotracker.swrcb.ca.gov</a>) and the Alameda County Environmental Health website (<a href="http://geotracker.swrcb.ca.gov">http://geotracker.swrcb.ca.gov</a>)

#### SITE INVESTIGATION AND CLEANUP SUMMARY

Please be advised that the following conditions exist at the site:

 Total petroleum hydrocarbons as gasoline were previously detected in soil at concentrations up to 150 ppm.

If you have any questions, please call Jerry Wickham at (510) 567-6791. Thank you.

Sincerely,

Donna L. Drogos, P.E.

LOP and Toxics Program Manager

#### Enclosures:

- Remedial Action Completion Certificate
- 2. Case Closure Summary

CC:

Ms. Cherie McCaulou SF- Regional Water Quality Control Board 1515 Clay Street, Suite 1400 Oakland, CA 94612

Danielle Stefani (w/enc) Livermore-Pleasanton Fire Department 3560 Nevada Street Pleasanton, CA 94566

City of Livermore Planning Department (w/enc) 1052 South Livermore Avenue Livermore, CA 94550 Closure Unit (w/enc)
State Water Resources Control Board
UST Cleanup Fund
P.O. Box 944212
Sacramento, CA 94244-2120

Cheryl Dizon, QIC 80201 (w/enc) Zone 7 Water Agency 100 North Canyons Parkway Livermore, CA 94551

James Lehrman (w/o enc) Kleinfelder 7713 Koll Center Parkway, Suite 100 Pleasanton, CA 94566-3101

Jerry Wickham (w/orig enc), D. Drogos (w/enc), R. Garcia (w/enc)

# ALAMEDA COUNTY

#### **HEALTH CARE SERVICES**

**AGENCY** 



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

#### REMEDIAL ACTION COMPLETION CERTIFICATION

September 19, 2008

Mr. James Gotcher City of Pleasanton Public Works P.O. Box 520 Pleasanton, CA 94566-0802

Subject: Fuel Leak Case No. RO0002923 and Geotracker Global ID T06019727284, City of Pleasanton Fire Station #1, 4444 Railroad Avenue, Pleasanton, CA 94566 – Case Closure

Dear Mr. Gotcher:

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(s) 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, this agency finds that the site investigation and corrective action carried out at your underground storage tank(s) site is in compliance with the requirements of subdivisions (a) and (b) of Section 25296.10 of the Health and Safety Code and with corrective action regulations adopted pursuant to Section 25299.3 of the Health and Safety Code and that no further action related to the petroleum release(s) at the site is required.

This notice is issued pursuant to subdivision (h) of Section 25296.10 of the Health and Safety Code. Please contact our office if you have any questions regarding this matter.

Sincerely.

Ariu Levi Director

Alameda County Environmental Health

# CASE CLOSURE SUMMARY LEAKING UNDERGROUND FUEL STORAGE TANK - LOCAL OVERSIGHT PROGRAM

#### I. AGENCY INFORMATION

Agency Name: Alameda County Environmental Health	Address: 1131 Harbor Bay Parkway
City/State/Zip: Alameda, CA 94502-6577	Phone: (510) 567-6791
Responsible Staff Person: Jerry Wickham	Title: Senior Hazardous Materials Specialist

#### **II. CASE INFORMATION**

Site Facility Name: City of Pleasar	nton Fire Station #1	
Site Facility Address: 4444 Railroa	nd Avenue, Pleasanton, CA 94566	
RB Case No.:	Local Case No.;	LOP Case No.: RO0002923
URF Filing Date: 04/12/2006	APN: 94-105-1	
Responsible Parties	Addresses	Phone Numbers
Responsible Parties  James Gotcher, City of Pleasanton Public Works	Addresses  200 Old Bernal Avenue, P.O. Box 91566	
James Gotcher, City of	200 Old Bernal Avenue, P.O. Box	520

Tank I.D. No	Size in Gallons	Contents	Closed In Place/Removed?	Date
1	500 gallons	Gasoline	Removed	09/12/1996
2	500 gallons	Diesel	Removed	09/12/1996
_				
	Piping		Removed	09/12/1996

#### III. RELEASE AND SITE CHARACTERIZATION INFORMATION

Cause and Type of Release: Unknown. No holes, cracks, or other signs of failure were observed in the gasoline				
tank during removal. The diesel tank had rust, corrosion, and small holes on top.				
Site characterization complete? Yes	Date Approved By Oversight Agency:			

Date: September 4, 2008

Monitoring wells installed? No	Number: 0	Proper screened interval? NA
Highest GW Depth Below Ground Surface: 46 feet bgs	Lowest Depth: 46 feet bgs	Flow Direction: Based on regional flow directions, presumed to northwest
Most Sensitive Current Use: Drinking water source.		

Summary of Production Wells in Vicinity: The nearest water supply well (3S/1E 21B) is a municipal well located approximately 2,000 feet northeast of the site. Based on the cross gradient location of the well, the apparent absence of an impact to groundwater from the fuel release, and the distance from the site, the well is not expected to be a receptor for the site. No other water supply wells appear to be within 2,000 feet of the site.

Are drinking water wells affected? No

Aquifer Name: Amador Subbasin of Livermore-Amador Groundwater Basin

Nearest SW Name: Arroyo Del Valle is approximately 1,300 feet north of the site

Off-Site Beneficial Use Impacts (Addresses/Locations): None

Where are reports filed? Alameda County Environmental Health and Livermore-Pleasanton Fire Department

TREATMENT AND DISPOSAL OF AFFECTED MATERIAL				
Material	Amount (Include Units)	Action (Treatment or Disposal w/Destination)	Date	
Tank	Two 500-gallon tanks	Tanks were transported to Erickson, Inc. in Richmond, CA for disposal.	09/12/1996	
Piping	Not reported	Not reported	09/12/1996	
Free Product				
Soil	Not reported	Off-site disposal destination not reported.	Not reported	
Groundwater				

#### MAXIMUM DOCUMENTED CONTAMINANT CONCENTRATIONS BEFORE AND AFTER CLEANUP (Please see Attachments 1 through 6 for additional information on contaminant locations and concentrations)

01	Soil (	Soil (ppm)		r (ppb)
Contaminant	Before	After	Before	After
TPH (Gas)	<1	<50	<50	<50
TPH (Diesel)	150	<0.05	<50	<50
Oil and Grease	NA	NA	NA	NA
Benzene	<0.005	<0.0005	<0.5	<0.5
Toluene	<0.005	<0.0005	<0.5	<0.5
Ethylbenzene	<0.005	<0.0005	<0.5	<0.5
Xylenes	0.008	<0.0005	<0.5	<0.5
Lead	6.7	6.7	NA	NA
MTBE	<0.005(1)	<0.005(1)	<0.5(2)	<0.5(2)
Other (8240/8270)	NA(3)	NA(3)	NA(3)	NA(3)

<sup>(1)</sup> MTBE, DIPE, ETBE, TAME, EDB, and EDC <0.005 ppm; TBA <0.05 ppm in soil. (2) MTBE, DIPE, ETBE, TAME, EDB, and EDC <0.5 ppb; TBA <2 ppb in groundwater. (3) No analysis for other VOCs or SVOCs.

Site History and Description of Corrective Actions:

One 500-gallon gasoline underground storage tank (UST) and one diesel UST were removed on September 12, 1996 from Fire Station #1 in Pleasanton, CA. The gasoline UST had no obvious holes, cracks, or other signs of failure when removed. The diesel UST had rust, corrosion, and holes on the top of the tank. Following tank removal, soil samples were collected from beneath each of the tanks and the stockpile. No fuel hydrocarbons were detected in the two soil samples collected from beneath the USTs. The stockpile soil sample contained TPH as diesel and xylenes at concentrations of 150 and 0.008 ppm, respectively.

On June 26, 2007, one soil boring was advanced to a depth of 28 feet bgs at the location of the former USTs. Due to the depth limitation of the drill rig, the boring was terminated without encountering groundwater. No indications of soil contamination were observed in the boring but no soil samples were collected for chemical analysis.

A direct push drill rig was used to advance one soil boring to a depth of 55 feet bgs on April 3, 2008. Soil samples were continuously logged in the field and screened at five-foot intervals. No staining, odor, or elevated PID readings were observed in the soil samples. Fuel hydrocarbons and oxygenates were not detected in two soil samples selected for chemical analysis. Groundwater was encountered in the boring at a depth of 46 feet bgs. Fuel hydrocarbons and oxygenates were not detected in a grab groundwater sample collected from a temporary well casing installed in the boring.

#### IV. CLOSURE

Does completed corrective action protect existing	ng beneficial uses per the Regional B	loard Basin Plan? Yes
Does completed corrective action protect poten	tial beneficial uses per the Regional	Board Basin Plan? Yes
Does corrective action protect public health for does not make specific determinations conce available in our files to date, it does not appear current and projected future land use and cond	erning public health risk. However, r that the release would present a ris	, based upon the information
Site Management Requirements: None		
Should corrective action be reviewed if land use	e changes? No	
Was a deed restriction or deed notification filed	? No	Date Recorded:
Monitoring Wells Decommissioned: NA	Number Decommissioned: 0	Number Retained: 0
List Enforcement Actions Taken: None	ofference of the control of the cont	
List Enforcement Actions Rescinded:	4,47	

#### V. ADDITIONAL COMMENTS, DATA, ETC.

1	ane	idera	tione	and/or	Varian	COC.
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None.

Conclusion:

Alameda County Environmental Health staff believe that the levels of residual contamination do not pose a significant threat to water resources, public health and safety, and the environment based upon the information available in our files to date. No further investigation or cleanup is necessary. ACEH staff recommend case closure for this site.

#### **VI. LOCAL AGENCY REPRESENTATIVE DATA**

Prepared by: Jerry Wickham	Title: Senior Hazardous Materials Specialist
Signature: June Wicksham	Date: 69/10/08
Approved by: Donna L. Drogos, P.E.	Title: Supervising Hazardous Materials Specialist
Signature: Land Ligh	Date: 09 /10 /08

This closure approval is based upon the available information and with the provision that the information provided to this agency was accurate and representative of site conditions.

#### VII. REGIONAL BOARD NOTIFICATION

Regional Board Staff Name: Cherie McCaulou	Title: Engineering Geologist
RB Response: Concur, based solely upon information contained in this case closure summary.	Date Submitted to RB: 9//6/08
Signature: Cher McCaul	Date: 9/12/08

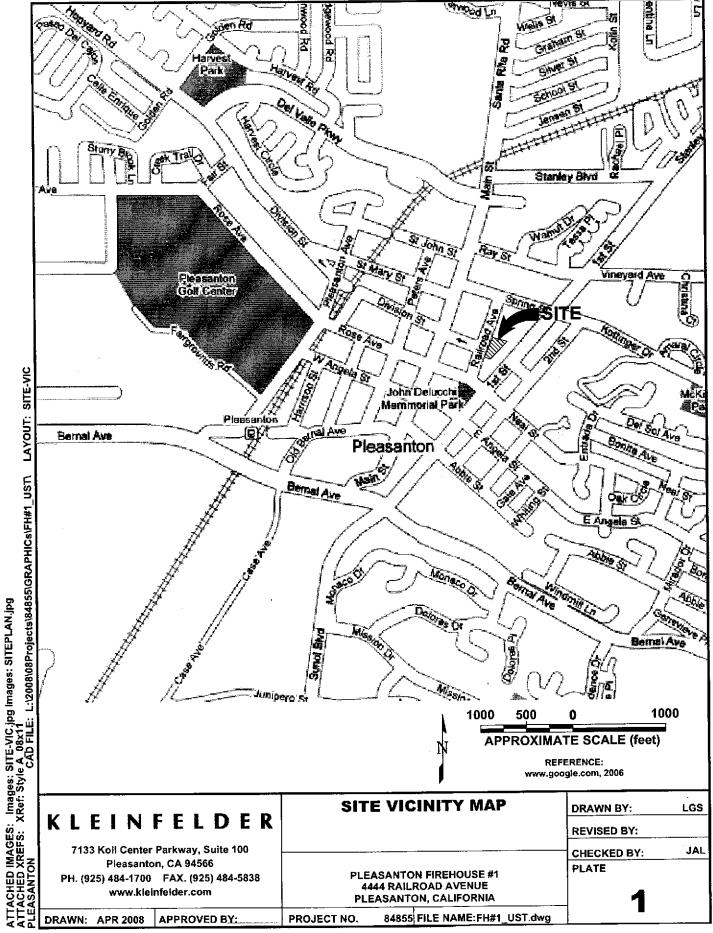
#### VIII. MONITORING WELL DECOMMISSIONING

Date Requested by ACEH: NA	Date of Well Decommissioning Report: NA	
All Monitoring Wells Decommissioned: NA	Number Decommissioned: 0	Number Retained: 0
Reason Wells Retained: NA		
Additional requirements for submittal of ground	water data from retained wells: NA	
ACEH Concurrence - Signature:	het allam.	Date: 09/19/08

#### Attachments:

- 2.
- Site Vicinity Map (1 page) Site Plan (1 page) Soil Analytical Data (2 pages) 3.
- Groundwater Analytical Data (1 page)
- 5. Boring Logs (3 pages)

This document and the related CASE CLOSURE LETTER & REMEDIAL ACTION COMPLETION CERTIFICATION shall be retained by the lead agency as part of the official site file.



# TABLE 1 SUMMARY OF SOIL ANALYTICAL RESULTS FIRE STATION NO. 1 PLEASANTON, CALIFORNIA

			D and Date	RWQCB - ESLs	Hazardous Waste Critera	
		RR-2-10	RR-2-30	Residential Land Use 2007	TTLC	STLC x 10
Analyte	Method	4/3/2008	4/3/2008			
Total Lead (mg/kg)	6020A	4.0	6.7	200	1,000	50
Petroleum Hydrocarbons (mg/kg)	8015C					
TPH (Gasoline)		ND (<1.0)	ND (<1.0)	83		
TPH (Diesel)		ND (<1.0)	ND (<1,0)	83	_	
BTEX and Oxygenates (mg/kg)	8260B					
Benzene		ND (<0.005)	ND (<0.005)	1.0		-
Toluene		ND (<0.005)	ND (<0.005)	40		
Ethylbenzene		ND (<0.005)	ND (<0.005)	30		
Total Xylenes		ND (<0.005)	ND (<0.005)	20		<del>-</del>
tert-Amyl Methyl Ehter (TAME)		ND (<0.005)	ND (<0.005)	NE	**-	
tert-Butyl Alcohol (TBA)		ND (<0.05)	ND (<0.05)	NE		_
Diisopropyl Ether (DIPE)		ND (<0.005)	ND (<0.005)	NE		
Ethyl tert-Butly Ether (ETBE)		ND (<0.005)	ND (<0.005)	NE		<del></del> '
Methyl tert-Butyl Ether (MTBE)		ND (<0.005)	ND (<0.005)	5.0		
Ethylene Dibromide		ND (<0.004)	ND (<0.004)	0.05		
1, 2-Dichloroethane		ND (<0.004)	ND (<0.004)	0.5		***

Samples were analyzed by McCampbell Analytical, Inc of Pittsburg, California, a state-certified analytical laboratory. Laboratory data met EPA and laboratory specifications for quality assurance and quality control.

<sup>1</sup> California Regional Water Quality Control Board, San Francisco Bay Region. Screening For Environmental Concerns at Sites with Contaminated Soil and Groundwater, Volume 1: Summary Tier 1 Lookup Tables, Shallow Soils, Groundwater is Current or Potential Source of Drinking Water, Interim Final, November 2007.

#### Acronyms/Abbreviations:

mg/kg - milligrams per kilogram

mg/L - milligrams per liter

ESLs - Environmental Screening Levels

RWQCB - Regional Water Quality Control Board (San Francisco Bay Region)

ND - Not detected at or above laboratory reporting limit

NE - Not established

## Soil Sample Analyses:

Samples taken at time of tank removal:

The soil samples were labeled:

PB-D-7' PB-G-7.5' soil sample from the diesel tank pit bottom soil sample from the gasoline tank pit bottom

SP

soil sample from the stockpile

### Summary of analyses of soil samples:

	<u>TPH(g)</u>	MTBE	Benzen e	<u>Toulene</u>	Ethyl Benzene	<u>Xylenes</u>
PB-D-7' PB-G-7.5' SP	ND ND ND	  	ND ND ND	ND ND ND	ND ND ND	ND ND ND
PB-D-7' PB-G-7.5' SP	TPH-d ND ND ND 150					

Disposal of stockpile: It is recommended that thetank pit be backfilled and compacted.

# SPECIFIC INFORMATION REGARDING THE TANKS

Tank # 1(PB-D):

Size/capacity: 500 gallons

Former contents of the tank: diesel

Construction of the tank: single walled steel.

Age of the tank: unknown.

Condition of the tank upon removal: The tank was found to be in good condition, no

holes were found in the tank.

Material sampled: soil

Tank # 2 (PB-G):

Size/capacity: 500 gallons

Former contents of the tank: gasoline

Construction of the tank: single walled steel.

# TABLE 2 SUMMARY OF GROUNDWATER ANALYTICAL RESULTS FIRE STATION NO. 1 PLEASANTON, CALIFORNIA

		Sample ID and Date	RWQCB - ESLs <sup>1</sup>
		RR-2	Residential Land Use 2007
Analyte	Method	4/3/2008	
Petroleum Hydrocarbons (µg/L)	8015C		
TPH (Gasoline)	ŀ	ND (<50)	83
TPH (Diesel)		ND (<50)	83
Volatile Organic Compounds (μg/L)	8260B		
Benzene		ND (<0.5)	1.0
Toluene		ND (<0.5)	40
Ethylbenzene		ND (<0.5)	30
Total Xylenes		ND (<0.5)	20
tert-Amyl Methyl Ehter (TAME)		ND (<0.5)	NE
tert-Butyl Alcohol (TBA)		ND (<2.0)	NE
Diisopropyl Ether (DIPE)		ND (<0.5)	NE
Ethyl tert-Butly Ether (ETBE)	1	ND (<0.5)	NE
Methyl tert-Butyl Ether (MTBE)		ND (<0.5)	5.0
Ethylene Dibromide		ND (<0.5)	0.05
1, 2-Dichloroethane		ND (<0.5)	0.5

Samples were analyzed by McCampbell Analytical, Inc of Pittsburg, California, a state-certified analytical laboratory. Laboratory data met EPA and laboratory specifications for quality assurance and quality control.

#### Acronyms/Abbreviations:

mg/kg - milligrams per kilogram

µg/L - micrograms per liter

ESLs - Environmental Screening Levels

RWQCB - Regional Water Quality Control Board (San Francisco Bay Region)

ND - Not detected at or above laboratory reporting limit

NE - Not established

<sup>&</sup>lt;sup>1</sup> California Regional Water Quality Control Board, San Francisco Bay Region, Screening For Environmental Concerns at Sites with Contaminated Soil and Groundwater, Volume 1: Summary Tier 1 Lookup Tables, Shallow Soils, Groundwater is Current or Potential Source of Drinking Water, Interim Final, November 2007.

Date	Complete	ed: 6/26/07	•		Drilling method: _			
Logg	ged By:	J. Willi	ams		<u> </u>	Fisch Enviro	nmentai	
Tota	l Depth:	28.0 ft	······································		Hammer Wt: Notes:	None		· · · · · · · · · · · · · · · · · · ·
Depth (feet)	Sample Number	Sample Type Blows/Foot	Recovery (%)	OVA (ppm) PID/FID	Description			
	V/ Z			Q III	<u> </u>	ck	Remarks	Well Construction
1 - 2 - 3 - 4 - 5 - 6			88	0.0		- dark	÷	
7 - 8 - 9 - 10			75	0.0	FINE SAND with CLAY (SC)- dark yellowish-brown (10YR 3/4), moist, l poorly graded, with gravel 1 to 3 cm			
11 - 12 - 13 -		$\bigwedge$	100	0.0	- increasing gravel content (approxim	ately 20%)		
14 - 15 - 16 - 17 - 18 -		$\bigvee$	100	0,6	COARSE SAND with GRAVEL and (SW) - dark yellowish-brown (10YR moist, loose, well graded (approxima gravel)	4/6),		
19 - 20 - 21			100	0.0	SANDY CLAY (CL) - dark yellowish-b (10YR 4/6), moist, medium stiff	brown		_
22 23 24 25 –		$\bigvee_{i=1}^{N}$	100	0.4	FINE SAND with CLAY (SP)- dark yellowish-brown (10YR 4/6), moist, I poorly graded	loose,		
26 - 27 - 28 -	RR-128		100		- yellowish-brown (10YR 5/6)			
29 - 30 31 - 32 - 33 -					Refusal at approximately 28 feet below ground surface. Boring backfilled with neat cement	t grout.		-
34 <u> </u> 35 <u> </u>						·		
				•	LOG OF BO	RING NO	. RR-1	PLATE

PLEASANTON FIREHOUSE #1 4444 RAILROAD AVENUE PLEASANTON, CLAIFORNIA

CORPROJECTS:84855/84855 FM1.GPJ

PROJECT NO.

84855

**ATTACHMENT 5** 

Total Depth: sample fumber ample Type (%) (%) (%) (%) (%) (%) (%) (%) (%) (%)	Date Complete	J. Willia	ams		Drilling method: Direct Push - Geogrobe 6600 Vironex  Hammer Wi: None	
ASPHALT CONCRETE - 4 inches thick  AGREGATE BASE - olive-brown (2.5Y 4/3), moist, loose, poorly graded  FINE SAND with CLAY (SP) - olive-brown (2.5Y 4/3), moist, loose, poorly graded  CLAYEY SAND (8C) - dark yellowish-brown (10°R 3/4), very moist, loose, fine grained, poorly graded  SILTY SAND with CLAY and GRAVEL (SM)-yellowish-brown (10°R 3/4), very moist, dense, poorly graded  - increasing clay content  SANDY CLAY (CL) - light yellowish-brown (10°R 6/4), moist, eith (10°R 6/4),	Total Depth:	55.0 ft				
AGGREGATE BASE - olive-brown (2.5Y 4/3), moist, loose, well graded FINE SAND with CLAY (SP) - olive-brown (2.5Y 4/4), moist, loose, poorly graded  CLAYEY SAND (SC) - dark yellowish-brown (10YR 3/4), very moist, loose, fine grained, poorly graded  CLAYEY SAND (SC) - dark yellowish-brown (10YR 3/4), very moist, loose, fine grained, poorly graded  SILTY SAND with CLAY and GRAVEL (SM)-yellowish-brown (10YR 5/6), slightly moist, dense, poorly graded  - increasing day content  SANDY CLAY (CL) - light yellowish-brown (10YR 6/4), moist, stiff  CLAYEY SAND (SC) - yellowish-brown (10YR 5/6), moist, dense, poorly graded  CLAYEY SAND (SC) - yellowish-brown (10YR 5/6), moist, dense, poorly graded	Depth (feet) Sample Number	Sample Type Blows/Foot	Recovery (%)	OVA (ppm) PID/FID USCS	Description Remarks	Well Construction
Moist, loose, well graded	1 -	\/			ASPHALT CONCRETE - 4 inches thick	
8 9 10 RR-2-10 70 0.0 SILTY SAND (SC) - dark yellowish-brown (10YR 3/4), very molst, loose, fine grained, poorty graded SILTY SAND with CLAY and GRAVEL (SM)-yellowish-brown (10YR 5/6), slightly molst, dense, poorty graded - increasing clay content  80 0.0 SANDY CLAY (CL) - light yellowish-brown (10YR 6/4), moist, stiff  SANDY CLAY (CL) - light yellowish-brown (10YR 6/4), moist, stiff  CLAYEY SAND (SC) - yellowish-brown (10YR 5/6), moist, dense, poorty graded  CLAYEY SAND (SC) - yellowish-brown (10YR 5/6), moist, dense, poorty graded	3 - 4 - 5 -		80		moist, loose, well graded  FINE SAND with CLAY (SP)- olive-brown	
dense, poorly graded - increasing clay content  80 0.0  80 0.0  80 0.0  SANDY CLAY (CL) - light yellowish-brown (10YR 6/4), moist, stiff  CLAYEY SAND (SC) - yellowish-brown (10YR 5/8), moist, dense, poorly graded  CLAYEY SAND (SC) - yellowish-brown (10YR 5/8), moist, dense, poorly graded	8 - 9 - 10		70	0.0	(10YR 3/4), very molst, loose, fine grained, poorly graded SILTY SAND with CLAY and GRAVEL (SM)-	· -
17 - 18 - 19 - 20 - 21 - 22 - 23 - 24 - 25 - 26 - 27 - 28 - 29 - 30 - RR-2-30   SANDY CLAY (CL) - light yellowish-brown (10YR 5/6), moist, dense, poorly graded   SANDY CLAY (CL) - light yellowish-brown (10YR 5/6), moist, dense, poorly graded   SANDY CLAY (CL) - light yellowish-brown (10YR 5/6), moist, dense, poorly graded   SANDY CLAY (CL) - light yellowish-brown (10YR 5/6), moist, dense, poorly graded   SANDY CLAY (CL) - light yellowish-brown (10YR 5/6), moist, dense, poorly graded   SANDY CLAY (CL) - light yellowish-brown (10YR 5/6), moist, dense, poorly graded   SANDY CLAY (CL) - light yellowish-brown (10YR 5/6), moist, dense, poorly graded   SANDY CLAY (CL) - light yellowish-brown (10YR 5/6), moist, dense, poorly graded   SANDY CLAY (CL) - light yellowish-brown (10YR 5/6), moist, dense, poorly graded   SANDY CLAY (CL) - light yellowish-brown (10YR 5/6), moist, dense, poorly graded   SANDY CLAY (CL) - light yellowish-brown (10YR 5/6), moist, dense, poorly graded   SANDY CLAY (CL) - light yellowish-brown (10YR 5/6), moist, dense, poorly graded   SANDY CLAY (CL) - light yellowish-brown (10YR 5/6), moist, dense, poorly graded   SANDY CLAY (CL) - light yellowish-brown (10YR 5/6), moist, dense, poorly graded   SANDY CLAY (CL) - light yellowish-brown (10YR 5/6), moist, dense, poorly graded   SANDY CLAY (CL) - light yellowish-brown (10YR 5/6), moist, dense, poorly graded   SANDY CLAY (CL) - light yellowish-brown (10YR 5/6), moist, dense, poorly graded   SANDY CLAY (CL) - light yellowish-brown (10YR 5/6), moist, dense, poorly graded   SANDY CLAY (CL) - light yellowish-brown (10YR 5/6), moist, dense, poorly graded   SANDY CLAY (CL) - light yellowish-brown (10YR 5/6), moist, dense, poorly graded   SANDY CLAY (CL) - light yellowish-brown (10YR 5/6), moist, dense, poorly graded   SANDY CLAY (CL) - light yellowish-brown (10YR 5/6), moist, dense, poorly graded   SANDY CLAY (CL) - light yellowish-brown (10YR 5/6), moist, dense, poorly graded   SANDY CLAY (CL) - light yellowish-brown (10YR 5/6), moist, dense, poorly graded	12 - 13 - 14 -	$\bigvee$	80	0.0	dense, poorly graded	
22 - 23 - 24 - 25 - 26 - 27 - 28 - 29 - 30 RR-230 - 31 - 32 - 33 - 34 - 34 - 34 - 34 - 31 - 32 - 33 - 34 - 34 - 34 - 34 - 34 - 34	17 18 - 19 - 20	$\bigvee_{i=1}^{n}$	ВО	0.0		-
27 - 28 - 29 - 30 - RR-230   50   0.0   CLAYEY SAND (SC) - yellowish-brown (10YR 5/6), moist, dense, poorly graded	22 - 23 - 24 - 25 -		80	0.0		
32 - 33 - 34 -	27 - 28 - 29 -	$\bigvee_{i=1}^{n}$	50	0.0		-
35	32 - 33 - 34 -	$\bigvee$				
	35 -	<u> </u>	s			··

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PROJECT NO.

KLEINFELDER

84855

PLEASANTON FIREHOUSE #1 4444 RAILROAD AVENUE PLEASANTON, CLAIFORNIA

4/18/2008 11:49:35 AM

4/18/2008 11:49:35 AM (cour,q) PLEASANTON, CLAIFORNIA 99878 PROJECT NO. 4444 RAILROAD AVENUE PLEASANTON FIREHOUSE #1 INEELDER LOG OF BORING NO. RR-2 **STA19** ·0L 69 89 *L*9 99 ۶9 **b**9 ٤9 79 19 6\$ Boring backfilled with nest cement grout. 85 Boring terminated at approximately 56 feet below ground surface. 9ς (10YR 4/6), wet, medium stiff SANDY CLAY (CL) - dark yellowish-brown ςς 0.0 ᅇ Joose, well graded Þ۶ yellowlsh-brown (10YR 4/6), saturated, very ٤s COPRSE SAND With CLAY (SW)- dark 25 15 05 08 64 exbausive clay 81 (10YR 4/6), wet, soft, coarse sand grains, LV SANDY CLAY (CL) - dark yellowish-brown  $\bar{\Delta}$ Şŧ 0.0 0Þ ÞÞ - Increasing clay content 77 [t dense, well graded 0.0 07 yellowish-brown (10YR 4/6), very moist, very 6ε CORRSE SAND WITH CLAY (SW)- dark 86 9€ CLAYEY SAND (SC) - continued Well Construction Remarks USCS OVA (ppm) PID/FID Describlion Recovery (%) Sample Type Depth (feet) Blows/Foot Total Depth: .cesoV JJ 0.88 enoN :М төттөН roddeq glx: J. Williams **XenoilV** Orilling method: Direct Push - Geoprobe 6600 Date Completed: 413108

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