

ALAMEDA COUNTY
HEALTH CARE SERVICES

AGENCY
DAVID J. KEARS, Agency Director



RO# 1098

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

StID 1828

April 24, 1998

East Bay Enterprises
c/o Christine Noma
1111 Broadway, Suite 2400
Oakland, CA 94607-4036

Mr. David Wendel, Trustee
B. MacLeod trust
1111 Broadway, Suite 2400
Oakland, CA 94607-4036

Mr. Phil Wood
900 Modoc Street
Berkeley, CA 94707

Mr. Henry Achatz
2000 Powell, Suite 1200
Emeryville, CA 94608

Mr. Bernard Quante
108 Blossom Court
San Rafael, CA 94901

Re: Fuel Leak Site Case Closure for 9029 San Leandro Street, Oakland, CA 94603

Dear Messrs. Wendel, Wood, Achatz, Quante, and Ms. Noma:

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 Protection Division is required to use this case closure letter for all UST leak sites. We are also transmitting to you the enclosed case closure summary. These documents confirm the completion of the investigation and cleanup of the reported release at the subject site. The subject fuel leak case is closed.

SITE INVESTIGATION AND CLEANUP SUMMARY

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

- up to 5,900 ppm Oil and Grease exists in soil beneath the site.

Ms. Noma, Mr. Achatz, etal
re: Transmittal Letter
April 24, 1998
Page 2 of 2

If you have any questions, please contact me at (510) 567-6762.

Sincerely,



eva chu
Hazardous Materials Specialist

enlosure:

1. Case Closure Letter
2. Case Closure Summary

c: Frank Kliewer
City of Oakland-Planning
1330 Broadway, 2nd Floor
Oakland, CA 94612

files (wood13)

ALAMEDA COUNTY
HEALTH CARE SERVICES

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DAVID J. KEARS, Agency Director



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1131 Harbor Bay Parkway, Suite 250
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REMEDIAL ACTION COMPLETION CERTIFICATION

**StID 1828 - 9029 San Leandro Street, Oakland, CA
(2-1,000 gallon underground tanks removed in November 21, 1988)**

April 24, 1998

East Bay Enterprises
c/o Christine Noma
1111 Broadway, Suite 2400
Oakland, CA 94607-4036

Mr. David Wendel, Trustee
B. MacLeod trust
1111 Broadway, Suite 2400
Oakland, CA 94607-4036

Mr. Phil Wood
900 Modoc Street
Berkeley, CA 94707

Mr. Henry Achatz
2000 Powell, Suite 1200
Emeryville, CA 94608

Mr. Bernard Quante
108 Blossom Court
San Rafael, CA 94901

Dear Messrs. Wendel, Wood, Achatz, Quante, and Ms. Noma:

This letter confirms the completion of site investigation and remedial action for the underground storage tanks formerly located at the above-described location. Thank you for your cooperation throughout this investigation. Your willingness and promptness in responding to our inquiries concerning the former underground storage tank are greatly appreciated.


Based on information in the above-referenced file and with the provision that the information provided to this agency was accurate and representative of site conditions, no further action related to the underground tank release is required.

Ms. Noma, Mr. Achatz, etal
re: 9029 San Leandro St, Oakland, CA
April 24, 1998
Page 2 of 2

This notice is issued pursuant to a regulation contained in Title 23, Section 2721(e) of the California Code of Regulations.

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

Sincerely,



Mee Ling Tung, Director

cc: Richard Pantages, Chief of Division of Environmental Protection
Chuck Headlee, RWQCB
Dave Deaner, SWRCB
Leroy Griffin, OFD
files-ec (wood12)

01-0041

CASE CLOSURE SUMMARY
Leaking Underground Fuel Storage Tank Program

I. AGENCY INFORMATION

Date: July 26, 1996

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: Alameda Chemical & Scientific
Site facility address: 9029 San Leandro St, Oakland, CA 94603
RB LUSTIS Case No: N/A Local Case No./LOP Case No.: 1828
URF filing date: 11/22/88 SWEEPS No: N/A

Responsible Parties: Addresses: Phone Numbers:

East Bay Enterprises 1111 Broadway, #2400
c/o Christine Noma Oakland, CA 94607-4036

David Wendel, Trustee 1111 Broadway, #2400
of the B. Macleod Trust Oakland, CA 94607-4036

Phil Wood 900 Modoc St, Berkeley, CA 94707

Henry Achatz 2000 Powell, #1200, Emeryville, CA 94608

Bernard Quante 108 Blossom Ct, San Rafael, CA 94901

<u>Tank No:</u>	<u>Size in gal.:</u>	<u>Contents:</u>	<u>Closed in-place or removed?:</u>	<u>Date:</u>
1	1,000	Unknown	Removed	11/21/88
2	1,000	"	"	"

III. RELEASE AND SITE CHARACTERIZATION INFORMATION

Cause and type of release: Unknown
Site characterization complete? YES
Date approved by oversight agency: 7/16/96
Monitoring Wells installed? Yes Number: 1
Proper screened interval? Yes, 5.5' to 20' bgs
Highest GW depth below ground surface: ~8.2' Lowest depth: ~9.0'
Flow direction: Regional groundwater flows to southwest
Most sensitive current use: Commercial
Are drinking water wells affected? No Aquifer name: Unknown
Is surface water affected? No Nearest affected SW name: NA
Off-site beneficial use impacts (addresses/locations): None

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

Treatment and Disposal of Affected Material:

<u>Material</u>	<u>Amount</u> <u>(include units)</u>	<u>Action (Treatment</u> <u>or Disposal w/destination)</u>	<u>Date</u>
Tank	2 USTs	Disposed by Levin Metals, Richmond	11/21/88
Soil	138 tons	Casmalia Resources, in Casmalia	12/5/88
Rinsate	5,400 gallons	Gibson Oil Refinery, Bakersfield	2/22/89

Maximum Documented Contaminant Concentrations - - Before and After Cleanup

<u>Contaminant</u>	<u>Soil (ppm)</u>		<u>Water (ppb)</u>	
	<u>Before¹</u>	<u>After²</u>	<u>Before³</u>	<u>After</u>
TPH (Gas)	13	NA	290,000	<50
TPH (Diesel)	2,600	110	3,100,000	<50
Benzene	ND	0.012	<200	<0.5
Toluene	ND	0.078	980	"
Ethylbenzene	ND	0.017	<300	"
Xylenes	0.34	0.083	7,500	"
Oil & Grease	5,800	5,900	18,000,000	<500
Heavy metals	NA	NA		
Other	HVOCs	ND	ND	ND
	PCBs (8080)		ND	ND

NOTE: 1 soil sample collected during tank removal
2 soil sample collected after overexcavation
3 "grab" groundwater from pit at time of UST removal

IV. CLOSURE

Does completed corrective action protect existing beneficial uses per the Regional Board Basin Plan? **Undetermined**
Does completed corrective action protect potential beneficial uses per the Regional Board Basin Plan? **Undetermined**
Does corrective action protect public health for current land use? **YES**
Site management requirements: **None**
Should corrective action be reviewed if land use changes? **YES**
Monitoring wells Decommissioned: **No, pending site closure**
Number Decommissioned: **0** Number Retained: **1**
List enforcement actions taken: **NOV issued 11/5/92; PRP on 2/15/94**
List enforcement actions rescinded: **Above, in compliance**

V. LOCAL AGENCY REPRESENTATIVE DATA

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

Signature: *Eva Chu* Date: *8/23/96*

Reviewed by

Name: **Dale Klettke** Title: **Haz Mat Specialist**

Signature: *Dale Klettke* Date: *7/29/96*

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

Signature: *Thomas Peacock* Date: *8-22-96*

VI. RWQCB NOTIFICATION

Date Submitted to RB: *8/23/96* RB Response: *Approved*

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

Signature: *Kevin Graves* Date: *9/5/96*

VII. ADDITIONAL COMMENTS, DATA, ETC.

On November 21, 1988 two 1-K USTs (which stored unknown hydrocarbons) were removed from within a common pit. Soil samples (A1, A2, B1, B2) and a "grab" groundwater sample were collected and analyzed for TPHg, TPHd, TOG, BTEX, and VOCs (8240). Elevated levels of TPHd and TOG were identified in the soil samples. The "grab" groundwater sample contained elevated levels of TPHg, TPHd, and TOG. (See Figs 1, 2, and Table 1)

On December 5, 1988 the tank pit was overexcavated horizontally ~2 feet on the four sidewalls and vertically down to groundwater (~14'bg), removing ~112 cy of affected soil. Six confirmatory sidewall samples (C1, C2, D1, D2, E1, E2) were collected and analyzed for the same above constituents. TOG levels were about the same, but diesel concentrations were much lower. (See Fig 3, Table 1)

A soil/groundwater investigation was conducted in August 1994 to delineate the extent of soil contamination and to determine the severity of groundwater contamination. Five investigative borings (IB-1 through IB-5) were drilled to 10' bg, and one monitoring well, MW-1, was installed to 20' bg, (in the downgradient direction, based on regional flow, of the former tank pit excavation). (See Fig 4). Soil and water samples were analyzed for TPHg, TPHd, BTEX, and TPH-mo. Water was also analyzed for the five metals: Cd, Cr, Pb, Ni, & Zn.

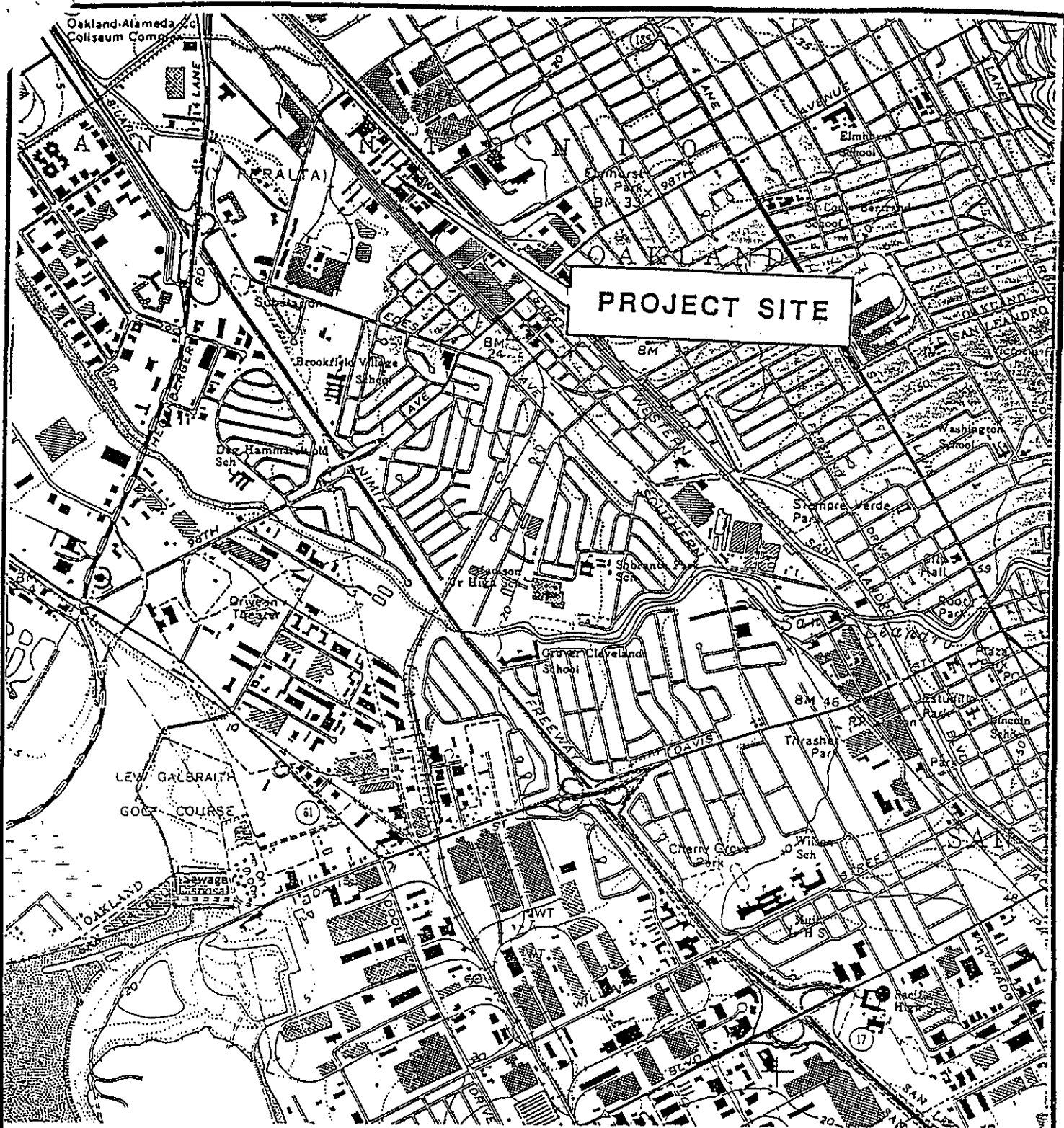
Only TPHmo was detected in soil (in all borings except IB-4). However, the hydrocarbon-impacted soils appear to be limited to a relatively narrow layer of soil near the groundwater table between about 7' to 10' bg, and within 10' of the former excavation perimeter. Migration of these less mobile hydrocarbons should be minimal in the silt sediments found at 4' to 20' bg. The groundwater sample contained 160ppb TPHd. Cr, Pb, And Ni levels were above CA MCLs. (See Table 2 and Boring log)

Another groundwater sampling event occurred in November 1995. Groundwater did not contain TPHg, TPHd, TPHmo or BTEX. Cr and Ni concentrations were still above CA MCLs. (See Table 3). However, these may be background levels, as groundwater does not appear to be significantly impacted by the hydrocarbon release at the site. Shallow groundwater is not a source of drinking water in this area. The residual hydrocarbons at 7' to 10' bg should pose no risk to human health. Continued monitoring is not warranted.

Closure is recommended because:

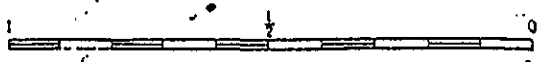
- o the leak and ongoings sources have been removed;
- o the site has been adequately characterized;
- o the dissolved plume is not migrating;
- o no water wells surface water, or other sensitive receptors are likely to be impacted;
- o the site presents no significant risk to human health; and,
- o the site presents no significant risk to the environment.

wood10



PROJECT SITE

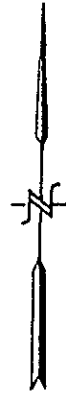
SCALE



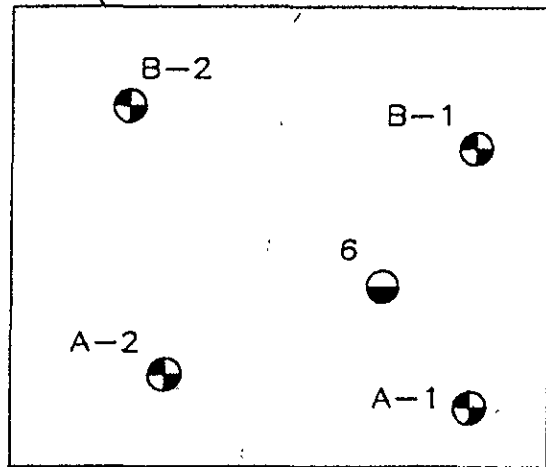
ADAPTED FROM USGS 7.5-MINUTE
SAN LEANDRO QUADRANGLE MAP

DESIGNED BY:	CHECKED BY:	FIGURE 1 SITE VICINITY MAP	DATE:	FIGURE:
DRAWN BY:	SCALE:		CENTURY WEST ENGINEERING	
DWG. NO.:		CWEC 20553-001- 03		

5 ABOVE GROUND
TEMPORARY
STORAGE TANK



APPROXIMATE LIMITS
OF TANK PIT
EXCAVATION



LEGEND:

⊕ SOIL SAMPLE LOCATION

● WATER SAMPLE LOCATION

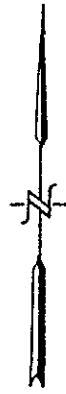
NOTES:

1. SOIL SAMPLES TAKEN FROM
SIDEWALLS OF TANK PIT.
2. WATER SAMPLE No.5 TAKEN FROM
ABOVE GROUND STORAGE TANK.

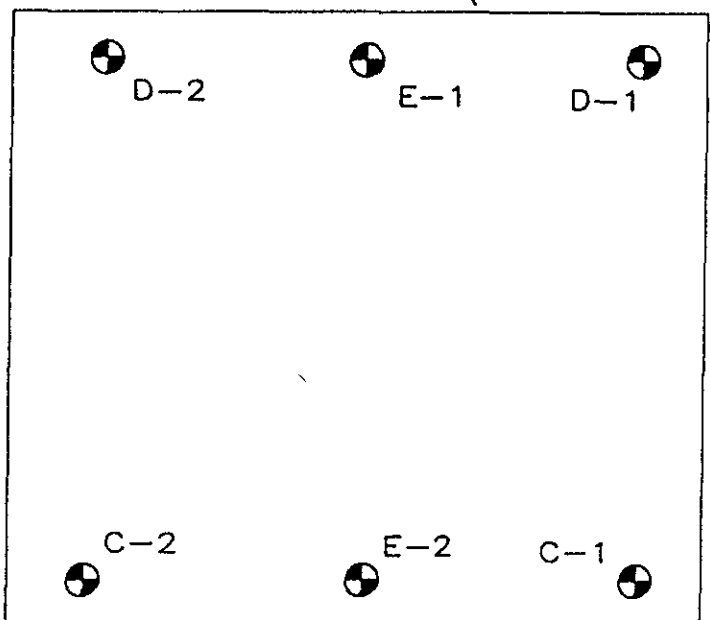


ERICKSON	FIGURE NO. 42	INITIAL SAMPLING LOCATIONS
	PROJECT NO. 4308	
	DATE: 3-20-89	ALAMEDA CHEMICAL CO. 9029 SAN LEANDRO ST. OAKLAND, CALIFORNIA

ABOVE GROUND
TEMPORARY
STORAGE TANK



APPROXIMATE LIMITS
OF TANK PIT
OVER-EXCAVATION



LEGEND:

⊕ SOIL SAMPLE LOCATION

NOTES:

1. SOIL SAMPLES TAKEN FROM
SIDEWALLS OF TANK PIT.
(APPROX. 13 FT. BELOW GRADE.)



ERICKSON

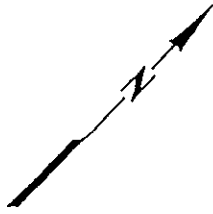
FIGURE NO.
43

PROJECT NO.
4308

DATE:
3-20-89

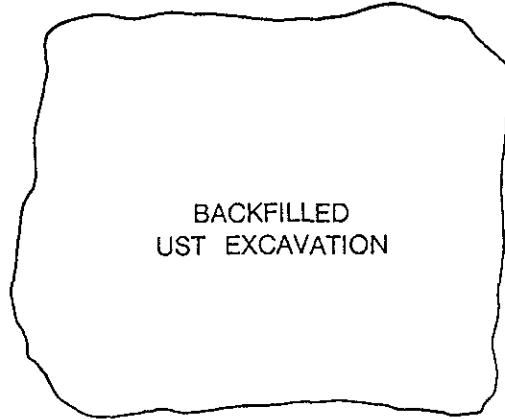
SOIL SAMPLE LOCATIONS
SUBSEQUENT TO OVER-EXCAVATION

ALAMEDA CHEMICAL CO.
9029 SAN LEANDRO ST.
OAKLAND, CALIFORNIA



IB-3
●
ND (6')
240 (10')

IB-5
●
ND (5')
1,600 (9')



IB-1
●
2,900 (8')
ND (12')

ND (6')
ND (10')



MW-1

IB-2
●
2000 (7')
160 (11')

IB-4
●
ND (9')

MONITORING WELL
SOIL BORING
ND - NON-DETECTABLE CONCENTRATION (<10 ppm)



DESIGNED BY:	CHECKED BY:	FIGURE 4 SITE PLAN/CONCENTRATION MAP Motor Oil (ft) CWEC: 20553-001-02	DATE:	FIGURE:
DRAWN BY:	SCALE:		CENTURY WEST ENGINEERING	
DWG. NO.:				

Table 1

Laboratory Analyses
Alameda Chemical Co.
Oakland, California

Tank Ref. No.	Tank Size (Gal)	Product Type	Date Sampled	Lab Report No.	Sample I.D. No.	Benzene (ppm)	Toluene (ppm)	Xylene (ppm)	Ethyl Benzene (ppm)	TPH Gas (ppm)	Diesel (ppm)	Oil and Grease (ppm)	Volatile Organics (1)	PCB (1) (ppm)
1	1,000	Unknown	11/21/88	6680	A-1	ND	ND	ND	ND	1.2	ND	140	NO	} initial sampling
					A-2	ND	ND	ND	ND	ND	810	1,100	YES	
2	1,000	Unknown	11/21/88	6680	B-1	ND	ND	0.34	ND	13	2,600	5,800	YES	
					B-2	ND	ND	ND	ND	ND	600	1,000	YES	
Tank Pit	Unknown	12/5/88	6756	C-1	ND	ND	ND	ND	-	33	4,000	-	} soil samples overexcavation	
				C-2	ND	ND	ND	ND	-	40	4,000	-		
				D-1	ND	ND	ND	ND	-	110	4,300	-		
				D-2	0.012	0.078	0.083	0.017	-	110	3,700	-		
				E-1	ND	ND	ND	ND	-	50	5,900	-		
					E-2	ND	ND	ND	ND	-	32	3,400	-	
Holding		Unknown	11/21/88	6680	Water-5 <i>in tank</i>	-	-	-	-	-	17,000 27,000	NO	NO	
-		Groundwater	11/21/88	6680	Water-6	ND	0.98	7.5	ND	290	3,100	18,000	NO	

ND = NONE DETECTED

(1) = Complete Laboratory Report in Attachment B

NO analysis for 5 metals

Ground water was encountered in the investigative and well borings at a depth of approximately nine feet below grade. No hydrocarbon odors or sheens were noted in water from monitoring well MW-1 during purging and sampling activities.

3.2 Results of Laboratory Analyses

Soil and ground water analytical results are summarized in Table 1. Laboratory data reports for soil and ground water samples are contained in Appendix D.

Sample ID	Sample Depth	Concentration (ppm)						
		TPH-G	TPH-D	TPH-MO	B	T	E	X
Soil Samples								
IB-1.1	8.0 ft	ND(1) ¹	ND(50)	2,900	ND(.0025)	ND(.0025)	ND(.0025)	ND(.0025)
IB-1.2	12.0 ft	ND(1)	ND(1)	ND(10)	ND(.0025)	ND(.0025)	ND(.0025)	ND(.0025)
IB-2.1	7.0 ft	ND(1)	ND(50)	2,000	ND(.0025)	ND(.0025)	ND(.0025)	ND(.0025)
IB-2.2	11.0 ft	ND(1)	ND(5)	160	ND(.0025)	ND(.0025)	ND(.0025)	ND(.0025)
IB-3.1	6.0 ft	ND(1)	ND(1)	ND(10)	ND(.0025)	ND(.0025)	ND(.0025)	ND(.0025)
IB-3.2	10.0 ft	ND(1)	ND(5)	240	ND(.0025)	ND(.0025)	ND(.0025)	ND(.0025)
IB-4.1	9.0 ft	ND(1)	ND(1)	ND(10)	ND(.0025)	ND(.0025)	ND(.0025)	ND(.0025)
IB-5.1	5.0 ft	ND(1)	ND(1)	ND(10)	ND(.0025)	ND(.0025)	ND(.0025)	ND(.0025)
IB-5.2	9.0 ft	ND(1)	ND(50)	1,600	ND(.0025)	ND(.0025)	ND(.0025)	ND(.0025)
MW-1.1	6.0 ft	ND(1)	ND(1)	ND(10)	ND(.0025)	ND(.0025)	ND(.0025)	ND(.0025)
MW-1.2	10.0 ft	ND(1)	ND(1)	ND(10)	ND(.0025)	ND(.0025)	ND(.0025)	ND(.0025)
Ground Water Sample								
MW-1	9.0 ft	ND(0.05)	0.16	ND(0.5)	ND(.0005)	ND(.0005)	ND(.0005)	ND(.0005)

1 - Not detected above the value expressed in the parentheses.

2 - The laboratory data report states "The positive result appears to be a heavier hydrocarbon than Diesel."

The five metals analysis of the ground water sample from MW-1 resulted in the following metals concentrations.

Ca MCLs (ppm)		
.005	Cadmium	< 0.03 ppm (method detection level = 0.03 ppm)
.05	Chromium	2.3 ppm
.05	Lead	0.39 ppm
.1	Nickel	3.1 ppm
.5	Zinc	2.6 ppm

Table 3
 Summary of Ground Water Analytical Results
 9029 San Leandro Street UST Site

Sample ID	Sample Date	Sample Depth (ft)	Concentration (PPM)												
			TPH ₁₀	TPH ₂₀	TPH ₃₀	B	T	E	X	Co	Cr	Pb	Ni	Zn	
MW-1	08/18/94	9.0 ft.	ND (0.05) [2]	0.16 [3]	ND (0.5)	ND (.0005)	ND (.0005)	ND (.0005)	D (.0005)		ND (0.03)	2.3	0.39	3.1	2.6
	11/16/95	8.2 ft.	ND (0.05)	ND (0.05)	ND (0.5)	ND (.0005)	ND (.0005)	ND (.0005)	D (.0005)		ND (0.02)	0.13	0.009	0.22	0.23

1. Depth in feet below ground surface.
 2. Not detected above the level expressed in parentheses.
 3. The laboratory data report states, "The positive result appears to be a heavier hydrocarbon than diesel".
- PPM = Milligrams per liter.

WELL BORING MW-1

Century West Engineering

Site Location: 9029 San Leandro Blvd.	Boring ID: MW-1
Boring Location: Downgradient from excavation	Elevation:
Purpose: Soil Investigation	Logged By: Bob Bogar
Date: 08/09/94	Blank Casing: From: 0.5 To: 5.34
Consulting Firm: Century West Engineering	Perforations: From: 5.34 To: 20.1
Project Number: 20553-001-02	Filter Sand: From: 20.1 To: 4.0
Drilling Contractor: Exploration GeoServices	Bentonite: From: 4.0 To: 3.0
Drilling Method: Hollow Stem Auger	Grout: From: 3.0 To: 0.5

Depth	Sample ID	Sampling Interval	Blow Counts	Profile	Soil Description	Remarks	
01				▽	0 - 0.5 ft Asphalt		
02					0.5 - 2.0 ft Light brown silty GRAVEL; dry; no hydrocarbon odor or discoloration.		
03					2.0 - 4.0 ft Light brown to green, sandy SILT, rust mottled, gravelly; dry; no hydrocarbon odor or discoloration.		
04							
05							
06	MW-1.1	T	5				
07		L	7			4.0 - 8.0 ft Black to dark grey SILT; dry soft organic; no hydrocarbon odor or discoloration.	
08							
09							
10		T	3				
11	MW-1.2	L	4				
12						8.0 - 20.0 ft Light to medium brown SILT; soft, moist to saturated; no hydrocarbon odor or discoloration.	
13							
14							
15							
16							
17							
18							
19							
20					Ground Water Depth - 9.0 ft Total Auger Depth - 20.0 ft		

INVESTIGATIVE BORING IB-1

Century West Engineering

Site Location: 9029 San Leandro Blvd.				Boring ID: IB-1		
Boring Location: Southwest from excavation				Elevation:		
Purpose: Soil Investigation				Logged By: Bob Bogar		
Date: 08/09/94				Blank Casing:		From: To:
Consulting Firm: Century West Engineering				Penorations:		From: To:
Project Number: 20553-001-02				Filter Sand:		From: To:
Drilling Contractor: Exploration GeoServices				Bentonite:		From: To:
Drilling Method: Hollow Stem Auger				Grout:		From: 11 ft To: Surf.
Depth	Sample ID	Sampling Interval	Blow Counts	Profile	Soil Description	Remarks
<u>01</u>					0 - 0.5 ft Asphalt	Note: Sandy gravels are probably imported fill material.
<u>02</u>			0.5 - 1.0 ft Grey brown Sandy GRAVEL; dry, soft; no hydrocarbon odor or discoloration.			
<u>03</u>			1.0 - 4.0 ft Light to medium brown sandy SILT; moist, soft; no hydrocarbon odor or discoloration.			
<u>04</u>					4.0 - 7.0 ft Black clayey SILT; moist, soft, organic; no hydrocarbon odor or discoloration.	
<u>05</u>					7.0 - 10.0 ft Dark grey SILT; slight hydrocarbon odor and greenish discoloration.	
<u>06</u>						
<u>07</u>		T	8			
<u>08</u>	IB-1.1	↓	11			
<u>09</u>			13			
<u>10</u>						
<u>11</u>		T	5		10.0 - 12.0 ft Light brown fine SAND; moist to wet, soft; no hydrocarbon odor or discoloration.	
<u>12</u>	IB-1.2	↓	5			
<u>13</u>						
<u>14</u>						
<u>15</u>						
					Ground Water Depth - 9.0 feet Final Auger Depth - 11.0 feet	

INVESTIGATIVE BORING IB-2

Century West Engineering

Site Location: 9029 San Leandro Blvd.					Boring ID: IB-2		
Boring Location: Southeast from excavation					Elevation:		
Purpose: Soil Investigation					Logged By: Bob Bogar		
Date: 08/09/94					Blank Casing: From: To:		
Consulting Firm: Century West Engineering					Perforations: From: To:		
Project Number: 20553-001-02					Filter Sand: From: To:		
Drilling Contractor: Exploration GeoServices					Bentonite: From: To:		
Drilling Method: Hollow Stem Auger					Grout: From: 10 ft To: Surf.		
Depth	Sample ID	Sampling Interval	Blow Counts	Profile	Soil Description	Remarks	
01					0 - 0.5 ft Asphalt		
02					0.5 - 1.5 ft Grey to brown sandy GRAVEL; dry ; no hydrocarbon odor or discoloration.		
03							
04					1.0 - 4.0 ft Light to medium brown sandy SILT; dry, soft; no hydrocarbon odor or discoloration.		
05							
06	IB-2.1	T	5		4.0 - 7.0 ft Black to dark grey, clayey SILT; moist, soft, organic; slight to moderate hydrocarbon odor.		
07		L	6				
08						7.0 - 10.0 ft Dark grey SILT; moderate hydrocarbon odor and greenish discoloration.	
09							
10							
11	IB-2.2	T	7		10.0 - 11.5 ft Light green fine silty SAND; moist to wet, soft; slight hydrocarbon odor.		
12		L	9				
13							
14							
15						Ground Water Depth - 9.0 feet Final Auger Depth - 10.0 feet	

INVESTIGATIVE BORING IB-3

Century West Engineering

Site Location: 9029 San Leandro Blvd.

Boring ID: IB-3

Boring Location: Northwest from excavation

Elevation:

Purpose: Soil Investigation

Logged By: Bob Bogar

Date: 08/09/94

Blank Casing: From: To:

Consulting Firm: Century West Engineering

Perforations: From: To:

Project Number: 20553-001-02

Filter Sand: From: To:

Drilling Contractor: Exploration GeoServices

Bentonite: From: To:

Drilling Method: Hollow Stem Auger

Grout: From: 10 ft To: surf.

Depth	Sample ID	Sampling Interval	Blow Counts	Profile	Soil Description	Remarks	
01				▽	0 - 0.5 ft Asphalt		
02					0.5 - 2.0 ft Rust to light brown, silty GRAVEL; dry, soft; no hydrocarbon odor or discoloration.		
03					2.0 - 4.0 ft Light to olive green sandy SILT; dry, soft; no hydrocarbon odor or discoloration.		
04							
05							
06					4.0 - 8.0 ft Dark brown to black clayey SILT; moist, soft, organic; no hydrocarbon odor or discoloration.		
07		T	8				
08	IB-3.1	L	12				
09			16			8.0 - 10.0 ft Light green silty SAND; fine, moist, soft; slight hydrocarbon odor.	
10							
11		T	6				
12	IB-3.2	L	6				
13			9				
14							
15						Ground Water Depth - 9.0 feet Final Auger Depth - 10.0 feet	

INVESTIGATIVE BORING IB-4

Century West Engineering

Site Location: 9029 San Leandro Blvd.	Boring ID: IB-4
Boring Location: Southeast from excavation	Elevation:
Purpose: Soil Investigation	Logged By: Bob Bogar
Date: 08/09/94	Blank Casing: From: To:
Consulting Firm: Century West Engineering	Perforations: From: To:
Project Number: 20553-001-02	Filter Sand: From: To:
Drilling Contractor: Exploration GeoServices	Bentonite: From: To:
Drilling Method: Hollow Stem Auger	Grout: From: 10 ft To: surf.

Depth	Sample ID	Sampling Interval	Blow Counts	Profile	Soil Description	Remarks
<u>01</u>					0 - 0.5 ft Asphalt	
<u>02</u>					0.5 - 2.0 ft Grey to brown silty GRAVEL; dry ; no hydrocarbon odor or discoloration.	
<u>03</u>					2.0 - 4.0 ft Light to medium brown sandy SILT; dry, soft; no hydrocarbon odor or discoloration.	
<u>04</u>						
05						
<u>06</u>					4.0 - 8.0 ft Black to dark grey clayey SILT; moist, soft, organic; no hydrocarbon odor or discoloration.	
<u>07</u>						
<u>08</u>		T	6			
<u>09</u>	IB-4.1	⊥	8	— ∇ —	8.0 - 9.0 ft Dark green clayey SILT; moist soft, organic; no hydrocarbon odor.	
10			11			
<u>11</u>					Ground Water Depth - 9.0 feet	
12					Final Auger Depth - 10.0 feet	

INVESTIGATIVE BORING IB-5

Century West Engineering

Site Location: 9029 San Leandro Blvd.					Boring ID: IB-5			
Boring Location: Northeast from excavation					Elevation:			
Purpose: Soil Investigation					Logged By: Bob Bogar			
Date: 08/09/94					Blank Casing: From: To:			
Consulting Firm: Century West Engineering					Perforations: From: To:			
Project Number: 20553-001-02					Filter Sand: From: To:			
Drilling Contractor: Exploration GeoServices					Bentonite: From: To:			
Drilling Method: Hollow Stem Auger					Grout: From: 9 ft To: surf.			
Depth	Sample ID	Sampling Interval	Blow Counts	Profile	Soil Description		Remarks	
01				—▽—	0 - 0.5 ft	Asphalt		
02					0.5 - 1.0 ft	Grey brown GRAVEL; dry; no hydrocarbon odor or discoloration.		
03					1.0 - 4.0 ft	Light to medium brown sandy SILT; dry, soft; no hydrocarbon odor or discoloration.		
04								
05		T	4					
06	IB-5.1	⊥	6 7			4.0 - 9.0 ft	Black to dark green clayey SILT; moist, soft, organic; slight to moderate hydrocarbon odor, no discoloration.	
07								
08		T	5 7					
09	IB-5.2	⊥	10					
10								
11								
12								
13								
14					Ground Water Depth - 9.0 feet Final Auger Depth - 9.0 feet			
15								