

ALAMEDA COUNTY
HEALTH CARE SERVICES

AGENCY
DAVID J. KEARS, Agency Director



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

StID 4476 - 730 29th Street, Oakland, CA
(1-1K gallon diesel UST closed-in-place, 1-2K gallon
gasoline UST and 3-1.5K gallon solvent USTs removed in
October 1986)

September 15, 1997

Mr Steven Towle
Civic Bank of Commerce
2101 Webster St, 14th Fl
Oakland, CA 94612

Ms Patty Wilson
1216 Masonic
Berkeley, CA 94706

Mr John Jordan
730 29th St, #C7
Oakland, CA 94609

Dear Ms Wilson and Messrs Towle and Jordan:

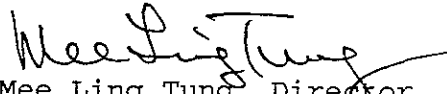
This letter confirms the completion of site investigation and remedial action for the underground storage tanks formerly located at the above-described location. Thank you for your cooperation throughout this investigation. Your willingness and promptness in responding to our inquiries concerning the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

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: Chief, Division of Environmental Protection
Kevin Graves, RWQCB
Dave Deaner, SWRCB (with attachment-case closure summary)
Leroy Griffin, OFD
files-ec (ca10c1s.3)



ENVIRONMENTAL PROTECTION
CASE CLOSURE SUMMARY
Leaking Underground Fuel Storage Tank Program

I. AGENCY INFORMATION

Date: June 13, 1997

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

II. CASE INFORMATION

Site facility name: Calous Building
Site facility address: 730 29th Street, Oakland, CA 94609
RB LUSTIS Case No: N/A Local Case No./LOP Case No.: 4476
URF filing date: SWEEPS No: N/A

<u>Responsible Parties:</u>	<u>Addresses:</u>	<u>Phone Numbers:</u>
Steven Towle Civic Bank of Commerce 2101 Webster St, 14th Fl Oakland, CA 94612	Patti Wilson 1216 Masonic Berkeley, Ca 94706	John Jordan 730 29th St, #C7 Oakland, CA 94609

<u>Tank No:</u>	<u>Size in gal.:</u>	<u>Contents:</u>	<u>Closed in-place or removed?:</u>	<u>Date:</u>
S-1	1,000	Diesel	Closed-in-place	
S-2	2,000	Gasoline	Removed	10/21/86
S-3	1,500	Solvent	Removed	"
S-4	1,500	"	"	"
S-5	1,500	"	"	"

III. RELEASE AND SITE CHARACTERIZATION INFORMATION

Cause and type of release: Unknown
Site characterization complete? YES
Date approved by oversight agency: 6/12/97
Monitoring Wells installed? Yes Number: 3
Proper screened interval? Yes, 8' to 25'bgs in well MW-1
Highest GW depth below ground surface: 9.58' Lowest depth: 15.03' in MW-1
Flow direction: SW
Most sensitive current use: Residential
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> (include units)	<u>Action (Treatment</u> <u>or Disposal w/destination)</u>	<u>Date</u>
Tank	3 USTs	Disposed by H & H, in S.F.	10/86
Piping	1 UST	Closed-in-Place	10/86
Rinsate	850 gal.	Demmenno Kerdoon, in Compton	5/12/89
Soil			

Maximum Documented Contaminant Concentrations - - Before and After Cleanup

<u>Contaminant</u>	<u>Soil (ppm)</u>		<u>Water (ppb)</u>	
	<u>Before¹</u>	<u>After</u>	<u>Before</u>	<u>After</u>
TPH (Gas)	710		25,000	<5,000
TPH (Diesel)	120		2,300	<1,000
Benzene	<1.0		ND	ND
Toluene	<1.0		6	ND
Ethylbenzene	<1.0		71	51
Xylenes	2.2		270	310
PCE/TCE	ND/ND		6.1/3.3	ND/ND
1,2-DCP	ND		6.1	ND
Stoddard/mineral spirits	4,600 ²		44,000	36,000

NOTE: 1 soil sample collected from borings BH-A @10'bgs, 2/96
 2 soil sample collected from boring CB-5 @10'bgs, 3/30/94

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? _____
 Does completed corrective action protect potential beneficial uses per the Regional Board Basin Plan? _____
 Does corrective action protect public health for current land use? **YES**
 Site management requirements: **Yes, a site safety plan is required if the area by the former solvent tanks is excavated/trenched to depths greater than 5'bgs.**

Should corrective action be reviewed if land use changes? **YES**
 Monitoring wells Decommissioned: **None, pending site closure**
 Number Decommissioned: **0** Number Retained: **3**
 List enforcement actions taken: **None**

List enforcement actions rescinded: **NA**

V. LOCAL AGENCY REPRESENTATIVE DATA

Name: Eva Chu Title: Haz Mat Specialist


Signature:  Date: 7/9/97

Reviewed by

Name: Madhulla Logan Title: Haz Mat Specialist

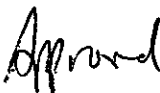
Signature:  Date: 6/13/97

Name: Thomas Peacock Title: Supervisor

Signature:  Date: 6/8/97


VI. RWQCB NOTIFICATION

Date Submitted to RB: 7/10/97

RB Response: 

RWQCB Staff Name: Kevin Graves

Title: AWRCE

Signature: 

Date: 7-18-97

VII. ADDITIONAL COMMENTS, DATA, ETC.

The site was formerly a laundry facility which has now been converted into a live-work apartment complex. (See Fig 1 and 2)

In October 1986 1-2K gallon gasoline UST and 3-1,500 gallon stoddard/mineral spirit USTs were removed. In addition, 1-1K gallon diesel UST was closed-in-place. One soil sample each was collected from near the diesel and gasoline tanks and analyzed for TPHg (analysis for TPHd was not performed). TPHg was not identified above the detection limit. A soil sample was also collected from below the solvent tank excavation and analyzed for TPH as heptane-isooctane (TPH-hi). 490ppm TPH-hi was identified in this sample. The solvent tank pit was excavated to ~15'bgs, and a second soil sample was collected. It contained 220ppm TPH-hi.

In March 1994 five borings (CB-1 through CB-5) were drilled around the former USTs to 20' to 25'bgs. Groundwater was encountered at ~20'bgs. Contamination was only observed from boring CB-3 and CB-5, by the former solvent tanks. Up to 4,600ppm TPH as mineral spirit/stoddard solvent (TPH-ms/ss) were identified in soil from 10'bgs. Grab water samples also revealed up to 47,000ppb TPH-ms/ss. Water from boring CB-1, next to the diesel UST, contained 340ppb TPHd (atypical). (See Fig 2, Tables 1 and 2)

In February 1996 three borings (BH-A, BH-B, and BH-C) were drilled to 20' to 25'bgs and converted into wells MW-1, MW-2, and MW-3, respectively. Soil samples were collected at 10'bgs. Only boring BH-A contained elevated TPH. (See Fig 3, Table 3)

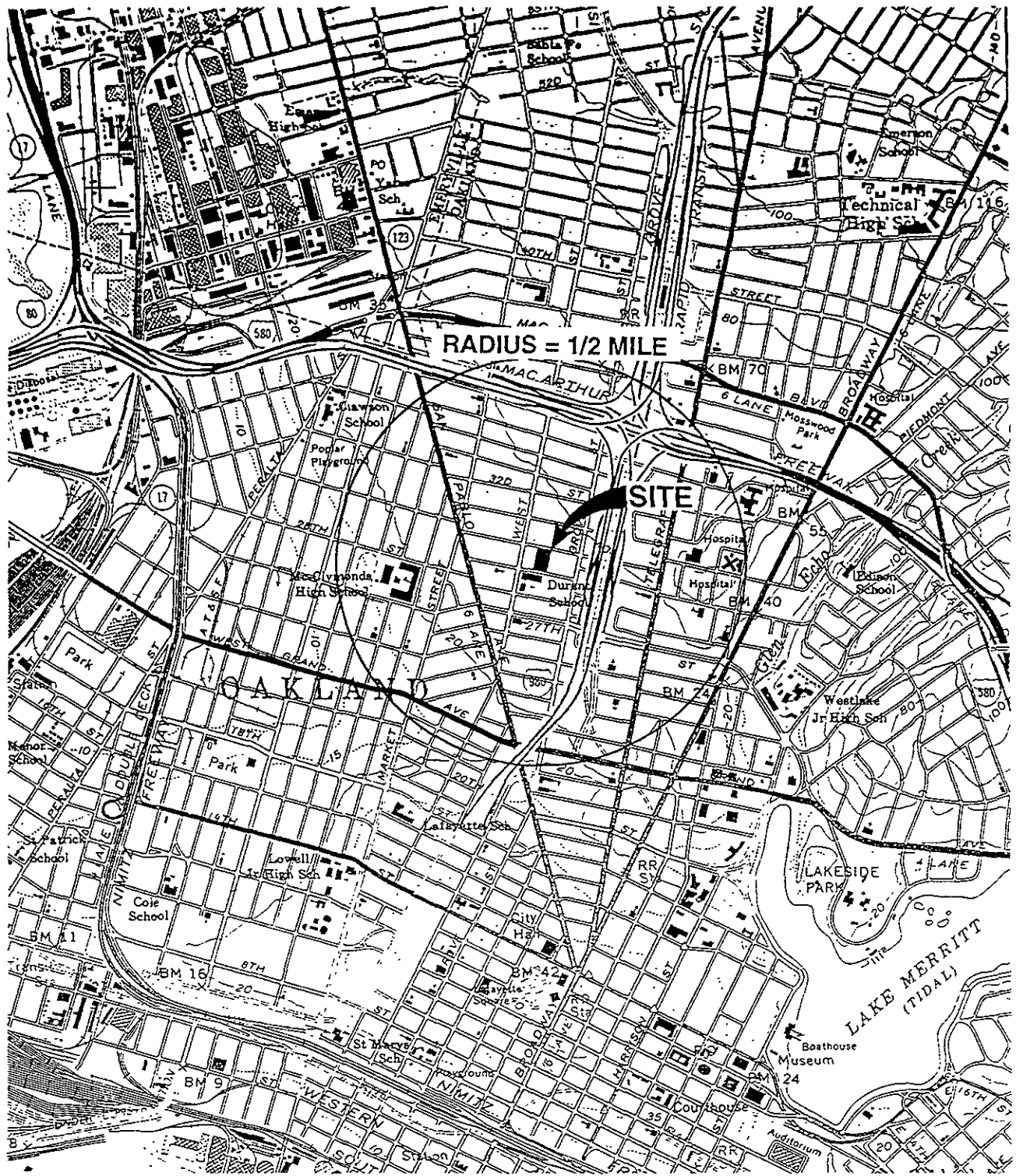
Groundwater was sampled for five consecutive quarters (2/96 to 2/97) and analyzed for TPHg, TPHd, TPHms, TPHss, BTEX, MTBE, and HVOC. Well MW-1 continues to exhibit up to 36,000ppb TPH-ms. And well MW-2 contains ~310ppb TPHd. (See Table 4)

In March 1997 a boring (BH-D) was advanced, using a direct push method, just west of the former diesel tank. A soil (from 15'bgs) and a grab groundwater sample were collected for TPHd analysis. TPHd was not detected above the detection limits. A water sample was also collected from well MW-1 for PNAs analysis. PNAs were not detected in water from well MW-1. (See Table 5)

TPH-ms/ss identified in well MW-1 appears limited in extent. Contamination has not migrated to downgradient well MW-2, approximately 100' away. The chemicals of concern, namely benzene and PNAs, have not been detected at levels which would pose a risk to human health or the environment. Therefore, continued monitoring is not warranted.

In summary, case closure is recommended because:

- o the leak and ongoing 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; and,
- o the site presents no significant risk to human health or the environment.



0 2000 4000
SCALE IN FEET

Source: USGS Topographic Map of the Oakland West 7.5 Minute Quadrangle, California

SITE LOCATION MAP

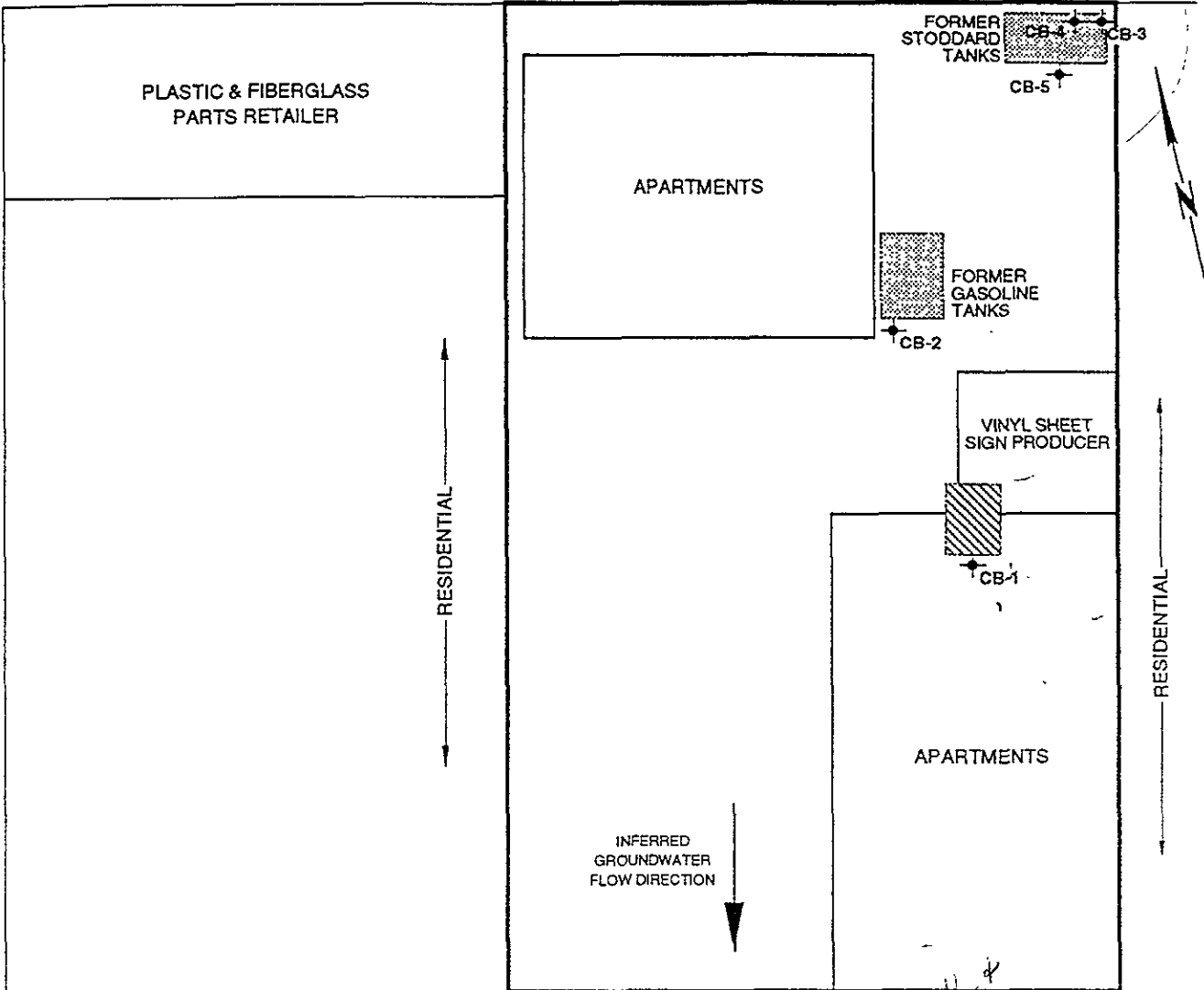
LIVE/WORK APARTMENTS
730 29th Street
Oakland, California

Scale	AS SHOWN	Project No.	93-44-406-0*
Prepared by	RCP	Date	08/12/93
Checked by	TNW	Drawing No	
Approved by	RMB		1

RESIDENTIAL

30th STREET

WEST STREET



RESIDENTIAL

RESIDENTIAL

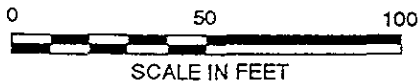
INFERRED
GROUNDWATER
FLOW DIRECTION

LEGEND

CB-1 CORE BORING LOCATION

AREA OF FORMER UNDERGROUND TANK EXCAVATION

AREA OF UNDERGROUND DIESEL TANK ABANDONED IN PLACE



29th STREET

SCHOOL

PLOT PLAN

LIVE / WORK APARTMENTS
730 29th Street
Oakland, California

Scale	AS SHOWN	Project No.	93-44-406-02
Prepared by	TNW	Date	12/13/93
Checked by	RCP	Drawing No.	
Approved by	RCP		2



Converse Environmental West

TABLE 2¹ RESULTS OF HYDROCARBON ANALYSES - SOIL SAMPLES

Live/Work Apartments
730 29th Street
Oakland, California

Core Boring Number	Sample Depth (ft bgs)	Date Sampled	¹ TPH-ss (mg/kg)	¹ TPH-ms (mg/kg)	TPH-d (mg/kg)	TPH-g (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Total Xylenes (mg/kg)
CB-1	5	3/30/94	NA	NA	8.0 ²	NA	ND(0.0025)	ND(0.0025)	ND(0.0025)	0.019
	10	3/30/94	NA	NA	ND(1)	NA	ND(0.0025)	ND(0.0025)	ND(0.0025)	ND(0.0025)
	15	3/30/94	NA	NA	ND(1)	NA	ND(0.0025)	ND(0.0025)	ND(0.0025)	ND(0.0025)
CB-2	5	3/30/94	NA	NA	NA	ND(1)	ND(0.0025)	ND(0.0025)	ND(0.0025)	ND(0.0025)
	10	3/30/94	NA	NA	NA	ND(1)	ND(0.0025)	ND(0.0025)	ND(0.0025)	ND(0.0025)
	15	3/30/94	NA	NA	NA	ND(1)	ND(0.0025)	ND(0.0025)	ND(0.0025)	ND(0.0025)
	19.5	3/30/94	NA	NA	NA	ND(1)	ND(0.0025)	ND(0.0025)	ND(0.0025)	ND(0.0025)
CB-3	7	3/30/94	69	77	NA	ND(20)	NA	NA	NA	NA
	10	3/30/94	1,300	1,500	NA	ND(100)	NA	NA	NA	NA
	15	3/30/94	330	440	NA	ND(50)	NA	NA	NA	NA
	20	3/30/94	780	880	NA	ND(100)	NA	NA	NA	NA
CB-4	5	3/30/94	ND(10)	ND(10)	NA	ND(1)	NA	NA	NA	NA
	10	3/30/94	ND(10)	ND(10)	NA	ND(1)	NA	NA	NA	NA
	15	3/30/94	ND(10)	ND(10)	NA	ND(1)	NA	NA	NA	NA
	18	3/30/94	ND(10)	ND(10)	NA	ND(1)	NA	NA	NA	NA

TABLE 1 (cont'd) RESULTS OF HYDROCARBON ANALYSES - SOIL SAMPLES

Live/Work Apartments
730 29th Street
Oakland, California

Core Boring Number	Sample Depth (ft bgs)	Date Sampled	¹ TPH-ss (mg/kg)	¹ TPH-ms (mg/kg)	TPH-d (mg/kg)	TPH-g (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl-benzene (mg/kg)	Total Xylenes (mg/kg)
CB-5	4.5	3/30/94	1,700	2,000	NA	ND(500)	NA	NA	NA	NA
	10	3/30/94	4,100	4,600	NA	ND(500)	NA	NA	NA	NA
	15	3/30/94	3,400	3,800	NA	ND(200)	NA	NA	NA	NA
	20	3/30/94	4,000	4,500	NA	ND(200)	NA	NA	NA	NA

NOTES:

- 1 Results have been quantified as mineral spirits or as Stoddard solvent since the two could not be distinguished separately from the chromatogram pattern
- 2 Positive result for diesel appears to be a lighter hydrocarbon than diesel.

ft bgs Feet below ground surface.
mg/kg Milligrams per kilogram (parts per million).
TPH-g Total petroleum hydrocarbons quantified as gasoline.
TPH-d Total petroleum hydrocarbons quantified as diesel.
TPH-ss Total petroleum hydrocarbons quantified as Stoddard solvent.
TPH-ms Total petroleum hydrocarbons quantified as mineral spirits.
ND Not detected above laboratory detection limit. Detection limits shown in parenthesis.
NA Not analyzed for the analyte noted

TABLE 2. RESULTS OF HYDROCARBON ANALYSES -
GROUNDWATER SAMPLES

Live/Work Apartments
730 29th Street
Oakland, California

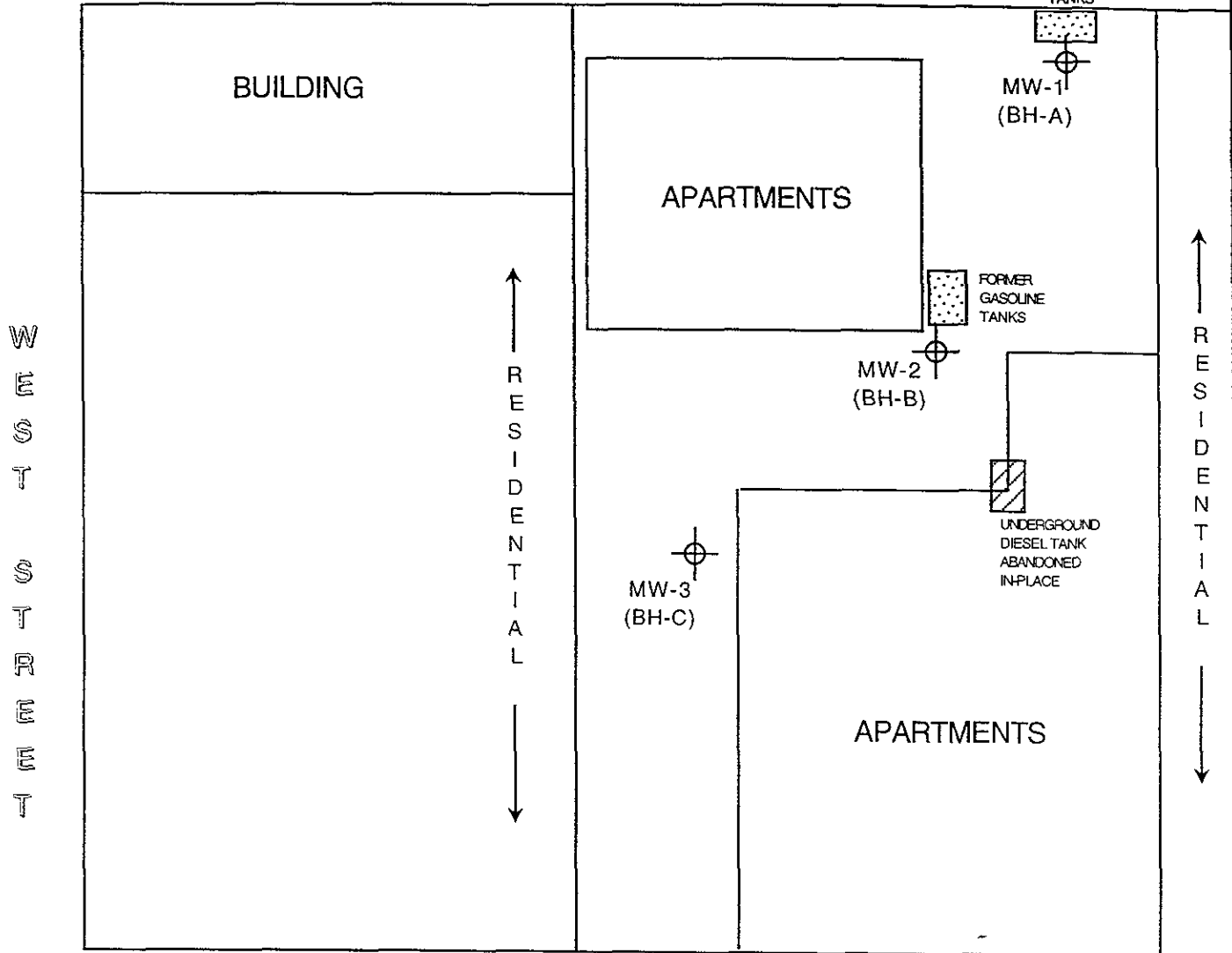
Core Boring Number	Date Sampled	¹ TPH-ss (µg/l)	¹ TPH-ms (µg/l)	TPH-d (µg/l)	TPH-g (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethylbenzene (µg/l)	Total Xylenes (µg/l)
CB-1	3/30/94	NA	NA	340 ²	NA	ND(0.5)	1	ND(0.5)	2
CB-2	3/30/94	NA	NA	NA	ND(50)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
CB-3	3/30/94	40,000	44,000	NA	ND(1,000)	NA	NA	NA	NA
CB-4	3/30/94	110	130	NA	ND(50)	NA	NA	NA	NA
CB-5	3/30/94	42,000	47,000	NA	ND(500)	NA	NA	NA	NA

NOTES:

- 1 Results have been quantified as mineral spirits or as Stoddard solvent since the two could not be distinguished separately from the chromatogram pattern
- 2 Positive result for diesel has an atypical chromatogram pattern for diesel.

µg/l Micrograms per liter (parts per billion).
 TPH-g Total petroleum hydrocarbons quantified as gasoline.
 TPH-d Total petroleum hydrocarbons quantified as diesel.
 TPH-ss Total petroleum hydrocarbons quantified as Stoddard solvent.
 TPH-ms Total petroleum hydrocarbons quantified as mineral spirits.
 ND Not detected above laboratory detection limit. Detection limits shown in parenthesis.
 NA Not analyzed for the analyte noted

30TH STREET



29TH STREET

LEGEND

 MONITORING WELL

 NORTH

SCALE
1" = 50'

MONITORING WELL LOCATION MAP

730 29th STREET
OAKLAND, CALIFORNIA

AQUA SCIENCE ENGINEERS, INC. Figure 2

results are tabulated in Tables One and Two, and a copy of the certified analytical report and chain of custody form are included in Appendix E.

TABLE ONE 3
 Summary of Chemical Analysis of SOIL Samples
 All results are in parts per million

Boring & Depth	TPH-G	TPH-D	TPH-SS	TPH-MS	Benzene	Toluene	Ethyl Benzene	Total Xylenes
BH-A-10.0'	710*	120*	700	770*	<0.1	<0.1	<0.1	2.2
BH-B-10.0'	<1	<1	<1	<1	<0.005	<0.005	<0.005	<0.005
BH-C-10.0'	<1	2.6*	<1	<1	<0.005	<0.005	<0.005	<0.005

Notes:

* = Non-typical chromatogram pattern

TABLE TWO 3
 Summary of Chemical Analysis of SOIL Samples
 All results are in parts per million

Boring & Depth	1,2-Dichloropropane	Other VOCs
BH-A-10.0'	<0.025	<0.005-0.1
BH-B-10.0'	<0.005	<0.001-0.02
BH-C-10.0'	<0.005	<0.001-0.02

710 ppm TPH-G, 770 ppm TPH-MS, 700 ppm TPH-SS, 120 ppm TPH-D and 2.2 ppm xylenes were detected in the soil sample collected from 10.0-foot bgs in boring BH-A; however, only the TPH-SS matched a compound standard. No benzene, toluene, ethylbenzene or other VOCs were detected in the soil sample collected from 10.0-foot bgs in boring BH-A, and no hydrocarbons were detected in soil samples collected from borings BH-B or BH-C.

were present during the purging of monitoring wells MW-2 and MW-3. The pH, temperature and conductivity of the purged water were monitored during the well purging, and samples were not collected until these parameters stabilized. No pH, temperature and conductivity readings were recorded during the purging of monitoring well MW-1 because of fears that the sheen present on the groundwater from that well may damage the meter. Groundwater samples were collected from each well using dedicated polyethylene bailers.

The samples were decanted from the bailers into 40-ml volatile organic analysis (VOA) vials and 1-liter amber glass bottles. The samples were preserved with hydrochloric acid, capped, labeled and placed into an ice chest containing wet ice for transport to Chromalab, Inc. of Pleasanton, California (ELAP #1094) under chain-of-custody. Well sampling field logs are presented in Appendix A.

The well purge water was placed in 55-gallon steel 17H drums, labeled, and left on-site for temporary storage.

The groundwater samples were analyzed for total petroleum hydrocarbons as gasoline (TPH-G) by EPA Method 5030/8015M, total petroleum hydrocarbons as diesel (TPH-D), stoddard solvent (TPH-SS) and mineral spirits (TPH-MS) by EPA Method 3510/8015M, benzene, toluene, ethylbenzene and total xylenes (BTEX) by EPA Method 8020, MTBE by EPA Method 8020, and halogenated volatile organic compounds (HVOCs) by EPA 8010. The analytical results for this and the previous sampling periods are presented in Tables Two and Three, and the certified laboratory report and chain-of-custody form are included as Appendix B.

TABLE ~~THREE~~ 4
Summary of Chemical Analysis of GROUNDWATER Samples
 All results are in parts per billion

Well I.D./ Date	TPH-G	TPH-D	TPH-SS	TPH-MS	Benzene	Toluene	Ethyl Benzene	Total Xylenes
-----	-----	-----	-----	-----	-----	-----	-----	-----
<u>MW-1</u>								
02-28-96	25,000*	2,300*	24,000	30,000*	<2	6	71	270
05-15-96	<250	<50	<50	15,000	<12	<12	30	130
08-01-96	<500	<1,000	<1,000	36,000	<5	20	60	500
11-01-96	<50	460*	<250	9,500	<0.5	<0.5	16	56
02-07-97	<5,000	<1,000	<1,000	36,000	<50	<50	51	310

TABLE ~~III~~ 4
(Continued)

Summary of Chemical Analysis of **GROUNDWATER** Samples
All results are in parts per billion

Well I.D./ Date	TPH-G	TPH-D	TPH-SS	TPH-MS	Benzene	Toluene	Ethyl Benzene	Total Xylenes
<u>MW-2</u>								
02-28-96	<50	440*	<50	<50	<0.5	<0.5	<0.5	<1
05-15-96	<50	<50	<50	<50	<0.5	<0.5	<0.5	<0.5
08-01-96	<50	360*	<52	280	<0.5	<0.5	<0.5	<0.5
11-01-96	<50	260*	<53	<53	<0.5	<0.5	<0.5	<0.5
02-07-97	<50	310*	<50	<50	<0.5	<0.5	<0.5	<0.5
<u>MW-3</u>								
02-28-96	<50	<50	<50	<50	<0.5	<0.5	<0.5	<1
05-15-96	<50	<50	<50	<50	<0.5	<0.5	<0.5	<0.5
08-01-96	<50	<50	<50	62	<0.5	<0.5	<0.5	<0.5
11-01-96	<50	<50	<50	<50	<0.5	<0.5	<0.5	<0.5
02-07-97	<50	<50	<50	<50	<0.5	<0.5	<0.5	<0.5
DTSC MCL	NE	NE	NE	NE	1	100**	680	1,750

Notes:

- * = Non-typical chromatogram pattern
- ** = DTSC recommended action level; MCL not established
- NE = DTSC MCLs and RALs not established

TABLE ~~III~~ 4

Summary of Chemical Analysis of **GROUNDWATER** Samples
All results are in parts per billion

Well	MTBE	TCE	PCE	1,2-DCP	Chloroform	Other HVOCs
<u>MW-1</u>						
02-28-96	---	<2.5	<2.5	6.1	<2.5	< 2.5-50
05-15-96	<120	0.90	<0.5	<0.5	<0.5	<0.5
08-01-96	<50	3.3	6.1	<0.5	<0.5	< 0.5-3
11-01-96	<5.0	0.6	<0.5	2.1	<0.5	< 0.5-5
02-07-97	<500	<3.0	<3.0	<3.0	<3.0	< 3-5
<u>MW-2</u>						
02-28-96	---	<1.0	<1.0	<1.0	<1.0	< 1.0-20
05-15-96	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5
08-01-96	<5.0	<0.5	<0.5	<0.5	<0.5	< 0.5-3
11-01-96	<5.0	<0.5	<0.5	<0.5	<0.5	< 0.5-5
02-07-97	<5.0	<0.5	<0.5	<0.5	<2.0	< 0.5-5

TABLE ~~THREE~~ 4
(Continued)

Summary of Chemical Analysis of **GROUNDWATER** Samples
All results are in parts per billion

Well	MTBE	TCE	PCE	1,2-DCP	Chloroform	Other HVOCs
-----	-----	-----	-----	-----	-----	-----
<u>MW-3</u>						
02-28-96	---	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0-20
05-28-96	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
08-01-96	< 5.0	< 0.5	< 0.5	< 0.5	0.9	< 0.5-3
11-01-96	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5-5
02-07-97	< 5.0	< 0.5	< 0.5	< 0.5	< 2.0	< 0.5-5
DTSC						
MCL	NE	5.0	5.0	5.0	NE	Varies

Notes:

TCE = Trichloroethene

PCE = Tetrachloroethene

1,2-DCP = 1,2-Dichloropropane

HVOCs = Halogenated Volatile Organic Compounds

NE = DTSC MCL and RAL not established

4.0 CONCLUSIONS

Although, a hydrocarbon sheen was present on the groundwater surface in monitoring well MW-1 and elevated TPH-MS concentrations were detected in groundwater samples collected from the well, none of the compounds detected exceeded DTSC MCLs for drinking water this quarter. There is currently no drinking water standard for TPH-MS in water. Only low concentrations of ethylbenzene and total xylenes, below DTSC MCLs for drinking water, were detected in groundwater samples collected from monitoring well MW-1. Only 310 ppb TPH-D were detected in groundwater samples collected from monitoring well MW-2. No other hydrocarbons or HVOCs were detected in groundwater samples collected from monitoring wells MW-2 and MW-3.

5.0 RECOMMENDATIONS

ASE recommends that the case be reviewed by ACHCSA and RWQCB for case closure.

TABLE ~~ONE~~ 5
 Summary of Chemical Analysis of **SOIL** Samples
 All results are in **parts per million**

Boring	Depth Sampled	TPH-D
-----	-----	-----
BH-D	15.0'	<1.0

EXPLANATION OF TABLES

Notes:

Non-detectable concentrations noted by the less than symbol (<) followed by the detection limit

6.0 ANALYTICAL RESULTS FOR GROUNDWATER

The groundwater samples from boring BH-D were analyzed by Chromalab for TPH-D by modified EPA Method 3510/8015 (GCFID). The groundwater samples from monitoring well MW-1 were analyzed by Chromalab for polynuclear aromatic hydrocarbons (PNAs) by EPA Method 8310 (GCFID). The analytical results are tabulated in Table Two, and the certified analytical report and chain of custody forms are included in Appendix C.

cont. **TABLE ~~TWO~~ 5**
 Summary of Chemical Analysis of **GROUNDWATER** Samples
 All results are in **parts per billion**

Boring	TPH-D	All PNAs
-----	-----	-----
BH-D	<77	---
MW-1	---	<0.25 - <23

EXPLANATION OF TABLES

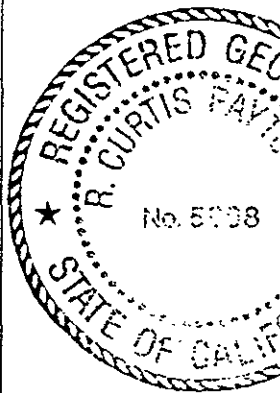
Notes:

Non-detectable concentrations noted by the less than symbol (<) followed by the detection limit.

--- = Not analyzed

Project Name	<u>CIVIC BANK OF COMMERCE</u>	Geologist	<u>Glen Mitchell</u>
Site Address	<u>730 29th Street</u>	Drilling Co./Rig Type	<u>Power Core / Core Boring Apparatus</u>
	<u>Oakland, California</u>	Drillers	<u>Michael Noeswicz</u>
Project No.	<u>93-44-406-03 /B5</u>	Drilling Method	<u>Hollow Stem Auger</u>
Start Date & Time	<u>March 30, 1994</u>	Auger/Bit Diameter	<u>2"</u>
Completion Date & Time	<u>March 30, 1994</u>	Hammer Type	<u>Jack Hammer</u>

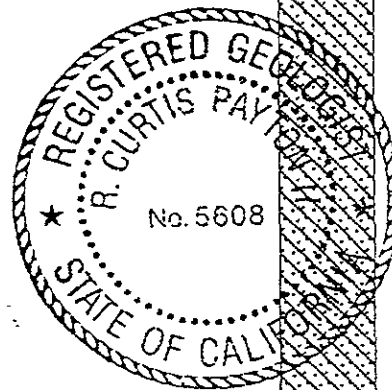
Depth (Ft)	Blows / 6"			OVM (ppmv) (Soil Headspace)	Sample / Recov	Soil Description Order of Description Terms Soil/rock type (general soils code) color & mottling; density; moisture level; grain size (fine to coarse); degree of grading; other tangibles (organics, shell, roots calcium deposits); voids (rootholes, biota holes); intangibles (iron oxide or manganese staining); odors (describe); permeability estimates.	Graphical Symbol	Water Level	Notes Rig behavior; driller comments; breathing zone OVM; flowing sand; date & time of water level measurements.
	2" O.D. (spt)	2.5" O.D.	3.0" O.D.						
						Concrete			
						Void			
						CLAY (CL); brown, firm, moist			
5						as above; gray			
				0		CLAY (CL); with silt, reddish brown, moist, black charcoal (?) fragments			
10				0		as above; grading with coarse-grained sand, moist increasing black charcoal (?) fragments			
				0		CLAYEY SAND (SC); with gravel, reddish tan, firm, moist, coarse-grained, well graded			
15									March 30, 1994 @ 3:30 P
						CLAYEY SAND (SC); tan, loose, wet			
						Decreasing fines with depth			
20						Total Depth of Boring: 20 ft.			





Project Name	<u>CIVIC BANK OF COMMERCE</u>	Geologist	<u>Glen Mitchell</u>
Site Address	<u>730 29th Street</u>	Drilling Co./Rig Type	<u>Power Core / Core Boring Apparatus</u>
	<u>Oakland, California</u>	Drillers	<u>Michael Noeswicz</u>
Project No.	<u>93-44-406-03 /B5</u>	Drilling Method	<u>Hollow Stem Auger</u>
Start Date & Time	<u>March 30, 1994</u>	Auger/Bit Diameter	<u>2"</u>
Completion Date & Time	<u>March 30, 1994</u>	Hammer Type	<u>Jack Hammer</u>

Depth (Ft)	Blows / 6"			OVM (ppmv) (Soil Headspace)	Sample / Recov	Soil Description Order of Description Terms Soil / rock type (general soils code) color & mottling; density; moisture level; grain size (fine to coarse); degree of grading; other tangibles (organics, shell, roots calcium deposits); voids (rootholes, biota holes); intangibles (iron oxide or manganese staining); odors (describe); permeability estimates.	Graphical Symbol	Water Level	Notes Rig behavior; driller comments; breathing zone OVM; flowing sand; date & time of water level measurements.
	2" O.D.(spt)	2.5" O.D.	3.0" O.D.						
						Concrete			
						Base rock			
				104		CLAY (CL); with silt, greenish gray, firm, moist, strong petroleum odor			
5				140		as above; reddish brown, stiff, moist, black veins			
						as above; greenish gray			
10				152		CLAYEY SAND (SC); greenish gray, firm, very moist, strong petroleum hydrocarbon odor			
						as above; with trace gravel			
15				78					
20				480		CLAY (CL); with sand, grayish brown, firm, very moist, strong petroleum hydrocarbon odor			



SOIL BORING LOG AND MONITORING WELL CONSTRUCTION DETAILS

Boring BH-A/Well MW-1

Project Name: Former CivicBank Property

Project Location: 730 - 29th Street, Oakland, CA

Page 1 of 1

Driller: Soils Exploration Services

Type of Rig: CME 55

Type and Size of Auger: 8-inch O.D. Hollow-stem.

Logged By: Robert E. Kitay

Date Drilled: February 22, 1996

Checked By: David M. Schultz, P.E.

WATER AND WELL DATA

Depth of Water First Encountered: 19.4'

Total Depth of Well Completed: 25.0'

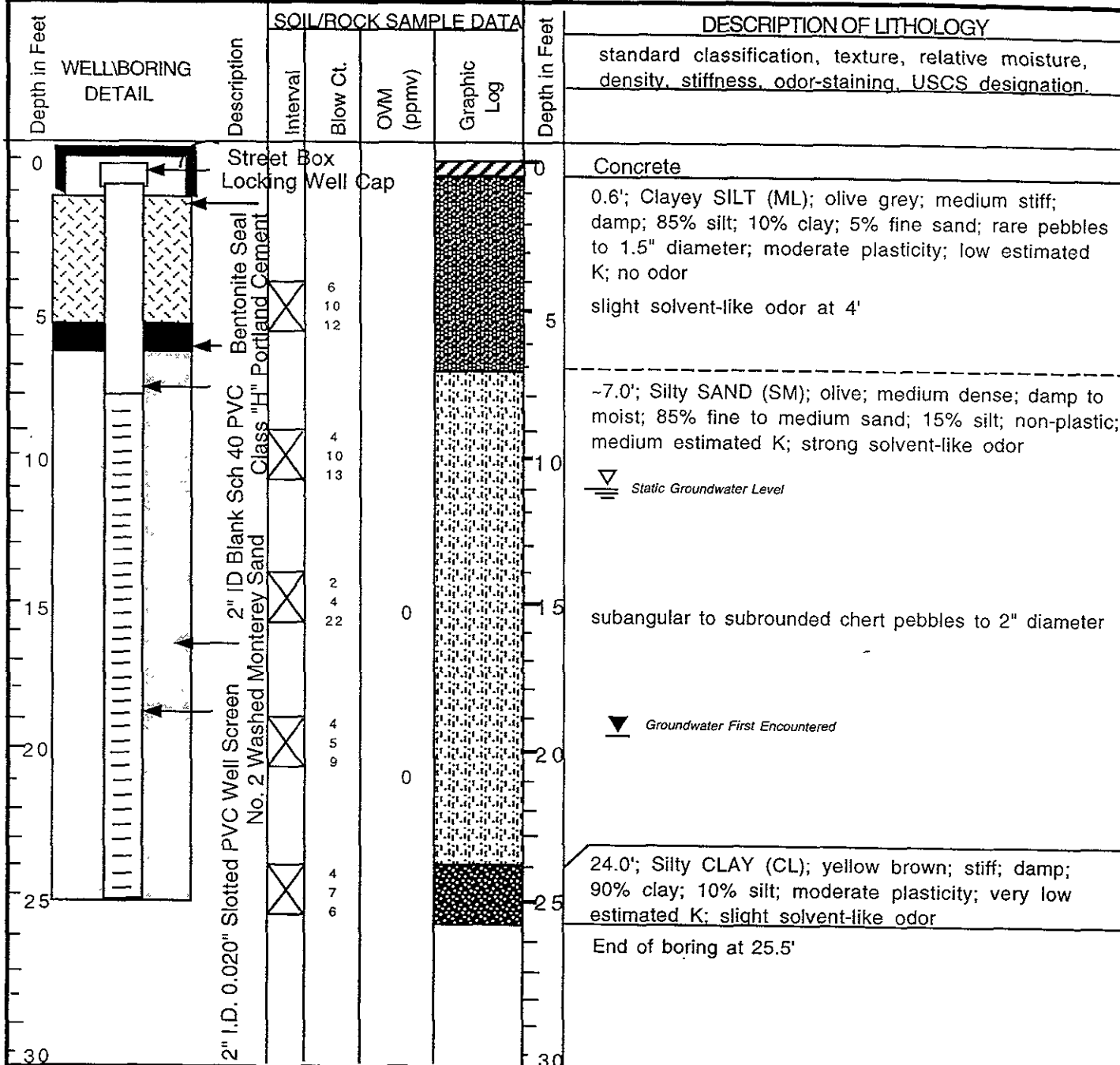
Well Screen Type and Diameter: 2" Diameter Schedule 40 PVC

Static Depth of Water in Well: 10.8'

Well Screen Slot Size: 0.020"

Total Depth of Boring: 25.5'

Type and Size of Soil Sampler: 2" I.D., Calif. Split-barrel



SOIL BORING LOG AND MONITORING WELL CONSTRUCTION DETAILS

Boring BH-B/Well MW-2

Project Name: Former CivicBank Property

Project Location: 730 - 29th Street, Oakland, CA

Page 1 of 1

Driller: Soils Exploration Services

Type of Rig: CME 55

Type and Size of Auger: 8-inch O.D. Hollow-stem.

Logged By: Robert E. Kitay

Date Drilled: February 22, 1996

Checked By: David M. Schultz, P.E.

WATER AND WELL DATA

Depth of Water First Encountered: 14.5'

Total Depth of Well Completed: 20.0'

Well Screen Type and Diameter: 2" Diameter Schedule 40 PVC

Static Depth of Water in Well: 10.8'

Well Screen Slot Size: 0.020"

Total Depth of Boring: 20.5'

Type and Size of Soil Sampler: 2" I.D., Calif. Split-barrel

Depth in Feet	WELLBORING DETAIL	Description	SOIL/ROCK SAMPLE DATA				Depth in Feet	DESCRIPTION OF LITHOLOGY
			Interval	Blow Ct.	OMV (ppmv)	Graphic Log		standard classification, texture, relative moisture, density, stiffness, odor-staining, USCS designation.
0		Street Box Locking Well Cap					0	Concrete
0 - 4		Bentonite Seal					0 - 4	0.6'; Clayey SILT (ML); yellow brown; medium stiff; damp; 85% silt; 10% clay; 5% fine sand; rare quartz pebbles to 1.5" diameter; moderate plasticity; low estimated K; no odor
4 - 6		Portland Cement		4			4 - 6	
6 - 8				6			6 - 8	
8 - 7		2" ID Blank Sch 40 PVC			0		8 - 7	
7 - 18		Class "H" Portland Cement		7			7 - 18	
18 - 29				18			18 - 29	
29 - 6		2" I.D. 0.020" Slotted PVC Well Screen			0		29 - 6	
6 - 11		No. 2 Washed Monterey Sand		6			6 - 11	
11 - 13				11			11 - 13	
13 - 6				13			13 - 6	
6 - 12				12			6 - 12	
12 - 14				14			12 - 14	
14 - 0				0			14 - 0	medium to coarse sand; no odor at 19'
0 - 20.5				0			0 - 20.5	End of boring at 20.5'

Static Groundwater Level

Groundwater First Encountered

SOIL BORING LOG AND MONITORING WELL CONSTRUCTION DETAILS

Boring BH-C/Well MW-3

Project Name: Former CivicBank Property

Project Location: 730 - 29th Street, Oakland, CA

Page 1 of 1

Driller: Soils Exploration Services

Type of Rig: CME 55

Type and Size of Auger: 8-inch O.D. Hollow-stem.

Logged By: Robert E. Kitay

Date Drilled: February 22, 1996

Checked By: David M. Schultz, P.E.

WATER AND WELL DATA

Depth of Water First Encountered: 11.0'

Total Depth of Well Completed: 20.0'

Well Screen Type and Diameter: 2" Diameter Schedule 40 PVC

Static Depth of Water in Well: 10.8'

Well Screen Slot Size: 0.020"

Total Depth of Boring: 20.5'

Type and Size of Soil Sampler: 2" I.D., Calif. Split-barrel

