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

StID 3066

February 16, 2001

Mr. Mike Gilmore
Carolyn McElhinney Trust
123 Scenic Drive
Orinda, CA 94563

Re: Fuel Leak Site Case Closure for 5865 Broadway Terrace, Oakland, CA

Dear Mr. Gilmore:

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 conditions exist at the site:

- up to 310ppm TPH as gasoline, and 0.70ppm benzene exists in soil beneath the site;
- a site safety plan is required for the protection of construction workers in the event excavation/trenching is proposed in the vicinity of residual soil contamination.

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

eva chu
Hazardous Materials Specialist

enlosures: 1. Case Closure Letter 2. Case Closure Summary

c: Leroy Griffin, Oakland Fire Department
files (carservices7)

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REMEDIAL ACTION COMPLETION CERTIFICATION

StID 3066 - 5865 Broadway Terrace, Oakland, CA
(3 underground storage tanks removed on October 7, 1998)

February 16, 2001

Mr. Mike Gilmore
Carolyn McElhinney Trust
123 Scenic Drive
Orinda, CA 94563

Dear Mr. Gilmore:

This letter confirms the completion of site investigation and corrective 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, this agency finds that the site investigation and corrective action carried out at your underground storage tank site is in compliance with the requirements of subdivisions (a) and (b) of Section 25299.37 of the Health and Safety Code and with corrective action regulations adopted pursuant to Section 25299.77 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 25299.37 of the Health and Safety Code. Please contact our office if you have any questions regarding this matter.

Sincerely,

Mee Ling Tung, Director

cc: Chuck Headlee, RWQCB
Allan Patton, SWRCB
Leroy Griffin, OFD
files-ec (carservices6)

RB# 01-2530

CASE CLOSURE SUMMARY
Leaking Underground Fuel Storage Tank Program

I. AGENCY INFORMATION

Date: January 3, 2001

AUG 07 2001

Agency name: **Alameda County-HazMat**
City/State/Zip: **Alameda, CA 94502**
Responsible staff person: **Eva Chu**

Address: **1131 Harbor Bay Pkwy**
Phone: **(510) 567-6700**
Title: **Hazardous Materials Spec.**

II. CASE INFORMATION

Site facility name: **C.A.R. Services**
Site facility address: **5865 Broadway Terrace, Oakland, CA 94618**
RB LUSTIS Case No: **N/A** Local Case No./LOP Case No.: **3066** /RO-277
URF filing date: **12/7/98** SWEEPS No: **N/A**

Responsible Parties:	Addresses:	Phone Numbers:
Mike Gilmore **Carolyn E McElhinney Trust**	**123 Scenic Drive** **Orinda, CA 94563**	**(925) 254-2882**

Tank No:	Size in gal.:	Contents:	Closed in-place or removed?:	Date:
1	3,000	Gasoline	Removed	10/7/98
2	7,500	Gasoline	"	"
3	250	Waste Oil	"	"

III. RELEASE AND SITE CHARACTERIZATION INFORMATION

Cause and type of release: **Unknown cause of gasoline release**
Site characterization complete? **YES**
Date approved by oversight agency: **12/22/2000**
Monitoring Wells installed? **No**
Proper screened interval? **NA**
Highest GW depth below ground surface: **Groundwater was encountered at approximately 14 to 16 feet bgs in boreholes advanced using direct push system**
Flow direction: **Based on topography, groundwater is assumed to flow west/southwest**
Most sensitive current use: **Commercial**
Are drinking water wells affected? **No** Aquifer name:
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 and Oakland Fire Dept-OES, 1605 MLK Jr Wy, Oakland, CA 94612

Treatment and Disposal of Affected Material:

Material	Amount (include units)	Action (Treatment or Disposal w/destination)	Date
Tank	3 USTs	Disposed by Erickson, in Richmond, CA	10/7/98
Soil	788 tons	Disposed at Kelly Canyon L.F. in Pittsburg, CA	5/22 - 6/28/00
Groundwater	625 gallons	Disposed at Alviso Oil in Alviso, CA	5/23/00

Maximum Documented Contaminant Concentrations - - Before and After Cleanup

Contaminant	Soil (ppm)		Water (ppb)	
	Before[1]	After[2]	Before[3]	After[4]
TPH (Gas)	3,800	310	2,200	ND
Benzene	2	0.70	7.3	<0.5
Toluene	ND	1.2	7.9	<0.5
Ethylbenzene	11	0.46	41	<0.5
Xylenes	16	1.3	100	<0.5
MTBE	11	4.0	160	72
Heavy Metals	with geogenic levels			
TOG	ND			

NOTE: 1 soil concentration from tank pit at time of UST removal, 10/98
2 soil concentration after tank pit overexcavation, 6/00
3 grab groundwater collected after overexcavation and after 625 gallons was purged from pit, 5/00
4 grab groundwater collected from soil boring advanced downgradient of tank pit, 4/99

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: **A site safety plan must be prepared for construction workers in the event excavation/trenching is proposed in the vicinity of residual soil and groundwater contamination.**
Should corrective action be reviewed if land use changes? **YES**
Monitoring wells Decommissioned: **NA**
Number Decommissioned: **0** Number Retained: **0**
List enforcement actions taken: **NA**
List enforcement actions rescinded: NA

V. LOCAL AGENCY REPRESENTATIVE DATA

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

Signature: Eva Chu Date: 1/5/01

Reviewed by

Name: **Barney Chan** Title: **Haz Mat Specialist**

Signature: Barney Chan Date: 1/3/01

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

Signature: Thomas Peacock Date: 1-4-01

VI. RWQCB NOTIFICATION

Date Submitted to RB: 1/5/01 RB Response: Concur

RWQCB Staff Name: **Chuck Headlee** Title: **AEG**

Signature: Chuck Headlee Date: 2/8/01

VII. ADDITIONAL COMMENTS, DATA, ETC.

The site currently consists of a gasoline service station with an auto repair facility. A new 20,000-gallon UST (split into two compartments of 12,000 and 8,000 gallons) for the storage of gasoline was installed in May 2000. New dispensers also installed. (See Figs 1 and 2)

In October 1998 the first generation dispenser islands, product piping and three USTs (1-7.5K and 1-3K gallon gasoline UST and a 250-gallon waste oil tank) were removed from the site. Soil samples collected beneath the USTs contained up to 3,800ppm TPHg, 2ppm benzene, and 11ppm MTBE. A four into one composite sample of the stockpiled soil contained up to 1,100ppm TPHg. The stockpiled soil was reused to backfill the excavation. (See Fig 3, Table 1)

In April 1999, five direct push borings (AEI-1 through AEI-5) were advanced to delineate the extent of soil and possible groundwater contamination at the site. Borings AEI-1 and AEI-2 were advanced to a depth of 6'bgs adjacent to the former dispensers. Soil samples collected at 3 feet bgs did not contain petroleum hydrocarbon constituents. Borings AEI-4 and AEI-5 were advanced to 15' and 11.5'bgs, respectively, when refusal was encountered. Groundwater was not encountered in AEI-4 or AEI-5. Soil from boring AEI-4 contained up to 10ppm TPHg, 9.2ppm TPHd, 0.93ppm MTBE and 0.18ppm benzene at 10 feet bgs. The hydrocarbon concentrations decreased at 15 feet bgs. Boring AEI-5 did not contain analytes sought at 5 feet bgs, except for 6.8ppm TPHd. Boring AEI-3 was advanced to 16'bgs. Groundwater was initially encountered at 13 feet bgs. Soil from 5 feet and 10 feet bgs did not contain

hydrocarbon constituents. However, groundwater contained 72ppb MTBE and 11ppb TAME. (See Fig 3 and Tables 2 and 3)

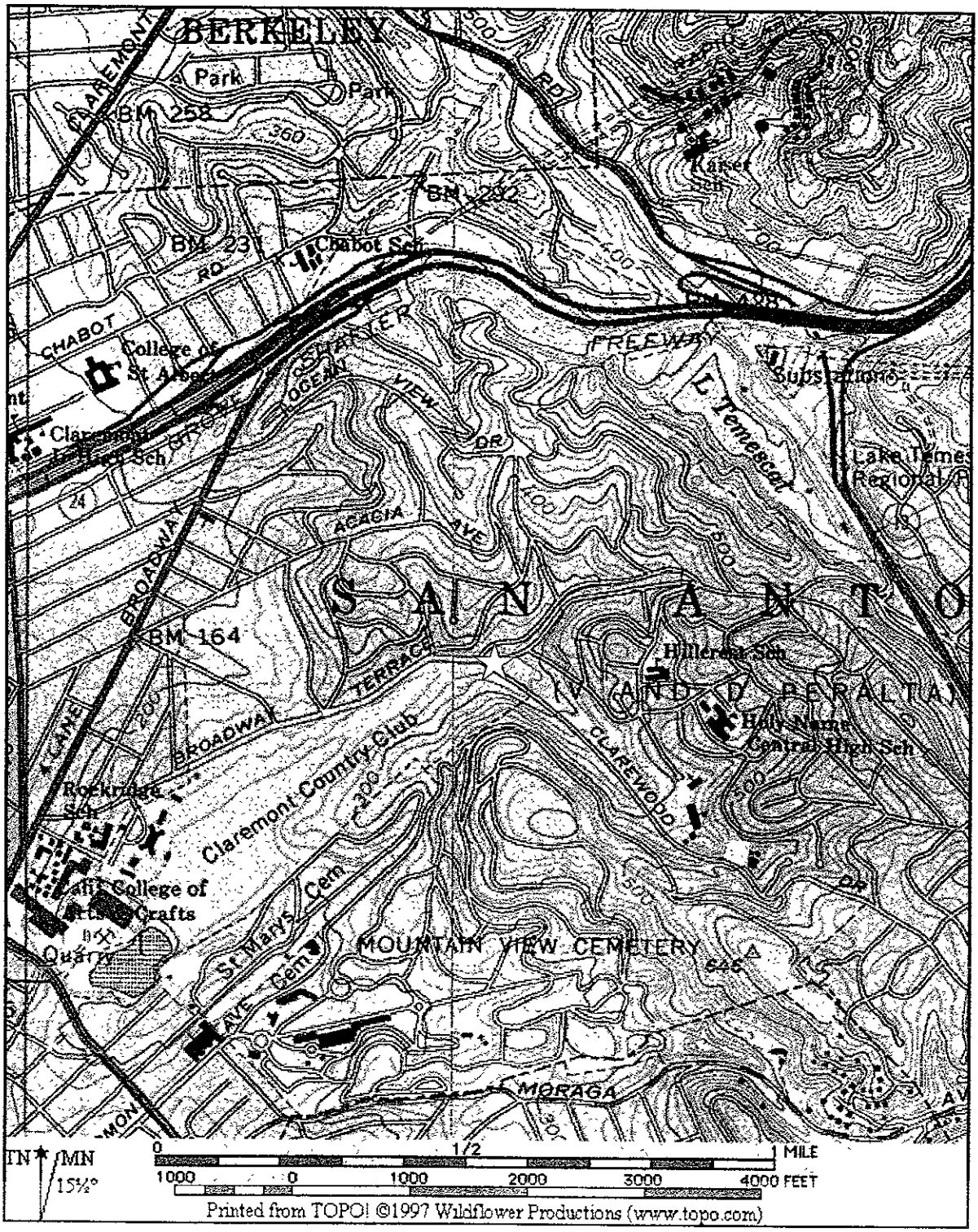
Overexcavation of the former tank pit was performed in May 2000. Approximately 5 feet more of the west wall was removed (to accommodate the installation of a 20K, two-compartment UST). A soil sample was taken from the west wall at 14 feet bgs. Black, silty clay with moderate hydrocarbon odor was noted. A grab groundwater sample was also collected after 625 gallons were purged and groundwater allowed to recharge. Approximately 788 tons of contaminated soil was off-hauled and disposed at Keller Canyon Landfill. (See Fig 5)

The soil sample collected at 14 feet bgs from the west wall contained 310ppm TPHg, 2.8ppm MTBE (Method 8260), 0.13ppm TAME and 0.70ppm benzene. The grab water sample contained 2,200ppb TPHg, 160ppb MTBE, and 7.3ppb benzene. (See Tables 4 and 5)

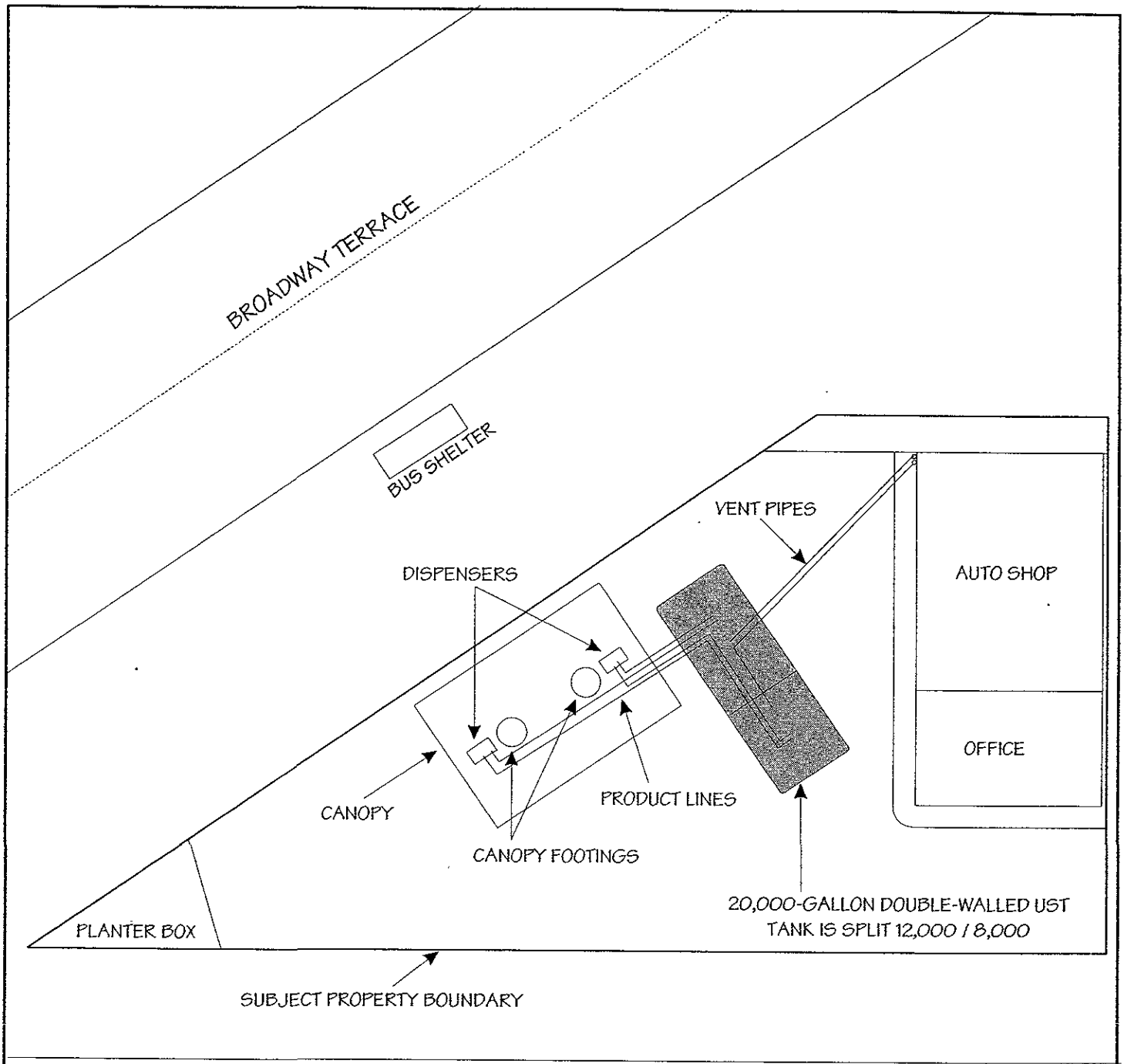
Based on analytical results of soil samples collected from the tank excavation and soil borings advanced in April 1999, it appears that the extent of soil contamination is limited to the immediate vicinity of the tank pit. Bedrock is encountered at the site at various depths, beginning at ~12 to 15 feet bgs at the former tank pit (see Boring Logs). Perched groundwater has been impacted by MTBE. However, the levels do not exceed the RWQCB's RBSL of 1800ppb. A well and conduit survey did not identify any potential sensitive receptors within 1000 feet of the site. A man-made channel/storm drain located within 200 feet of the site is at approximately 8 feet bgs. Unless there is significant seasonal water table fluctuations at the site, the channel should not act as a preferential pathway for contaminants to migrate from the site. Permanent groundwater monitoring wells are not warranted at the site.

In summary, case closure is recommended because:

- the leak and ongoing sources have been removed;
- the site has been adequately characterized;
- the dissolved hydrocarbon plume is not migrating;
- no preferential pathways exist at the site;
- no water wells, deeper drinking water aquifers, surface water, or other sensitive receptors are likely to be impacted; and,
- the site presents no significant risk to human health or the environment.



HK2, Inc./SEMCO 70 Chemical Way Redwood City, CA 94063	☆ *SITE LOCATION*	**SITE LOCATION** C A.R Service 5865 Broadway Terrace Oakland, California **FIGURE 1**
FN 98-0225ustrpt F1 DRWG BAW/12 98		



AEI Consultants

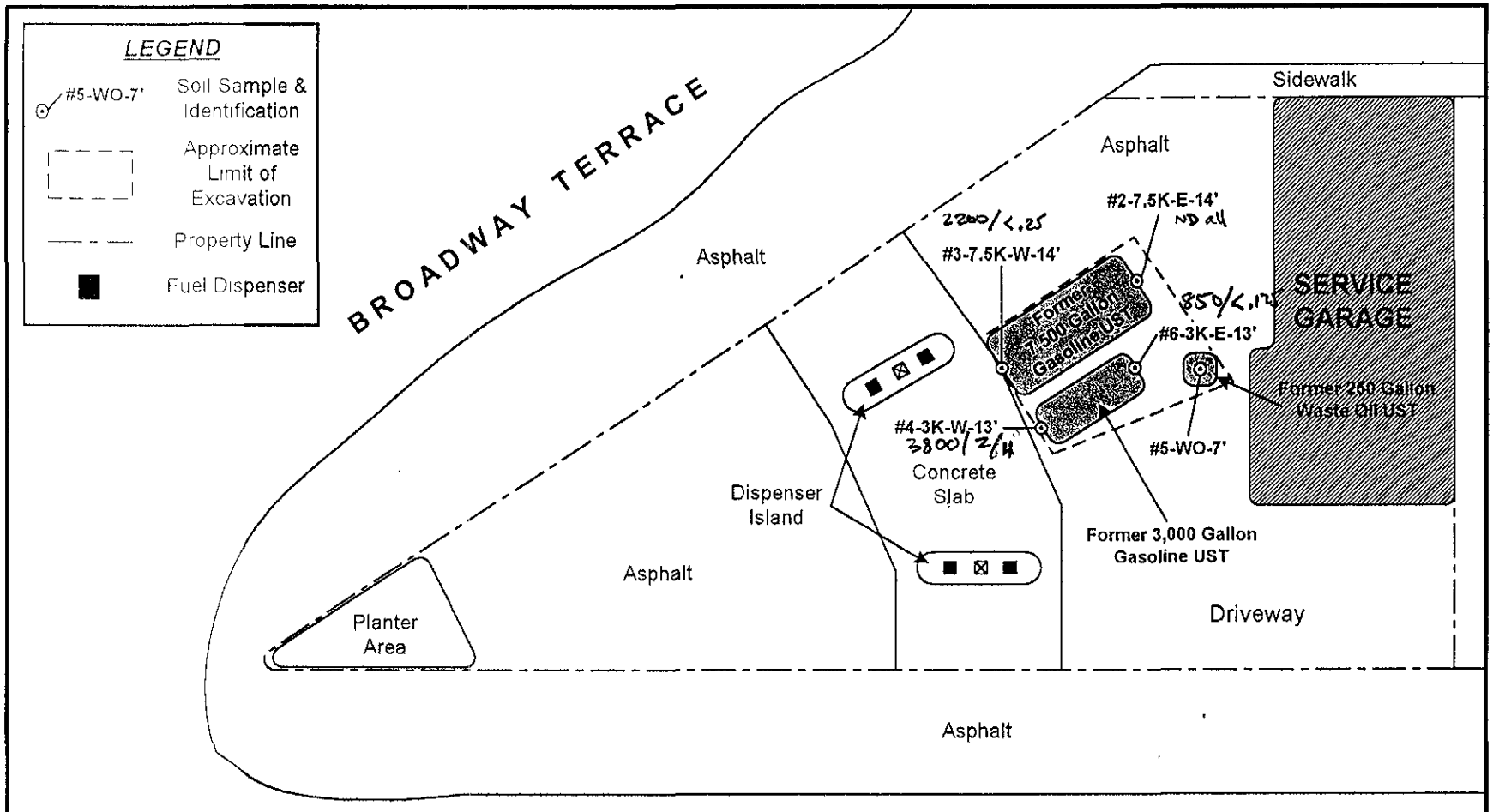
3210 OLD TUNNEL ROAD, SUITE B, LAFAYETTE, CA

SCALE 1" = 20' | DRAWN BY J. ORMEROD | DATE 10/11/00

SITE MAP

5865 BROADWAY TERRACE
OAKLAND, CALIFORNIA

DRAWING NUMBER
FIGURE 2



HK2, Inc./SEMCO
70 Chemical Way
Redwood City, CA 94063

FN 98-0225ustrpt F2 DRWG:BAW/12.98

N E S W

Scale in Feet (Approximate)

0 10 20

SITE PLAN
C.A.R. Service
5865 Broadway Terrace
Oakland, California
FIGURE 3

Table 1

North State Environmental
Chemical Waste Disposal · Tracking · Consulting

CERTIFICATE OF ANALYSIS

Lab Number: 98-1289
Client: Semco
Project: 5865 Broadway Terrace

Date Reported: 10/23/98

Gasoline,BTEX and MTBE by Methods 8015M and 8020
Total Cd, Cr. Ni, Pb and Zn by AA Spectroscopy
Total Extractable Petroleum Hydrocarbons by SM 5520 E & F

Analyte	Method	Result	Unit	Date Sampled	Date Analyzed
Sample: 98-1289-01 Client ID: #1-SP				10/07/98	SOIL COMP.
Gasoline	8015M	1100	mg/Kg		10/14/98
Benzene	8020	ND<0.125	mg/Kg		
Ethylbenzene	8020	4	mg/Kg		
MTBE	8020	*2	mg/Kg		
Toluene	8020	2	mg/Kg		
Xylenes	8020	47	mg/Kg		
Lead	7420	20	mg/Kg		10/14/98
Sample: 98-1289-02 Client ID: #2-7.5K-E-14'				10/07/98	SOIL
Gasoline	8015M	ND			10/14/98
Benzene	8020	ND			
Ethylbenzene	8020	ND			
MTBE	8020	*ND			
Toluene	8020	ND			
Xylenes	8020	ND			
Lead	7420	12	mg/Kg		10/14/98
Sample: 98-1289-03 Client ID: #3-7.5K-W-14'				10/07/98	SOIL
Gasoline	8015M	2200	mg/Kg		10/14/98
Benzene	8020	ND<0.25	mg/Kg		
Ethylbenzene	8020	11	mg/Kg		
MTBE	8020	*ND<0.25	mg/Kg		
Toluene	8020	ND<0.25	mg/Kg		

*Confirmed by GC/MS method 8260.

P.O. Box 5624 · South San Francisco, California 94083 · 650-588-2838 · FAX 588-1950

North State Environmental
Chemical Waste Disposal · Trucking · Consulting

cont. Table 1

C E R T I F I C A T E O F A N A L Y S I S

Lab Number: 98-1289
Client: Semco
Project: 5865 Broadway Terrace

Date Reported: 10/23/98

Gasoline,BTEX and MTBE by Methods 8015M and 8020
Total Cd, Cr, Ni, Pb and Zn by AA Spectroscopy
Total Extractable Petroleum Hydrocarbons by SM 5520 E & F

nalyte	Method	Result	Unit	Date Sampled	Date Analyzed
ample: 98-1289-03	Client ID: #3-7.5K-W-14'			10/07/98	SOIL
ylenes	8020	16	mg/Kg		
ead	7420	3	mg/Kg		10/14/98
ample: 98-1289-04	Client ID: #4-3K-W-13'			10/07/98	SOIL
asoline	8015M	3800	mg/Kg		10/14/98
enzene	8020	2	mg/Kg		
thylbenzene	8020	ND<0.25	mg/Kg		
TBE	8020	*11	mg/Kg		
oluene	8020	ND<0.25	mg/Kg		
ylenes	8020	ND<0.5	mg/Kg		
ead	7420	3	mg/Kg		10/14/98
ample: 98-1289-05	Client ID: #5-WO-7'			10/07/98	SOIL
admium	7130	ND			10/14/98
hromium	7190	47	mg/Kg		
ead	7420	15	mg/Kg		
ickel	7520	63	mg/Kg		
inc	7950	71	mg/Kg		
asoline	8015M	2	mg/Kg		10/14/98
enzene	8020	ND			
thylbenzene	8020	0.017	mg/Kg		
TBE	8020	*ND			
oluene	8020	0.005	mg/Kg		

*Confirmed by GC/MS method 8260.

P O Box 5624 • South San Francisco, California 94083 • 650-588-2838 FAX 588-1950

cont. Table 1

North State Environmental
Chemical Waste Disposal · Trucking · Consulting

C E R T I F I C A T E O F A N A L Y S I S

) Number: 98-1289
.ent: Semco
)ject: 5865 Broadway Terrace

:e Reported: 10/23/98

Gasoline,BTEX and MTBE by Methods 8015M and 8020
Total Cd, Cr, Ni, Pb and Zn by AA Spectroscopy
Total Extractable Petroleum Hydrocarbons by SM 5520 E & F

.yte	Method	Result	Unit	Date Sampled	Date Analyzed
)le: 98-1289-05 Client ID: #5-WO-7'				10/07/98	SOIL
:nes	8020	ND			
[	5520F	ND			10/12/98
)le: 98-1289-06 Client ID: #6-3K-E-13'				10/07/98	SOIL
)line	8015M	850	mg/Kg		10/14/98
:ene B	8020	ND<0.125	mg/Kg		
'lbenzene	8020	1	mg/Kg		
: MTBE	8020	*ND<0.12	mg/Kg		
ıene T	8020	ND<0.125	mg/Kg		
:nes X	8020	ND<0.25	mg/Kg		
l	7420	3	mg/Kg		10/14/98

)nfirmed by GC/MS method 8260.

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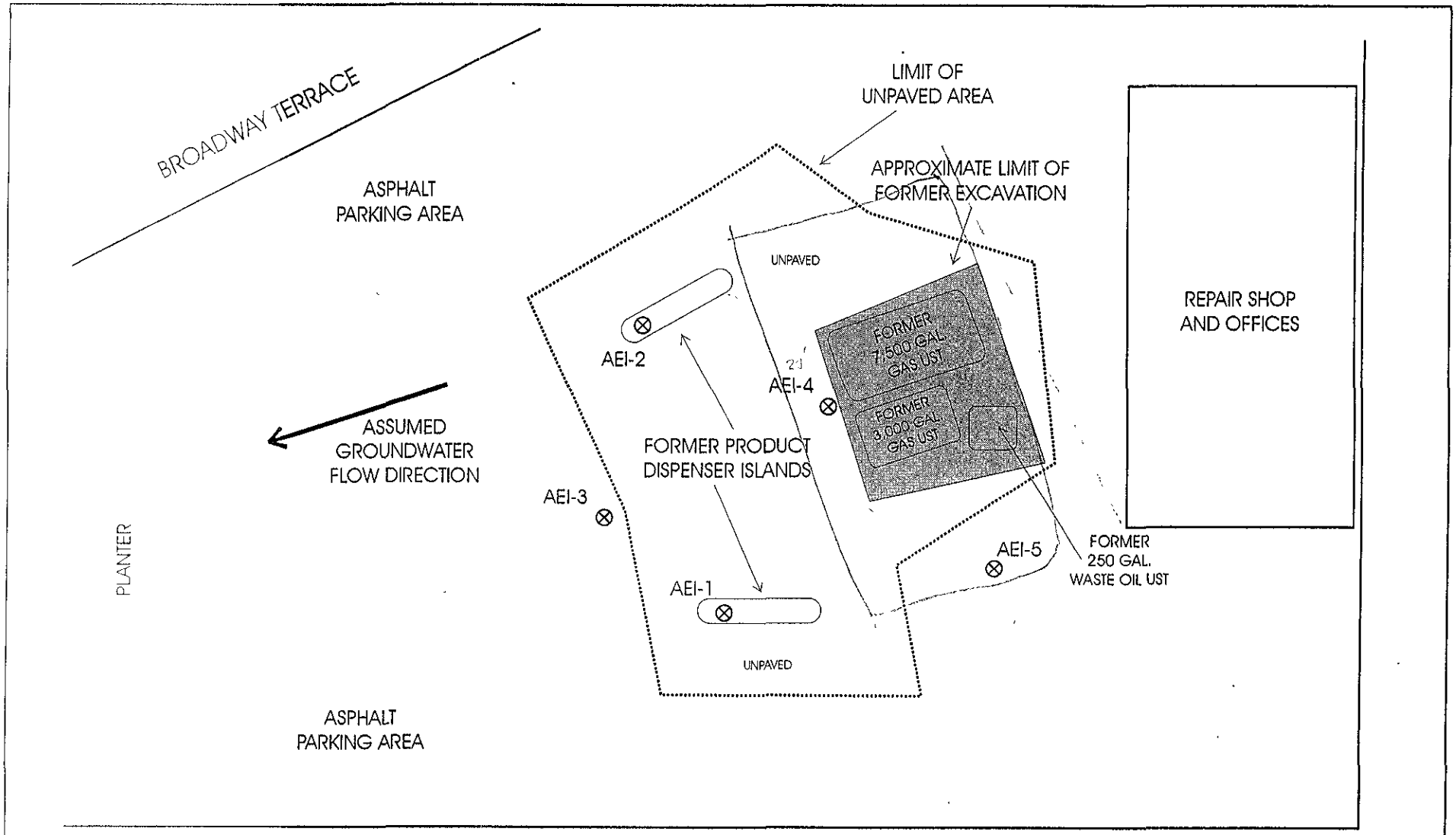


ALL ENVIRONMENTAL, INC.
901 MORAGA ROAD, SUITE C, LAFAYETTE, CA

SITE PLAN

5865 BROADWAY TERRACE
OAKLAND, CALIFORNIA

FIGURE 4

⊗ AEI-1 SOIL BORING LOCATIONS AND IDENTIFICATION

0 10 20
SCALE: 1In. = 16 ft.

N

Table 2
Soil Sample Analytical Results
April 5, 1999

Sample ID	TPH as gasoline mg/kg	TPH as diesel mg/kg	Fuel Oxygenates by EPA 8260					Benzene mg/kg	Toluene mg/kg	Ethylbenzene mg/kg	Xylenes mg/kg	PAHs* mg/kg
			DIPE µg/kg	ETBE µg/kg	MTBE µg/kg	TAME µg/kg	t-Butanol µg/kg					
AEI-1 3'	<1.0	<1.0	-	-	<50	-	-	<0.005	<0.005	<0.005	<0.005	-
AEI-2 3'	<1.0	<1.0	-	-	<50	-	-	<0.005	<0.005	<0.005	<0.005	-
AEI-3 5'	<1.0	<1.0	-	-	<50	-	-	<0.005	<0.005	<0.005	<0.005	-
AEI-3 10'	<1.0	<1.0	-	-	<50	-	-	<0.005	<0.005	<0.005	<0.005	-
AEI-4 10'	19	**9.2**	<50	<50	**930**	<50	<250	**0.18**	**0.076**	**0.15**	**0.45**	<0.33
AEI-4 15'	<1.0	<1.0	-	-	**130**	-	-	<0.005	**0.011**	<0.005	**0.007**	-
AEI-5 5'	<1.0	**6.8**	-	-	<50	-	-	<0.005	<0.005	<0.005	<0.005	-
AEI-5 9'	<1.0	<1.0	-	-	<50	-	-	<0.005	<0.005	<0.005	<0.005	-
MDL	1.0	1.0	50	50	50	50	250	0.005	0.005	0.005	0.005	0.33

MDL - Method Detection Limit

ND - Not detected above the Method Detection Limit (unless otherwise noted)

ug/kg = micrograms per kilogram (ppb)

mg/kg = milligrams per kilogram (ppm)

- Not Analyzed

* - All Polynuclear Aromatic Hydrocarbons (PAH) by EPA method 8270 were not detected above the MDL

Table 3
Groundwater Sample Analytical Results
April 5, 1999

Sample ID	TPH as gasoline µg/L	Fuel Oxygenates by EPA 8260					Benzene µg/L	Toluene µg/L	Ethylbenzene µg/L	Xylenes µg/L	VOCs* µg/L
		DIPE µg/L	ETBE µg/L	MTBE µg/L	TAME µg/L	t-Butanol µg/L					
AEI-3 W	<50	<1.0	<1.0	**72**	**11**	<5.0	<0.5	<0.5	<0.5	<0.5	<1.0
MDL	50	1.0	1.0	1.0	1.0	5.0	0.5	0.5	0.5	0.5	1.0

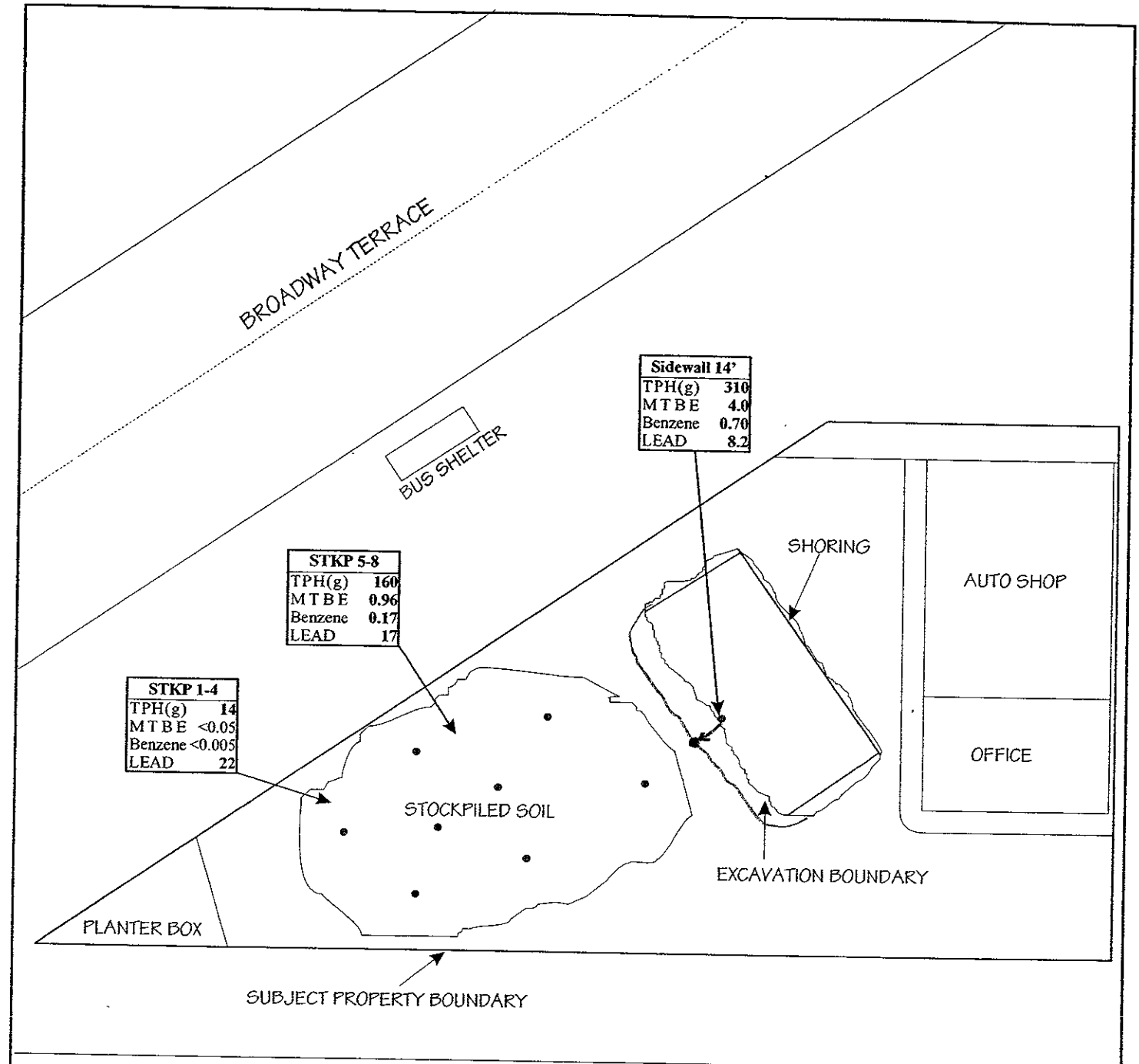
MDL = Method Detection Limit

ND = Not detected above the Method Detection Limit (unless otherwise noted)

µg/L = micrograms per liter (ppb)

mg/L = milligrams per liter (ppm)

* - All Volatile Organic Compounds (VOC) analyzed by EPA method 8260 were not detected above the MDL



KEY

- SOIL SAMPLE LOCATION

TPH(g) TOTAL PETROLEUM HYDROCARBON AS GASOLINE
MTBE METHYL TERTIARY BUTYL ETHER
LEAD TOTAL LEAD

SOIL SAMPLE RESULTS IN mg/kg

N

AEI Consultants

3210 OLD TUNNEL ROAD, SUITE B, LAFAYETTE, CA

SCALE 1" = 20' | DRAWN BY J. ORMEROD | DATE 10.11.00

SAMPLE LOCATION MAP

5865 BROADWAY TERRACE
OAKLAND, CALIFORNIA

DRAWING NUMBER
FIGURE 5

TABLE 4 - Soil Sample Analyses

	Sidewall 14'	STKP 1-4	STKP 5-8
TPH-GASOLINE (mg/kg)	310	14	160
MTBE (mg/kg)	4.0	<0.05	0.96
Di-isopropyl Ether (µg/kg)	<100	NA	NA
Ethyl tert-Butyl Ether (µg/kg)	<100	NA	NA
Methyl-tert Butyl Ether (µg/kg)	2800	NA	NA
tert-Amyl Methyl Ether (µg/kg)	130	NA	NA
tert-Butanol (µg/kg)	<500	NA	NA
BENZENE (mg/kg)	0.70	<0.005	0.17
TOLUENE (mg/kg)	1.2	0.057	0.86
ETHYL BENZENE (mg/kg)	0.46	0.10	0.26
TOTAL XYLENES (mg/kg)	1.3	0.36	0.40
TOTAL LEAD (mg/kg)	8.2	22	17

mg/kg = milligrams per kilogram (parts per million)
mg/kg = micrograms per kilogram (parts per billion)
NA = not analyzed

TABLE 5 - Groundwater Sample Analyses

	GW 14'
TPH-GASOLINE (µg/L)	2200
MTBE (µg/L)	160
BENZENE (µg/L)	7.3
TOLUENE (µg/L)	7.9
ETHYL BENZENE (µg/L)	41
TOTAL XYLENES (µg/L)	100

µg/L = micrograms per liter (ppb)
mg/L = milligrams per liter (ppm)

Project No: 3177

Project Name: Broadway Terrace

Client: Mike Gilmore

Location: South Dispenser

Sheet: 1 of 1

Log of Borehole: AEI-1

Depth (ft)	Depth (m)	Soil Symbol	Subsurface Description	Sample Data: Sample Label	Sample Data: Type	Sample Data: Blow Counts/	Sample Data: Recovery	Well Data	Remarks
0	0		Ground Surface						
1									Discrete sampling
2									
3	1		***SAND*** Fine sand with minor silt and gravel	AEI-1 3'	SS	NA	60		Slight product odor PID = 0.0 ppm
4									
5			Clay increasing	AEI-1 5'	SS	NA	60		PID = 3 ppm
6	2		End of Borehole						
7									
8									
9									
10	3								
11									
12									
13	4								
14									
15									
16	5								
17									
18									
19									
20	6								

Drill Date 4/5/99

Drill Method Direct Push

Total Depth 6

Depth to Water NA

Reviewed by JPD

Logged by PJM

All Environmental Inc
901 Moraga Road, Suite C
Lafayette, CA 94549
(800) 801-3224

Project No: 3177

Sheet: 1 of 1

Project Name: Broadway Terrace

Client: Mike Gilmore

Location: North Dispenser

Log of Borehole: AEI-2

Depth (ft / m)	Soil Symbol	Subsurface Description	Sample Data: Sample Label	Type	Blow Counts/	Recovery	Well Data	Remarks
0 / 0		Ground Surface						Discrete sampling
1								
2								No product odor
3 / 1		***SAND*** Fine silty sand with minor silt and gravel up to 1 cm	AEI-2 3'	SS	NA	60		PID = 5 ppm
4								
5		Minor clay	AEI-2 5'	SS	NA	90		PID = 0 ppm
6 / 2		End of Borehole						
7								
8								
9								
10 / 3								
11								
12								
13 / 4								
14								
15								
16 / 5								
17								
18								
19								
20 / 6								

Drill Date 4/5/99

Drill Method Direct Push

Total Depth 6

Depth to Water NA

Reviewed by JPD

Logged by PJM

All Environmental, Inc
901 Moraga Road, Suite C
Lafayette, CA 94549
(800) 801-3224

Project No: 3177

Sheet: 1 of 1

Project Name: Broadway Terrace

Client: Mike Gilmore

Location: West of excavation

Log of Borehole: AEI-3

Depth (ft / m)	Soil Symbol	Subsurface Description	Sample Data: Sample Label	Type	Blow Counts/	Recovery	Well Data	Remarks
0 / 0		Ground Surface						
0		***PEA GRAVEL AND SAND FILL***						Continuous coring
1								
2								
3 / 1		***SAND*** Silty sand with minor clay and gravel up to 1 cm						PID = 8 ppm
4								
5			AEI-3 5'	SS	NA	-		
6 / 2		***CLAY*** Clay with silt and sand and 10% gravels up to 3 cm, damp						PID = 6 ppm No product odor
7								
8								
9								PID = 6 ppm
10 / 3			AEI-3 10'	SS	NA	-		Static Water Level at 10 feet bgs
11								
12								No product odor
13 / 4		Saturated	AEI-3 13'	SS	NA	-	▼	Initial Water Level
14								
15		***SILT*** Silt with sand and clasts up to 1.5 cm, saturated						
16 / 5		End of Borehole						
17								
18								
19								
20 / 6								

Drill Date 4/5/99

Drill Method Direct Push

Total Depth 16

Depth to Water 13

Reviewed by JPD

Logged by PJM

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Project No: 3177

Sheet: 1 of 1

Project Name: Broadway Terrace

Client: Mike Gilmore

Location: Near former USTs

Log of Borehole: AEI-4

Depth (ft / m)	Soil Symbol	Subsurface Description	Sample Data: Sample Label	Type	Blow Counts/	Recovery	Well Data	Remarks
0 / 0		Ground Surface						
0		***PEA GRAVEL AND SAND FILL***						Continuous coring
1								
2								
3 / 1		***SAND*** Sand with silt and angular clasts up to 2 cm						PID Malfunction
4								
5			AEI-4 5'	SS	NA	-		
6		***SAND and CLAY*** Interbedded sand and clay with angular clasts up to 2 cm						Strong Hydrocarbon Odor
7								
8								
9								Strong Hydrocarbon Odor
10 / 3			AEI-4 10'	SS	NA	-		
11		Sand decreasing						
12								
13 / 4								Strong Hydrocarbon Odor
14		Angular clasts > 50%						No Groundwater Generated
15			AEI-4 15'	SS	NA	-		Refusal Encountered
		End of Borehole						
16 / 5								
17								
18								
19								
20 / 6								

Drill Date 4/5/99

Drill Method Direct Push

Total Depth 15

Depth to Water NA

Reviewed by JPD

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Project No: 3177

Sheet: 1 of 1

Project Name: Broadway Terrace

Client: Mike Gilmore

Location: South of Excavation

Log of Borehole: AEI-5

Depth (ft / m)	Soil Symbol	Subsurface Description	Sample Data: Sample Label	Sample Data: Type	Sample Data: Blow Counts/	Sample Data: Recovery	Well Data	Remarks
0 / 0		Ground Surface						
1		***ASPHALT and FILL***						Continuous coring
2		***SAND*** Coarse sand with clay and coarse gravel up to 3 cm, loose						
3 / 1								PID Malfunction
4								
5			AEI-5 5'	SS	NA	-		
6								No Hydrocarbon Odor
7 / 2								
8								No Hydrocarbbon Odor
9		Sand decreasing	AEI-5 9'	SS	NA	-		
10 / 3		Clay increasing						
11		***CLAY*** Sandy clay with angular clasts, wet						Wet sample, no significant water generated
12		End of Borehole						Refusal Encountered
13 / 4								
14								
15								
16 / 5								
17								
18								
19								
20 / 6								

Drill Date 4/5/99

Drill Method Direct Push

Total Depth 11 5

Depth to Water NA

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