



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

**REMEDIAL ACTION COMPLETION CERTIFICATION**

**StID 3788- 2452 Magnolia Street, Oakland, CA  
(1-1,500 gallon gasoline tank removed on June 3, 1988)**

April 21, 1999

Mr. Francis Collins  
c/o Debra Baker  
P.O.Box 8685  
Emeryville, CA 94662

Dear Mr. Collins:

This letter confirms the completion of site investigation and remedial action for the underground storage tank 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.

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 (magnolia-8)



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StID 3788

April 21, 1999

Mr. Francis Collins  
c/o Debra Baker  
P.O.Box 8685  
Emeryville, CA 94662

**Re: Fuel Leak Site Case Closure for 2452 Magnolia Street, Oakland, CA**

Dear Mr. Collins:

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 75,000ppm TPH as gasoline and 5.6ppm benzene exists in soil beneath the planter area;
- up to 17,000ppb TPHg and 440ppb benzene exists in groundwater beneath the planter area;
- a site safety plan must be prepared for construction workers in the event of excavation/trenching is proposed in the vicinity of residual soil and groundwater contamination; and,
- "No Dumping" signs will be posted in the planter area.

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

eva chu  
Hazardous Materials Specialist

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

c: Frank Kliewer, City of Oakland, Planning Dept, 1330 Broadway, 2<sup>nd</sup> Floor, Oakland, CA 94612  
files (magnolia-9)

**CASE CLOSURE SUMMARY**  
**Leaking Underground Fuel Storage Tank Program**

99 APR 20 PM 1:23

**I. AGENCY INFORMATION**

**Date: March 8, 1999**

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: **Blount International, LTD**  
Site facility address: **2452 Magnolia Street, Oakland, CA 94608**  
RB LUSTIS Case No: **N/A** Local Case No./LOP Case No.: **3788**  
URF filing date: **6/21/88** SWEEPS No: **N/A**

<u>Responsible Parties:</u>	<u>Addresses:</u>	<u>Phone Numbers:</u>
Francis Collins c/o Debra Baker	P.O. Box 8685 Emeryville, CA 94662	510/653-6871

<u>Tank No:</u>	<u>Size in gal.:</u>	<u>Contents:</u>	<u>Closed in-place or removed?:</u>	<u>Date:</u>
1	1,500	Gasoline	Removed	6/3/88

**III. RELEASE AND SITE CHARACTERIZATION INFORMATION**

Cause and type of release: **Unknown**  
 Site characterization complete? **YES**  
 Date approved by oversight agency: **2/4/99**  
 Monitoring Wells installed? **Yes** Number: **1**  
 Proper screened interval? **Yes, 6' to 20'bgs, but there were times when groundwater was above the screened interval.**  
 Highest GW depth below ground surface: **3.37'** Lowest depth: **7.64'**  
 Flow direction: **Possible SW to SE (based on groundwater data from nearby sites)**  
 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):  
 Report(s) on file? **YES** Where is report(s) filed? **Alameda County** **Oakland Fire Dept**  
**1131 Harbor Bay Pkwy and** **505 14<sup>th</sup> St, Ste 510**  
**Alameda, CA 94502** **Oakland, CA 94612**

**Treatment and Disposal of Affected Material:**

<u>Material</u>	<u>Amount (include units)</u>	<u>Action (Treatment or Disposal w/destination)</u>	<u>Date</u>
Tank	One	Disposed by H & H Ship Service, San Francisco	6/3/88

**Maximum Documented Contaminant Concentrations - - Before and After Cleanup**

Contaminant	Soil (ppm)		Water (ppb)	
	Before <sup>1</sup>	After <sup>2</sup>	Before <sup>3</sup>	After <sup>4</sup>
TPH (Gas)	3,300		< 50	ND
TPH (Diesel)	62		560	ND
Benzene	< 0.01		< 0.5	ND
Toluene	< 0.01		< 0.5	ND
Ethylbenzene	0.42		< 0.5	ND
Xylenes	0.82		< 0.5	ND
MTBE	NA		ND	NA

Other

- NOTE: 1 TPH results collected from tank pit at time of tank removal, 6/88. BTEX results from HP-2 or HP-3, located within 25' of former UST, 3/95. Soil from HP-1, located 60' from the former UST contained 75,000ppm TPHg, and 5.6, 45, 17, and 96ppm BTEX, respectively, in 3/95
- 2 no overexcavation of tank pit performed
- 3 Water sample collected from hydropunch HP-2 or HP-3, located within 25' of former UST, 3/95 and 6/95. Groundwater from HP-1, approximately 60' from the former UST contained 17,000ppb TPHg, and 440, 2,300, 480, and 2,600ppb BTEX, respectively, in 3/95
- 4 results from groundwater monitoring well, 3/95

**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. "No Dumping" signs will be posted in the planter area.**

Should corrective action be reviewed if land use changes? **YES**

Monitoring wells Decommissioned: **Yes**

Number Decommissioned: **1** Number Retained: **0**


List enforcement actions taken:

List enforcement actions rescinded:

**V. LOCAL AGENCY REPRESENTATIVE DATA**

Name: **Eva Chu**

Title: **Haz Mat Specialist**

Signature: 

Date: **3/23/99**

**Reviewed by**

Name: **Juliet Shin**

Title: **Haz Mat Specialist**

Signature: 

Date: **03/15/99**

Name: **Thomas Peacock**

Title: **Supervisor**

Signature: 

Date: **3-22-99**

**VI. RWQCB NOTIFICATION**

Date Submitted to RB: **3/24/99**

RB Response:

RWQCB Staff Name: **Chuck Headlee**

Title: **EG**

Signature: 

Date: **4/9/99**

**VII. ADDITIONAL COMMENTS, DATA, ETC.**

The site is currently used as industrial artist studios. There are 33 units in the complex leased to painters, sculptors, photographers, writers, musicians, hardware designers, etc. The current complex was constructed in 1988/89, after the entire property was leveled. New sewer lines were installed and the foundation was poured with the plumbing in the foundation.

Before the current complex was constructed, one 1500-gallon gasoline underground storage tank (USTs) was removed from the site on June 3, 1988. Gasoline odor was noted in the soil from the pit. Four soil samples were collected at ~10-' to 11-' below ground surface (bgs) and analyzed for Total Petroleum Hydrocarbon (TPH) using EPA Method 8015. Up to 3,300ppm TPH was detected in the soil samples.

In February 1989 a groundwater monitoring well, MW-M1, was installed ~20' west of the former tank excavation. A soil sample was collected at 6'bgs and analyzed for TPH as gasoline (TPHg), TPH as diesel (TPHd), TPH as kerosene (TPHk), and Benzene, Toluene, and Xylenes (BTX). None of the analytes sought were identified above the laboratory detection limits. A groundwater sample collected also did not contain the above analytes. Subsequent sampling of Well MW-M1 in May, September, December 1989 did not identify TPHg, TPHd, TPHk or BTEX in groundwater. ( See Fig 1, Table 2)

Although groundwater samples collected from MW-M1 were non detect for the contaminants of concern, it was uncertain whether MW-M1 was located downgradient of the former tank since groundwater investigation at nearby sites (2331 Magnolia and 2311 Adeline) identified groundwater to be flowing to the SSW to SE. Therefore, additional investigations were required to assess groundwater quality "downgradient" of the former UST. Two hydropunches were completed in March 1995. HP-1 was located approximately 60' southwest of the former UST (in a planter area out in the sidewalk). And HP-2 was approximately 25' southeast of the former UST. Soil samples were collected from HP-1 at 6.5' to 7.0' bgs and 8.5' to 9'bgs, and from HP-2 at 6.5-7.0' bgs. Groundwater was encountered at ~9'bgs.

Soil and groundwater analytical results revealed elevated TPHg and BTEX from boring HP-1. Low to ND concentrations of petroleum hydrocarbons were in HP-2. It was suspected that the hydrocarbon detected in HP-1 was due to a surface spill, unrelated to the former UST. To verify this, hydropunch HP-3 was advanced between the former tank and HP-1. Unremarkable levels of petroleum hydrocarbons were found in soil and groundwater samples from HP-3. Subsequently, in December 1998, Borings B1-5 and B2-5 were advanced in the vicinity of former boring HP-1 to delineate the extent of soil and groundwater contamination in the planter area. Groundwater was encountered at 10' to 12'bgs. Elevated hydrocarbon concentrations were found in soil and groundwater from boring B1-5 (located near former boring HP-1). However, subsurface contamination appeared limited in extent, as boring B2-5 contained significantly lower levels of hydrocarbons, as did soil and water samples from borings MW-M1 and HP-3. (See Fig 1, 2, Table 1 - 4)

The surface spill appears to be due to illegal dumping, possibly by persons performing automotive repairs in the streets. The groundwater contaminant plume appears limited in extent. If the illegal dumping of hazardous wastes into the planter area is prevented, residual hydrocarbons in soil and groundwater should naturally bioattenuate. Additional subsurface investigations are not warranted.

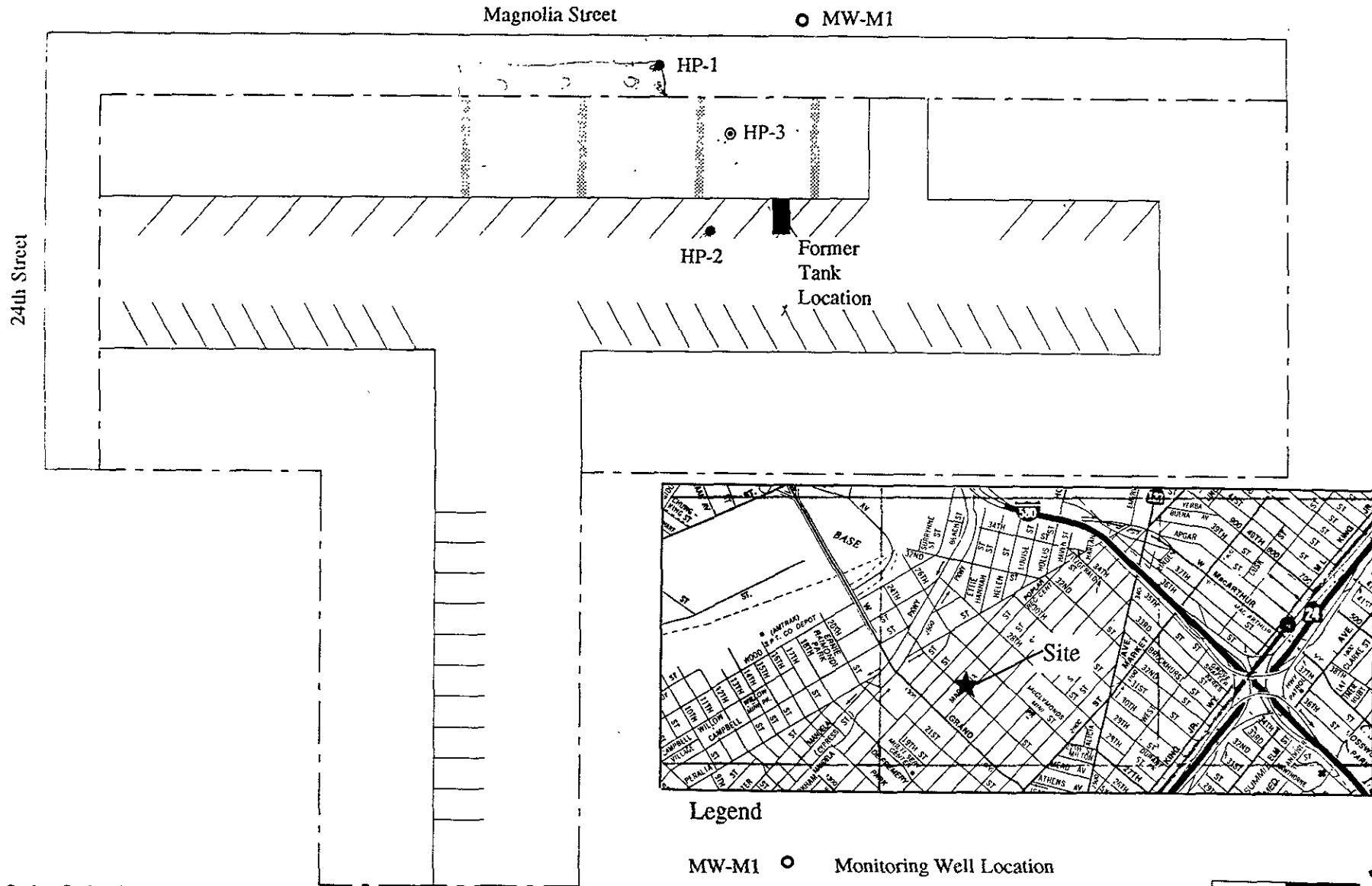
In summary, case closure is recommended because:

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

*Residual soil and groundwater contamination is limited to the planter area, outside the building structure. Volatilization of vapors from soil and/or groundwater to outdoor air (uncapped planter area) would be the preferential pathway for the migration of contaminants. Based on ASTM's RBCA Tier 1 Look Up Table, soil and groundwater volatilization of benzene (5.6ppm in soil, and 440ppb in groundwater) to outdoor air does not pose a significant risk to human health in a commercial scenario.*

# SITE PLAN AND SAMPLING LOCATIONS

Figure 1

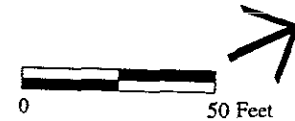


**2452 Magnolia Street  
Emeryville, California**

Adeline Street

### Legend

- MW-M1 ○ Monitoring Well Location
- HP-1 ● Hydropunch Location
- B-1 ⊙ Proposed Boring Location



**BASELINE**

**TABLE 1: SUMMARY OF ANALYTICAL RESULTS, SOIL**  
**2452 Magnolia Street, Oakland, California**  
**March and June 1995**  
(mg/kg)

Sample ID	Date	Depth (feet)	Diesel <sup>1</sup>	Gasoline <sup>1</sup>	Benzene <sup>2</sup>	Toluene <sup>2</sup>	Ethylbenzene <sup>2</sup>	Total Xylenes <sup>2</sup>
HP-1	3/16/95	6.5-7.0	--	75,000	0.27	2.8	1.2	6.8
	3/16/95	8.5-9.0	--	910	5.6	45	17	96
HP-2	3/16/95	6.5-7.0	--	65	<0.013	<0.013	0.42	0.82
HP-3	6/6/95	3.0-3.5	62 <sup>3</sup>	<1.0	<0.005	<0.005	<0.005	<0.005
	6/6/95	6.5-7.0	<1.0	<1.0	<0.005	<0.005	<0.005	<0.005

Notes: -- = Not analyzed for.

<xx = Compound reported below laboratory reporting limits.

Sampling locations presented in Figure 1.

Laboratory report for the June 1995 sampling is included in Appendix B.

<sup>1</sup> California DOHS Method/LUFT Manual, October 1989.

<sup>2</sup> EPA Method 8020.

<sup>3</sup> The chromatogram for this sample does not resemble the laboratory diesel standard

**TABLE 2: SUMMARY OF ANALYTICAL RESULTS, GROUNDWATER**  
**2452 Magnolia Street, Oakland, California**  
(µg/L)

Sample ID	Date	Diesel <sup>1</sup>	TPH as Gasoline <sup>1</sup>	Benzene <sup>2</sup>	Toluene <sup>2</sup>	Ethylbenzene <sup>2</sup>	Total Xylenes <sup>2</sup>
MW-M1	02/13/89	--	<50	<1	<1	<1	<1
	05/01/89	--	<50	<1	<1	<1	<1
	09/13/89	--	<50	<0.5	<0.5	<0.5	<0.5
	12/04/89	--	<50	<1	<1	<1	<1
	03/16/95	--	<50	<0.5	<0.5	<0.5	<0.5
HP-1 <sup>3</sup>	03/16/95	--	17,000	440	2,300	480	2,600
HP-2 <sup>3</sup>	03/16/95	--	<50	<0.5	<0.5	<0.5	<0.5
HP-3 <sup>3</sup>	06/07/95	560 <sup>4</sup>	<50	<0.5	<0.5	<0.5	<0.5

Notes: -- = Not analyzed for.

<xx = Compound reported below laboratory reporting limits.

Sampling locations presented in Figure 1.

Laboratory report for the June 1995 sampling event is included in Appendix B.

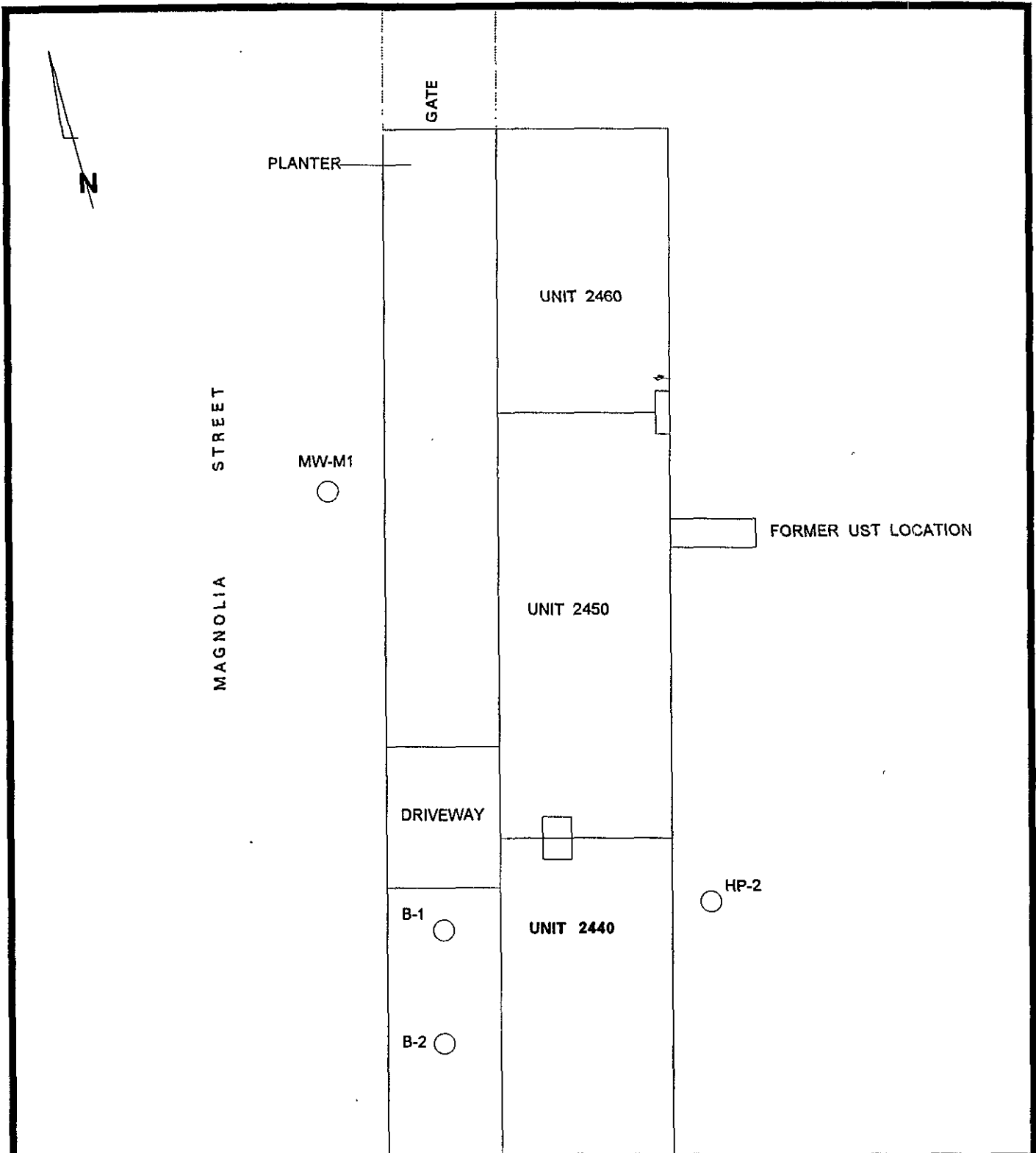
<sup>1</sup> California DOHS Method/LUFT Manual, October 1989.

<sup>2</sup> EPA Method 8020.

<sup>3</sup> Groundwater samples collected using hydropunch method.

<sup>4</sup> Sample chromatogram does not resemble the laboratory diesel standard.





**FIGURE 2**

**MAP TYPE:** SITE PLAN

○ B-1 SOIL BORING LOCATION

**SITE ADDRESS:** 2440 MAGNOLIA STREET, OAKLAND, CALIFORNIA

**DATE:** JANUARY 15, 1999

**PROJECT CODE:** SE-121/FC-08

**SCALE:** 1" : 10'

**SEQUOIA ENVIRONMENTAL CONSULTING SERVICES**

1510 514 1900  
SAN LEANDRO, CA

**TABLE 3**

**Summary of Analytical Results  
of Soil Samples** ppm

Sample I.D	TPH-G	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes
B1-5'	590	ND	2.6	14	12	55
B2-5'	ND	ND	ND	ND	ND	ND

Note: Concentrations in soil samples are reported in milligrams per kilogram (ppm).

ND = Non-detect or below the reporting limit.

**4.2 Grab Groundwater Samples**

Two grab groundwater samples, B1-5 and B2-5, were collected from the soil borings' B-1 and B-2 respectively. The samples were analyzed for TPH-G, BTEX and MTBE using EPA Methods 8015 and 8020. Laboratory results show that groundwater sample from boring B-1 contained detectable levels of TPH-G and BTEX. The results also show that groundwater sample from boring B-2 contained low levels of TPH-G and BTEX. Summary of groundwater analytical results is presented in Table 2. Detailed laboratory results and chain of custody form are in Appendix B.

**TABLE 4**

**Summary of Analytical Results  
of Grab Groundwater Samples** ppb

Sample I.D	TPH-G	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes
B1-5	92,000	ND <1,500	3300	17,000	3,800	19,000
B2-5	89	ND	1.0	6.0	2.8	1.4

Note: Concentrations of groundwater samples are reported in microgram per liter (ppb).



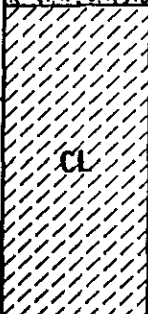

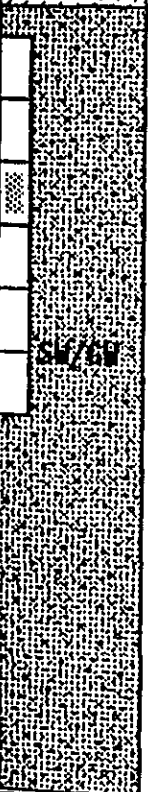
ND = Non-detect or below the reporting limit.

**DRILLING LOG**

**BASELINE**  
 5900 Hollis St., "D"  
 Emeryville, CA 94608  
 (415) 420-8686

Location Banta Collins - 2452 Magnolia St.  
 Driller ASE Drilling  
 Method Hollow Stem Continuous Flight  
 Logger WKS Datum \_\_\_\_\_

Boring No. MW-M1  
 Date 2/8/89  
 Bore size 7"  
 Casing size 2"

Depth	Graphic	Lithology	Notes
0 ft		Asphalt top.	
1		Base rock.	
2		Very dark gray/black, CLAY, moist.	No odor.
3			
4		Greenish gray, sandy CLAY, moist.	
5			
6		Dark yellowish brown, sandy GRAVEL, gravelly SAND, moist.	8-16-22 Blow counts
7			9-12-10
8			
9			
10			

DRILLING LOG

BASELINE  
 5900 Hollis St., "D"  
 Emeryville, CA 94608  
 (415) 420-8686

Location	<u>Banta Collins - 2452 Magnolia Street</u>	Boring No.	<u>MW-M1</u>
Driller	<u>ASE Drilling</u>	Date	<u>2/8/89</u>
Method	<u>Hollow Stem Continuous Flight</u>	Bore size	<u>7"</u>
Logger	<u>WKS</u> Datum _____	Casing size	<u>2"</u>

Depth	Graphic	Lithology	Notes
11 ft			
12			
13			
14			
15			
16			
17			
18			
19			
20			
21			
		Total depth 20.5 feet.	

# DRILLING LOG

Location	2452 Magnolia Street, Oakland	Boring no.	HP-1
Driller	Precision Sampling	Project no.	S9105-B0
Method	Hydraulically-driven	Date	3/16/95
Logger	WKS Datum	Bore size	2"
		Casing size	1"

Depth (ft.)	Graphic	Lithology	Notes
0	CL	Dark brown, silty CLAY, low plasticity, soft, rootlets, very moist.	
1			
2			
3	CH	Greenish-gray, mottled, silty CLAY, trace of gravel and sand, subangular 1/2- to 1/3-inch diameter clasts, very fine-grained, high plasticity, veinlets, firm, very moist.	Petroleum odor HNu = 0 ppm in breathing zone HNu = 0 ppm in borehole HNu = 4 ppm at sample
4			
5			
6			
7	SW	Greenish-gray, SAND with gravel and trace of clay, fine- to coarse-grained, subangular to angular clasts, 1/3- to 2/3-inch diameter, medium dense, very moist to wet.	HNu = 0 ppm in breathing zone HNu = 5 ppm in borehole HNu = 240 ppm at sample
8			
9			
10			

# DRILLING LOG

Location	2452 Magnolia Street, Oakland		Boring no.	HP-1
Driller	Precision Sampling		Project no.	S9105-B0
Method	Hydraulically-driven		Date	3/16/95
Logger	WKS	Datum	Bore size	2"
			Casing size	1"

Depth (ft.)	Graphic	Lithology	Notes
10	SP	Dark greenish-gray, SAND, trace of silt, fine-grained, medium dense, wet.	
11	GW	Brown, GRAVEL with sand, subangular to subrounded 1/3- to 3/4-inch diameter clasts, medium- to coarse-grained, medium dense, wet.	Petroleum odor
12	CH	Light brown, silty CLAY, trace of sand and gravel, highly plastic, firm, wet.	Less odor
13		Total depth = 13.0 feet.	
14			
15			
16			
17			
18			
19			
20			

# DRILLING LOG

Location	2452 Magnolia Street, Oakland	Boring no.	HP-2
Driller	Precision Sampling	Project no.	S9105-B0
Method	Hydraulically-driven	Date	3/16/95
Logger	WKS	Datum	Bore size 2"
		Casing size	1"

Depth (ft.)	Graphic	Lithology	Notes
0		Concrete slab	
1			
2	CL	Very dark brown, sandy CLAY with silt, very fine-grained, low plasticity, soft to very soft, wet.	
3			
4	CH	Greenish-gray, silty CLAY, trace of gravel, subangular 1/3- to 2/3-inch diameter clasts, high plasticity, firm, moist.	HNu = 0 ppm in breathing zone HNu = 3 ppm in borehole HNu = 70 ppm at sample Petroleum odor
5			
6	CH-GC	Greenish-gray, gravelly CLAY to clayey GRAVEL with sand, 1/3- to 1.5-inch diameter subangular clasts, highly plastic, fine- to medium-grained, very moist.	
7			HNu = 0 ppm in breathing zone HNu = 4 ppm in borehole HNu = 250 ppm at sample
8			HNu = 6 ppm at sample
9	SW	Brown, SAND with gravel, some clay, fine- to coarse-grained, subangular to subrounded clasts, 1/3- to 1-inch diameter, medium dense, wet.	
10			

# DRILLING LOG

Location	2452 Magnolia Street, Oakland	Boring no.	HP-2
Driller	Precision Sampling	Project no.	S9105-B0
Method	Hydraulically-driven	Date	3/16/95
Logger	WKS Datum	Bore size	2"
		Casing size	1"

Depth (ft.)	Graphic	Lithology	Notes
10		Some interbedding of clayey silt, light brown, 1 inch thick.	
11			
12	CH	Light brown, silty CLAY with gravel, highly plastic, 1/3- to 3/4-inch diameter subangular to subrounded clasts, firm, very moist.	
13		Total depth = 13.0 feet.	
14			
15			
16			
17			
18			
19			
20			



# DRILLING LOG

Location	2452 Magnolia Street, Oakland	Boring no.	HP-3
Driller	Precision Drilling	Project no.	S9105-B0
Method	Hydraulically-driven	Date	6/6/95
Logger	WKS	Datum	Bore size 2"
		Casing size	

Depth (ft.)	Graphic	Lithology	Notes
0		Concrete slab (7")	
		Baseroack	
1		Concrete slab (8")	
2	CH	Olive, CLAY with gravel, high plasticity, firm, very moist.	
3	CH	Black, silty CLAY, high plasticity, soft, wet.	Gastech = 0% LEL HNu = 0 ppm in breathing zone HNu = 3 ppm at sample
4			Possible perched water at 3.0 ft.
5			
6			
7	GC/CH	Greenish-gray, gravelly CLAY with sand, high plasticity, 1/2- to 3/4-inch diameter angular to subangular clasts, stiff, very moist.	Gastech = 0% LEL HNu = 0 ppm in breathing zone HNu = 0 ppm at sample
8			
9			Gastech = 0% LEL HNu = 0 ppm in breathing zone HNu = 0 ppm at sample
10		Olive brown, clayey GRAVEL with sand, 1/2- to 1-inch diameter subangular to angular clasts, high plasticity, medium dense to dense, very moist.	

# DRILLING LOG

Location	2452 Magnolia Street, Oakland	Boring no.	HP-3
Driller	Precision Drilling	Project no.	S9105-B0
Method	Hydraulically-driven	Date	6/6/95
Logger	WKS	Datum	Bore size 2"
			Casing size

Depth (ft.)	Graphic	Lithology	Notes
10			
11		Becoming wet at 11.0 feet.	Water observed between grains starting at 11.0 feet.
12			Gastech = 0% LEL in borehole HNu = 0 ppm in breathing zone HNu = 0 ppm at sample
13			
14	CH	Pale brown, silty CLAY, trace of gravel, high plasticity, firm to stiff, wet.	
15			
16		Total depth = 16.0 feet.	Installed 1" PVC. Pulled auger, let water come in hole.
17			
18			
19			
20			

# DRILLING AND LITHOLOGIC LOG

BORING B-1

PROJECT NAME: Magnolia Street LOCATION: 2440 Magnolia Street, Oakland, California  
 DRILLING METHOD: Continuous Coring TOTAL DEPTH OF HOLE: 12 Feet DATE DRILLED: December 11, 1998  
 INITIAL DEPTH TO GROUNDWATER: 12 Feet STATIC WATER LEVEL: 4 Feet LENGTH OF SCREEN: N/A  
 DIAMETER OF SCREEN: N/A SLOT SIZE: N/A LENGTH OF CASING: N/A DIAMETER OF CASING: N/A  
 SAMPLER TYPE: Core Sampler DRILLING COMPANY: Vironex, Inc.  
 LOGGED BY: Chris Wabuzoh REVIEWED BY: Ola Balogun, P.E. CA #41747

CORE SAMPLE CONDITION LEGEND  UNDISTURBED  DISTURBED  NO RECOVERY

DESCRIPTION	DEPTH	USCS SYMBOL	SAMPLES			WELL CONSTRUCTION	
			NUMBER	CONDITION	BLOWS	PIPE	FILL
0 to 2 Feet (Dark Fill Materials of plant soil, has strong petroleum hydrocarbon odor).							
SANDY CLAY: Greenish; about 40% hard, angular to subrounded, coarse to fine sand; about 60% of clay with low plasticity; moist; has strong hydrocarbon odor; no reaction with hydrochloric acid (HCL).	5	CL	B1-5'	<input checked="" type="checkbox"/>			
SANDY CLAY: Brownish; about 45% hard, subangular to rounded, coarse to fine sand; about 55% clay with low to medium plasticity; saturated; moderate odor; no reaction with HCL.	10	CL		<input checked="" type="checkbox"/>			
Groundwater was encountered at 10 feet below ground surface. Drilling was stopped at 12 feet below ground surface.	15						
	20						

# DRILLING AND LITHOLOGIC LOG

BORING B-2

PROJECT NAME: Magnolia Street LOCATION: 2440 Magnolia Street, Oakland, California  
 DRILLING METHOD: Continuous Coring TOTAL DEPTH OF HOLE: 16 Feet DATE DRILLED: December 11, 1998  
 INITIAL DEPTH TO GROUNDWATER: 12 Feet STATIC WATER LEVEL: 4 Feet LENGTH OF SCREEN: N/A  
 DIAMETER OF SCREEN: N/A SLOT SIZE: N/A LENGTH OF CASING: N/A DIAMETER OF CASING: N/A  
 SAMPLER TYPE: Core Sampler DRILLING COMPANY: Vironex, Inc.  
 LOGGED BY: Chris Wabuzoh REVIEWED BY: Ola Balogun, P.E. CA #41747

CORE SAMPLE CONDITION LEGEND



UNDISTURBED



DISTURBED



NO RECOVERY

DESCRIPTION	DEPTH	USCS SYMBOL	SAMPLES			WELL CONSTRUCTION	
			NUMBER	CONDITION	BLOWS	PIPE	FILL
<p>0 to 2 Feet (Dark, Fill Materials of plant soil, has no petroleum hydrocarbon odor).</p> <p>SANDY CLAY: Brownish; about 40% hard, angular to subrounded, coarse to fine sand; about 60% of clay with low plasticity; moist; has no petroleum hydrocarbon odor; no reaction with hydrochloric acid (HCL).</p> <p>SANDY CLAY: Brownish; about 45% hard, subrounded to rounded, coarse to fine sand; about 55% clay with low to medium plasticity; saturated; no odor no reaction with HCL.</p> <p>SANDY CLAY: Brownish; about 30% hard, rounded; fine to very fine sand; about 70% clay with medium to high plasticity; no odor; saturated; no reaction with HCL.                      Groundwater was encountered at 12 feet below ground surface. Drilling was stopped at 16 feet below ground surface.</p>	<p>5</p> <p>10</p> <p>15</p> <p>20</p>	<p>CL</p> <p>CL</p> <p>CL</p>	<p>B2-5'</p>	<p>[Disturbed]</p> <p>[Disturbed]</p> <p>[Disturbed]</p>			