ALAMEDA COUNTY

HEALTH CARE SERVICES

AGENCY



ENVIRONMENTAL HEALTH SERVICES

ENVIRONMENTAL PROTECTION

Alameda, CA 94502-6577

(510) 567-6700 FAX (510) 337-9335

1131 Harbor Bay Parkway, Suite 250

DAVID J. KEARS, Agency Director

October 1, 2001 StID #5552/R00000270

Mr. Ronn Simpson P.O. Box 3090 Berkeley, CA 94703

RE: 489 43rd St., Oakland CA 94609

Dear Mr. Simpson:

This letter transmits the enclosed underground storage tank (UST) case closure letter in accordance with the Health and Safety Code, 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 Health Services, Local Oversight Program (LOP) is required to use this case closure letter. We are also enclosing the case closure summary. This document confirms the completion of the investigation and cleanup of the reported release at the subject site.

Site Investigation and Cleanup Summary:

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

- 1900 parts per million (ppm) Total Petroleum Hydrocarbons as gasoline (TPHg), 1300 ppm TPH as diesel, 1.6 ppm MTBE, 0.2, 0.46, 17, 48 ppm benzene, toluene, ethyl benzene and xylenes, respectively remain in the soil at the site.
- 80 ppb TPHq remain in groundwater at the site.

Please contact me at (510) 567-6765 with any questions.

Sincerely,

Barney M. Chan

Hazardous Materials Specialist

Barney M. Cham

onclosures: Case Closure Letter, Case Closure Summary

c: 3. Chan, files (letter only)

Mr. H. Gomez, City of Oakland Fire Services, 1605 MLM Jr. Dr., Oakland, CA 94612

Trlt 489 43rdSt

ALAMEDA COUNTY

HEALTH CARE SERVICES





DAVID J. KEARS, Agency Director

October 1, 2001 StID #5552/R00000270

REMEDIAL ACTION COMPLETION CERTIFICATION

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

Mr. Ronn Simpson P.O. Box 3090 Berkeley, CA 94703

RE: 489 43rd St., Oakland CA 94609

Dear Mr. Simpson:

This letter confirms the completion of site investigation and remedial action for the one(1) 1000 gallon gasoline tank 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 tank is greatly appreciated.

Based on information in the above-referenced file and with provision that the information provided to this agency was accurate and representative of site conditions, this agency finds that the site investigation and corrective action carried out at your underground storage tank(s) site is in compliance with the requirements of subdivisions (a) and (b) of Section 25299.37 of this 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) as the site is required.

This notice is issued pursuant to subdivision (h) of Section 25299.37 of the Health and Safety Code.

Please contact Barney Chan at (510) 567-6765 if you have any questions regarding this matter.

Sincerely,

Mee Ling Tung

Director, Environmental Health

c: 'B. Chan, Hazardous Materials Division-files

Chuck Headlee, RWQCB

Mr. Allan Patton, SWRCB Cleanup Fund

Mr. H. Gomez, City of Oakland Fire Services, 1605 MLK Jr. Dr., Oakland CA 94612

RACC489 43rdSt

JUL 1 1 2001

PB#01-2305

CASE CLOSURE SUMMARY

Leaking Underground Fuel Storage Tank Program

Jone 11

I. AGENCY INFORMATION Date: March 27, 2001

Agency name: Alameda County-HazMat Address: 1131 Harbor Bay Parkway

Room 250

City/State/Zip: Alameda, CA 94502-6577 Phone: (510) 567-6700

Responsible staff person: Barney Chan Title: Hazardous Materials Spec.

II. CASE INFORMATION

Site facility name: Mr. Ronn Simpson Property

Site facility address: 489 43rd St. Oakland CA 94609

RB LUSTIS Case No: N/A Local Case No./LOP Case No.: 5552 RoH0000 270

ULR filing date: 9/18/95 SWEEPS No: N/A

Responsible Parties: Addresses: Phone Numbers:

Mr. Ronn Simpson P.O. Box 3090 510-658-9006

Berkeley, CA 94703

Tank
No:Size in
gal.:Contents:
or removed?:Closed in-place
or removed?:Date:11000gasolineremoved9/18/95

III. RELEASE AND SITE CHARACTERIZATION INFORMATION

Cause and type of release: several holes observed in UST upon removal

Site characterization complete? Yes

Date approved by oversight agency:

Monitoring Wells installed? YES Number: 1

Proper screened interval? Yes, from 10-20' bqs

Highest GW depth: 10.6 feet bgs Lowest depth: 12.9 feet bgs

Flow direction: southwest, using 4 wells from 490 $43^{\rm rd}$ St., directly upgradient from site and one on 489 $43^{\rm rd}$ St.

Leaking Underground Fuel Storage Program

Most sensitive current use: mixed commercial/residential

Are drinking water wells affected? No

Aquifer name:

Is surface water affected? No Nearest affected SW name:

Off-site beneficial use impacts (addresses/locations): NA

Report(s) on file? Yes

Where are report(s) filed?

and

City of Oakland Fire Services

Alameda County EHS and 1131 Harbor Parkway, 2nd Floor Alameda CA 94502

1605 MLK Jr. Dr.

Oakland CA 94612

Treatment and Disposal of Affected Material:

<u>Material</u>	Amount	Action (Treatment	<u>Date</u>		
	(include units)	of Disposal w/destination)			
USTs	1-1000 gallon	Disposed @ Erickson, Richmond	d 9/18/95		

Maximum Documented Contaminant Concentrations - - Before and After Cleanup

Contaminant	Soil (ppm)	Water (ppb)
	1 Before After 2	3 Before After 4
ТРНд	1900	18,000 80
Benzene	0.2	2400 ND
Toluene	0.46	28 ND
Ethylbenzene	17	840 ND
Xylenes	48	85 ND
TPHd	1300	ND
TPH-paint thinner		8800 ND
MTBE	1.6	<350 <5
Total Lead	18	<5

Comments (Depth of Remediation, etc.):

- soil samples from original tank removal, 9/18/95
- no over-excavation performed
- results from grab groundwater sample taken on 5/29/98 from SB-01
- most recent monitoring event from MWA-1, 12/28/00

IV. CLOSURE

Does completed corrective action protect existing beneficial uses per the Regional Board Basin Plan? unknown

Leaking Underground Fuel Storage Tank Program

IV. CLOSURE

Does completed corrective action protect potential beneficial uses per the Regional Board Basin Plan? unknown

Does corrective action protect public health for current land use? YES

Site management requirements: site should be included in the City of Oakland Permit Tracking System

Should corrective action be reviewed if land use changes? yes

Monitoring wells Decommisioned: NO

Number Decommisioned: no Number Retained: 1

List enforcement actions taken: NOV, 7/15/99

List enforcement actions rescinded: above

V. LOCAL AGENCY REPRESENTATIVE DATA

Name: Barney M. Chan Title: Hazardous Materials Specialist

Signature: Barney M Cha Date: 6(11/01

Reviewed by

Name: eva chu . Title: Hazardous Material Specialist

Signature: Date: 4(3/0)

Name: Susan Hugo Title: Acting Supervisor

Signature: Jusan 2 Hugt Date: 6/7/01

VI. RWQCB NOTIFICATION

Date Submitted to RB: RB Response: Concur

RWQCB Staff Name: C. Headlee / Title: AEG

Signature: (Luch Hella Date: 6/20/0

VII. ADDITIONAL COMMENTS, DATA, ETC. see site summary

Page 3 of 3

Site Summary for 489 43rd St., Oakland CA 94609 Ronn Simpson Property, aka Bucate Plata

This site is located on the southeast corner of Telegraph Ave. and 43rd St. See Figure 1A. An underground tank was discovered during a site investigation by the neighboring property at 490 43rd St. A soil and groundwater investigation was initiated at this neighboring site in 1991 subsequent to verifying a release from a gasoline and paint thinner tank. This release had migrated down-gradient of this site, beneath 43rd St. and commingled with the release from 489 43rd St.

On September 18, 1995 the 1000 gallon underground tank was removed from the sidewalk in front of this site. The tank was steel and was severely corroded with several large holes passing through the tank. A total of four soil samples were taken. Samples GAW-1-10.5' and GAE-1-11' were taken from the west and east ends of the tank, respectively, while sample GAM-1-13' was taken from the middle of the excavation. Sample STOK-1 was a discrete sample from the stockpiled soils. The sample from the center of the tank exhibited the most odors and appeared the most contaminated. See Figure 1 and Table 1 for the location and results of these samples. Up to 1900 ppm TPHg, 1300 ppm TPHd, and 0.2, 0.46, 17 and 48ppm BTEX, respectively, 14 ppm total lead and 1.6 ppm MTBE was exhibited in these samples. The sample from the stockpile soils exhibited low concentrations of contaminants and ND for benzene. Due to the location of the pit being along 43^{rd} St., the spoils were reused to backfill the pit.

To further characterize the potential impact to soil and groundwater at this site, on May 28, 1998 one borehole, SB-01, was advanced approximately 15' down-gradient of the former gasoline tank, within the existing building. One soil sample and one grab groundwater sampled were collected for chemical analysis. Due to the absence of any indications of contamination, the deepest unsaturated soil sample collected at 10' was sampled. Groundwater was encountered at 11.2'. The soil sample was ND for all analytes tested. Up to 18,000 ppb TPHg, 2,400, 28, 840, 85 ppb, BTEX respectively was found in the groundwater sample. In addition, MTBE was ND (< 350) and TPH as paint thinner was reported as 8800 ppb, indicating that the release from the upgradient property had moved off-site and was impacting this site. See Table 2 and Figure 2.

Because of the existence of the building down-gradient of the underground tank, the location of a monitoring well was proposed at the nearest accessible location, within the rear driveway.

Monitoring well MWA-1 was installed on October 29, 1999. Soils from the borehole were composed of sandy silt and silty sand to 5' bgs, followed by silty clay to 10' bgs. Gravelly sand was encountered from 10-15', followed by clayey silt to sandy silt to the depth of 20'. The final depth of the boring was 21.6'. The soil sample at 16' depth was analyzed because of field screening readings, however, it reported ND for all analytes, TPHd, TPHg, TPHpt, BTEX, MTBE and lead. The groundwater sample reported 380 ppb TPHg, 240 ppb TPHpt, 0.77, 3.5, 2.1, 1.6 ppb, BTEX, respectively, and ND for MTBE and lead. See Table 3, Figure 3 and the boring log for MWA-1.

Site Summary for 489 43rd St., Oakland CA 94609 Ronn Simpson Property, aka Bucate Plata Page 2

At approximately the same time, on July 26 and 27, 1999, the adjacent property at 490 43rd St. performed injections of oxygen releasing compound (ORC) into geoprobe borings within 43rd St. **See Figure 9.** Three hundred and fifty (350) pounds of ORC was injected in the form of a 25% slurry into 25 exploratory borings. Because of the narrowness of 43rd St. some of the ORC was injected within 10-30' of the former tank at 489 43rd St. Our office agreed to use the groundwater sampling results of MWA-1 to determine the extent of contamination and health risk of both sites. Because of the addition of ORC within the street, no active remediation was requested for this site.

Monitoring well MWA-1 has been monitored for four consecutive quarters. See attached results in Table 4. Monitoring of this well was performed simultaneously with the monitoring at 490 43rd St. and a gradient contour map was made using both sites' data. Groundwater gradient has been consistently to the southwest ie towards MWA-1. See groundwater contour map for 12/28/00, Figure 4. Analytical results have shown consistently low TPHg and TPHpt concentrations and ND for BTEX and MTBE.

Site closure is recommended based upon the following:

- The shallow groundwater is not of drinking water quality based upon the slow recharge of water in MWA-1 and the borings done in 43rd St. by the up-gradient property.
- The one irrigation well identified in a well survey done by the up-gradient property is cross-gradient of the releases, approximately the same distance from the UST as MWA-1. See
 Figure 10. Given the low concentrations found in MWA-1, it is unlikely that the irrigation well is impacted.
- The risk to human health is likely minimal, however, no reliable groundwater data exists other than from MW-4 from the investigation of 490 43rd St. located up-gradient of the UST and that from MWA-1. MW-4 has averaged 3350 ppb TPHg and 360 ppb benzene over the past four quarters in 2000. The grab groundwater results from sample SB-01 are likely an over estimation since the sample was noted to have contained greater than 5% sediment by volume. In addition, this sample was taken in May 1998. Nevertheless, the 2,400 ppb benzene reported in this grab groundwater sample from SB-01, is less than the ASTM 1E-05 Tier 1 RBSL for groundwater vapor intrusion to indoor air for a commercial setting (2560 ppb).
- This site should be included in the City of Oakland's Permit Tracking System to alert future utility worker of potential exposure to hydrocarbons in soil and groundwater.

489 43rd St., Oakland 94609 Ronn Simpson Property Page 3 Evaluation of need for deed restriction for:

Residual Conce	ntrations in:		Tier 1			
			Residential	Residential		
<u>Analyte</u>	Soil mg/kg	Groundwater mg/l	Oakland RBSL	RWQCB RBSL		
Conc. in ppm			Soil GW	Soil GW		
TPPH	1900	0.08		500 .640		
Benzene	0.2	ND	*0.069 0.11	0.39 .046		
Toluene	0.46	ND	360 210	2.6 0.04		
Ethylbenzene	17	ND	SAT >sol	2.5 0.03		
Xylenes	48	ND	SAT >sol	1.4 0.018		
TPHd	1300	ND		1000 .640		
MTBE	1.6	<5	4400 >sol	1.0 .18		

Assumptions: Shallow groundwater in Oakland is not considered potable GW encountered at approximately 10' bgs.

For soils, Table B-2 and for groundwater, Table F-2 of the RWQCB document used

The only analyte exceeding the Tier 1 City of Oakland RBSL is benzene. Boring logs indicate that soils are typically silty clay. The Tier 2 RBSL for silty clays is 3.3 ppm benzene in soil for the exposure pathway of inhalation of **indoor air**, **residential**. Therefore, the residual soil and groundwater concentrations are less than the Tier 2 Oakland RBSLs for residential exposure.

The RWQCB RBSLs are often more conservative than the City of Oakland. These RBSLs are taken as the most conservative of the potential exposure pathways. They are often based upon aquatic life protection, which is not a viable exposure pathway at this site. In addition, the City of Oakland RBSLs are more pertinent for Oakland sites since site specific data was used to derive them. TPH as gasoline, diesel and motor oil is not specifically addressed in the Oakland RBCA. They exist for the RWQCB RBSLs, but again are based upon aquatic protection. It would appear that a deed restriction is not necessary for this site. However, if land use changes to residential, the site should be re-evaluated to determine if this land use is still acceptable with the residual contamination at the site. Any future subsurface excavation or trenching at the site will require a risk management plan.

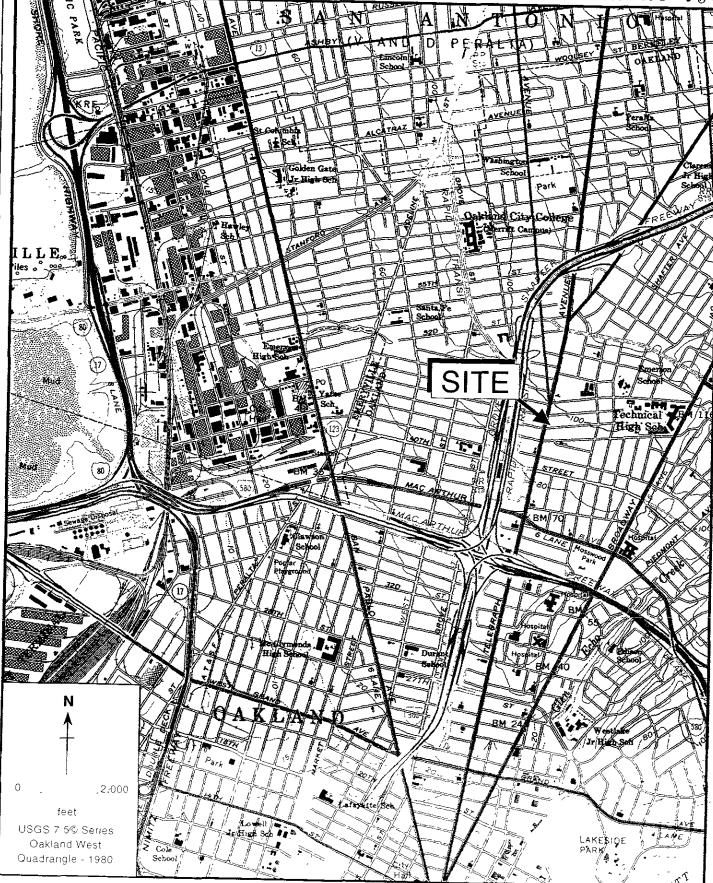
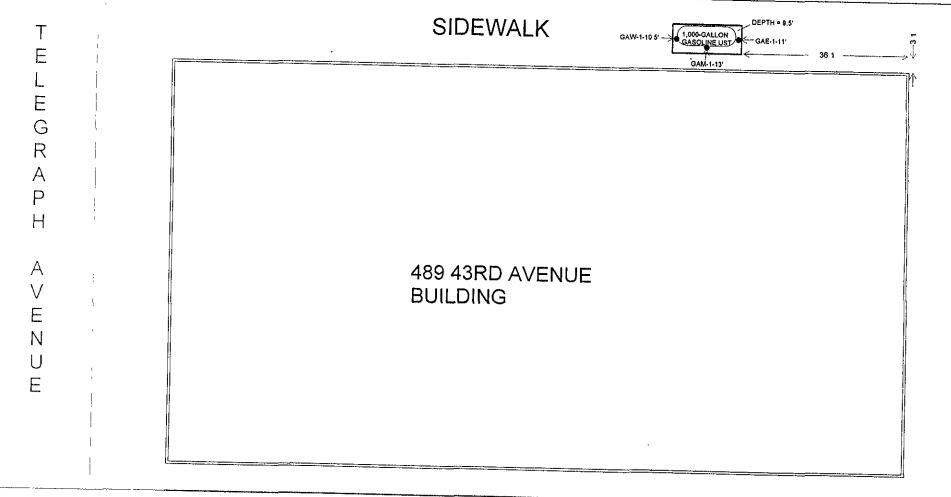


Figure 12 Site Location, 489 43rd Street Oakland, California

43RD STREET



ACCUTITE	ACCUTITE ENVIRONMENTAL ENG 35 SOUTH LINDEN AVENUE SOUTH SAN FRANCISCO, CA 9408		1	REMOVAL OF A 1,000-GALLON GASOLINE UNDERGROUND STORAGE TANK	FIGURE 1 DRAWN BY: SM
KEY.	APPROXIMATE SCALE: 1 INCH = 20 FEET	N/	SITE:	489 43RD STREET OAKLAND, CALIFORNIA	DATE: 9/18/95 REVISED:

- Soil sample GAE-1-11' was collected from the east end, approximately 11 feet below surface grade (approximately 1.5 feet below the bottom of the UST).
- Soil sample GAM-1-13' was collected from the middle, approximately 13 feet below surface grade (approximately 3.5 feet below the bottom of the UST).
- Soil sample Stok-1 was collected from the soil stockpile generated from the UST removal.

The attached Figure 1 shows the sampling locations.

All samples were collected from the backhoe bucket by driving clean brass tubes into the soil, using a rubber mallet. Samples were completely filled with soil to avoid head space and loss of volatiles. Samples were then covered with aluminum foil, capped, and taped.

The samples were shipped in an ice chest, accompanied by a chain of custody to North State Environmental Laboratory (A State of California Certified Laboratory). All samples were analyzed for Total Petroleum Hydrocarbons as Gasoline (TPH-G); Benzene, Toluene, Ethyl Benzene, and Xylenes (BTEX), with Methyl t-butyl ether (MTBE) distinction; for Total Petroleum hydrocarbons as

ANALYTICAL FINDINGS

The analytical findings of the collected samples are summarized in the Table below. Locations of the samples are depicted in Figure 1. The laboratory results are included in Attachment C.

Sample TPH-G	Table	1.	roodits at 6 It	iciuded in A	ttachmen	t C.
ID. Fri-G	Benzene Toluene	- 10	Xylenes M	and the state of t		
ppm*		Benzene		TPF	\$2 7 000	Total :
GAW-1-10.5' 150 GAE-1-11' 14	0.2 0.46	ppm	ppm pr	pm ppm	<i>3</i> 5	Lead (TTLC)
GAM-1-13'	0.090 0.13	0.28	4.6	068 140		ppm
STOK-1 1,500	N.D.** 0.19	17	40	016 160		10
*ppm = Parts per million	N.D. 0.024	0.050	0.3 N.	1300		14
**N.D.= Non detect or be	or mg/kg		14.1	D. 24		18

^{**}N.D.= Non detect or below the detection limit

CONCLUSIONS AND RECOMMENDATIONS

- Both Diesel and Gasoline were detected in significant levels in the samples collected from
- The tank owner is required to send a copy of the attached report to the following agency:

Ms Eva Chu Hazardous Materials Specialist Alameda County Department of Environmental Health (ACDEH) Division of Environmental Protection 1131 Harbor Bay Parkway, 2nd Floor Alameda, California 94502



3



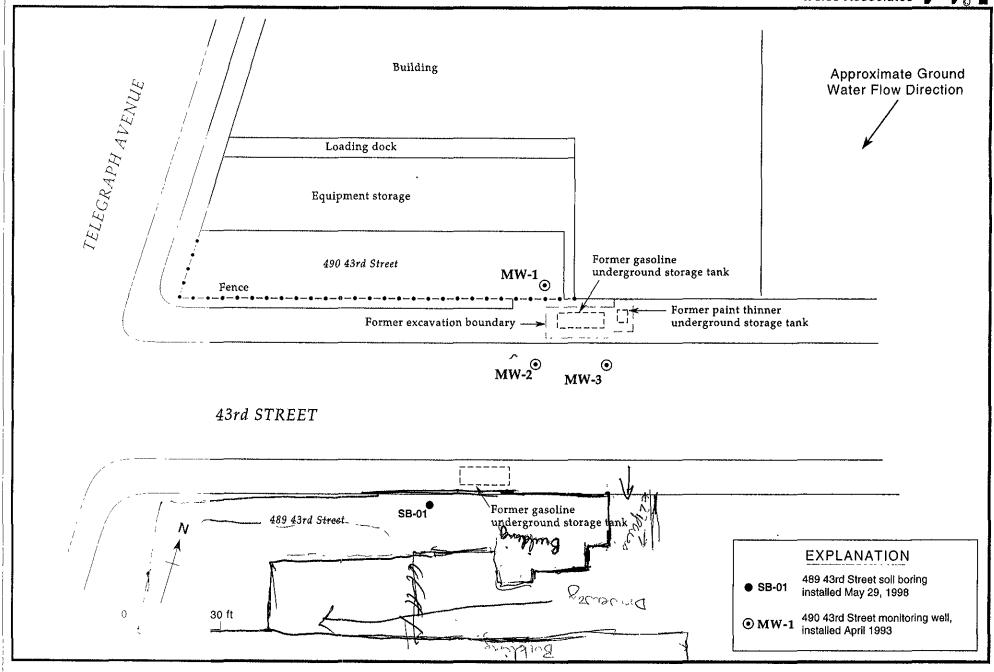


Figure 2 Soil Boiing Location - 489 43rd Street, Oakland, California

Table 2. Borehole Sample Results for 489 43rd Street, Oakland, California.

	Type	Sample Depth	TPH-G	В	T	E	X	MTBE	ТРН-РТ
		(ft bgs)							
SB-01-05.0	Soil	5.0	ла	na	na	na	70		
SB-01-10.0	Soil	10.0	<1.0	<0.005	<0.005		na	na	па
WS-01-11.2	Crous a		Í	٠٥.٥٥٥	<0.005	<0.005	<0.005	<0.05	<1.0
1	Ground Water	11.2	18,000ª	2,400	28	840	85	<350	8,800ª

na = not analyzed

<"x" = means not detected above the reporting limit of "x"

a = laboratory noted that unmodified or weakly modified gasoline was significant, a lighter than water immiscible sheen is present, and the liquid sample contained greater than ~5 vol. % sediment Soil results are given in mg/kg

Groundwater results are given in ug/L

mg/kg = parts per million (ppm)

ug/L = parts per billion or (ppb)

The soil sample was reported to have no concentrations of COCs above the laboratoryreporting limit.

The groundwater sample was reported to have a TPH-G concentration of 18,000 ppb, a benzene concentration of 2,400 ppb, and a TPH-PT concentration of 8,800 ppb. The laboratory indicated that the TPH-G and TPH-PT results included a large fraction of an unmodified or weakly modified gasoline. Due to the interference from the TPH-G concentration, the laboratory had to raise the MTBE reporting limit to 350 ppb.

Copies of the laboratory report and chain-of-custody are included as Attachment B.

Table 3. Soil and Ground Water Sampling and Analyses Monitoring Well Installation on October 29, 1999, 489 43rd Street, Bucate Plata

Sample ID	Date	Matrix Sampled	TPH-D	TPH-G	Benzene	Toluene	Ethyl benzene	Xylenes	MTBE	Lead	Paint
MWA-16	10/29/99	Soil	ND	ND			CONZENC		1		Thinner
1)1010			1110	IND	ND	ND	ND	ND	ND	ND	ATTO
DI&D2	10/29/99	Soil	NĎ	ND	ND	ND			_ - \-	IND	ND
			}		\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	ND	ND	ND	NA	8.2	NA
Detection Limit	-	Soil	1 mg/kg	1 mg/l-	0.007					mg/kg	
			, merke	1 mg/kg	0.0050 mg/kg	0.0050 mg/kg	0.0050 mg/kg	0.0050 mg/kg	0.0050	5.0	1 mg/kg
199A	11/2/99	Water	ND	200 #				mg/kg	mg/kg	mg/kg	
			ND	380 μg/l*	0.77 μg/l	3.5 μg/l	2.1 µg/l	1.6 µg/l	ND	ND	-
199B	11/2/99	Water	ND	ND	ND	ND			1	IND	240 μg/l*
Detection Limit	<u>-</u>				110	עאו	ND	ND	ND	ND	ND
1.111111		Water	50 μg/L	50 μg/L	0.50 μg/L	0.50 μg/L	0.50 μg/L	0.50 μg/L			1
laximum				!					5.0 μg/L	0.0050 mg/L	50 μg/L
oncentration			Not	Not	1 μg/L	150	700			Mg/L	
evel (set by the althorna Dept of calth Services)			available	available	- M8/12/	150 μg/L	700 μg/L	1750 μg/L	Not available	15 μg/L	Not available
egend	<u>_</u>										

* Gasoline and paint thinner did not meet respective calibration standards.

Sample ID MWA-16 soil sample collected at 16 ft bgs.

D1 & D2 composite soil sample taken from drums of investigation-derived waste, collected for waste disposal purposes. 4199 \ ground water sample collected during well development

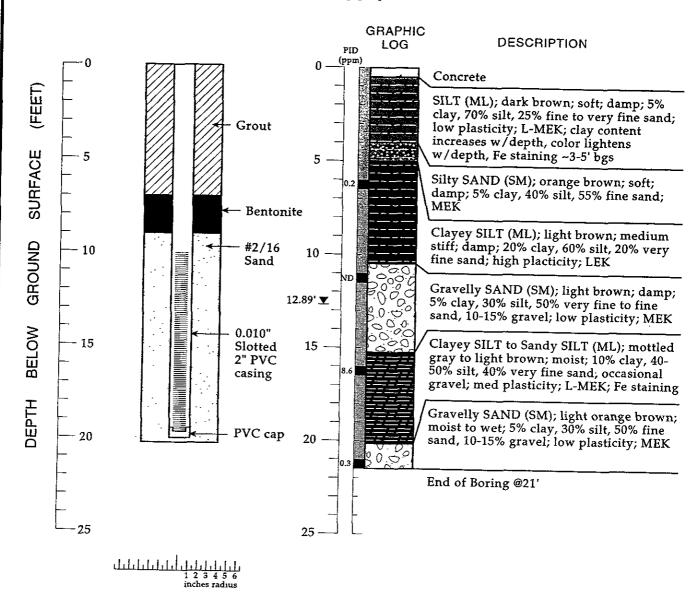
1199B trip blank sample

ND = at or below laboratory detection limit.

TPH-D = total petroleum hydrocarbons as diesel

TPH-G = total petroleum hydrocarbons as gasoline

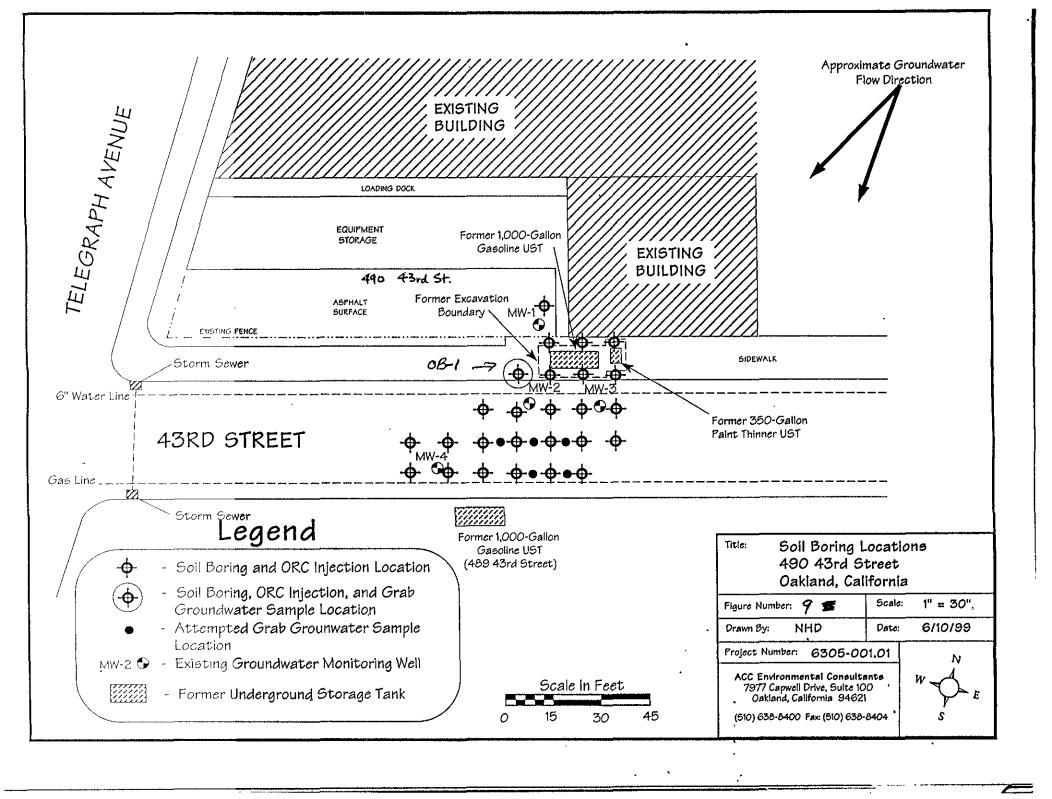
MWA-1



EXPLANATION

??-	Water level during well development (11/2/99) Contact (dotted where approximate) Uncertain contact Gradational contact Location of recovered core	Supervisor: Drilling Company: License Number Driller:	Rich
	Location of core sample sealed for chemical analysis		October 29, 1999
EK =	Estimated hydraulic conductivity, L= low, M= moderate, H= high	Well Head Completion Type of Sampler	
PID =	Photoionization detector Parts per million	Ground Surface Elevation	Not available

Boring Log and Well Construction Details-Well MWA-1, 489 43rd Street, Oakland, California



Ground Water Sampling and Analyses, Quarterly Well Sampling on December 28, 2000—489 43rd Street, Bucate Plata Table 4

Sample Location	Sample Date	Matrix Sampled	TPH-D μg/L	TPH-G μg/L	Benzene μg/L	Toluene μg/L	Ethyl benzene µg/L	Xylenes μg/L	MTBE μg/L	Lead μg/L	Paint Thinner µg/L
MWA-1	12/20/99	Water	57	110	ND	0.79	ND	ND	ND	ND	ND
MWA-I	3/27/00	Water	ND	84	ND	ND	ND	ND	ND	ND	75
MW Δ-1	6/29/00	Water	ND	97	ND	ND	NĎ	ND	ND	ND	51
MW/A-1	9/22/00	Water	ND	64	ND	ND	ND	ND	ND	ND	160
MWA-I	12/28/00	Water	" ND	80	ND	ND	NĎ	ND	ND	ND	ND
Laboratory	12/20/00	Water	50	50	0.50	0.50	0.50	0.50	5.0	5.0	50
Detection Limit											
Maximum Contai water standard set by Services)			N/A	N/A	1.0	150	700	1750	N/A	N/A 	N/A

<u>I egend</u>

All results are expressed in µg/L unless otherwise noted

N.A. Not available

ND at or below laboratory detection limit.

[P][-1] total petroleum hydrocarbons as diesel

TPH-G total petroleum hydrocarbons as gasoline

Paint Thinner = total petroleum hydrocarbons as paint thinner

Note 1 The State of California has not yet developed a final MCL for MTBE. The State is proposing a primary MCL of 13 µg/L for MTBE and a secondary MCL of 5

Note 2. The Nate of California has not established an MCL for lead, but the USEPA has established a lead MCL of 15 µg/L.

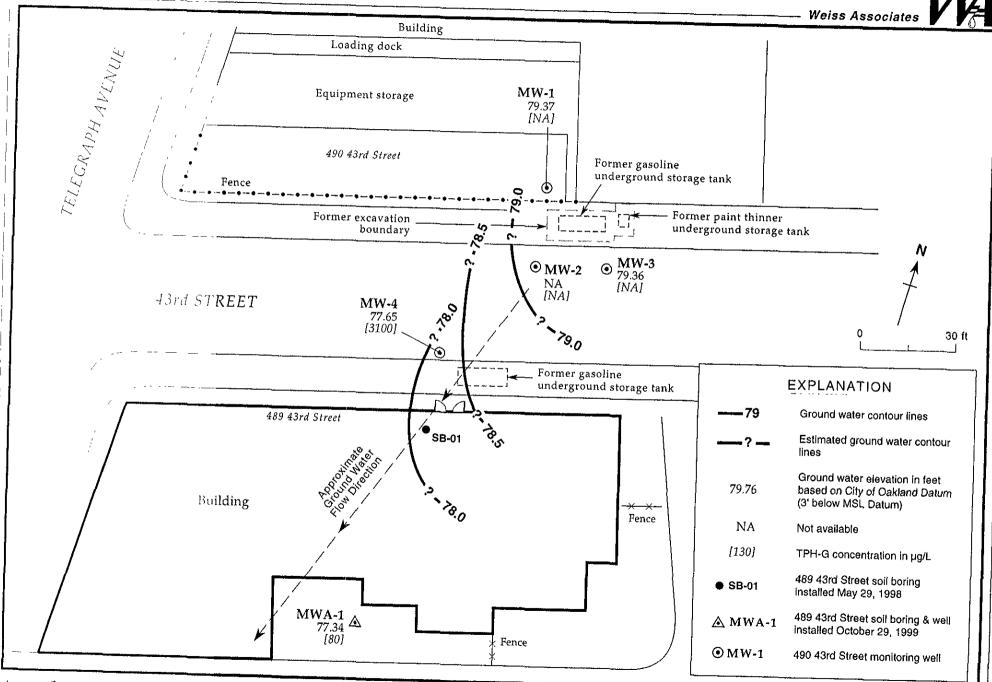


Figure 3. Quarterly Sampling Data, December 28, 2000 - 489 43rd Street, Oakland, California