HEALTH CARE SERVICES

AGENCY

DAVID J. KEARS, Agency Director

August 27, 1996 STID 1452 page 1 of 2 Alameda County CC4580 Environmental Protection Division 1131 Harbor Bay Parkway, Room 250 Alameda CA 94502-6577

John Leonardini 2001 Victorine Rd. Livermore CA 94550

REMEDIAL ACTION COMPLETION CERTIFICATION

RE: Express Auto Service site, 333 Broadway, Oakland CA 94607

Dear Mr. Leonardini.

Thank you for submitting the Well Destruction Report, dated 8/20/96, prepared by W.A. Craig, Inc.

This letter confirms the completion of site investigation and remedial action for the following four underground storage tanks at the above referenced site: 550-gallon waste oil, two 3,000-gallon gasoline, and one 4,000-gallon gasoline. Based on the available information 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 at this time. Please be aware that this does not free present or future landowners or operators from cleanup responsibilities in the event that new information indicates a pollutant problem on the site or originating from the site. This notice is issued pursuant to a regulation contained in Title 23, Division 3, Chapter 16, Section 2721(e) of the California Code of Regulations.

The owner must promptly notify this agency if there is a proposal for a change in land use, site activity, or structural configuration of the site (ie basements in new buildings where none were before). Such site modifications may require a re-evaluation of the chemical exposure pathways, receptor sensitivities (ie residential vs commercial/industrial), and/or other applicable criteria which may have been employed to assess potential human health risk during the case closure process.

If you have any questions regarding this letter, please contact Jennifer Eberle at (510) 567-6700, ext. 6761. Attached is a copy of the Case Closure Summary, which was reviewed and approved by this agency and the Regional Water Quality Control Board (RWQCB).

Very truly yours,

Mee Ling Tung, Director

August 27, 1996 STID 1452 page 2 of 2 John Leonardini

cc: Acting Chief, Environmental Protection Division

Kevin Graves, RWQCB

Lori Casias, SWRCB (with attachment)

Dave Deaner, SWRCB, UST Cleanup Fund Program

Jennifer Eberle (3 copies)

David Orr, WA Craig, PO Box 448, Napa CA 94559-0448

Julie Rose, attorney, Randick and O'Dea, 1800 Harrison St., Suite 1771, Oakland CA 94612

LOP/Completion je.1452clos.let enclosure (clos sum)

CASE CLOSURE SUMMARY Leaking Underground Fuel Storage Tank Program

I. AGENCY INFORMATION

Agency name: Alameda County-HazMat

City/State/Zip: Alameda CA 94502

Responsible staff person: Jennifer Eberle

Date: 5/31/96

Address: 1131 Harbor Bay Pky

Phone: (510) 567-6700

Title: Hazardous Materials Spec.

II. CASE INFORMATION

Site facility name: Express Auto Service

Site facility address: 333 Broadway, Oakland CA 94607

RB LUSTIS Case No: N/A Local Case No./LOP Case No.: 1452

URF filing date: 12/8/95, submitted by Leland Yialelis SWEEPS No: N/A

Addresses: Phone Numbers: Responsible Parties:

John Leonardini, 2001 Victorine Rd., Livermore CA 94550

<u>Tanl</u> No:	<u>Size ir</u>	<u>Contents:</u>	Closed in-placed or removed		
1	550	waste oil	removed	6/30/92	-
2	3,000	gasoline	removed	12/8/95	ज हाई
3	•	gasoline	removed	12/8/95	The state of the s
4	•	gasoline	removed	12/8/95	ලා වූඩ
		-			கு ீந

III. RELEASE AND SITE CHARACTERIZATION INFORMATION

Cause and type of release: unknown

Site characterization complete? YES Monitoring Wells installed? YES

Proper screened interval? YES Number: 1 permanent well and 6 piezometers

Flow direction: west-southwest, based on data from adjacent site (County building at 499-5th St.)

Most sensitive current use: commercial; future plans are for parking lot

Are drinking water wells affected? NO Aquifer name: Is surface water affected? NO Nearest affected SW name:

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

Report(s) on file? YES Where is report(s) filed?

Alameda County, 1131 Harbor Bay Pky, Alameda Ca 94502

TREATMENT AND DISPOSAL OF AFFECTED MATERIAL:

Mate		Action (Treatment	<u>Date</u>					
	(include units) o	f Disposal w/destination)						
Tank	3 USTs (10,000 lb)	disposed to Erickson	12/8/95					
	two 3,000-gal and	manifest # 95893664						
	one 4,000-gal							
	550 gal waste oil	disposed to Erickson	6/30/92					
	3	Manifest #9168852						
Soil	200 yd3	removed to Vasco Rd land	fill 2/28/96					
	•	In Livermore (non haz mar						
	20 yd3	removed to Vasco Rd land	fill 3/5/96					

III, RELEASE AND SITE CHARACTERIZATION INFORMATION (Continued) Maximum Documented Contaminant Concentrations - - Before and After Cleanup

Contaminant	Soil (ppm)*		Soil (ppm)**		Water (ppb)
	Before*	After*	<u>Before</u>	** After**	Before After
TPH (Gas)	15	ND	1000	1.6	ND## ND#
TPH (Diesel)	44	ND	NA	NA	ND# ND#
Benzene	ND	ND	0.038	ND	ND## ND#
Toluene	ND	ND	2.1	ND	0.58## ND#
Ethylbenzene	ND	ND	8.2	0.010	ND## ND#
Xylenes	0.20	ND	40	0.12	ND## ND#
Oil & Grease	600	ND	NA	NA	1,300# 900@
HVOCs by 8010	ND	NA	NA	NA	NA
semiVOCs by 8270	ND	NA	NA	NA	NA
Cadmium	2.2	3.9	NA	NA	NA
Chromium	20	39	NA	NA	NA
Lead	210	16	6.1	NA	ND# ND#
Nickel	30	33	NA	NA	NA
Zinc	145	33	NA	NA	NA

Comments (Depth of Remediation, etc.):

@this was the most recent concentration of TOG by 5520 in MW1, see Table 2

^{*}waste oil tank pit

^{**}gasoline tank pit; see Table 3 (before) and Table 6 (after)
#from MW1 (near waste oil UST); see Table 2 and Table 5
##from piezometers around gasoline UST excavation; see Table 5

IV. CLOSURE

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

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

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

Site management requirements: NA

Should corrective action be reviewed if land use changes? YES

Monitoring wells Decommisioned: they will be when RWQCB signs off

Number Decommissioned: 0 Number Retained: 7

List enforcement actions taken: none List enforcement actions rescinded: none

V. ADDITIONAL COMMENTS, DATA, ETC.

There is apparently a long history of UST use at this site. Mr. Leonardini's father purchased this property in 1944. It was reportedly used by Shell Oil prior to that time.

A 550-gallon waste oil UST was removed on 6/30/92, and witnessed by J. Eberle of Alameda County. The UST was rusted with no apparent holes. One soil sample was collected below the fill end at 8'bgs. The soil in the pit appeared to be fill (bricks in the soil). One sample was collected of the stockpiled soil. See Figures 1 and 2.

The pit sample contained 15 ppm Tphg, ND BTE, 0.20 ppm xylenes, 44 ppm TPHd, 600 ppm TRPH, ND HVOCs by 8010, ND semi-VOCs by 8270, 210 ppm lead, 2.2 ppm Cd, 20 ppm Cr, 30 ppm Ni, and 145 ppm Zn. These results were all <10 x the STLCs, except lead. The stockpile sample contained 1.2 ppm TPHg, ND BTEX, 13 ppm TPHd, 200 ppm TRPH, ND HVOCs by 8010, ND semi-VOCs by 8270, 2400 ppm lead, 2.4 ppm Cd, 17 ppm Cr, 12 ppm Ni, and 160 ppm Zn. These results were all <10 x the STLCs, except lead. The data was not tabulated.

The waste oil pit was overexcavated on 8/20/92, and witnessed by J. Eberle. Four sidewall samples and one bottom sample were collected. There were no obvious signs of contamination in the pit, except a few darker spots. The soil was a light brown, fine sand.

Maximum sample concentrations indicated ND TRPH, ND TPHd, ND TPHg, ND BTEX, 16 ppm Pb, 3.9 ppm Cd, 39 ppm Cr, 33 ppm Ni, and 33 ppm Zn. The metal results were all <10 x the STLCs. This work was all performed by W.A. Craig, Inc. of Napa.

On 9/20/93, All Environmental Inc. (AEI) installed one groundwater monitoring well within 10' west-southwest of the former waste oil tank location. See Figure 3. The rationale for only one well was due to consistent gw flow information (west-southwest) from an adjacent site (Alameda County Health Headquarters Building, 499-5th St.) with 3 wells.

Soil samples were collected in the borehole at 5.5', 10.5' and 14'bgs. They were analyzed for TPHd, TOG, and total lead. Results indicated ND TPHd, a maximum of 18 ppm TOG, and a maximum of 3.7 ppm total lead. See Table 1. The soils were fine to medium grained sand, to the total depth of 25.5'bgs. Groundwater was first encountered at 14'bgs, and stabilized at 13.5'bgs. No petroleum odors were reported during drilling or sampling.

This well was sampled for six quarters, from 9/93 through 6/95. See Table 2. TPHd and total lead were ND for five quarters, then discontinued. Total Oil and Grease was detected at fairly low concentrations (ND to 1.5 mg/L), with the exception of one anomolous result (13 mg/L) in March 1994.

AEI hand-augered four borings to a depth of 8'bgs around the remaining three fuel tanks on 8/1/94. See Figure 4. Results indicated ND TPHg and ND BTEX in all four borings. This investigation was conducted to determine if the tanks were leaking. A tightness test was also conducted on 7/26/94. Results indicated that all three tanks were tight. This was documented in AEI's report dated July 29 and August 1, 1994.

On 12/8/95, the three gasoline USTs (two 4,000-gallon and one 3,000-gallon) were removed by W.A. Craig, and witnessed by J. Eberle. There were no obvious holes in any of the three USTs, but all had rust. Six soil samples were taken in the tank pit, and two soil samples were taken from the pump island. See Figure 5. Results indicated maximum concentrations of 1,000 ppm TPHg in sample PB-2-S, and 0.038 ppm benzene in sample PB-1-S. See Table 3.

The pit was overexcavated on 1/22/96. Field observations indicated that the impacted soil continued to the north and east in the excavation. J. Eberle witnessed the collection of two soil samples (LN-1 and LW-2), which would presumably delineate the edge of the contamination. See Figure 6 and Table 6. Results for both samples indicated ND TPHg and ND benzene. W.A. Craig did not initially remove soil from the excavation because the extent of the apparently contaminated soil appeared to exceed the 200 yd3 of soil that their contract allowed to be removed. This soil was sampled while remaining in the excavation. Two composite samples were collected. Results indicated maximum concentrations of 1100 ppm TPHg and ND benzene. See Table 6.

W.A. Craig rethought the site remediation strategy, and submitted a "Work Plan for Site Characterization," dated 1/24/96. This workplan involved the placement of six Geoprobe borings for collection of soil and grab water samples. The borings were installed on 2/7/96. Groundwater was encountered at 11' and 14'bgs. See Figure 6. Boring B1 was performed at an angle of 34 degrees from vertical to collect soil and grab water samples below the building. Soil results indicated absolutely ND TPHg and ND BTEX on every sample. See table 4. Groundwater results also indicated ND TPHg and BTEX on every sample, with the exception of 0.58 ppb toluene in sample B1. See Table 5. The monitoring well (MW1) was also sampled at the same time, and was ND for TPHg and BTEX.

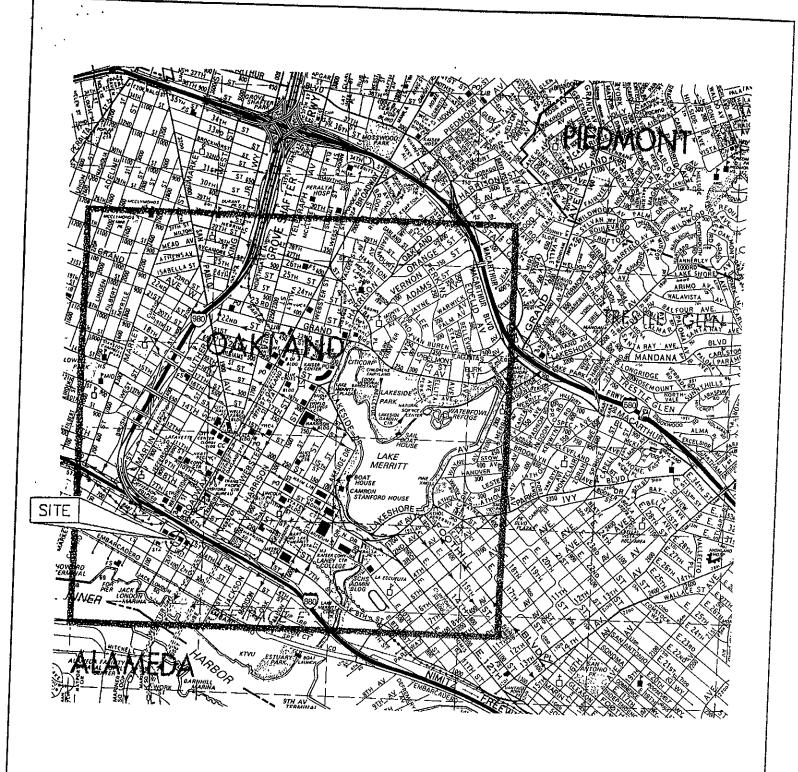
It appeared that the gasoline impacted soil was limited to the immediate excavation area. As a result of these findings, approximately 200 yd3 of soil was removed from the excavation on 2/28/96 and 2/29/96, and offhauled to Vasco Rd. in Livermore. Eight soil confirmation samples were collected, on 2/29/96 in the absence of the County representative. See Figure 7. Maximum soil results indicated 770 ppm TPHg (sample #4); benzene was all ND except for 0.042 ppm in sample #7. See Table 6.

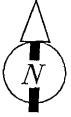
Further overexcavation was conducted on 3/5/96 by WA Craig, to remove impacted areas of the excavation. Approximately 20 yd3 of soil was removed. Three confirmation samples were collected on 3/5/96, in the absence of the County representative. See Figure 8. Maximum soil results indicated 1.6 ppm TPHg and ND benzene. See Table 6. This additional 20 yd3 of soil was offhauled to Vasco Rd landfill on 3/5/96. The excavation was backfilled with excavated material segregated during the tank removal, as well as clean, imported fill.

Although we expected to see more contamination here due to the long history of use, it is likely that any gasoline contamination dispersed rapidly through the sandy soils; it has not been discovered by this investigation. This case warrants closure due to the lack of gasoline constituents in groundwater throughout the site and the successful overexcavation resulting in the removal of gasoline contaminated soils.

VI. LOCAL AGENCY REPRESENTATIVE DATA

Name: Jennifer Eberle	Title: Hazardous Materials Specialist	
Signature: There	Date: 6-24-96	
Reviewed by		
Name: Amy Leech	, Title: Hazardous Materials Specialist	
Signature Mun Kacov	Title: Hazardous Materials Specialist Date: Title: Manager Date: Dat	6-10-96 19
Name: Tom Peacock	/ Title: Manager	Annloed
Signature: Mm Raw	Title: Manager Date: 6-24-96	Omg
VII. RWQCB NOTIFIC	- -	1
Date Submitted to RB: 6-2	24-96 RB Response: Approved	
RWQCB Staff Name: Kevin		es Control Engineer
n//////	- 7/10/96	





From Thomas Bros. Map - 1992

Fig 1

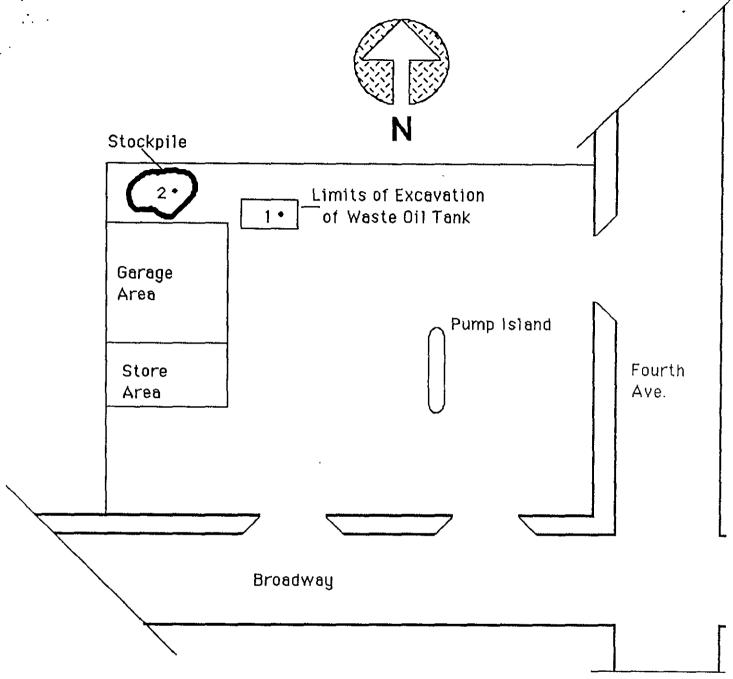
ALL ENVIRONMENTAL, INC. 641 CROW CANYON RD, SAN RAMON SCALE: 1 NCH = 2200 FEET

DRAWN BY: REVISED:

SITE LOCATION MAP

333 BROADWAY

DELOTION



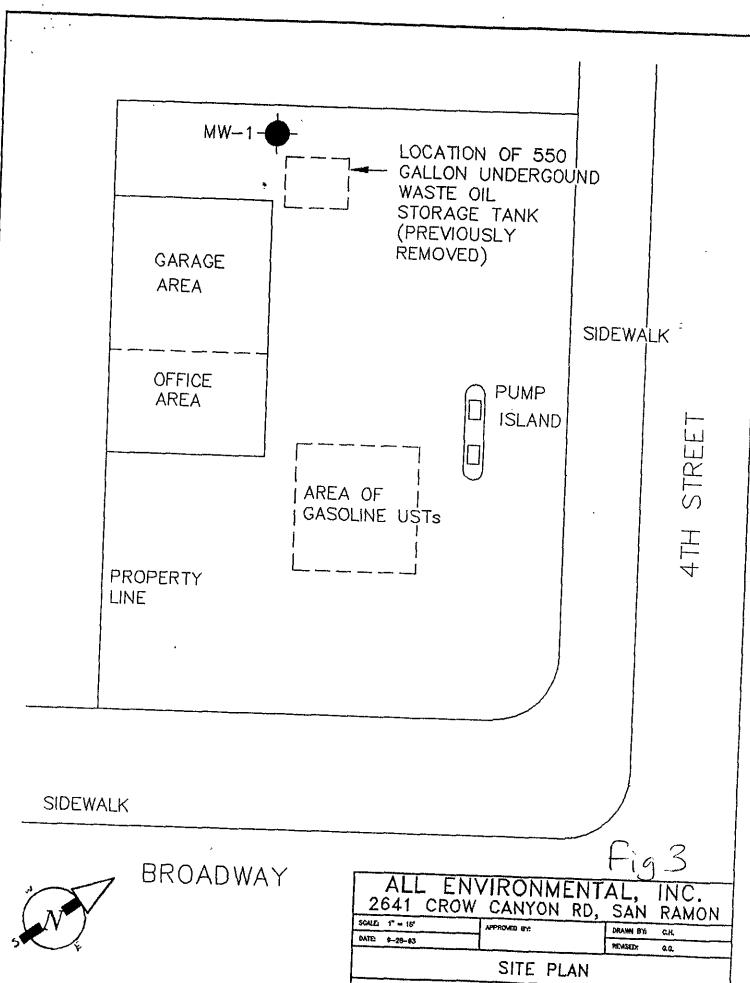
• Denotes where sample was obtained.

Sample Legend

- 1) Express Pit
- 2) Express Pile

Fig 2

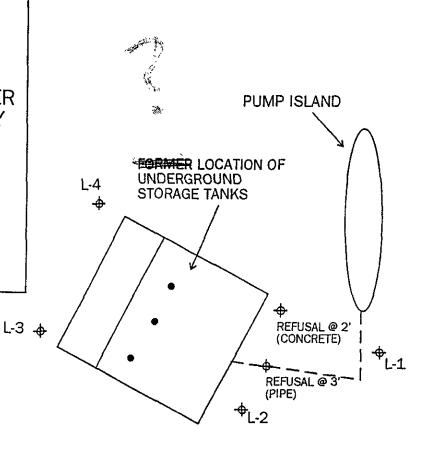
Date: December 1992	WA Craig Inc. 303	0F0 77F7
Job No.: 3457-0-92	W.A. Craig, Inc. 707-	252-3353
Scale: no scale-reference only	Leonardini Investments, Inc.	Figure No.
Drawn: JGH	2001 Victorine Rd.	a
Chk'd: WAC II	Livermore, Ca. 94550	3
App'd: Wac II/ JGH	Sample Location Map	Rev.



DRAWING HUMBER

333 BROADWAY

EXPRESS AUTO SERVICE CENTER 333 BROADWAY



BROADWAY

W E

+ SOIL BORING LOCATIONS

ALL ENVIRONMENTAL, INC. 2641 CROW CANYON ROAD, SAN RAMON

SCALE: NOT TO SCALE
DATE: 17 AUGUST 94

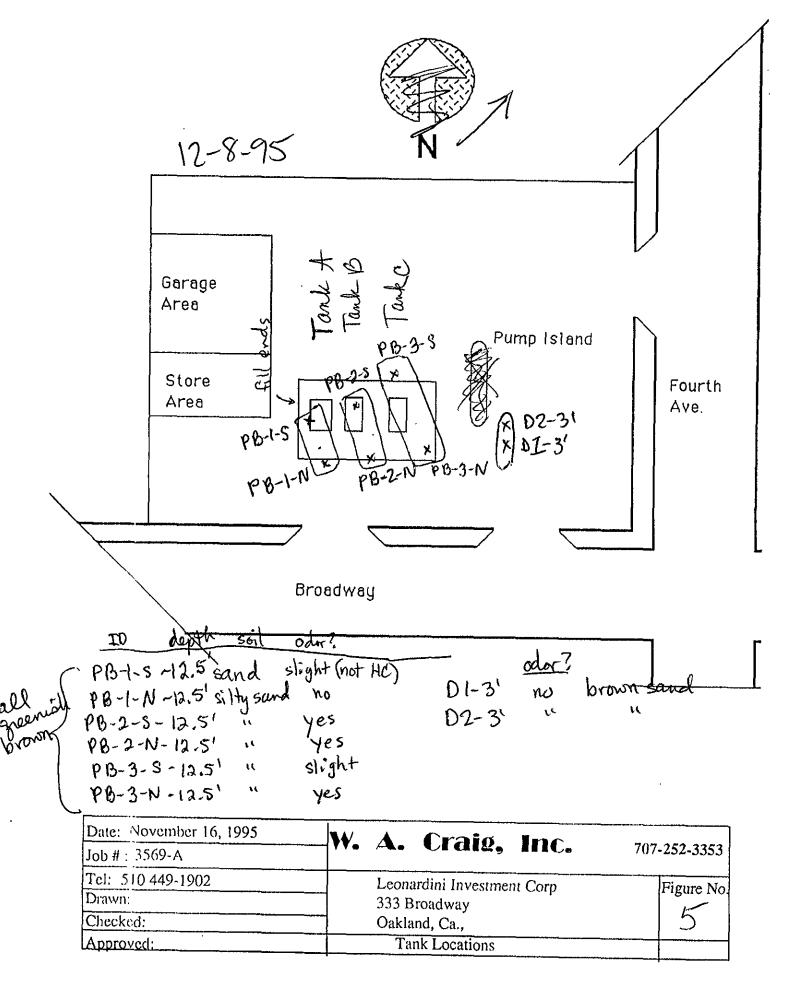
APPROVED BY:

DRAWN BY: C. KISSICK REVISED: C. KISSICK

SITE MAP

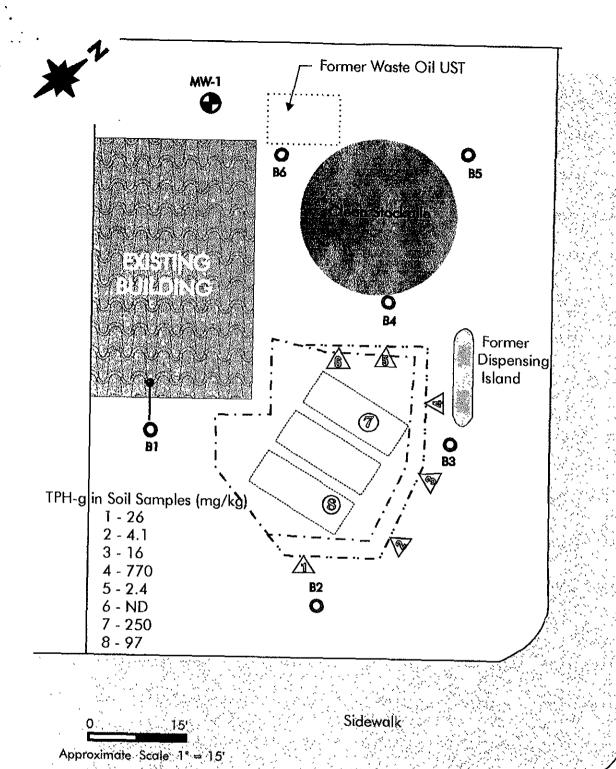
333 BROADWAY

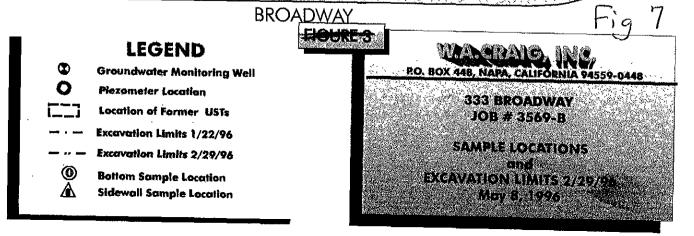
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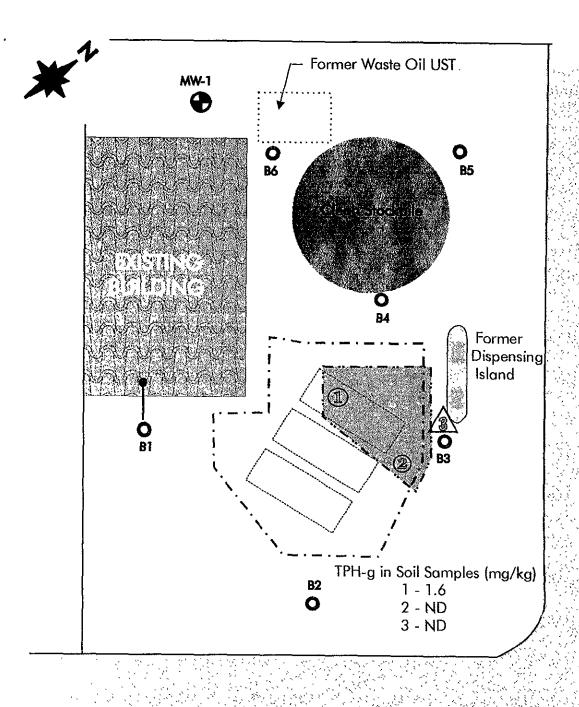


Former Waste Oil UST

MW-1







O 15'
Approximate Scale 1" = 15'

Sidewalk

BROADWAY



Groundwater Monitoring Well

Plezometer Location

Location of Former USTs

Excavation Limits 2/29/96

----- Excavation Limits 3/5/96

Bottom Sample Location
 Sidewall Sample Location

SAMPLE LOCATIONS and

EXCAVATION LIMITS TO 96

PO. BOX 448, NAPA, CALIFORNIA 94559-0448

333 BROADWAY JOB # 3569-B

TABLE 1: RESULTS OF SOIL AND GROUNDWATER SAMPLE ANALYSIS
September 20 and 28, 1993

	Sample I.D.	TPH diesel (mg/kg)	Total oil & grease (mg/kg)	total lead (mg/kg)
9-20-93	MW-1, 5.5'	N.D.	18	3.4
	MW-1, 10.5	N.D.	N.D.	3.5
	MW-1, 14'	N.D.	N.D.	3.7
		(mg/L)	(mg/L)	(mg/L)
9-28 [MW-1	N.D.	1.3	N.D.
`	mg/kg and mg/L	- nom	1,300ppb	

mg/kg and mg/L = ppm N.D. = not detected

GROUNDWATER FLOW DIRECTION DETERMINATION

The three wells across the street were surveyed to a relative datum to allow calculation of that site's groundwater gradient and groundwater flow direction. These wells were installed by others in April, 1992. The groundwater flow direction on four separate occasions between 1992 and 1993 was towards the west southwest (see Appendix A). This local groundwater flow data indicates that MW-1 then, should be in line to intercept groundwater flow from beneath the removed tank.

CONCLUSIONS, RECOMMENDATIONS

Groundwater flow direction was determined by measuring depth to water in three groundwater wells on an adjacent site on August 12, 1993 and again on September 15, 1993.

On September 20, 1993, one borehole was drilled downgradient from a previously removed 550 gallon waste oil tank. Soil samples were taken at 5' intervals and analyzed for petroleum hydrocarbons and lead. The bore hole was converted to a groundwater monitoring well which was developed, sampled and analyzed for petroleum hydrocarbons and lead.

Minor levels of oil and grease were found in the shallow (5.5') soil sample and the water sample. Thus it appears that groundwater has been impacted by the release.

analytical data for the groundwater samples collected from MW-1 to date are listed in the following table:

Table 1 - Groundwater Analytical Results, MW-1

MW - 1	Sept.	Dec.	Mar.	June	Dec.	June
	'93	'93	'94	'94	'94	'95
TPH-Diesel (ug/L)	ND	ND	ND	ND	ND	N/A
Total Oil & Grease (mg/L)	1.3	0.6	13	1.5	ND	0.9
Total Lead (mg/L)	ND	ND	ND	ND	ND	N/A

DLis0.5

ug/L= parts per billion (ppb)

mg/L = parts per million (ppm)

ND = Non-Detectable Concentration

N/A = Not Analyzed

3520

6.0 CONCLUSIONS AND RECOMMENDATIONS

MW-1 groundwater analyses for the sixth quarter continued to indicate relatively low levels of oil & grease. The source of oil & grease at the site has been removed, and concentrations of oil & Grease have, in general, continued to decline since concentrations peaked in March, 1994.

Because residual contamination levels in the groundwater are relatively low, we recommend that sampling be discontinued. AEI recommends that the site be closed, and that the well be properly destroyed.

Table 3

Soil Sample Analyses:
Samples taken at time of tank removal:
The soil samples were labeled:
SP-Comp-1 Composite gasoli

P-Comp-1	ne pit stockpile
P-Comp-2	ne pit stockpile
B-1-S	end 3,000 gallon tank
B-1-N	end 3,000 gallon tank
B-2-S	end 4,000 gallon tank
B-2-N	end 4,000 gallon tank
B-3-S	end 4,000 gallon tank
B-3-N	end 4,000 gallon tank
D-1-3'	: #1
)-2-3'	: #2
D-1-3'	end 4,000 gallon tank : #1 : #2

Summary of analyses of soil samples:

•	V				
SP-Comp-1	H(g) 88 ⁄	Benzene ND	Toluene 0.075	Ethyl Benzene 0.048	Xylenes 0.94
SP-Comp-2-	53 v	ND.	ND	ND	0.71
PB-1-S	330	0.038	0.45	ND	ND
PB-1-N	1.5	ND	ND	ND	0.012
PB-2-S	1000	ND -	2.1	8.2	40
PB-2-N	10 -	0.013	0.011	0.14	0.22
PB-3-S	ND	0.007	ND	0.008	0.011
PB-3-N	ND .	ND	ND	ND	ND
D-1-3'	ND	ND	ND	ND	ND
D-2-3'	ND	ND	ND	ND	ND

SP-Comp-1 SP-Comp-2 PB-1-S PB-1-N PB-2-S PB-2-N PB-3-S PB-3-N D-1-3	772 5.0 5.8 6.1 3.6 4.8 4.6 4.1
D-1-3' D-2-3'	4.1 · 5.0

Disposal of stockpile: The stockpile from the tank pit had low levels of detectable contamination. After consultation with the County it is recommended that this soil be properly returned to the pit.

TABLE &

Soil Sample Analytical Results 333 Broadway, Oakland, California

Boring No. Sample Depth (feet)	SAMPLE DATE	TPH-g (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl Benzene (mg/kg)	Xylene (ing/kg)
B1 13,5-14	02/07/96	ND	ND	ND	ND	ND
BI 15,5-16		ND	ND	ND	ND	ND
B2 14.5-15		ND	ND	ND	ND	ND
B3 7.5-8		ND	ND	ND	ND	ND
B3 11.5-12		ND	ND	ND	ND	ND
B3 15.5-16		ND	ND	ND	ND	ND
B3 23.5-24		ND	ND	ND	ND	ND
B4 6-6.5		ND	ND	ND	ND	ND
B4 13-13.5]	ND	ND	ND	ND	ND
B4 17.5-18	[ND	ND	ND	ND	ND
B5 10-10.5		ND	ND	ND	ND	ND
B5 14,5-15		ND	ND	ND	ND	ND
B5 19.5-20		ND	ND	ND	ND	ND
B6 7.5-8		ND	ND	ND	ND	ND
B6 11.5-12		ND	ND	ND	ND	ND
B6 15.5-16		ND	ND	ND	ND	ND

(mg/kg) = milligrams per kilogram in soil ND = Not detected at the laboratory limit of detection.

TABLE 5

Groundwater Sample Analytical Results 333 Broadway, Oakland, California

			TPH-g (mg/l)	Benzene (ing/l)	Toluene (ing/t)	Ethyl Benzene (mg/l)	Xylene (mg/l)
B1		02/07/96	ND	ND	0.00058	ND	ND
B2	,		ND	ND	ND	ND	ND
В3	-7	02/09/96	ND	ND	ND	ND	ND
B4		02/07/96	ND	ND	ND	ND	ND
B5			ND	ND	ND	ND	ND
В6			ND	ND	ND	ND	ND
MW-1			ND	ND	ND	ND	ND

(mg/l) = milligrams per litre in groundwater ND = Not detected at the laboratory limit of detection.

TABLE # 6

Confirmation Soil Sample Analytical Results 333 Broadway Oakland, California

Sample No. Depth in Feet	Sample Date	TPH-g (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl Benzene (mg/kg)	Xylene (mg/kg)	lead (mg/kg)	Reactivity	Corrosivity (pH)	Ignitability
LN-1 SW 15'	01/22/96	ND	ND	ND	ND	ND		-		
LW2 16'		ND	ND	ND	0.025	0.015				
SP-1 (stockpile)		1100	ND	1.7	10	94	6.0	negative	6.97	negative
SP-2 (stockpile)		59	ND	0.11	0.36	2.1	6.2	negative	6.53	negative
1-022996-E-\$W-9'	02/29/96	26	ND	ND	0.015	0.053		:		······································
2-022996-E-SW-10	overex	<u>(4.1</u>)	ND	ND	ND	ND		· · · · · · · · · · · · · · · · · · ·		
3-022996-N-SW-8'	Ų	16	ND	0.016	0.034	0.43				·
4-022996-N-SW-13'		770	ND	4.6	13	77				
.5-022996-W-SW-12'		€ 2.4	ND	ND	ND	0.010				·
6-022996-W-\$W-13'		ND	ND	ND	ND	ND				
7-022996-W-PB-17		250	0.042	0.18	1.0	12		<u> </u>		· · · · · · · · · · · · · · · · · · ·
8-022996-E-PB-17		97	ND	0.29	1.0	5,7				
1-030596-W-PB-17'	03/05/96	1.6	ND	ND	ND	ND				
2-030596-N-PB-16'	overex	ND	ND	ND	(0.010	0.12				
3-030596-N-SW-13'	<u>_</u>	ND	ND	ND	ND	ND				

Explanation:

(mg/kg) = milligrams per kilogram in soil ND = Not detected at the laboratory limit of detection

Blank areas indicate no testing was performed

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