

ALAMEDA COUNTY
HEALTH CARE SERVICES

AGENCY

DAVID J. KEARS, Agency Director



ENVIRONMENTAL HEALTH SERVICES

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

StID 852

August 14, 1998

Mr. Anthony Batarse Jr.
Lloyd Wise Nissan
10500 E. 14th Street
Oakland, CA 94603

Dear Mr. Batarse:

RE: Fuel Leak Site Case Closure for 10500 E 14th Street, Oakland

Dear Mr. Batarse:

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:

- o up to 18,000ppb TPH as gasoline and 270ppb benzene exists in groundwater beneath the site; and,
- o a human health risk assessment is required if a building is proposed in the vicinity of the former gasoline tank.

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, 1330 Broadway, 2nd Fl, Oakland, CA 94612
files-ec (lloydwise2-13)

ALAMEDA COUNTY
HEALTH CARE SERVICES

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DAVID J. KEARS, Agency Director



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

REMEDIAL ACTION COMPLETION CERTIFICATION

**StID 852 - 10500 E 14th Street, Oakland, CA
(1-550 gallon waste oil and 1-2,000 gallon gasoline tank removed in February
1993**

August 14, 1998

Mr. Anthony Batarse Jr.
Lloyd Wise Nissan
10500 E. 14th Street
Oakland, CA 94603

Dear Mr. Batarse:

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

Based on information in the above-referenced file and with the provision that the information provided to this agency was accurate and representative of site conditions, no further action related to the underground tank release is required.

This notice is issued pursuant to a regulation contained in Title 23, Section 2721(e) of the California Code of Regulations.

Please contact our office if you have any questions regarding this matter.

Sincerely,

Mee Ling Tung, Director

cc: Richard Pantages, Chief of Division of Environmental Protection
Chuck Headlee, RWQCB
Dave Deaner, SWRCB
Leroy Griffin, OFD
files-ec (lloydwise2-12)

CASE CLOSURE SUMMARY
Leaking Underground Fuel Storage Tank Program

I. AGENCY INFORMATION

Date: April 29, 1998

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: **Lloyd Wise Nissan**

Site facility address: **10500 E. 14th Street, Oakland, CA 94603**

RB LUSTIS Case No: **N/A**

Local Case No./LOP Case No.: **852**

URF filing date: **6/8/94**

SWEEPS No: **N/A**

Responsible Parties:

Addresses:

Phone Numbers:

Anthony Batarse Jr.
Lloyd Wise Nissan

10500 E. 14th Street
Oakland, CA 94603

(510) 638-4000

Tank **Size in**
No: **gal.:**

Contents:

Closed in-place
or removed?:

Date:

A **550**

Waste Oil

Removed

2/17/93

B **2,000**

Gasoline

"

2/18/93

III. RELEASE AND SITE CHARACTERIZATION INFORMATION

Cause and type of release: **Unknown**

Site characterization complete? **YES**

Date approved by oversight agency: **3/27/98**

Monitoring Wells installed? **Yes** Number: **2**

Proper screened interval? **Yes, 15' to 29' bgs**

Highest GW depth below ground surface: **8.04'**

Lowest depth: **28.30' in MW-1-N**

Flow direction: **WSW**

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): **None**

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

Alameda County
1131 Harbor Bay Pkwy
Alameda, CA 94502

and **Oakland Fire Dept**
1605 MLK Jr Dr
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	2 USTs	Disposed by H & H, in San Francisco	Feb 1993
Piping			
Soil	~115 cy	Unknown	
Rinsate	100 gallon	Recycled at Gibson Oil, Redwood City	2/16/93

Maximum Documented Contaminant Concentrations -- Before and After Cleanup

<u>Contaminant</u>	<u>Soil (ppm)</u>		<u>Water (ppb)</u>	
	<u>Before¹</u>	<u>After²</u>	<u>Before³</u>	<u>After⁴</u>
TPH (Gas)	160	NA	240,000	18,000
TPH (Diesel)	39	ND	NA	NA
Benzene	ND	ND	3,600	270
Toluene	0.21	ND	2,600	120
Ethylbenzene	0.57	ND	6,900	1,800
Xylenes	0.98	ND	40,000	6,300
MTBE	NA	NA	NA	ND
Oil & Grease	ND	NA	NA	ND
Heavy metals	w/in geogenic levels			

NOTE: 1 soil samples collected at time of UST removal, Feb 1993
2 soil samples collected after overexcavation of gasoline pit, Mar 1993
3 maximum groundwater concentrations detected from monitoring wells
4 most recent groundwater concentrations from wells, Feb 1998

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: **An assessment of human health risk due to volatilization of chemicals of concern from soil and groundwater to indoor air is required if a building is proposed in the vicinity of the former gasoline tank..**

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

Monitoring wells Decommissioned: **0, pending site closure**

Number Decommissioned: **0** Number Retained: **2**


List enforcement actions taken: **NOV in May 1995**

List enforcement actions rescinded: **NA**

V. LOCAL AGENCY REPRESENTATIVE DATA

Name: **Eva Chu**

Title: **Haz Mat Specialist**

Signature: 

Date: **4/29/98**

Reviewed by

Name: **Larry Seto**

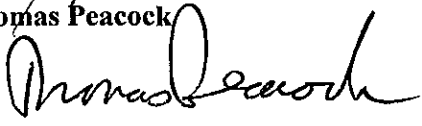
Title: **Sr. Haz Mat Specialist**

Signature: 

Date: **4-29-98**

Name: **Thomas Peacock**

Title: **Supervisor**

Signature: 

Date: **5-5-98**

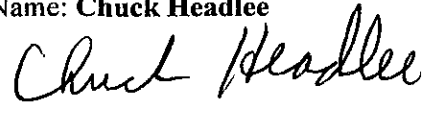
VI. RWQCB NOTIFICATION

Date Submitted to RB: **5/6/98**

RB Response:

RWQCB Staff Name: **Chuck Headlee**

Title: **REG**

Signature: 

Date: **6/11/98**

VII. ADDITIONAL COMMENTS, DATA, ETC.

Two USTs were used at the Lloyd Wise automobile showroom and auto repair facility. A 550 gallon waste oil UST was located in the back of the site, adjacent to the service bay. A 2,000-gallon gasoline UST was located in the front of the auto showroom (see Figs 1 and 2). Both USTs were removed in February 1993. Two soil samples (B-1 and B-2) and a water sample (B-4) were collected from the waste oil tank pit. Analytical results did not contain remarkable levels of petroleum hydrocarbons (see Table 1). No further action was required at the waste oil pit.

Soil samples C-1 and C-2 were collected below the gasoline UST @8' bgs. Up to 160 ppm TPHg, and ND, 0.21, 0.57, and 0.98 ppm BTEX, respectively, were identified (see Table 2). The pit was overexcavated in March 1993. Final dimensions of the pit was 16' x 20' x 12' in depth. Two confirmatory soil samples (EX-N/B and EX-S/B) were collected from the pit bottom, and soil samples (EX-N, EX-S, EX-W, and EX-E) were collected from each sidewall. These samples did not contain detectable levels of TPHg or BTEX. (See Fig 3 and Table 3)

In April 1994 one monitoring well, MW-1-N was installed immediately west of the former gasoline pit. A soil sample (MW-1-N @15') from the well boring contained low levels of petroleum hydrocarbons. Groundwater contained up to 120,000 ppb TPHg, and 2,000, 2,600, 4,500, and 40,000 ppb BTEX, respectively. (See Fig 4, Tables 4 and 5)

Boring B-1 was drilled upgradient of the former UST. Well MW-2-N was installed further downgradient of well MW-1-N. Gradient was confirmed with groundwater elevation data collected from the two on-site wells and from one off-site well located across 105th Street, at Lloyd Wise Oldsmobile. Soil from B-1 and MW-2-N did not contain remarkable levels of hydrocarbons (see Fig 4, Table 5). However, groundwater from well MW-2-N contained elevated TPHg and BTEX (see Table 7). To further delineate the extent of the plume, six exploratory Hydropunch borings were drilled in January 1997. Soils samples were collected from two of the borings (B-1H and B-2N). Grab groundwater samples were collected from each boring. Soil and groundwater analytical results indicate that petroleum hydrocarbons are limited in groundwater to the vicinity of the former gasoline UST and the monitoring wells. (See Fig 5, Tables 8 and 9)

After eight sampling events (from 4/94 to 2/98) TPHg and benzene levels have continued to decrease. Current residual soil and groundwater contamination levels do not pose a risk to human health (based on ASTM RBCA Tier 1 Lookup Table), assuming volatilization of soil or groundwater to outdoor air, the only current complete exposure pathway. Natural biodegradation appears to be reducing hydrocarbon concentrations at the site. Continued monitoring is not warranted. However, construction of a building over the vicinity of the former gasoline UST will require an evaluation of risk to human health due to volatilization of chemicals of concern from soil and groundwater to indoor air.

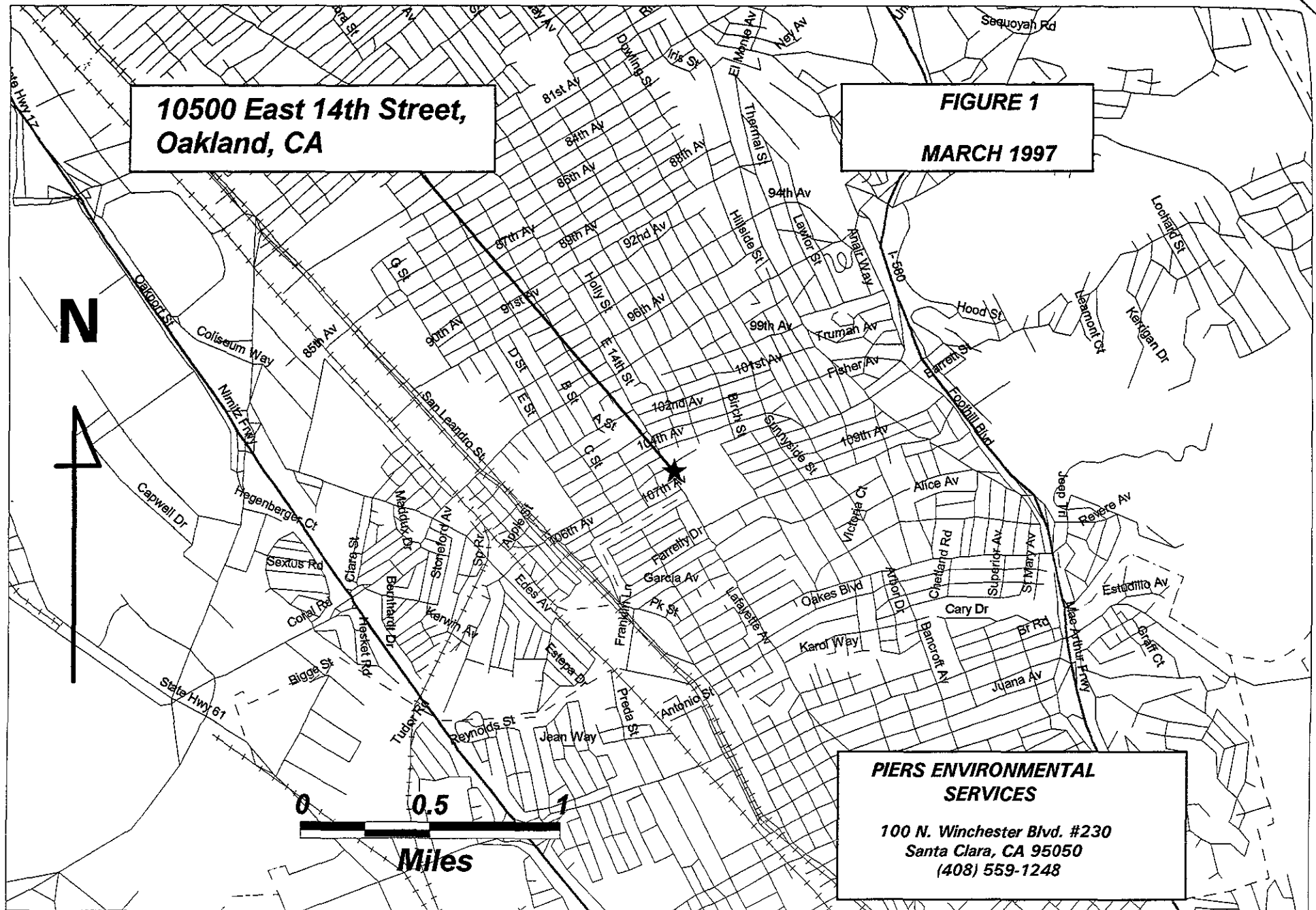
In summary, case closure is recommended because:

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

**10500 East 14th Street,
Oakland, CA**

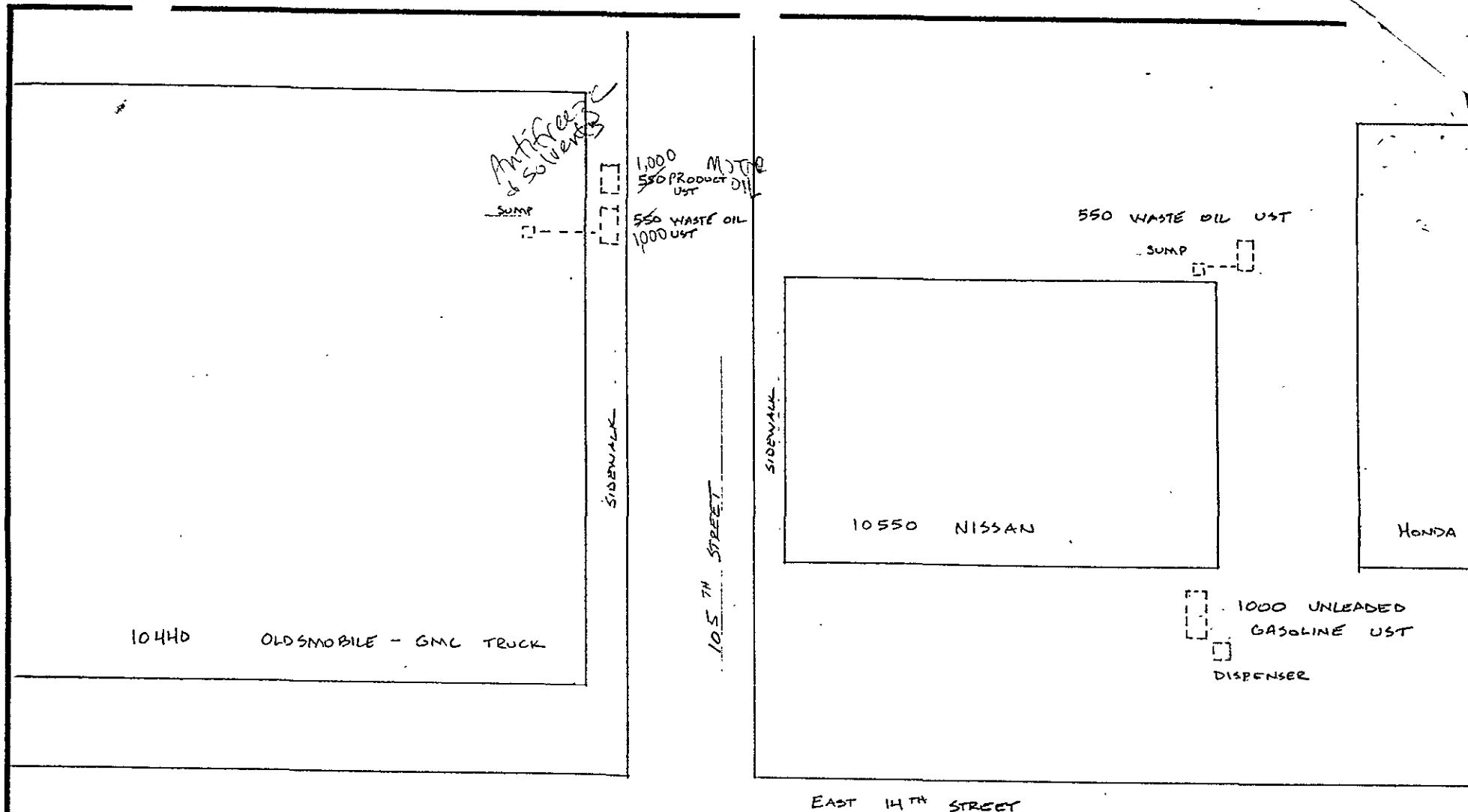
FIGURE 1

MARCH 1997



**PIERS ENVIRONMENTAL
SERVICES**

**100 N. Winchester Blvd. #230
Santa Clara, CA 95050
(408) 559-1248**



GEN-TECH ENVIRONMENTAL INC

SCALE: 40' = 1"

APPROVED BY:

DRAWN BY DBG

DATE: 1-15-93

REVISED

10440 AND 10550 EAST 14TH STREET, OAKLAND CA

SITE PLAN

Fig 2

DRAWING NUMBER

9302-1

Table 1

Following is a table indicating the analysis results for the soil and water samples.

	9302-B-1	9302-B-2	9302-B-4(water)

TPH			
Gas	1.0ppm	N.D.	120ppb
TPH			
Disl	2.9ppm	39ppm	not reported
B	N.D.	N.D.	N.D..
T	N.D.	N.D.	1.2ppb
E	N.D.	N.D.	7.2ppb
X	5.3ppb	7.0ppb	26ppb
Oil & Grease	N.D.	N.D.	not reported
Cad mium	N.D.	N.D.	not reported
Chro mium	42ppm	43ppm	not reported
Lead	15ppm	16ppm	not reported
Nickel	45ppm	50ppm	not reported
Zinc	42ppm	45ppm	not reported

UNDERGROUND TANK TECHNICAL CLOSURE REPORT

Page 11 of 14

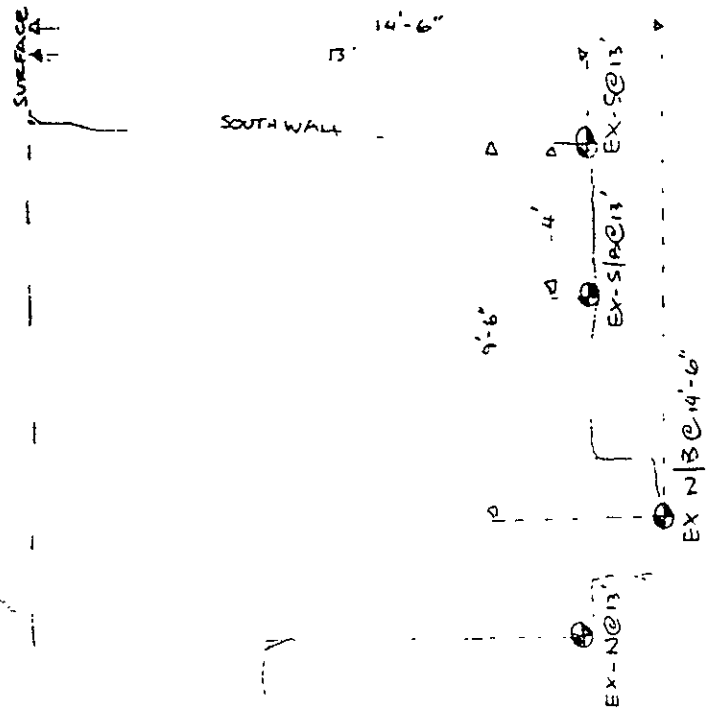
Table 2

Following is a table indicating the analysis results for the soil samples.

	9302-C-1	9302-C-2	9302-C-3	9302-C-4

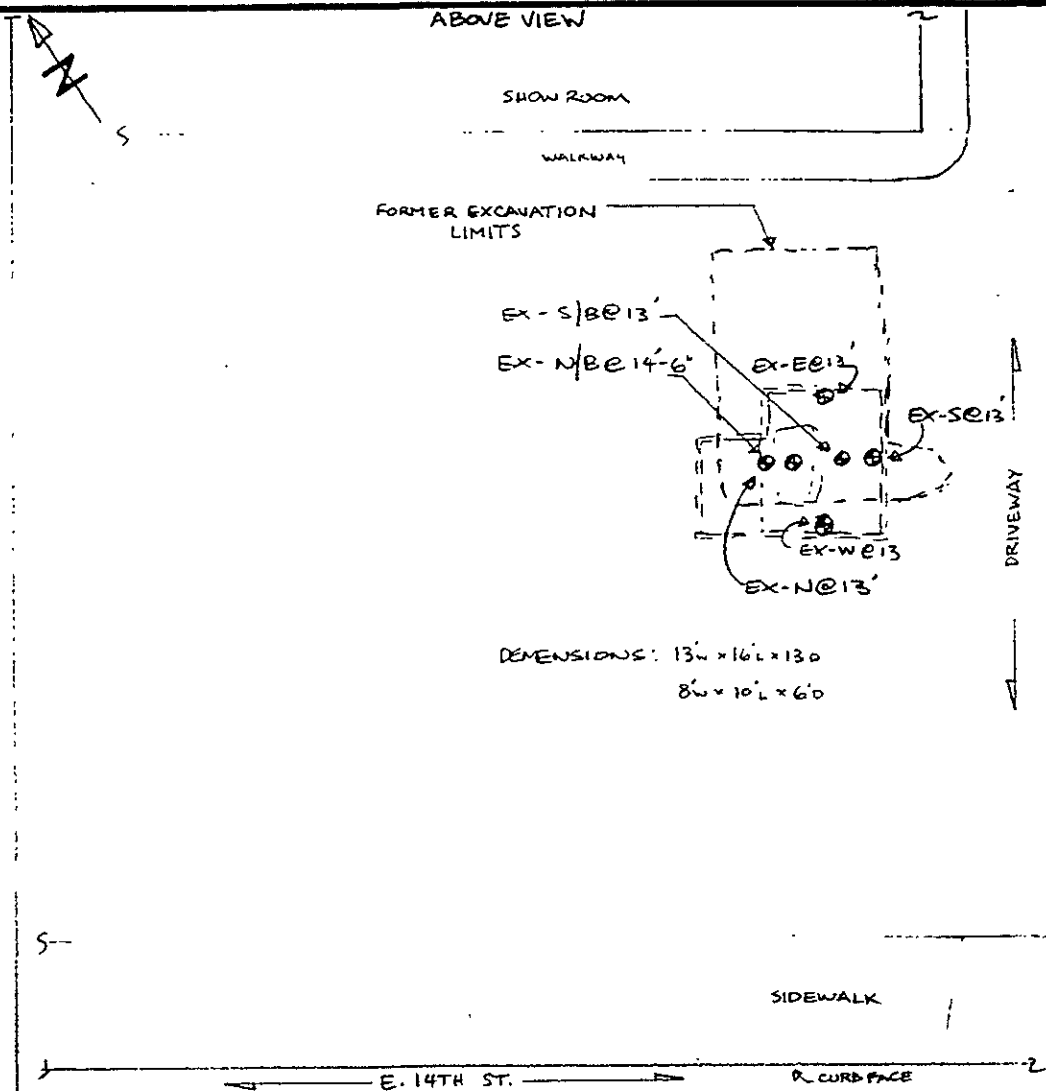
TPH				
Gas	1.2ppm	160ppm	1.2ppm	N.D.
B	N.D.	N.D.	N.D.	N.D.
T	N.D.	210ppb	N.D.	N.D.
E	5.5ppb	570ppb	N.D.	N.D.
X	N.D.	N.D. 980ppb	N.D.	N.D.

PROFILE VIEW
SCALE: 1" = 5' VIEW - EAST



* TOTAL EXCAVATED MATERIAL = 115 yds

ABOVE VIEW



DEMEASIONS: 13' x 16' x 13'
8' x 10' x 6'

LLOYD A WISE NISSAN
10525 E 14TH ST. OAKLAND CA.

FIG 3

SCALE: 1" = 20'

APPROVED BY:

DRAWN BY E.L.

DATE: 3-11-93

REVISED

⊕ = SOIL SAMPLE LOCATION(S)

EXCAVATION LOCATION AND PROFILE

DRAWING NUMBER
9302-02

CHROMALAB, INC.

Environmental Laboratory (1094)

5 DAYS TURNAROUND

Table 3

March 26, 1993

ChromaLab File No.: 0393257

GEN-TECH ENVIRONMENTAL

Attn: Eric LissolRE: Six soil samples for Gasoline and BTEX analysis

Project Name: AABATARSE

Project Number: 9302

Date Sampled: Mar. 12, 1993

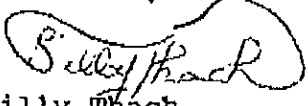
Date Submitted: Mar. 19, 1993

Date Analyzed: March 24, 1993

RESULTS:

Sample I.D.	Gasoline (mg/Kg)	Benzene (µg/Kg)	Toluene (µg/Kg)	Ethyl Benzene (µg/Kg)	Total Xylenes (µg/Kg)
EX-N/B @ 14'6"	N.D.	N.D.	N.D.	N.D.	N.D.
EX-S/B @ 13'	N.D.	N.D.	N.D.	N.D.	N.D.
EX-N @	N.D.	N.D.	N.D.	N.D.	N.D.
EX-S @	N.D.	N.D.	N.D.	N.D.	N.D.
EX-E @	N.D.	N.D.	N.D.	N.D.	N.D.
EX-W @	N.D.	N.D.	N.D.	N.D.	N.D.
BLANK	N.D.	N.D.	N.D.	N.D.	N.D.
SPIKE RECOVERY	88%	110%	112%	101%	104%
DUP SPIKE RECOVERY	---	108%	109%	105%	105%
DETECTION LIMIT	1.0	5.0	5.0	5.0	5.0
METHOD OF ANALYSIS	5030/8015	8020	8020	8020	8020

ChromaLab, Inc.


Billy Thach
Analytical Chemist
Eric Tam
Laboratory Director

do

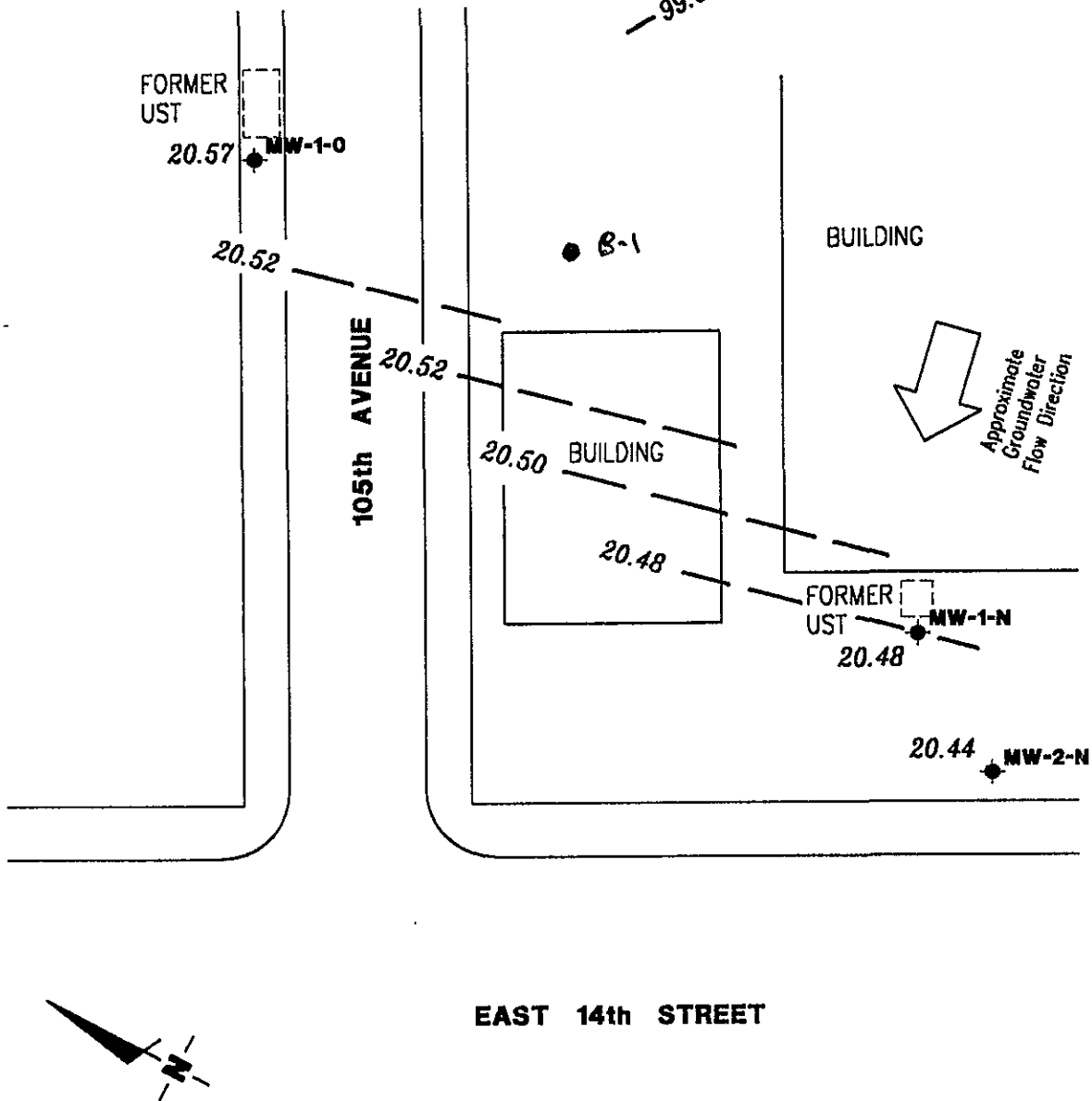
RECEIVED

APR 2 1993

ANSWERED _____

EXPLANATION

- ◆ Groundwater monitoring well
- 99.99 Groundwater elevation in feet referenced to Mean Sea Level (MSL) measured on August 9, 1995
- 99.99 — Groundwater elevation contour.



GROUNDWATER CONTOUR MAP

FIGURE 04

Lloyd Wise Nissan
10550 East 14th Street
Oakland, California

September 1995

Scale: 1" = 40'



PIERS ENVIRONMENTAL SERVICES

TABLE 4. SOIL BORING CHEMICAL DATA

Sample No.	TPHG mg/kg	Benzene ug/kg	Toluene ug/kg	Ethylbenzene ug/kg	Xylene ug/kg
MW#1-N@C/F	ND	8.6	ND	ND	10
MW#1-N@15'	30	10	ND	220	970

TABLE 5. GROUNDWATER CHEMICAL DATA

Sample No.	TPHG ug/l	TPHD ug/l	B -----	T ug/l	E -----	X -----	OG ug/l	VOA ug/l	EG ug/l	Pb mg/l
MW-1-0	ND	ND	ND	ND	ND	ND	ND	Yes*	ND	0.010
MW-1-N	120,000	NR	2,000	2,600	4,500	40,000	NR	NR	NR	0.010
Blank	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

ND - Not Detected

NR - Not Requested

mg/kg - milligram per kilogram (ppm) ug/kg - microgram per kilogram (ppb)

mg/l - milligram per liter (ppm) ug/l - microgram per liter (ppb)

Yes* - 5.7 ppb cis-1,2-dichloroethene (DCE); 3.2 ppb trichloroethene (TCE)

If well MW-1-0 is screened on top of aquifer, could there be higher concentrations of DCE + TCE if well was screened lower?

TABLE 6. SOIL CHEMICAL DATA

Sample No.	TPHG mg/Kg	B	T	E	X
		-----mg/Kg-----			
MW-2-N @15'	ND	ND	ND	ND	ND
MW-2-N @20'	2.1	0.038	0.024	0.091	0.26
MW-2-N @25'	ND	ND	ND	ND	ND
B-1 @ 18'	ND	ND	ND	ND	ND

mg/Kg = milligrams per kilogram (roughly equal to parts per million)
 ND = not detected at or above the laboratory method reporting limit

TABLE 7. GROUNDWATER CHEMICAL DATA

Samp. No.	TPHG	TPHD	B	T	E	X	Total Lead	Ethy. Gly.	O&G	VOCs
							-----ug/L-----			
MW-1-O	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW-1-N	240,000	NA	3,600	1,200	6,900	35,000	ND	NA	NA	NA
MW-2-N	190,000	NA	2,100	1,000	2,200	14,000	NA	NA	NA	NA

ug/L = micrograms per liter (roughly equal to parts per billion)
 ND = not detected at or above the laboratory method reporting limit
 NA = not analyzed

MW-10
(24.98)

105th AVENUE

Showroom/
Repair
Building

B-4N

Adjacent Auto
Dealership Building

B-2H

B-1N

MW-1N
(25.00)

B-1H

B-2N

MW-2N
(24.97)

B-3N

EAST 14TH STREET

(24.98) Groundwater
elevation in feet
above mean level

N

BORING LOCATION MAP

FIGURE 15

Project No. 96377
10500 East 14th Street
Oakland, California

March, 1997
Scale: 1" = approx. 40'



PIERS ENVIRONMENTAL SERVICES

Entech Analytical Labs, Inc.

CA ELAP# 1369

525 Del Rey Avenue, Suite E • Sunnyvale, CA 94086 • (408) 735-1550 • Fax (408) 735-1554

Table 8

Piers Environmental Services
100 N. Winchester Blvd., Ste 230
Santa Clara, CA 95050
Attn: Stuart Solomon

Date:	2/3/97
Date Received:	1/27/97
Date Analyzed:	1/28-1/29/97
Project No.:	96377+96376
Sampled By:	Client

Certified Analytical Report


Soil Sample Analysis:

Sample ID	Sample Date	Sample Time	Lab #	DF	TPH-Gas	Benzene	Toluene	Ethyl Benzene	Xylene
B-1H @10'	1/24/97		D2202	1	ND	ND	ND	ND	ND
B-1H @15'	1/24/97		D2203	1	ND	ND	ND	ND	ND
B-2N @10'	1/24/97		D2204	1	ND	ND	ND	ND	ND
B-2N @15'	1/24/97		D2205	1	ND	ND	ND	ND	ND

1. $DLR = PQL \times DF$
2. Analysis performed by Entech Analytical Labs, Inc. (CAELAP #1369)

Summary of Methods and Detection Limits:

	TPH-Gas	Benzene	Toluene	Ethylbenzene	Xylenes
EPA Method #	8015M	8020	8020	8020	8020
Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
PQL	1.0 mg/kg	0.005 mg/kg	0.005 mg/kg	0.005 mg/kg	0.005 mg/kg


Michael N. Golden, Lab Director

DF=Dilution Factor
DLR=Detection Reporting Limit

PQL=Practical Quantitation Limit
ND=None Detected at or above DLR

Table 9

Piers Environmental Services
100 N. Winchester Blvd., Ste 230
Santa Clara, CA 95050
Attn: Stuart Solomon

Date:	2/3/97
Date Received:	1/27/97
Date Analyzed:	1/28-1/29/97
Project No.:	96377+96376
Sampled By:	Client

Certified Analytical Report

Water Sample Analysis:

Test	B-1N	B-2N	B-3N	B-1H	Units	PQL	EPA Method #
Sample Matrix	Water	Water	Water	Water			
Sample Date	1/24/97	1/24/97	1/24/97	1/24/97			
Sample Time	10:10	8:59	8:20	9:30			
Lab #	D2192	D2193	D2194	D2195			
DF-Gas/BTEX	4	1	1	1			
TPH-Gas	4,500	290	ND	ND	µg/liter	50.0 µg/l	8015M
MTBE	23	ND	ND	ND	µg/liter	5.0 µg/l	8020
Benzene	12	0.73	ND	ND	µg/liter	0.5 µg/l	8020
Toluene	ND	ND	ND	ND	µg/liter	0.5 µg/l	8020
Ethyl Benzene	51	17	ND	ND	µg/liter	0.5 µg/l	8020
Xylenes	32	15	ND	ND	µg/liter	0.5 µg/l	8020

1. DLR=DF x PQL (DF=1 unless noted)
2. Analysis performed by Entech Analytical Labs, Inc. (CAELAP #1369)



Michael N. Golden, Lab Director

DF=Dilution Factor
DLR= Detection Reporting Limit

PQL=Practical Quantitation Limit
ND=None Detected at or above DLR

Entech Analytical Labs, Inc.

CA ELAP# 1369

525 Del Rey Avenue, Suite E • Sunnyvale, CA 94086 • (408) 735-1550 • Fax (408) 735-1554

cont. Table 9

Piers Environmental Services
100 N. Winchester Blvd., Ste 230
Santa Clara, CA 95050
Attn: Stuart Solomon


Date:	2/3/97
Date Received:	1/27/97
Date Analyzed:	1/28/97
Project No.:	96377+96376
Sampled By:	Client

Certified Analytical Report

Water Sample Analysis:

Test	B-2H	B-4N	Units	PQL	EPA Method #
Sample Matrix	Water	Water			
Sample Date	1/24/97	1/24/97			
Sample Time	11:00	12:00			
Lab #	D2196	D2197			
DF-Gas/BTEX	1	1			
TPH-Gas	ND	ND	µg/liter	50.0 µg/l	8015M
MTBE	ND	ND	µg/liter	5.0 µg/l	8020
Benzene	ND	ND	µg/liter	0.5 µg/l	8020
Toluene	ND	ND	µg/liter	0.5 µg/l	8020
Ethyl Benzene	ND	ND	µg/liter	0.5 µg/l	8020
Xylenes	ND	ND	µg/liter	0.5 µg/l	8020

1. DLR=DF x PQL (DF=1 unless noted)
2. Analysis performed by Entech Analytical Labs, Inc. (CAELAP #1369)


Michael N. Golden, Lab Director

DF=Dilution Factor
DLR= Detection Reporting Limit

PQL=Practical Quantitation Limit
ND=None Detected at or above DLR

Entech Analytical Labs, Inc.

CA ELAP# 1369

525 Del Rey Avenue, Suite E • Sunnyvale, CA 94086 • (408) 735-1550 • Fax (408) 735-1554

cont. Table 9

Piers Environmental Services
100 N. Winchester Blvd., Ste 230
Santa Clara, CA 95050
Attn: Stuart Solomon

Date:	2/3/97
Date Received:	1/27/97
Date Analyzed:	2/3/97
Project No.:	96377+96376
Sampled By:	Client

Certified Analytical Report

Water Sample Analysis:

Sample ID	Sample Date	Sample Time	Lab #	TRPH
B-3H	1/24/97	11:30	D2198	ND
EB-1	1/24/97	12:45	D2199	ND
EB-2	1/24/97	1:40	D2200	ND
EB-3	1/24/97	2:19	D2201	ND

1. $DLR = DF \times PQL$ (DF=1 unless noted)
2. Analysis performed by Entech Analytical Labs, Inc. (CAELAP #1369)

Test Methods:

Test	EPA Method #	Units	PQL
TRPH	418.1	mg/liter	5.0 mg/l


Michael N. Golden, Lab Director

DF=Dilution Factor
DLR=Detection Reporting Limit

PQL=Practical Quantitation Limit
ND=None Detected at or above DLR

2.1 Laboratory Analyses

Table 10

The following analyses was performed by Priority on groundwater samples obtained from the monitor wells:

TPH-gas (EPA Method 8015)M; BTEX (EPA Method 602)
Nitrate& Nitrite as Nitrogen (EPA) Method 353.3)

The results of the groundwater sample were as follows:

Results in Parts Per Billion (PPB)

2/18/98

Well#	Sample#	TPH/g	Benzene	Toluene	EthylBenzene	Xylene	NO ₃ /NO ₂	DTW
MW1N	MW1-E	17,000	270	120	1800	6300	0.57	8.04
MW2N	MW1-W	18,000	250	14	580	4300	0.59	8.33

HISTORICAL GROUNDWATER ANALYSIS

All Results in Parts Per Billion (PPB)

2/24/97

Sample#	TPH/g	Benzene	Toluene	EthylBenzene	Xylene	DTW	MTBE
MW1N	23,000	290	120	1100	4300	12.94ft.	ND
MW2N	23,000	610	41	950	3800	13.24ft.	ND

2/29/96

Sample#	TPH/g	Benzene	Toluene	EthylBenzene	Xylene	DTW
MW1N	31,000	510	160	1400	7400	12.46ft
MW2N	30,000	1400	ND	970	5600	12.70ft.

11/16/95

Sample#	TPH/g	Benzene	Toluene	EthylBenzene	Xylene	DTW
MW1N	55,000	1000	1200	3100	12000	19.78ft
MW2N	68,000	4600	1000	970	15000	19.50ft.

8/9/95

Sample#	TPH/g	Benzene	Toluene	EthylBenzene	Xylene	DTW
MW1N	240,000	3600	1200	6900	35000	17.77ft
MW2N	190,000	2100	1000	2200	14000	17.46ft.

cont. Table 10

5/18/95 Sample# MW1N	TPH/g 97,000	Benzene ND	Toluene ND	EthylBenzene ND	Xylene ND	DTW 14.56ft.
11/3/94 Sample# MW1N	TPH/g 75,000	Benzene 130	Toluene 210	EthylBenzene 380	Xylene 1200	DTW 21.10ft.
4/27/94 Sample# MW1N	TPH/g 120,000	Benzene 2000	Toluene 2600	EthylBenzene 4500	Xylene 40,000	DTW 28.30ft.

Project No. 9352 Boring/Well No. MW-1-N
 Client: A. A. Balarse Date Drilled:
 Location: 14th St. Oakland, CA Logged by: EL
 Drilling Method: Hollowstem
 Permit: ACFDWCD 94231
 Water Levels: 1st Enc: 20' Static: 19.82'

Borehole Completion

Well Installed: Sch 40 PVC 2" dia.
 Total Depth: 30' Casing Depth: 29.5'
 Screen Length: 14' 0.020" Blank Length: 15.5'
 Top Sand Pack: 12' 2/12 sand
 Top Bentonite: 11'
 Grout Seal: 11' to 1' surface vault box

Sample No.	OV	Blow Count	Sample	Depth	Lithology Log	Well Detail/ Backfill
					Asphalt Pavement and Baserock	
MW-1-N 5'		13		5	CL - Silty CLAY, very dark grayish brown 2.5YR3/2, 30% silt, med. high plasticity, laminated, stiff, damp.	
					Same as above, 6" thick silt bed, color change to 2.5Y3/1.	
MW-1-N 10'		45		10	Same as above, color change to olive brown 2.5Y4/4.	
					SM - Silty SAND, dark yellowish brown, 10YR4/4, very dense damp.	
MW-1-N 15'		28		15	CL - Silty CLAY, brown 10Y4/3, highly plastic, laminated, very stiff, damp.	
					CL - Silty CLAY, dark greenish gray 5GY4/1, highly plastic, rare burrows 1mm dia., stained and petroleum odor, very stiff, damp.	
MW-1-N 20'		30		20	Same as above, burrows wet, very moist to <u>saturated</u> .	
MW-1-N 25'		18		25	ML-SM - Sandy SILT to Silty SAND, olive brown 2.5Y4/3, 50% silt 50% sand, slightly plastic,	
MW-1-N 26'		7			CL - Silty CLAY - light olive brown, 10% silt, greenish gray staining, 1 mmdia. burrows <u>wet</u> , highly plastic, very stiff, moist; slight petroleum odor.	
				30	SM - Silty SAND, dark olive green to gray, 5GY4/1, 30% silt, loose, <u>saturated</u> ; when plug pushed, lower 1 foot of borehole collapses.	
					Bottom of Borehole = 30 feet	
					NOTE: The borehole was extended to a depth of 30 feet at the order of the Alameda Health Department representative, monitoring well construction similarly altered.	

Note: Clay is not acting as aquita

L.W. Nissan

PIERS Environmental Services

Exploratory Boring Log

Project No. 95193 Client: A.A. Batarse, Inc.

Boring # MW-2

Date 8-4-95

Location: 10550 E. 14th St., Oakland, CA

Logged By: B. Halsted

Drilling Method: 8 Inch Hollow Stem

Permit: Zone 7

Page 1 of 1

Sample No.	Blow Count	Sample Type	Location Depth USGS	Lithology Description	H2O Mark	Well Const. Detail
				4 inches asphalt, 8 inches baserock		
MW-2		Soil	5'	CL Silty Clay - 15%--20% silt - Very Dark Gray/Brown, Very Moist, Medium/High Plasticity, Stiff, Medium/High D/S		
@5'	5/6/8					2" PVC Blank
MW-2		Soil	10'			
@10'	4/7/8					1' Bentonite Chips
MW-2		Soil	15'	Silty Clay - <15% silt, olive brown, dry to very little moisture, very stiff, high plasticity, Medium to High D/S, very slight petroleum odor.		
@15'	5/7/9					2/12 Sand Pack
MW-2		Soil	20'	No changes except increase in moisture.		
@20'	7/10/12					2" slotted .02 PVC
MW-2		Soil	25'	Silty Clay, 35% silt, some very fine sand, olive brown, slightly moist, low to med. plasticity, med. D/S, very stiff.		
@25'	9/14/17					
MW-2		Soil	30'			
@30'	12/18/23			BOH @ 30.5 ft.		
			35'			
			40'			