ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY
DAVID J. KEARS, Agency Director

Alameda County CC4580
Environmental Health Services
1131 Harbor Bay Pkwy., #250
Alameda CA 94502-6577
(510)567-6700 FAX(510)337-9335

August 2, 1996

REMEDIAL ACTION COMPLETION CERTIFICATION

Mr. Keith Rutledge
Alternative Investments
P.O. Box 94
Willits, California 95490

RE: Former Exxon Service Station
5829 Adeline Street, Oakland, California 94608
STID # 4253

Dear Mr. Rutledge:

This letter confirms the completion of site investigation and remedial action for the three underground storage tanks (1 - 10,000 gallon gasoline, 1 - 8,000 gallon gasoline and 1 - 3,300 gallon gasoline) removed on November 22, 1991 at the above described location. Enclosed is the Case Closure Summary for the referenced site for your records.

Based upon the available information, including the current land use, and with the provision that the information provided to this agency was accurate and representative of site conditions, no further action related to the three gasoline underground storage tank release is required.

This notice is issued pursuant to a regulation contained in Title 23, California Code of Regulations, Division 3, Chapter 16, Section 2721 (e). If a change in the present land use is proposed, the property owner must promptly notify this agency.

Please contact Susan L. Hugo at (510) 567-6780 if you have any questions regarding this matter.

Sincerely,

Mee Ling Tung, Director

Enclosure

c: Gordon Coleman, Acting Chief, Environmental Protection - files
Kevin Graves, RWQCB
Lori Casias, SWRCB (with enclosure)
Thomas Cundey, SCI, 171 12th St., Suite 201, Oakland, CA 94607
DAVE DEANER, SWRCB CLEAN UP FUND PROGRAM

ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY
DAVID J. KEARS, Agency Director

RAFAT A. SHAHID, DIRECTOR

DEPARTMENT OF ENVIRONMENTAL HEALTH
1131 Harbor Bay Parkway
Alameda, CA 94502-6577
(510) 567-6777

May 1, 1996

STID # 4253

Mr. Keith Rutledge
Alternative Investments
P.O. Box 94
Willits, California 95490

RE: Case Closure - Former Exxon Service Station
5829 Adeline Street, Oakland, California 94608

Dear Mr. Rutledge:

The Alameda County Department of Environmental Health, Environmental Protection Division has recently received concurrence from the Regional Water Quality Control Board regarding this office determination that no further action is required concerning the removal of three underground storage tanks (1- 10,000 gallon gasoline, 1- 8,000 gallon gasoline and 1- 3,300 gallon gasoline) at the above referenced site.

Please be advised that the groundwater monitoring well (MW-1), two piezometers (P-1 and P-2) and the abandoned irrigation well at the site must be properly decommissioned before our agency will issue the **Remedial Action Completion Certification** (closure letter) for the subject site. A report must be submitted documenting the abandonment of the monitoring well, piezometers and irrigation well.

Additionally, you will need to notify this office 72 hours in advance of the well abandonment field activities.

If you have any questions concerning this letter, please contact me at (510) 567- 6780.

Sincerely,

Susan L. Hugo
Senior Hazardous Materials Specialist

c: Mee Ling Tung, Director, Environmental Health
Gordon Coleman, Acting Chief, Environmental Protection / files
Kevin Graves, San Francisco Bay RWQCB
Thomas Cundy, SCI, 171- 12th St., Suite 201, Oakland, CA 94607

01-1239
R0555

ENVIRONMENTAL PROTECTION

CASE CLOSURE SUMMARY
Leaking Underground Fuel Storage Tank Program

96 MAY -1 PM 2:00

I. AGENCY INFORMATION

Agency name: **Alameda County-HazMat** Date: **March 5, 1996**
City/State/Zip: **Alameda, CA 94502** Address: **1131 Harbor Bay Parkway**
Responsible staff person: **Susan Hugo** Phone: **(510) 567-6700**
Title: **Sr. Hazardous Materials Spec.**

II. CASE INFORMATION

Site facility name: **Former Exxon Service Station**
Site facility address: **5829 Adeline Street, Oakland CA 94608**
RB LUSTIS Case No: **N/A** Local Case No./LOP Case No.: **4253**
URF filing date: **12/3/91** SWEEPS No: **N/A**

Responsible Parties:	Addresses:	Phone Numbers:
Alternative Investments	P.O. Box 94	(707) 459-5533
c/o Mr. Keith Rutledge	Willits, CA 95490	

Tank No:	Size in gal.:	Contents:	Closed in-place or removed?:	Date:
1	10,000 gallon	Gasoline	Removed	11/22/91
2	8,000 gallon	Gasoline	Removed	11/22/91
3	3,300 gallon	Gasoline	Removed	11/22/91

III. RELEASE AND SITE CHARACTERIZATION INFORMATION

Cause and type of release: **Unknown, probably from overfilling the USTs**
Site characterization complete? **YES**
Date approved by oversight agency: **11/3/93**
Monitoring Wells installed? **YES** Number: **One (1) in addition to two piezometers**
Proper screened interval? **YES**
Highest GW depth below ground surface: **1.93 feet** Lowest depth: **5.99 feet**
Flow direction: **Southwesterly**
Most sensitive current use: **Unknown, but land use in the area are mixed residential / commercial,**
Are drinking water wells affected? **NO** Aquifer name: **NA**
Is surface water affected? **NO** Nearest affected SW name: **NA**
Off-site beneficial use impacts (addresses/locations): **NA**
Report(s) on file? **YES** Where is report(s) filed? **Alameda County 1131 Harbor Bay Parkway, Alameda, CA 94502-6577**

Treatment and Disposal of Affected Material:

Material	Amount (include units)	Action (Treatment of Disposal w/destination)	Date
Tank	1 - 3,300 gal	Erickson, Richmond, CA	11/22/91
	1 - 8,000 gal	Erickson, Richmond, CA	11/22/91
	1 - 10,000 gal	Erickson, Richmond, CA	11/22/91

Material	Amount (include units)	Action (Treatment of Disposal w/ destination	Date
Soil	136 yards Unknown	Aerated and reused at the site West Contra Costa Landfill Richmond, CA	6/3/92
Rinsate Water	900 gallons	DRG Refinery Services Patterson, CA	11/23/91
Product/water	5,000 gallons	Gibson Oil & Refining Co. Redwood City, CA	11/13/91
Groundwater	2,500 gallons	Discharge into storm drain with approval from RWQCB	3/92

III. RELEASE AND SITE CHARACTERIZATION INFORMATION (Continued)

Maximum Documented Contaminant Concentrations - - Before and After Cleanup

Contaminant	Soil (ppm)		Water (ppb)	
	Before	After	*** Before	After
TPH (Gasoline)	* 78	ND	5,000	61
TPH (Diesel)	** ND	2	-	270
Benzene	* ND	ND	78	ND
Toluene	* 0.083	ND	3.1	ND
Xylene	* 0.39	ND	170	ND
Ethylbenzene	* 0.088	ND	180	ND
Total Lead	** 1.68	-	-	-

* Soil sample (SS#6) collected from the tank excavation #2 (common pit for the 8,000 gallon and 10,000 gallon USTs) at the soil/water interface (see Plate 1).

** Soil sample (SS#1) collected from the tank excavation #1 (3300 gal UST) soil/water interface (see Plate 1).

*** Grab water sample collected from tank excavation #1 (3300 gal UST).

Comments (Depth of Remediation, etc.):

On November 22, 1991, three gasoline USTs (1-10,000 gallon and 1-8,000 gallon in a common pit & 1-3,300 gallon in a separate excavation) were removed from the subject site. Prior to the UST removals, approximately 5,000 gallon of gasoline contaminated water was pumped out of the 10,000 gallon UST and was disposed off site. Water sample (GS-1) collected from the contaminated water found 11,000 ppm TPH gasoline.

Following the UST removals, six soil samples were obtained from the two excavations at depths close to the soil/water interface. Low levels of petroleum hydrocarbon contamination were detected in the soil at concentration listed as "before cleanup" in the above table. In addition, grab water samples were collected from each excavation. The grab water sample from the common excavation (Tank Pit #2) found no detectable level of TPH gasoline and BTEX. However, the grab water sample from the smaller excavation (Tank Pit #1) found contamination listed in the above table.

Additional soil was excavated on 1/7/92 in the northwest and southeast corner of tank pit #2 (common pit) to remove the remaining residual soil contamination (78 ppm and 23 ppm). Confirmation soil samples (NW-1 & SE-2) did not detected any TPH gasoline or BTEX. Stockpiled soil (approx. 120 yds) from tank pit #2 was characterized (six composite soil samples collected), analyzed (nd for TPH gasoline and BTEX) and reused as backfill on site. The 16 yards of soil from the tank pit #1 contained low levels of benzene (13 ppm), toluene (14 ppm), ethyl benzene (6.3 ppm) and xylene (50 ppm) and was aerated, sampled and reused on site. Both excavations were dewatered prior to backfilling and approximately 2,500 gallons of water were generated and disposed into the storm drain with authorization from the SF Bay RWQCB.

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 Decommissioned: **No, will decommission upon case closure**
Number Decommissioned: **NA** Number Retained: **One (1) well, two (2) piezometers, & one (1) irrigation well.**

List enforcement actions taken: **NA**
List enforcement actions rescinded: **NA**

V. LOCAL AGENCY REPRESENTATIVE DATA

Name: **Susan L. Hugo** Title: **Sr. Hazardous Materials Specialist**
Signature: Susan L. Hugo Date: 4/17/96

Reviewed by

Name: **Thomas Peacock** Title: **Manager, LOP**
Signature: Thomas Peacock Date: 4-17-96

Name: **Barney Chan** Title: **Hazardous Materials Specialist**
Signature: Barney Chan Date: 4/17/96

VI. RWQCB NOTIFICATION

Date Submitted to RB: 4/17/96 RB Response: Approved

RWQCB Staff Name: **Kevin Graves** Title: **Water Resources Control Engineer**

Date: 4/26/96

VII. ADDITIONAL COMMENTS, DATA, ETC.

On July 20, 1994, one groundwater monitoring well (MW-1) and two piezometers (P-1 & P-2) were installed at the site. The two piezometers were used to confirm flow direction and gradient. Monitoring MW-1 was confirmed as being downgradient to the former tanks. In addition, the site has a domestic well (installed in 1980, about 25 feet deep with a surface seal extending about 20 feet deep)) located in the southwest corner of the property which was used for irrigation.

Soil sample collected from boring MW-1 at 9.5 feet bgs found 2 ppm TPH diesel and non detect for TPH gasoline and BTEX. Initial sampling of MW-1 did not detect any concentration of TPH gasoline, TPH diesel or BTEX. The well was sampled from 7/94 to 11/95 (seven events). Benzene was detected one time at 8.8 ppb during the sampling event conducted in 5/95. Overall, only low levels of petroleum hydrocarbon were detected in the groundwater at the following concentrations: nd - 1,400 ppb TPH gasoline, nd - 380 ppb TPH diesel, nd - 46 ppb ethyl benzene and nd - 2.7 ppb xylene. Piezometer P-1 was sampled one time (8/17/95) and the results showed nd for TPH gasoline, TPH diesel and BTEX.

The rationale for recommending case closure for the subject site are as follows:

1) Benzene was detected during one sampling event (5/95) at a very low concentration (8.8 ppb).

2) Benzene was not detected in any of the soil samples collected at the site.

3) Aggressive source removal has been conducted at the site. Very low levels of TPH diesel (2 ppm) in soil remain at the site.

4) The groundwater plume appears to be stable. The last sampling event (11/95) found low levels of TPH gasoline (61 ppb) and TPH diesel (270 ppb) but nd for BTEX.

5) The site presents no significant risk to human health and the environment.

Additional soil was excavated on 1/7/92 in the northwest and southeast corner of tank pit #2 (common pit) to remove the remaining residual soil contamination (78 ppm and 23 ppm). Confirmation soil samples (NW-1 & SE-2) did not detected any TPH gasoline or BTEX. Stockpiled soil (approx. 120 yds) from tank pit #2 was characterized (six composite soil samples collected), analyzed (nd for TPH gasoline and BTEX) and reused as backfill on site. The 16 yards of soil from the tank pit #1 contained low levels of benzene (13 ppm), toluene (14 ppm), ethyl benzene (6.3 ppm) and xylene (50 ppm) and was aerated, sampled and reused on site. Both excavations were dewatered prior to backfilling and approximately 2,500 gallons of water were generated and disposed into the storm drain with authorization from the SF Bay RWQCB.

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 Decommissioned: **No, will decommission upon case closure**
Number Decommissioned: **NA** Number Retained: **One (1) well, two (2) piezometers, & one (1) irrigation well.**

List enforcement actions taken: **NA**
List enforcement actions rescinded: **NA**

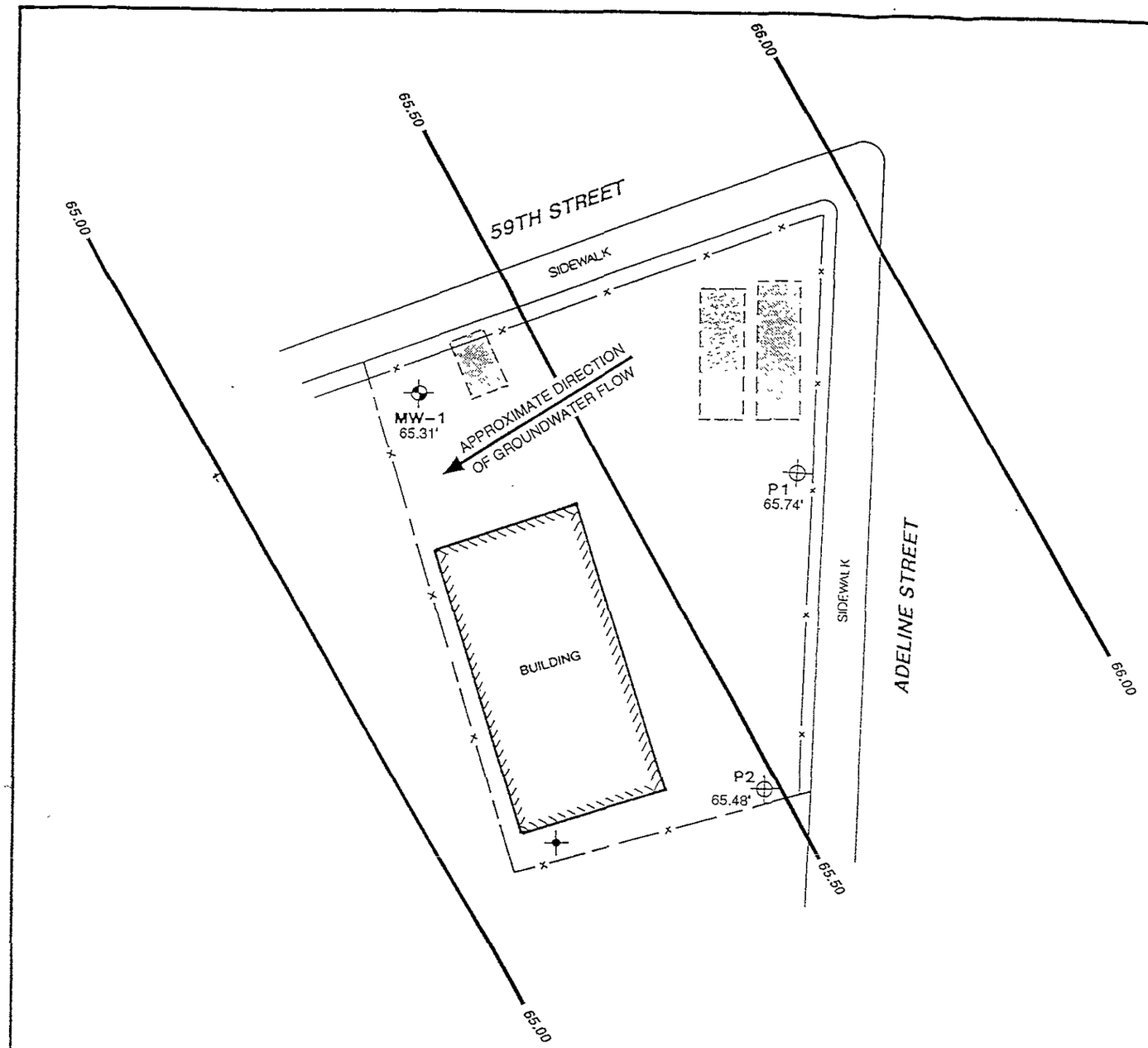
V. LOCAL AGENCY REPRESENTATIVE DATA

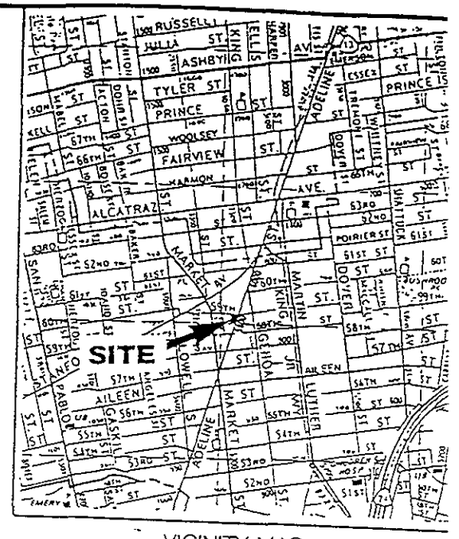
Name: **Susan L. Hugo** Title: **Sr. Hazardous Materials Specialist**
Signature: Susan L. Hugo Date: 4/17/96

Reviewed by

Name: **Thomas Peacock** Title: **Manager, LOP**
Signature: Thomas Peacock Date: 4-17-96

Name: **Barney Chan** Title: **Hazardous Materials Specialist**
Signature: Barney Chan Date: 4/17/96





VICINITY MAP

- MONITORING WELL
- PIEZOMETER
- DOMESTIC WELL
- APPROXIMATE FORMER TANK EXCAVATION LOCATION
- FENCE
- 66.00 GROUNDWATER ELEVATION CONTOUR

NOTE: GROUNDWATER ELEVATIONS ARE REFERENCED TO CITY OF OAKLAND MONUMENT 1978, LOCATED AT 58TH STREET AND ADELINE STREET, ELEVATION 69.45'.

N

APPROXIMATE SCALE (feet)

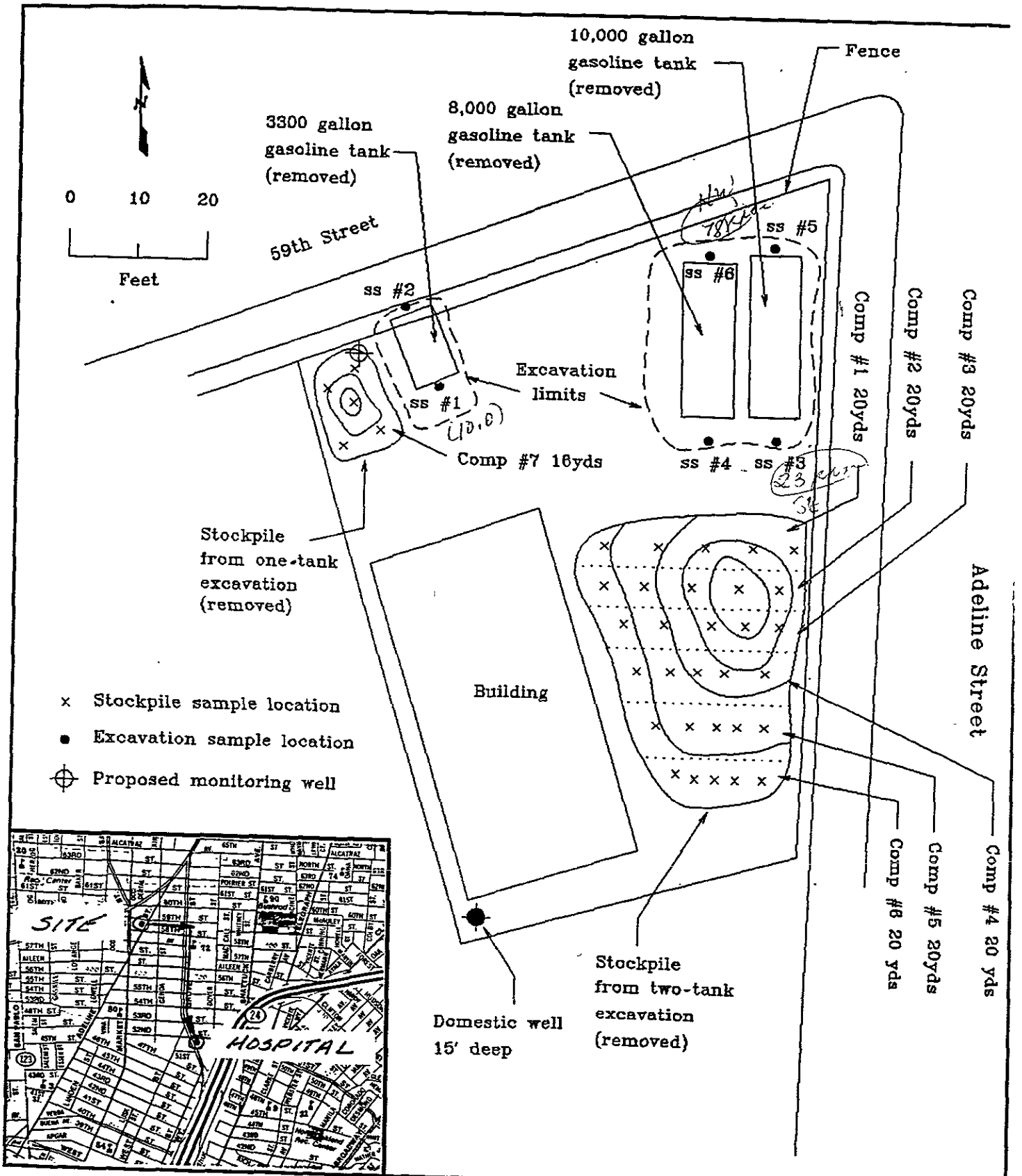
0 20 40

SITE PLAN

Subsurface Consultants

5829 ADELINE STREET – OAKLAND, CA

JOB NUMBER	DATE	APPROVED	PLATE
925.001	12/5/95	tc	1



TRANS TECH CONSULTANTS
ENVIRONMENTAL AND GEOTECHNICAL SERVICES

Site Plan and Location Map
Route to Hospital
5829 Adeline Street
Oakland, California

PLATE 1

DRAWN	JOB NUMBER	APPROVED	DATE
BSK	1233.01.01	DGM	1/13/93

0101s.p1

CHROMALAB, INC.

Analytical Laboratory (E694)

5 DAYS TURNAROUND

January 15, 1992 ChromaLab File No.: 0192053

GEN-TECH ENVIRONMENTAL

Attn: Cheryl Trillo

RE: Two soil samples for Gasoline/BTEX analysis

Project Name: ADELINE & 59TH ST., OAKLAND, CA
Project Number: 9161
Date Sampled: Jan. 7, 1992 Date Submitted: Jan. 8, 1992
Date Extracted: Jan. 14, 1992 Date Analyzed: Jan. 14, 1992

RESULTS:

Sample I.D.	Gasoline (mg/Kg)	Benzene (ug/Kg)	Toluene (ug/Kg)	Ethyl Benzene (ug/Kg)	Total Xylenes (ug/Kg)
NW-1	N.D.	N.D.	N.D.	N.D.	N.D.
SE-2	N.D.	N.D.	N.D.	N.D.	N.D.
BLANK	N.D.	N.D.	N.D.	N.D.	N.D.
SPIKE RECOVERY	91%	85%	86%	89%	88%
DETECTION LIMIT	1.0	5.0	5.0	5.0	5.0
METHOD OF ANALYSIS	5030/8015	8020	8020	8020	8020

ChromaLab, Inc.

Mary Cappelli
Analytical Chemist

Eric Tam
Laboratory Director

2239 Omega Road, #1 • San Ramon, California 94583
510/831-1788 • Facsimile 510/831-8798
Federal ID #68-0140157

CHROMALAB, INC.

Analytical Laboratory (E694)

5 DAYS TURNAROUND

December 16, 1991

ChromaLab File No.: 1291057

GEN-TECH ENVIRONMENTAL

Attn: Cheryl Trillo

RE: Seven soil samples for Gasoline/BTEX analysis

Project Name: RUTLEDGE
Project Location: 5829 Adeline, Oakland
Project Number: 9161
Date Sampled: Dec. 4, 1991
Date Extracted: Dec. 12, 1991

Date Submitted: Dec. 6, 1991
Date Analyzed: Dec. 13, 1991

RESULTS:

Sample I.D.	Gasoline (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl Benzene (mg/kg)	Total Xylenes (mg/kg)
CMP-1	N.D.	N.D.	N.D.	N.D.	N.D.
CMP-2	N.D.	N.D.	N.D.	N.D.	N.D.
CMP-3	N.D.	N.D.	N.D.	N.D.	N.D.
CMP-4	N.D.	N.D.	N.D.	N.D.	N.D.
CMP-5	N.D.	N.D.	N.D.	N.D.	N.D.
CMP-6	N.D.	N.D.	N.D.	N.D.	N.D.
CMP-7	N.D.	13	14	6.3	50
BLANK	N.D.	N.D.	N.D.	N.D.	N.D.
SPIKE RECOVERY	92.7%	90.9%	88.3%	86.3%	86.7%
DUP. SPIKE RECOVERY	89.5%	98.0%	97.0%	94.6%	93.6%
DETECTION LIMIT	1.0	5.0	5.0	5.0	5.0
METHOD OF ANALYSIS	5030/8015	8020	8020	8020	8020

ChromaLab, Inc.

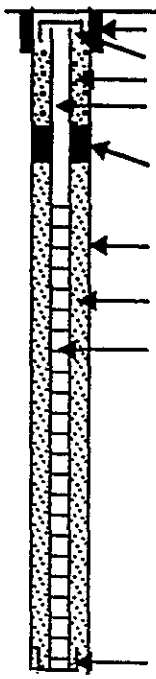
David Duong
Chief Chemist

Eric Tam
Laboratory Director

2239 Omega Road, #1 • San Ramon, California 94583
510/831-1788 • Facsimile 510/831-8798
Federal ID #68-0140157

LOG OF TEST BORING 1

EQUIPMENT 8" Hollow Stem Auger
DATE DRILLED 7/20/94
ELEVATION - -



MOISTURE CONTENT %	DRY DENSITY (PCF)	OVM (ppm)	DEPTH (feet)	SAMPLE	BLOWS PER FOOT	
			0			ASPHALTIC CONCRETE - 3" thick
		0				DARK BROWN SILTY CLAY (CL) medium stiff, moist, with some sand and gravel (fill)
		9	5		26	GREEN GRAY SILTY CLAY (CL) stiff, moist, with slight hydrocarbon odor
						GROUNDWATER LEVEL 6 DAYS AFTER DRILLING
		34	10		13	MOTTLED BROWN AND GRAY SANDY SILTY CLAY (CL) stiff, moist, with some gravel becomes very stiff below 11 feet
					32	
			15			
		0			30	BROWN SANDY CLAYEY SILT (ML) stiff, moist, with some gravel
			20			GROUNDWATER NOT ENCOUNTERED DURING DRILLING
			25			
			30			
			35			
			40			

SAMPLER TYPE:
CALIFORNIA DRIVE
O.D.: 2.5 inches
I.D.: 2.0 inches

HAMMER WEIGHT: 140 pounds
HAMMER DROP: 30 inches

Subsurface Consultants

5829 ADELINE STREET - OAKLAND, CA

JOB NUMBER	DATE	APPROVED
925.001	8/9/94	

PLATE 2

Table 2
Hydrocarbon Concentration in Soil

Sample @ Depth	TVH as gasoline (mg/kg)	TEH as diesel (mg/kg)	Benzene (ug/kg)	Toluene (ug/kg)	Ethyl-benzene (ug/kg)	Total xylenes (ug/kg)
MW-1 @ 9.5[1]	<1	2	<5	<5	<5	<5

Table 3
Hydrocarbon Concentration in Groundwater

Well	Date	TVH as gasoline (ug/l)	TEH as diesel (ug/l)	Benzene (ug/l)	Toluene (ug/l)	benzene (ug/l)	Ethyl-Total xylenes (ug/l)
MW-1	07/26/94	<50	<50	<5	<5	<5	<5

Table 2
Hydrocarbon Concentrations in Groundwater

Well	Date	TVH as gasoline (µg/l)	TEH as diesel (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total xylenes (µg/l)
MW-1	7/26/94	<50	<50	<0.5	<0.5	<0.5	<0.5
	10/21/94	110	<50	<0.5	<0.5	3.0	<0.5
	11/23/94	<50	--	<0.5	<0.5	<0.5	<0.5
	1/24/95	890	330*	<0.5	<0.5	22	2.2
	5/8/95	1,400	380*	8.8	<0.5	23	2.4
	8/11/95	1,300	<50	<0.5	<0.5	46	2.7
	11/8/95	61	270*	<0.5	<0.5	<0.5	<0.5
P-1	8/17/95**	<50	<50	<0.5	<0.5	<0.5	<0.5
	11/8/95	--	--	--	--	--	--

TVH = Total volatile hydrocarbons
TEH = Total extractable hydrocarbons
* Sample chromatogram does not resemble the diesel standard
** Groundwater for TEH as diesel sampled 9/19/95
-- = Not tested

Table 1
Groundwater Elevation Data

Well	TOC[1] Elevation[2] (feet, MSL)	Date	Depth to Groundwater (feet)	Groundwater Elevation (feet)
MW-1	70.38	7/26/94	4.91	65.47
		8/25/94	4.98	65.40
		9/26/94	5.10	65.28
		10/21/94	5.15	65.23
		11/23/94	4.21	66.17
		1/24/95	3.93	66.45
		5/8/95	3.66	66.72
		8/11/95	4.82	65.56
		11/8/95	5.07	65.31
P-1	71.10	7/26/94	5.00	66.10
		8/25/94	5.18	65.92
		9/26/94	5.29	65.81
		10/21/94	5.35	65.75
		11/23/94	3.73	67.37
		1/24/95	1.93	69.17
		5/8/95	3.92	67.18
		8/11/95	4.98	66.12
		11/8/95	5.36	65.74
P-2	71.42	7/26/94	5.69	65.73
		8/25/94	5.78	65.64
		9/26/94	5.78	65.64
		10/21/94	5.99	65.43
		11/23/94	4.73	66.69
		1/24/95	3.70	67.72
		5/8/95	4.85	66.57
		8/11/95	5.65	65.77
		11/8/95	5.94	65.48

[1]TOC = top of casing
[2]Based on 7/26/94 Survey. Reference Datum: City of Oakland Monument (1978) located at the intersection of 58th and Adeline Streets, Elevation 69.465 MSL.

	TPH as Gasoline	TPH as Diesel	Lead	B	E	T	X
	mg/Kg		µg/Kg				
SS #1	10	<1	1.68	<5	33	9.5	67
SS #2	2.1	<1	1.55	<5	5.3	<5	6.4
SS #3	23	--	--	<5	28	6.9	170
SS #4	6.5	--	--	<5	<5	<5	75
SS #5	10	--	--	<5	20	24	87
SS #6	78	--	--	<5	88	83	390
	mg/L		µg/L				
GS-1 (from 10,000 Gal tank)	11000	--	<100	--	--	--	--
VOAS #1	5	--	--	78	180	3.1	170
VOAS #2	<50	--	--	<0.5	<0.5	<0.5	<0.5

<1 : Less than the indicated laboratory reporting limit.
-- : Not analyzed