



Private Banking Group  
Real Estate Asset Management

525 Market Street, 18th Floor  
P. O. Box 63939  
San Francisco, CA 94163

May 29, 1996

Blumert

Mr. Dale Klettke  
Alameda County Health Services Agency  
Department of Environmental Health  
1131 Harbor Bay Parkway  
Alameda, CA 94502

ENVIRONMENTAL  
PROTECTION  
31 MAY 31 PM 1:34

Re: **Blumert Trust • Account #308-107222**  
**490 - 43rd Street/4300 Telegraph Avenue, Oakland, CA**  
**Property #001156**

Dear Mr. Klettke:

Pursuant to the Alameda County Health Services Agency's request, enclosed you will find a copy of the Additional Site Investigation Report for the captioned property.

The contact person at ACC Environmental Consultants is Dave DeMent (510) 638 - 8400.

Please contact the undersigned or Mr. DeMent if we can be of any further assistance.

Sincerely,

Jeffrey A. Hirsch  
Assistant Vice President  
and Senior Asset Manager  
(415) 396 - 6743

cc: Dave DeMent (w/out encl)  
Clarence Stump (w/encl)  
Cassandra Miller (w/encl)  
Ken Cheitlen, Esq. (w/encl)



# PRELIMINARY SITE ASSESSMENT REPORT

May 23, 1996

490 43rd Street  
Oakland, California

ENVIRONMENTAL  
PROTECTION  
95 MAY 31 PM 1:14

Prepared For:  
Mr. Jeffrey A. Hirsch  
Wells Fargo Trust

ACC Project No. 95-6305-1.1

OAKLAND • SACRAMENTO  
SEATTLE • LOS ANGELES

**ADDITIONAL SITE INVESTIGATION REPORT**

**490 43rd Street  
Oakland, California**

*ACC Project No. 95-6305-1.1*

Prepared for:

Mr. Jeffrey A. Hirsch  
Wells Fargo Trust  
525 Market Street, 18th Floor  
San Francisco, California 94105

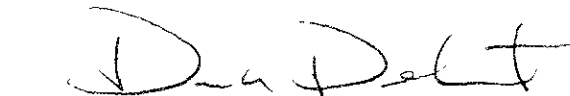
May 23, 1996

Prepared by:

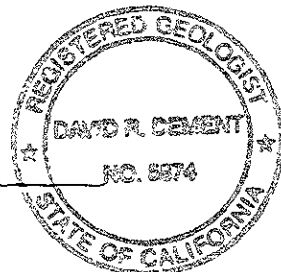


Misty Kaltreider  
Project Geologist

Reviewed by:



David R. DeMent, RG  
Senior Geologist



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**ADDITIONAL SITE INVESTIGATION REPORT**  
**490 43rd Street**  
**Oakland, California**

## **1.0 INTRODUCTION**

This Additional Site Investigation was conducted by ACC Environmental Consultants, Inc., (ACC) for Wells Fargo Trust on behalf of the Blumert Trust, at 490 43rd Street, Oakland, California (Figure 1). This site investigation was conducted at the request of the Alameda County Health Care Services, Department of Environmental Health (ACHCSA) for additional site investigation and delineation of impacted groundwater.

## **2.0 BACKGROUND**

The site is located at the northeastern corner of Telegraph Avenue and 43rd Street, Oakland, California (Figure 1). The property is relatively flat, at an elevation of approximately 90 feet above mean sea level. The confirmed groundwater flow direction is to the southwest.

The facility formerly operated one 1,000-gallon gasoline underground storage tank (UST) and one 350-gallon paint thinner UST, which were removed on December 11, 1991 (Figure 2). Laboratory analysis of soil samples collected under the gasoline tank indicated concentrations up to 220 parts per million (ppm) total petroleum hydrocarbons as gasoline (TPHg) and minor concentrations of benzene, toluene, ethylbenzene, and total xylenes (BTEX). Laboratory analysis of soil samples collected under the paint thinner tank indicated concentrations up to 25 ppm total petroleum hydrocarbons as paint thinner (TPH as paint thinner). Groundwater was observed in the excavation at a depth of approximately 12.5 feet below ground surface (bgs).

The tank pit, which contained both former USTs, was overexcavated on March 31, 1992, to remove additional impacted soil. Laboratory analysis of soil samples collected from excavation sidewalls indicated concentrations up to 720 ppm TPHg, 30 ppm BTEX constituents, and 190 ppm TPH as paint thinner.

Three groundwater monitoring wells were installed on April 12, 1993, by Kaprealian Engineering, Inc., (KEI), and have been monitored periodically since that time. Gradient has been calculated at approximately 0.01 foot/foot and flow direction has consistently been to the south-southwest. Groundwater samples from the three groundwater monitoring wells have indicated TPHg concentrations ranging from 170 to 2,100 parts per billion (ppb) in well MW-1, 11,000 to 18,000 ppb in well MW-2, and 1,500 to 14,000 ppb in well MW-3. TPH as paint thinner concentrations have ranged from 65 to 1,200 ppb in well MW-1, 670 to 11,000 ppb in well MW-2, and 480 to 8,700 ppb in well MW-3.

On June 1, 1994, KEI drilled exploratory soil borings EB1 and EB2 (Figure 2). Concentrations of TPHg and TPH as paint thinner were detected in soil samples collected from boring EB2 at a depth of 10 to 12 feet bgs. Grab groundwater samples from borings EB1 and EB2 indicated concentrations of TPHg at 3,400 ppb and 9,200 ppb, respectively, and TPH as paint thinner at 7,000 ppb and 3,700 ppb, respectively. Sieve analysis of saturated soil at the site determined that the soil should be classified as silty sand (SM).

To further evaluate the extent of hydrocarbon impact to soil and groundwater, the following scope of work was performed by ACC at the request of ACHCSA.

### **3.0 SCOPE OF WORK**

#### **3.1 Permits**

Before drilling and sampling activities, an excavation permit was obtained from the City of Oakland Department of Public Works to perform work within the City of Oakland. The locations of the proposed borings were marked with white paint, and Underground Services Alert was notified at least 48 hours prior to commencing work. A copy of the permit is included as Appendix 1.

#### **3.2 Exploratory Soil Borings**

ACC drilled two exploratory soil borings (SB1 and SB2) on April 16, 1996, to characterize soil conditions in the immediate vicinity of the former tank excavation (Figure 2). Six additional exploratory borings (B-3 through B-8) were drilled upgradient and downgradient of the former USTs to characterize groundwater in the general vicinity of the former tank excavation, and one grab groundwater sample was collected from each boring (Figure 2).

The pneumatic sampling tool used for the subsurface investigation was equipped with 5-foot sections of a 3/4-inch inside-diameter, galvanized steel probe pipe which was connected to a 1-foot-long galvanized steel soil core tube. Stainless steel insert rods were placed through the probe pipe and sampling core. The probe pipe, insert rods, and sampling core were all pre-cleaned before use and between sample drives by washing with trisodium phosphate as potable water solution, a potable water rinse, and distilled water rinse. The probe pipe, soil core, and insert rods were together driven pneumatically using a percussion hammer to the desired depth. The insert rods were then removed and the probe pipe and core were driven 12 inches into undisturbed soil to obtain a sample. One soil sample was collected at a depth of 9 feet bgs from borings SB-1 and SB-2, which are immediately adjacent to the former paint thinner UST.

Upon removal from the sampler, each sample was inspected for lithologic differences, logged by an ACC geologist, labeled, stored in a pre-chilled, insulated container, and transported with chain of custody to Chromalab, Inc., a state-certified laboratory. The soil cuttings and samples were described in accordance with the Unified Soil Classification System (USCS) after review by a California Registered Geologist. Lithologic logs of borings SB1 and SB2 and the USCS are attached as Appendix 2. Soil samples were evaluated subjectively for field evidence of volatile hydrocarbons (e.g., odor and discoloration). Grab groundwater samples were collected in borings B3 through B8.

The soil samples collected from borings SB1 and SB2 were submitted for analysis of TPHg and BTEX by EPA Methods 8015M/8020 and TPH as paint thinner by EPA Method 3510/8015. In addition, grab water samples collected from selected borings B3 through B8 were submitted for analysis of TPHg and BTEX by EPA Method 8015M/8020 and TPH as paint thinner by EPA Method 3510/8015.

## 4.0 FINDINGS

### 4.1 Subsurface Conditions

The investigation area was covered with concrete sidewalks and asphalt roadway above approximately 1 to 2 feet of baserock and fill material consisting of silt. Below the baserock/fill, the encountered native soil consisted of dark brown to dark olive gray silty clay (CL). Disseminated, very fine to fine grained sand was observed in both borings in which only soil samples were collected (SB1 and SB2). Sand content appeared to increase with depth. Soil borings were completed to a depth of 9 feet bgs; however, the borings where water samples were collected were completed to a depth of approximately 15 to 19 feet bgs. Lithologic logs and the USCS of the borings in which soil samples were collected (SB1 and SB2) are included as Appendix 2. Soils were not evaluated in borings B3 through B8. The borings were completed to a total depth of approximately 15 to 19 feet bgs. Some lithology information could be inferred from the rate of penetration, type of soil remaining on the sampling probes upon removal, ability to develop the boring with compressed air, and the ability to collect water samples.

During the investigation, water was encountered at a depth of approximately 15 feet bgs. Water samples were collected from selected borings with the use of precleaned stainless steel bailers. The water was immediately transferred to laboratory-supplied 40-milliliter VOA vials (without head space) and 1-liter amber bottles, which were placed in a pre-chilled, insulated container pending transport to Chromalab, Inc., a state-certified analytical laboratory.

### 4.2 Analytical Results

Soil samples collected from borings SB1 and SB2 were analyzed for TPHg, BTEX, and TPH as paint thinner. No TPHg and BTEX concentrations were detected in the two soil samples analyzed with the exception of 0.54 milligram per kilogram (mg/kg) or parts per million (ppm) total xylenes. TPH as paint thinner concentrations were detected in sample SB1-9.0 at 52 ppm and in sample SB2-9.0 at 78 ppm. Due to sample interference, the TPHg reporting limit in soil sample SB2-9.0 was raised to 500 mg/kg. However, the lack of detectable BTEX concentrations indicates that TPHg was probably not present, which is similar to the analytical results reported in sample SB1-9.0. Results of the soil sample analyses are summarized in Table 1. A copy of the analytical results and chain of custody record is included in Appendix 3.

TABLE 1 - SOIL SAMPLE ANALYTICAL RESULTS

Boring/ Sample Depth	Paint Thinner (ppm)	TPHg (ppm)	Benzene (ppm)	Toluene (ppm)	Ethyl- benzene (ppm)	Total Xylenes (ppm)
SB1-9.0	52	<100	<0.10	<0.10	<0.10	0.54
SB2-9.0	78	<500	<0.50	<0.50	<0.50	<0.5

Grab groundwater samples were collected from borings B3 through B8 and analyzed for TPHg, BTEX, and TPH as paint thinner. Concentrations of TPHg ranged from nondetect in samples collected from borings B3 and B8 to 46,000 micrograms per liter ( $\mu\text{g/L}$ ) or parts per billion (ppb) in boring B6. Concentrations of TPH as paint thinner ranged from nondetect in samples collected from borings B3 and B8 to 16,000 ppb in boring B7.

Analytical results for grab groundwater samples at this site are suspect due to overlapping fuel patterns. Respective sample fuel patterns overlap for both TPHg and TPH as paint thinner analyses and analytical fuel patterns resembles a gasoline and paint thinner mix. Sample results for the water analysis are presented in Table 2. Analytical results for TPH as paint thinner are illustrated on Figure 3 and TPHg analytical results are illustrated on Figure 4. A copy of the analytical results and chain of custody forms is attached as Appendix 3.

**TABLE 2 - GROUNDWATER SAMPLE ANALYTICAL RESULTS**

Boring/ Sample Number	TPHg (ppb)	Benzene (ppb)	Toluene (ppb)	Ethyl- benzene (ppb)	Total Xylenes (ppb)	Paint Thinner (ppb)
B3-W	< 50	0.89	1.6	< 0.50	0.91	< 500
B4-W	11,000*	200	66	220	96	6,800*
B5-W	5,300*	18	18	32	56	12,000*
B6-W	46,000*	880	< 0.50	160	180	< 800
B7-W	4,400*	190	14	130	100	16,000*
B8-W	< 50	< 0.50	0.97	< 0.50	1.8	< 500

Notes:  $\mu\text{g/L}$  = micrograms per Liter, approximately equal to ppb

\*Estimated concentration for gasoline and paint thinner due to overlapping fuel patterns. Fuel pattern resembles gasoline and paint thinner mix.

## 5.0 DISCUSSION

Previous soil samples collected in the northeastern corner of the excavation pit indicated an impact from contents of the former USTs. However, analytical results from the additional subsurface investigation conducted on April 16, 1996, indicated no concentrations of TPHg in soil samples SB1-9.0 and SB2-9.0, which were collected at a depth of 9 feet bgs in the northeastern corner of the previous excavation. Minor concentrations of TPH as paint thinner were detected in soil samples SB1-9.0 and SB2-9.0 at 52 and 78 ppm, respectively. These results indicate minor soil impact is probably confined to soils immediately adjacent to the former paint thinner UST.

The April 1996 investigation indicated elevated levels of TPHg and TPH as paint thinner in groundwater samples collected from exploratory soil borings drilled downgradient from the former UST excavation. Groundwater downgradient of the former USTs has been impacted from the



unauthorized release of gasoline constituents and paint thinner from these former USTs. Downgradient impacts are not fully delineated, but downgradient borings B4 through B7 indicate declining concentrations of TPH as paint thinner and help approximate the areal extent of impact. ACC believes that soil samples collected in the capillary zone are redundant when grab groundwater samples are being collected to investigate the downgradient extent of impacted groundwater. Field indications of petroleum hydrocarbons were observed in a saturated soil sample collected from boring B4, but a soil sample was not collected for analysis.

The clay content in soils from a depth of 4 to 15 feet bgs indicate that groundwater may be discontinuous in the area. Clayey soils like those observed at the site hinder migration of groundwater and any dissolved constituents; therefore, groundwater tends to migrate along preferential pathways such as via soils disturbed during utility installation. The former paint thinner UST bottom was at or above the depth of the utility lines in the area. Therefore, it is not unusual that groundwater impacted by TPH as paint thinner appears to occur primarily along existing utility lines. Because the former gasoline UST bottom was below the depth of the utility lines, there should not be a greater chance of TPHg migration along utility lines. (except if release was from above UST)

Collecting grab groundwater samples was difficult in the borings due to clay sealing the slots and perforations in the sampling probes. Borings had to be repeatedly developed with compressed air to open perforations and enable the probe to fill with water. Grab groundwater samples collected in upgradient borings B3 and B8 did not indicate concentrations of TPHg or TPH as paint thinner, but minor concentrations of toluene and xylenes were reported in the water sample collected from boring B8. These analytical results could indicate an offsite source, but the impact is minimal.

According to a letter to Mr. Ronn Simpson from the ACHCSA, dated January 10, 1996, soil samples collected during removal of the former gasoline UST at 489 43rd Street, across 43rd Street from the subject site, clearly indicated that the UST had been a source of gasoline impact to soils and shallow groundwater. Since 489 43rd Street is directly downgradient from the subject site, identifying a single source and the downgradient extent of impact from that source is extremely difficult. At this time, there are no groundwater monitoring wells adjacent to the 489 43rd Street gasoline UST to help characterize groundwater conditions.

There is no  
info re:  
impact to  
g.w. - no  
g.w. in pit  
@ 489  
43rd St

## 6.0 CONCLUSIONS

The data and observations discussed herein indicate that soil and groundwater in the vicinity of the former USTs at 490 43rd Street have been impacted due to a petroleum hydrocarbon release. Based on observations and analytical results of soil and groundwater samples collected in the general vicinity of two former USTs, ACC has made the following conclusions

- Soil samples collected in two borings immediately adjacent to the former paint thinner UST contained minor concentrations of TPH as paint thinner (less than 80 ppm), indicating impact to soil appears to be minimal and the majority of impacted soil was removed during tank removal and overexcavation activity;

- Grab groundwater samples collected in the general vicinity of the USTs indicate TPH as paint thinner and TPHg impacts to shallow groundwater are not fully delineated but TPH as paint thinner appears to have migrated preferentially along utility trench lines; *Probably; the highest conc. in grab g.w. samples were cross + slightly down gradient to the west, SW of former tanks*
- Shallow groundwater has been impacted by gasoline constituents, but it is unclear whether this impact is due to the former onsite gasoline UST or another gasoline UST formerly located offsite at 489 43rd Street or a combination of the two sources; *It's a stretch to say this - 489 - 43rd St tank is down gradient of the contamination - unless utility trenches are a major conduit from west tank*
- Offsite sources of hydrocarbons characteristic of gasoline or paint thinner do not appear to be present upgradient of the study area to any measurable extent; and
- General aquifer quality appears to be poor, the saturated zone has been classified as a silty sand (SM), and subsurface groundwater migration is believed to be minimal based on soil type, flat hydraulic gradient, and minimal surface water infiltration due to asphalt and concrete capping the general area.

## 7.0 RECOMMENDATIONS

Based on conclusions of the additional subsurface investigation performed at the subject site, ACC has the following recommendations:

- Conduct groundwater monitoring and sampling in the three monitoring wells in early June, analyze samples for constituents of concern, and analyze samples for total dissolved solids and total coliform to evaluate other possible impacts to shallow groundwater;
- Evaluate June sampling results for purposes of reducing groundwater monitoring frequency to annual or semiannual events;
- Request that the ACHCSA initiate subsurface investigation in regards to the former gasoline UST located at 489 43rd Street, including the installation of one or more groundwater monitoring wells to characterize groundwater conditions; and
- Perform future groundwater analyses specifically to address gasoline constituents (e.g., paint thinner, lead, MTBE, fuel fingerprint) and attempt to differentiate impacts to groundwater from the gasoline UST at the subject site and the gasoline UST at 489 43rd Street.

## 8.0 REFERENCES

California Regional Water Quality Control Board, San Francisco Bay Region. January 5, 1996. *Memorandum to: San Francisco Bay Area Agencies Overseeing UST Cleanup and Other Interested Parties*. Prepared by Mr. Kevin Graves, P.E.

Lawrence Livermore National Laboratory, Environmental Protection Department. October 16, 1995. *Recommendations to Improve the Cleanup Process for California's Leaking Underground Fuel Tanks (LUFTs)*. Prepared by David W. Rice, et al., submitted to the California State Water Resources Control Board and the Senate Bill 1764 Leaking Underground Fuel Tank Advisory Committee.

Kaprealian Engineering, Inc. January 18, 1996. *Quarterly Report, Wells Fargo Bank (Walter Blumert Co., Inc.), 490 43rd Street, Oakland, California*. Prepared for Wells Fargo Bank on behalf of the Blumert Trust.

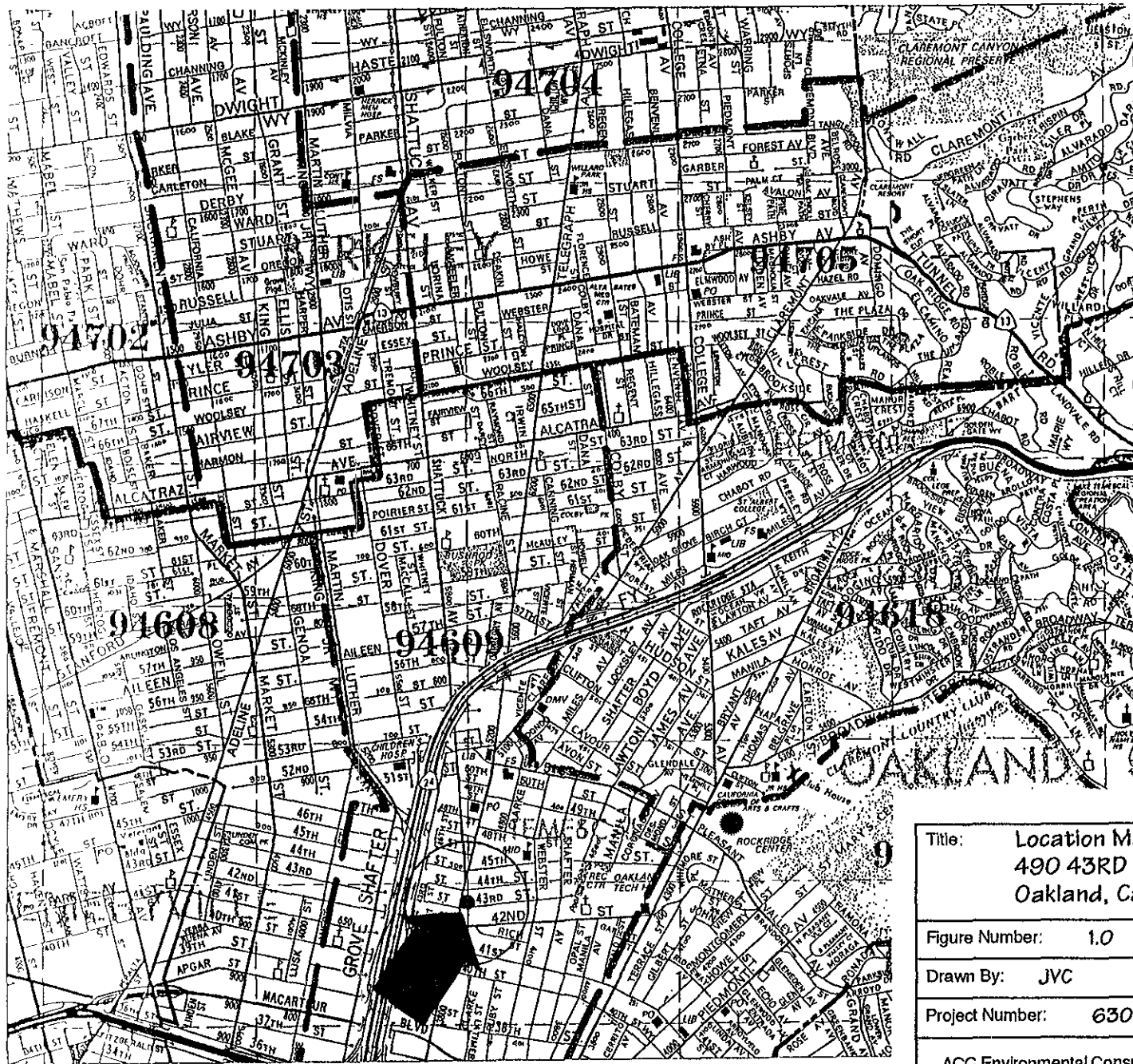
Kaprealian Engineering, Inc. July 20, 1994. *Continuing Subsurface Investigation and Quarterly Report, Wells Fargo Bank (Walter Blumert Co., Inc.), 490 43rd Street, Oakland, California*. Prepared for Wells Fargo Bank on behalf of the Blumert Trust.

## 9.0 LIMITATIONS

The service performed by ACC has been conducted in a manner consistent with the levels of care and skill ordinarily exercised by members of our profession currently practicing under similar conditions in the area. No other warranty, expressed or implied, is made.

The conclusions presented in this report are professional opinions based on the indicated data described in this report and applicable regulations and guidelines currently in place. They are intended only for the purpose, site, and project indicated. Opinions and recommendations presented herein apply to site conditions existing at the time of our study.

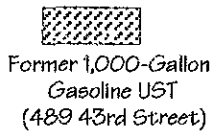
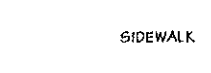
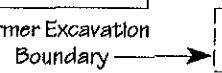
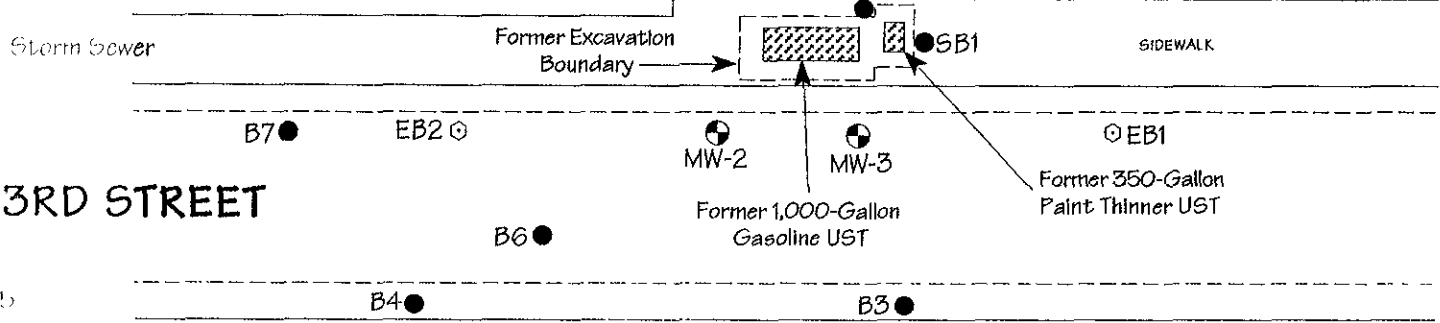
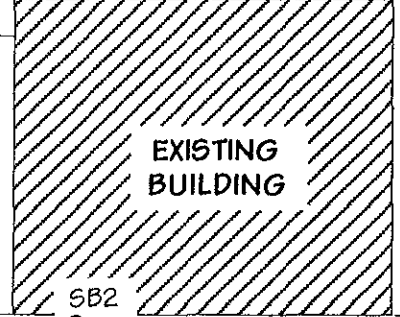
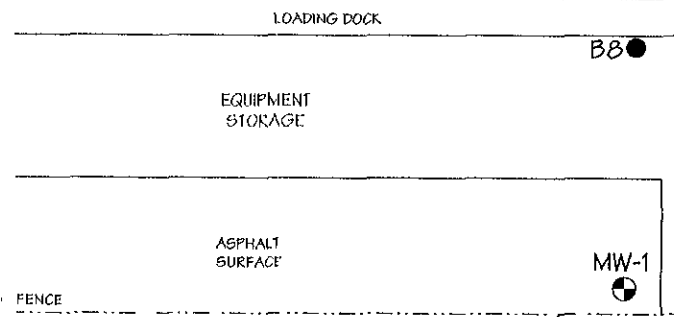
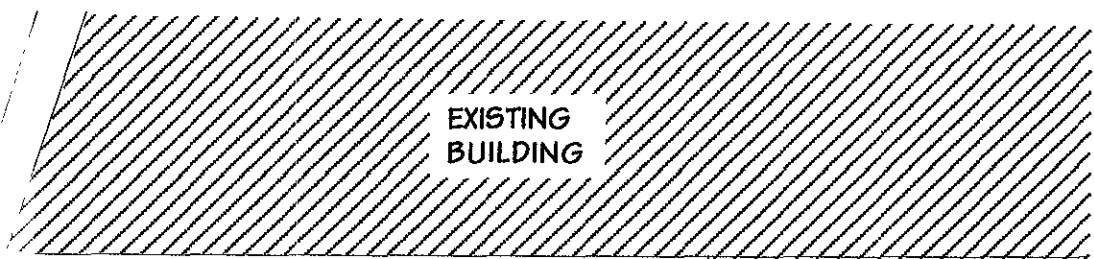
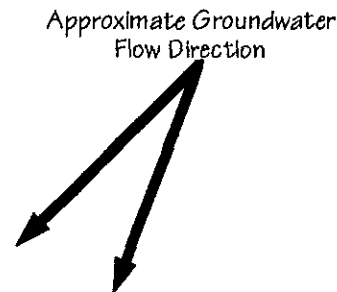
ACC has included analytical results from a state-certified laboratory, which performs analyses according to procedures suggested by the U.S. Environmental Protection Agency and the State of California. ACC is not responsible for laboratory errors in procedure or result reporting.



SOURCE: THOMAS BROTHERS GUIDE

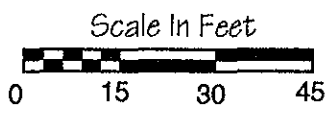
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Figure Number: 1.0	Scale:
Drawn By: JVC	Date: 12/19/95
Project Number: 6305-1.1	
ACC Environmental Consultants 7977 Capwell Drive, Suite 100 Oakland, California 94621 (510) 638-8400 Fax: (510) 638-8404	

TELEGRAPH AVENUE

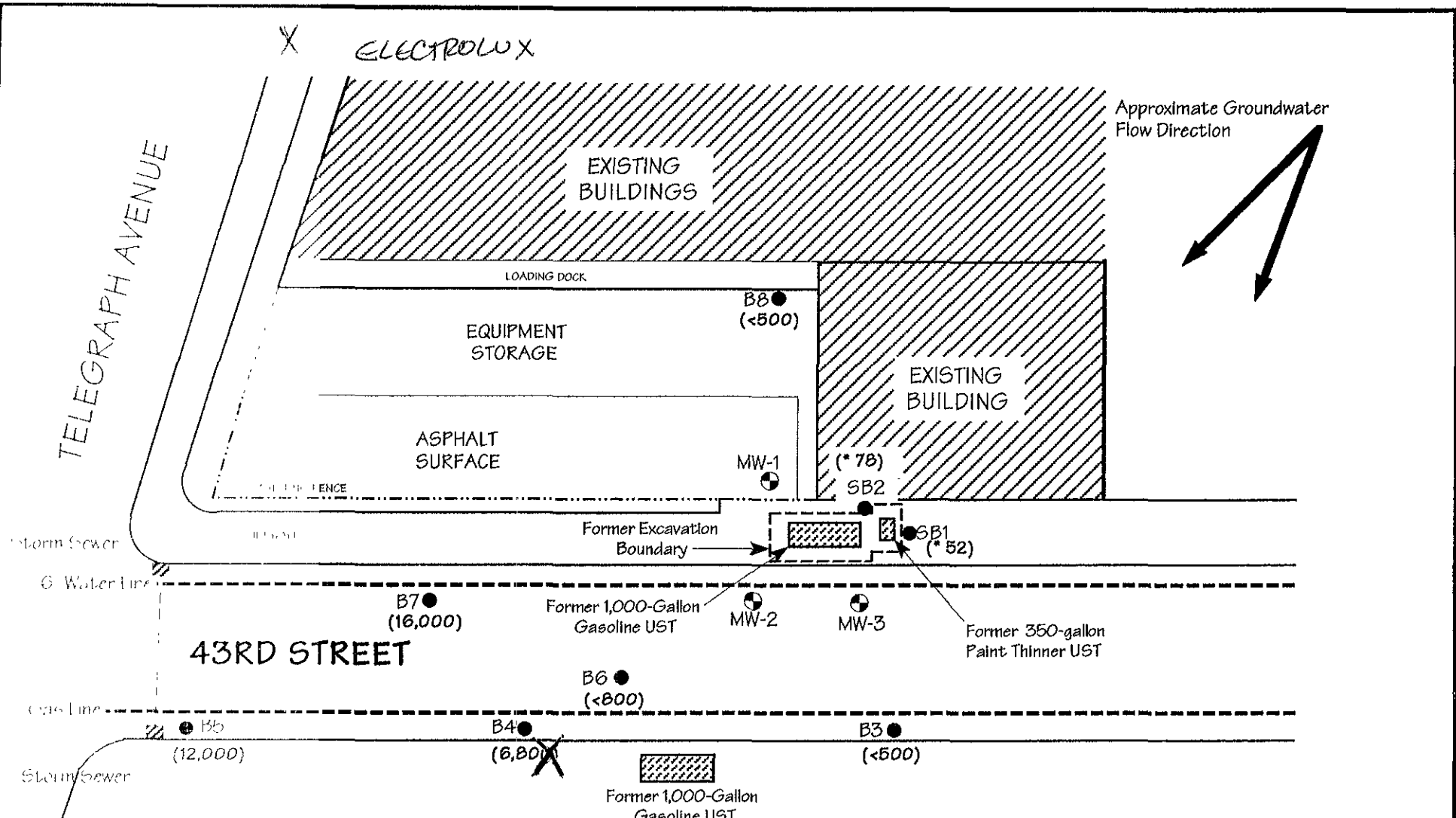


**Legend**

- MW-2 - Existing Groundwater Monitoring Well
- B4 - ACC Soil Boring Location (April 16, 1996)
- EB2 - Kaprealian Engineering Boring Location
- Former Underground Storage Tank



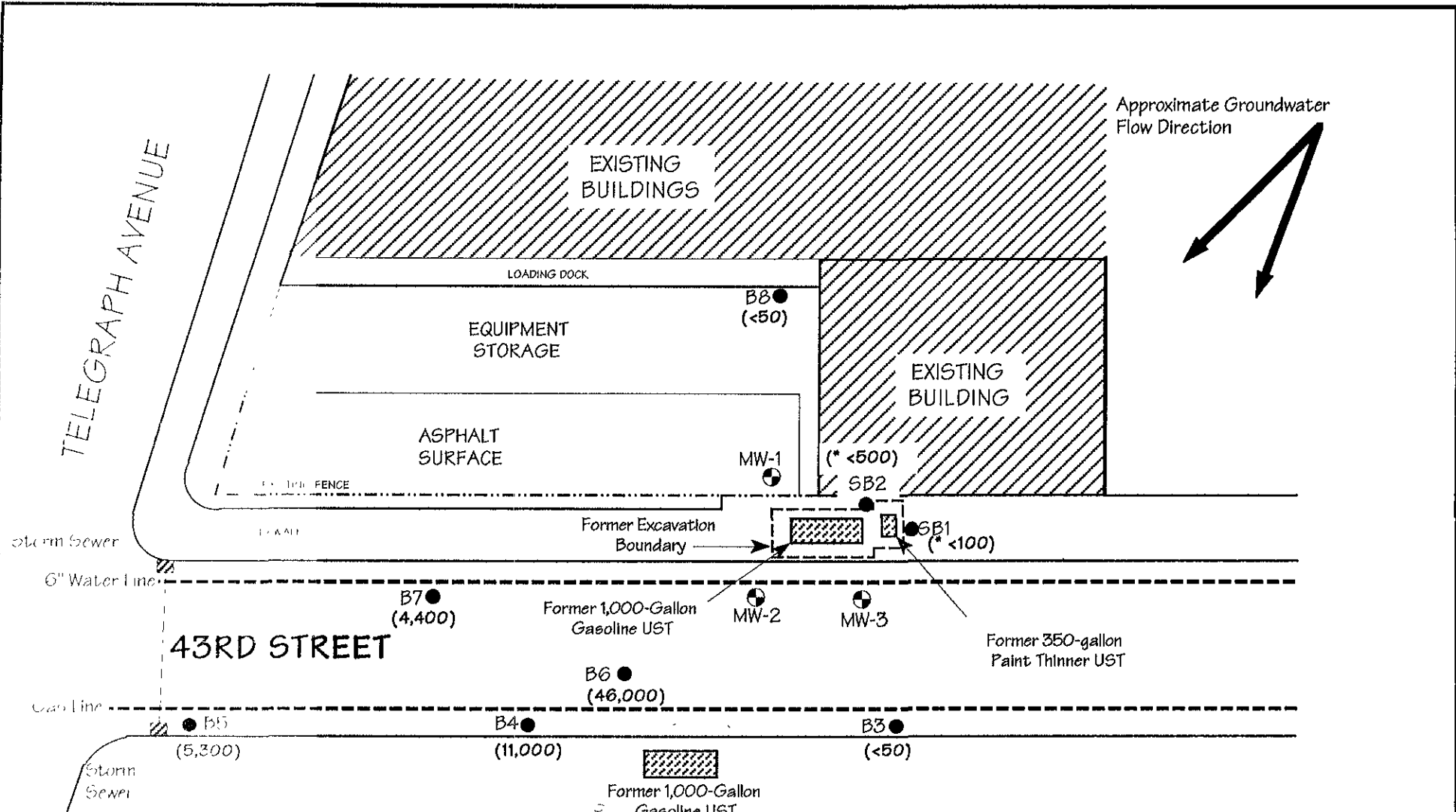
Title: <b>Site Plan</b> <b>490 43rd Street</b> <b>Oakland, California</b>	
Figure Number: <b>2.0</b>	Scale: <b>1" = 30"</b>
Drawn By: <b>JVC</b>	Date: <b>4/17/96</b>
Project Number: <b>6305-1.1</b>	
<b>ACC Environmental Consultants</b> 7977 Capwell Drive, Suite 100 Oakland, California 94621 (510) 638-8400 Fax: (510) 638-8404	



### Legend

- MW-2 Existing Monitoring Well
- B4 Soil Boring Location
- Former Underground Storage Tank
- (<500) - Water analytical result in parts per billion
- (\* 52) - Soil analytical result in parts per million

Title: <b>Paint Thinner Concentrations 490 43RD Street Oakland, California</b>	
Figure Number: <b>3.0</b>	Scale: <b>1" = 30"</b>
Drawn By: <b>JVC</b>	Date: <b>4/29/96</b>
Project Number: <b>6305-1.1</b>	
<b>ACC Environmental Consultants</b> 7977 Capwell Drive, Suite 100 Oakland, California 94621 (510) 638-8400 Fax: (510) 638-8404	



### Legend

- MW 2 Existing Monitoring Well
- B4 - Soil Boring Location
- Former Underground Storage Tank
- (<50) - Water analytical result in parts per billion
- (\* <100) - Soil analytical result in parts per million

Title: <b>TPHg Concentration Map</b> <b>490 43RD Street</b> <b>Oakland, California</b>	
Figure Number: <b>4.0</b>	Scale: <b>1" = 30"</b>
Drawn By: <b>JVC</b>	Date: <b>4/29/96</b>
Project Number: <b>6305-1.1</b>	
<b>ACC Environmental Consultants</b> 7977 Capwell Drive, Suite 100 Oakland, California 94621 (510) 638-8400 Fax: (510) 638-8404	

**PERMITS**

---



PERMIT  
EXCAVATION

Job Site 490 43RD ST

Parcel# 013 -1098-027-00

Appl# X9600317

Descr bore holes to investigate soil condition

Permit Issued 04/15/96

Work Type EXCAVATION-PRIVATE P

USA #

Util Co. Job #  
Util Fund #:

Acctg#:

Applicant

Phone#

Lic#

--License Classes--

Owner STUMP CLARENCE E & MARGARET

Contractor ENVIRONMENTAL CONTROL ASSO

X

(408)662-8178 695970 C57

Arch/Engr

Agent

Applic Addr 3011 TWIN PALM DR, APTOS CA, 95003

\$235.00 TOTAL FEES PAID AT ISSUANCE  
\$40.00 Applic \$195.00 Permit  
\$.00 Process \$.00 Rec Mgmt  
\$.00 Gen Plan \$.00 Invstg  
\$.00 Other

CITY OF OAKLAND

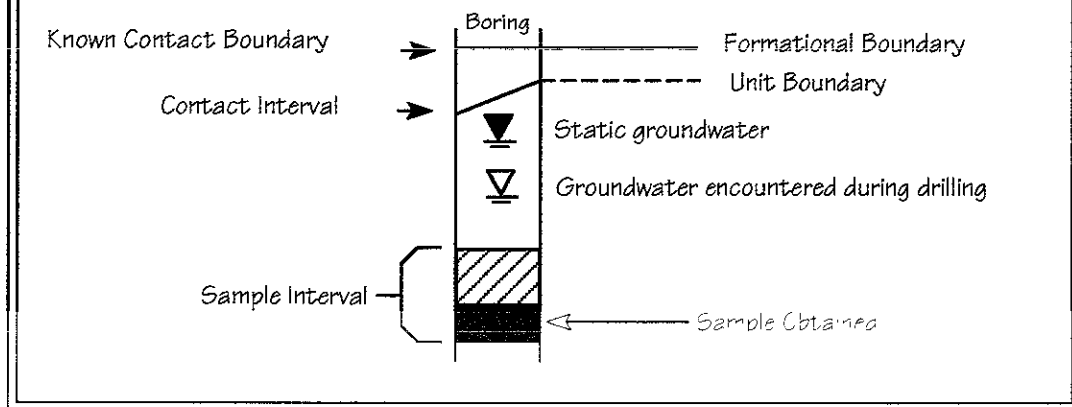
LITHOLOGIC LOGS  
AND  
UNIFIED SOIL CLASSIFICATION SYSTEM

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# UNIFIED SOIL CLASSIFICATION SYSTEM

MAJOR DIVISIONS				TYPICAL NAMES
COARSE GRAINED SOILS more than half more than half > #200 sieve	GRAVELS  more than half coarse fraction is larger than No. 4 sieve	CLEAN GRAVELS WITH LITTLE OR NO FINES	GW	well graded gravels, gravel-sand mixtures
			GP	poorly graded gravels, gravel-sand mixtures
		GRAVELS WITH OVER 12% FINES	GM	silty gravels, poorly graded gravel-sand silt mixtures
			GC	clayey gravels, poorly graded gravel-sand clay mixtures
	SANDS  more than half coarse fraction is smaller than No. 4 sieve	CLEAN SANDS WITH LITTLE OR NO FINES	SW	well graded sands, gravelly sands
			SP	poorly graded sands, gravelly sands
		SANDS WITH OVER 12% FINES	SM	silty sands, poorly graded sand-silt mixtures
			SC	clayey sands, poorly graded sand-clay mixtures
FINE GRAINED SOILS more than half < #200 sieve	SILTS AND CLAYS liquid limit less than 50		ML	inorg. silts and v.fine sands, rock flour silty or clayey sands, or clayey silts w/sl. plasticity
			CL	inorg. clays of low-med plasticity, gravelly clays, sandy clays, silty clays, lean clays
			OL	organic clays and organic silty clays of low plasticity
	SILTS AND CLAYS liquid limit greater than 50		MH	inorganic silty, micaceous or diatomaceous fine sandy or silty soils, elastic silts
			CH	inorganic clays of high plasticity, fat clays
			OH	organic clays of medium to high plasticity organic silts
HIGHLY ORGANIC SOILS		PT	peat and other highly organic soils	

## Legend for Boring Logs



**ACC Environmental Consultants**  
 7977 Cabot Drive, Suite 100  
 Oakland, California 94621  
 (510) 638-8400 Fax: (510) 638-8404

**SITE: BLUMERT TRUST PROPERTY**  
 490 43rd Street  
 Oakland, California  
 Project No. 95-6305-1.1

<b>Soil Color</b>  <u>Color Code</u> (Munsell Soil Color Chart)	HNu (ppm)	SAMPLE ID	SAMPLE INTERVAL	depth below ground surface (ft)	<b>EQUIPMENT: Geoprobe Pneumatic Sampling Device</b> <b>OPERATED BY: Environmental Control Associates</b> <b>LOGGED BY: D. DeMent</b> <b>LOCATION: 490 43rd Street, Oakland, California</b> <b>WORK DATE: 4/16/96</b> <b>BORING: SB1 of 2</b>
5YR-3/3				0	Concrete / Baserock
				2	Clayey Silt (ML), dark brown, w/ trace fine sand (<5%), slight plasticity, soft to medium stiff, damp
				4	Clay content increases with depth.
	0	SB1-9.0	[Hatched Box]	6	[Dotted Box]
5Y-3/2			[Hatched Box]	8	Silty Clay (CL), dark olive gray, 5-10% very fine to fine grained, disseminated sand, uniform, slight plasticity, medium stiff, damp, slight petroleum odor
				10	<b>TOTAL DEPTH OF BORING: 9.0 feet bgs</b>  12  14  16  18  20  22  24  26  28

<b>ACC Environmental Consultants, Inc.</b> 7977 Capwell Drive, Suite 100 Oakland, California 94621 (510) 638-8400 FAX: (510) 638-8404	Project No: <b>95-6305-1.1</b>  Date: <b>5/6/96</b>	Title <b>LOG OF BORING: SB-1</b> <b>Blumert Trust Property</b> 490 43rd Street Oakland, California
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ANALYTICAL RESULTS AND CHAIN OF CUSTODY RECORD

# CHROMALAB, INC.

Environmental Services (SDB)

April 24, 1996

Submission #: 9604654  
REISSUED

ACC ENVIRONMENTAL CONSULTANTS

Atten: David DeMent

Project: BLUMERT TRUST 490 43rd ST Project#: 6305-1.1  
Received: April 17, 1996

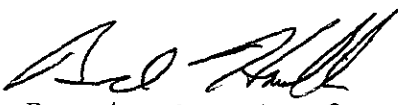
re: Six samples for Paint Thinner analysis

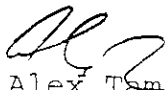
Matrix: WATER  
Sampled: April 1, 1996  
Method: EPA 3510/8015  
Extracted: April 18, 1996  
Analyzed: April 18, 1996

Sample #	Client Sample ID	Paint Thinner ( $\mu\text{g/L}$ )	Reporting limit ( $\mu\text{g/L}$ )
82843	B3-W	N.D.	500*
82844	B4-W	6800	500*
	Note: Estimated concentration for Paint Thinner due to overlapping fuel patterns. Fuel pattern resembles gasoline and paint thinner mix.		
82845	B5-W	12000	500*
	Note: Estimated concentration for Paint Thinner due to overlapping fuel patterns. Fuel pattern resembles gasoline and paint thinner mix.		
82846	B6-W	N.D.	800*
82847	B7-W	16000	500*
	Note: Estimated concentration for Paint Thinner due to overlapping fuel patterns. Fuel pattern resembles gasoline and paint thinner mix.		
82848	B8-W	N.D.	500*

\*: Reporting limit raised due to limited sample size.

Blank N.D. 50  
Blank Spike Recovery 83%

  
Dennis Mayugba for  
Chemist

  
Alex Tam  
Semivolatiles Supervisor

Note: Diesel was used as the spiking compound. Sample results were quantified against the Diesel calibration.



# CHROMALAB, INC.

Environmental Services (SDB)

April 24, 1996

Submission #: 9604654

ACC ENVIRONMENTAL CONSULTANTS

Atten: David DeMent

Project: BLUMERT TRUST 490 43RD ST  
Received: April 17, 1996

Project#: 6305-1.1

re: 1 sample for Gasoline and BTEX compounds analysis.  
Method: EPA 5030/8015M/8020


Sampled: April 16, 1996  
Matrix: SOIL  
Run#: 1135

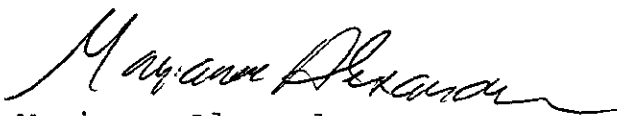
Analyzed: April 19, 1996

Spl#	CLIENT SPL ID	Gasoline (mg/Kg)	Benzene (mg/Kg)	Toluene (mg/Kg)	Ethyl Benzene (mg/Kg)	Total Xylenes (mg/Kg)
82839	SB1-9.0	N.D.	N.D.	N.D.	N.D.	0.54

Note: Reporting limit raised due to sample interference.

Reporting Limits	100	0.10	0.10	0.10	0.10
Blank Result	N.D.	N.D.	N.D.	N.D.	N.D.
Blank Spike Result (%)	106	102	101	106	113

  
June Zhao  
Chemist

  
Marianne Alexander  
Gas/BTEX Supervisor



# CHROMALAB, INC.

Environmental Services (SDB)

April 24, 1996

Submission #: 9604654

ACC ENVIRONMENTAL CONSULTANTS

Atten: David DeMent

Project: BLUMERT TRUST 490 43RD ST  
Received: April 17, 1996

Project#: 6305-1.1

re: 1 sample for Gasoline and BTEX compounds analysis.  
Method: EPA 5030/8015M/8020

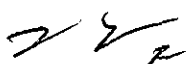
Matrix: SOIL  
Sampled: April 16, 1996 Run#: 1135

Analyzed: April 19, 1996

Spl#	CLIENT SPL ID	Gasoline (mg/Kg)	Benzene (mg/Kg)	Toluene (mg/Kg)	Ethyl Benzene (mg/Kg)	Total Xylenes (mg/Kg)
82840	SB2-9.0	N.D.	N.D.	N.D.	N.D.	N.D.

Note: Reporting limit raised due to sample interference.

Reporting Limits	500	0.50	0.50	0.50	0.50
Blank Result	N.D.	N.D.	N.D.	N.D.	N.D.
Blank Spike Result (%)	106	102	101	106	113

  
June Zhao  
Chemist

  
Marianne Alexander  
Gas/BTEX Supervisor

# CHROMALAB, INC.

Environmental Services (SDB)

April 24, 1996

Submission #: 9604654

ACC ENVIRONMENTAL CONSULTANTS

Atten: David DeMent

Project: BLUMERT TRUST 490 43RD ST  
Received: April 17, 1996

Project#: 6305-1.1

re: 6 samples for Gasoline and BTEX compounds analysis.  
Method: EPA 5030/8015M/8020


Matrix: WATER

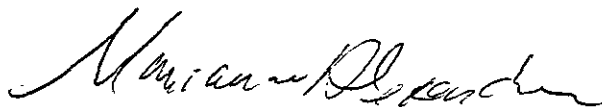
Sampled: April 16, 1996

Run#: 1117

Analyzed: April 18, 1996

Spl#	CLIENT SPL ID	Gasoline (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethyl Benzene (ug/L)	Total Xylenes (ug/L)
82843	B3-W	N.D.	0.89	1.6	N.D.	0.91
82844	B4-W	11000	200	66	220	96
	Note:	Estimated concentration for gasoline due to overlapping fuel patterns. Fuel pattern resembles gasoline and paint thinner mix.				
82845	B5-W	5300	18	18	32	56
	Note:	Estimated concentration for gasoline due to overlapping fuel patterns. Fuel pattern resembles gasoline and paint thinner mix.				
82846	B6-W	46000	880	N.D.	160	180
	Note:	Estimated concentration for gasoline due to overlapping fuel patterns. Fuel pattern resembles gasoline and paint thinner mix.				
82847	B7-W	4400	190	14	130	100
	Note:	Estimated concentration for gasoline due to overlapping fuel patterns. Fuel pattern resembles gasoline and paint thinner mix.				
82848	B8-W	N.D.	N.D.	0.97	N.D.	1.8
Reporting Limits		50	0.50	0.50	0.50	0.50
Blank Result		N.D.	N.D.	N.D.	N.D.	N.D.
Blank Spike Result (%)		112	104	99.9	104	111

  
Billy Thach  
Chemist

  
Marianne Alexander  
Gas/BTEX Supervisor

# CHROMALAB, INC.

Environmental Services (SDB)

April 24, 1996

Submission #: 9604654

ACC ENVIRONMENTAL CONSULTANTS

Atten: David DeMent

Project: BLUMERT TRUST 490 43rd ST Project#: 6305-1.1

Received: April 17, 1996

re: Two samples for Paint Thinner analysis

Matrix: SOIL

Extracted: April 18, 1996

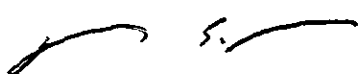
Sampled: April 1, 1996

Analyzed: April 19, 1996

Method: EPA 3550/8015

<u>Sample #</u>	<u>Client Sample ID</u>	<u>Paint Thinner (mg/Kg)</u>
82839	SB1-9.0	52
82840	SB2-9.0	78

Blank	N.D.
Blank Spike Recovery	71%
Reporting Limit	1.0

  
Dennis Mayugba  
Chemist

  
Alex Tam  
Semivolatiles Supervisor

Note: Diesel was used as the spiking compound. Sample results were  
quantified against the Diesel calibration.

**CHROMALAB, INC.**  
**SAMPLE RECEIPT CHECKLIST**

Client Name ACC  
 Project BLUMERT TRUST  
 Reference/Subm # 27420/9604654  
 Checklist completed by: Chowley 4/18/96  
 Signature / Date

Date/Time Received 4/17/96 1110  
 Received by B Morrow Date / Time  
 Carrier name \_\_\_\_\_  
 Logged in by MP 4/17/96  
 Matrix Soil/H2O Initials / Date

Shipping container in good condition? NA \_\_\_ Yes \_\_\_ No \_\_\_  
 Custody seals present on shipping container? Intact \_\_\_ Broken \_\_\_ Yes \_\_\_ No \_\_\_  
 Custody seals on sample bottles? Intact \_\_\_ Broken \_\_\_ Yes \_\_\_ No \_\_\_  
 Chain of custody present? Yes  No \_\_\_  
 Chain of custody signed when relinquished and received? Yes  No \_\_\_  
 Chain of custody agrees with sample labels? Yes  No \_\_\_  
 Samples in proper container/bottle? Yes  No \_\_\_  
 Samples intact? Yes  No \_\_\_  
 Sufficient sample volume for indicated test? Yes  No \_\_\_  
 \* VOA vials have zero headspace? NA \_\_\_ Yes \_\_\_ No   
 Trip Blank received? NA \_\_\_ Yes \_\_\_ No   
 All samples received within holding time? Yes  No \_\_\_  
 Container temperature? 9.5°C  
 pH upon receipt \_\_\_\_\_ pH adjusted \_\_\_\_\_ Check performed by: \_\_\_\_\_ NA \_\_\_

Any NO response must be detailed in the comments section below. If items are not applicable, they should be marked NA.

Client contacted? \_\_\_\_\_ Date contacted? \_\_\_\_\_  
 Person contacted? \_\_\_\_\_ Contacted by? \_\_\_\_\_

Regarding? \_\_\_\_\_  
 Comments: Limited sample provided by client  
 \* Headspace in 1 Voa each for: B5-W  
B6-W  
B7-W

Corrective Action: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

6511/82539-82540

27420

# CHROMALAB, INC.

SUBM #: 9604654 REP: PM  
 CLIENT: ACC  
 DUE: 04/24/96  
 REF #: 27420

## Chain of Custody

Environmental Services (SDB) (DOHS 1094)

DATE April 17, 1996 PAGE 1 OF 1

PROJ MGR David DeMent  
 COMPANY ACC Environmental  
 ADDRESS 7977 Capwell Drive #100  
Oakland CA 94621  
 SAMPLERS (SIGNATURE) \_\_\_\_\_  
 (PHONE NO.) (510) 638-8400  
 (FAX NO.) (510) 638-8404

### ANALYSIS REPORT

SAMPLE ID.	DATE	TIME	MATRIX	PRESERV.	TPH - Gasoline (EPA 5030, 8015)	TPH - Gasoline (5030, 8015) w/BTEX (EPA 602, 8020)	TPH - Diesel, TEPH (EPA 3510/3550, 8015)	PURGEABLE AROMATICS BTEX (EPA 602, 8020)	PURGEABLE HALOCARBONS (EPA 601, 8010)	VOLATILE ORGANICS (EPA 624, 8240, 524-2)	BASE/NEUTRALS, ACIDS (EPA 625/627, 8270, 525)	TOTAL OIL & GREASE (EPA 5520, B+F, E+F)	PCB (EPA 608, 8080)	PESTICIDES (EPA 608, 8080)	TOTAL RECOVERABLE HYDROCARBONS (EPA 418.1)	Paint Thinner	LUFT METALS: Cd, Cr, Pb, Zn, Ni	CAM METALS (17)	PRIORITY POLLUTANT METALS (13)	TOTAL LEAD	EXTRACTION (TCLP, STLC)	NUMBER OF CONTAINERS	
SB1-9.0	4/16/96	14:50	Soil	Cold		X										X							1
SB2-9.0		15:00	Soil	Cold		X										X							1
B3-W		10:00	Water	Cold		X										X							4
B4-W		11:45				X										X							4
B5-W		11:00				X										X							4
B6-W		14:30				X										X							2
B7-W		16:40				X										X							2
B8-W	✓	16:30	↓	↓		X										X							4

⊗ - If sample volume is sufficient, please call!

**PROJECT INFORMATION**  
 PROJECT NAME Blument Trust 490 43rd ST  
 PROJECT NUMBER 6305-1.1  
 PO # 6305-1.1  
 TAT STANDARD 5-DAY 24 48 72 OTHER

**SPECIAL INSTRUCTIONS/COMMENTS**  
 Note: Looking for paint thinner in B7-W but couldn't get any more sample volume - Can this be done with 2 VOA's? Even if it can't be quantified, can it be detected??

RELINQUISHED BY 1 <u>D. DeMent</u> (SIGNATURE) (TIME) <u>David DeMent</u> 4/17/96 (PRINTED NAME) (DATE) <u>ACC Env. Consultants</u> (COMPANY)	RELINQUISHED BY 2 _____ (SIGNATURE) (TIME) _____ (PRINTED NAME) (DATE) _____ (COMPANY)	RELINQUISHED BY 3 <u>[Signature]</u> 1350 (SIGNATURE) (TIME) <u>[Signature]</u> 4:17 96 (PRINTED NAME) (DATE) <u>Chromalab</u> (COMPANY)
RECEIVED BY 1 <u>[Signature]</u> 11:10 (SIGNATURE) (TIME) <u>[Signature]</u> 4:17 96 (PRINTED NAME) (DATE) <u>Chromalab</u> (COMPANY)	RECEIVED BY 2 _____ (SIGNATURE) (TIME) _____ (PRINTED NAME) (DATE) _____ (COMPANY)	RECEIVED BY (LABORATORY) 3 <u>Mimie Pak</u> 1350 (SIGNATURE) (TIME) <u>Mimie Pak</u> 4/17/96 (PRINTED NAME) (DATE) <u>Chromalab</u> (LAB)