



WELLS FARGO

#4252 ✓

Private Client Services
Specialty Assets - Real Estate

420 Montgomery Street, 3rd Floor
P.O. Box 63939
San Francisco, CA 94163
Fax (415) 983-0701

August 10, 1998

*Norma,
Please forward
Thanks
Sam*

~~Ms. Pamela Evans~~
Alameda County Health Services Agency
Department of Environmental Health
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502

RE: Blumert Trust - Account #308-107222
490 43rd Street/4300 Telegraph Avenue
Oakland, CA
Property #1156

Dear Ms. Evans

Enclosed please find a copy of the June 1998 Groundwater Monitoring Report for the captioned property.

The contact person at ACC Environmental Consultants is David DeMent (510) 638-8400. Please note for your records that this matter is now being handled by John Ward at Wells Fargo, he can be reached at (415) 396-3019.

Please contact John Ward or Mr. DeMent if we can be of any further assistance.

Sincerely,

Heather Fairfull
Vice President

- cc David DeMent (w o encl)
- Cassandra Miller (w o encl)
- Ken Chettien Esq (w o encl)
- John Ward (w o encl)
- Anthony de Cesare (w o encl)

Handwritten notes and stamps at the bottom right of the page.



GROUNDWATER MONITORING REPORT

July 20, 1998

490 43rd Street
Oakland, California

Prepared For:
Ms. Heather Fairfull
Wells Fargo Trust

OAKLAND ■ SACRAMENTO
SEATTLE ■ LOS ANGELES

ACC Project No. 96-6305-001 01

GROUNDWATER MONITORING REPORT

**490 43rd Street
Oakland, California**

ACC Project No. 96-6305-001.01

Prepared for:

Ms. Heather Fairfull
Wells Fargo Trust
525 Market Street, 18th Floor
San Francisco, California

July 20, 1998

Prepared by:

Carolyn Mulvihill

Carolyn Mulvihill
Technical Editor

Reviewed by:

D. R. DeMent

David R. DeMent, RG
Senior Geologist



TABLE OF CONTENTS

	Page
1.0 INTRODUCTION	1
2.0 BACKGROUND	1
3.0 GROUNDWATER MONITORING AND SAMPLING	2
3.1 Groundwater Monitoring	2
3.2 Groundwater Gradient	4
3.3 Groundwater Sampling	4
4.0 RESULTS OF GROUNDWATER MONITORING	5
5.0 DISCUSSION	7
5.1 Dissolved Oxygen	7
6.0 CONCLUSIONS	8
7.0 RECOMMENDATIONS	8

TABLES

1 - Groundwater Monitoring Data.....	3
2 - Groundwater Gradient and Flow Direction.....	4
3 - Groundwater Sample Analytical Results	5

FIGURES

- 1 - Location Map
- 2 - Site Plan
- 3 - Gradient Map

APPENDICES

- 1 - Well Monitoring Worksheet
- 2 - Analytical Results and Chain of Custody Record

GROUNDWATER MONITORING REPORT

490 43rd Street
Oakland, California

1.0 INTRODUCTION

Groundwater monitoring and sampling was conducted by ACC Environmental Consultants, Inc., (ACC) for Wells Fargo Trust on behalf of the Blumert Trust, for the subject property at 490 43rd Street, Oakland, California (Figure 1). The work was conducted at the request of the Alameda County Health Care Services Agency, Department of Environmental Health (ACHCSA) for additional site investigation and characterization of impacted groundwater.

The purpose of the work was to monitor groundwater flow direction and gradient and to evaluate the presence of petroleum hydrocarbons in the local groundwater associated with former gasoline and paint thinner (mineral spirits) underground storage tanks (USTs). The locations of the groundwater monitoring wells and pertinent site features are illustrated on Figure 2.

2.0 BACKGROUND

The site is located at the northeastern corner of Telegraph Avenue and 43rd Street, Oakland, California (Figure 2). The property is relatively flat, at an elevation of approximately 90 feet above mean sea level (MSL). The predominant groundwater flow direction is to the south-southwest.

The facility formerly operated one 1,000-gallon gasoline UST and one 350-gallon mineral spirit UST, which were removed on December 11, 1991 (Figure 2). Laboratory analysis of soil samples collected underneath the gasoline UST 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 underneath the mineral spirit UST indicated concentrations up to 25 ppm mineral spirits. Groundwater was observed in the excavation at a depth of approximately 12.5 feet below ground surface (bgs). The tank pit, which formerly contained both 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 mineral spirits.

Three groundwater monitoring wells were installed on April 12, 1993, by Kaprealian Engineering, Inc., (KEI) and have been monitored periodically since that time. Gradient was calculated at approximately 0.01 foot/foot and flow direction has consistently been to the south-southwest. Groundwater samples collected from the three monitoring wells indicated elevated TPHg and mineral spirit concentrations.

On June 1, 1994, KEI drilled exploratory soil borings EB1 and EB2. Concentrations of TPHg and mineral spirits ranging from 28 to 180 ppm were detected in soil samples collected from boring EB2 at depths of 10 and 12 feet bgs. Grab groundwater samples collected from borings EB1 and EB2 indicated concentrations of TPHg at 3,400 parts per billion (ppb) and 9,200 ppb, respectively.

and mineral spirits 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, ACC performed an exploratory boring investigation in April 1996. ACC drilled two exploratory soil borings (SB1 and SB2) to characterize soil conditions in the immediate vicinity of the former tank excavation and six additional exploratory borings (B3 through B8) upgradient and downgradient of the former USTs to characterize groundwater in the general vicinity of the former tank excavation. Concentrations of mineral spirits were detected in sample SB1-9.0 at 52 ppm and in sample SB2-9.0 at 78 ppm. Grab groundwater samples were collected from borings B3 through B8 and analyzed for TPHg, BTEX, and mineral spirits. Concentrations of TPHg ranged from nondetectable in samples collected from borings B3 and B8 to 46,000 ppb in boring B6. Concentrations of mineral spirits ranged from nondetectable in samples collected from borings B3 and B8 to 16,000 ppb in boring B7. Petroleum hydrocarbon impacts to shallow groundwater were not fully delineated, but concentrations of TPHg and mineral spirits appear to have migrated preferentially along utility trench lines. Field observations indicated that general aquifer quality was poor, and subsurface groundwater migration was believed to be minimal based on soil type, flat hydraulic gradient, and minimal surface water infiltration.

In a letter to Wells Fargo Bank dated October 17, 1996, ACHCSA approved biannual groundwater monitoring, the installation of one additional monitoring well, and evaluation of options to artificially introduce dissolved oxygen (DO) into shallow groundwater to assist natural bioremediation processes. Agreement on the well location and method of introducing DO into groundwater has not been made. Biannual groundwater monitoring and sampling has been conducted since December 1996.

ACC prepared a Work Plan dated July 16, 1998 which has been submitted to Wells Fargo Trust for review.

3.0 GROUNDWATER MONITORING AND SAMPLING

ACC monitored and sampled wells MW-1 through MW-3 on June 19, 1998. This sampling event was performed to characterize groundwater conditions at the site. Work at the site included measuring depth to water, subjectively evaluating groundwater in the wells, measuring groundwater parameters such as pH, temperature, conductivity, and DO, and purging and sampling the wells for laboratory analysis

3.1 Groundwater Monitoring

Before groundwater sampling, the depth to the surface of the water table was measured from the top of the well casing using a Solinst water level meter. The water level measurements were recorded to the nearest 0.01 foot with respect to MSL. Groundwater monitoring data obtained at the site is included as Appendix 1. Information regarding well elevations and groundwater levels is summarized in Table 1.

TABLE 1 - GROUNDWATER MONITORING DATA

Well Number (Well Elevation)	Date	Depth to Water*	Groundwater Elevation
MW-1 (91.02')	04/14/94	11.19	79.83
	05/23/94	10.75	80.27
	06/16/94	11.72	79.30
	04/12/95	9.72	81.31
	05/10/95	10.11	80.91
	06/28/95	10.91	80.11
	12/05/95	12.21	78.81
	05/30/96	10.23	80.79
	09/03/96	12.10	78.92
	12/06/96	9.32	81.70
	06/12/97	11.85	79.17
	12/16/97	8.87	82.15
	06/19/98	10.77	80.25
MW-2 (90.55')	04/14/94	10.95	79.60
	05/23/94	10.52	80.03
	06/16/94	11.49	79.06
	04/12/95	9.59	80.96
	05/10/95	10.00	80.55
	06/28/95	10.95	79.60
	12/05/95	12.34	78.21
	05/30/96	10.01	80.54
	09/03/96	11.87	78.68
	12/06/96	9.42	81.13
	06/12/97	11.65	78.90
	12/16/97	8.74	81.81
	06/19/98	10.49	80.06
MW-3 (90.90')	04/14/94	11.23	79.67
	05/23/94	10.74	80.16
	06/16/94	11.81	79.09
	04/12/95	9.72	81.18
	05/10/95	10.16	80.74
	06/28/95	10.99	79.91
	12/05/95	12.39	78.51
	05/30/96	9.97	80.93
	09/03/96	12.40	78.50
	12/06/96	9.12	81.78
	06/12/97	11.86	79.04
	12/16/97	8.54	82.36
	06/19/98	10.66	80.24

Notes *Depth to water measured in feet below top of casing

3.2 Groundwater Gradient

The groundwater flow direction as determined from monitoring well data collected on June 19, 1998, is illustrated on Figure 3. Based on groundwater elevation calculations, groundwater flow is predominantly toward the southwest at an average gradient of 0.010 foot/foot. Historic groundwater gradient at the site is summarized in Table 2.

TABLE 2 - GROUNDWATER GRADIENT AND FLOW DIRECTION

Date Monitored	Average Gradient (foot/foot)	Direction
04/14/94	0.007	south
05/23/94	0.008	south
06/16/94	0.007	south
04/12/95	0.010	South-southwest
05/10/95	0.011	South-southwest
06/28/95	0.010	South-southwest
12/05/95	0.020	South-southwest
05/30/96	0.014	southwest
09/03/96	0.012	southeast
12/06/96	0.036	southwest
06/12/97	0.012	South-southwest
12/16/97	0.026	southwest
06/19/98	0.010	southwest

3.3 Groundwater Sampling

Prior to groundwater sampling, each well was purged using a disposable polyethylene bailer. ACC measured pH, DO, conductivity, temperature, salinity, and turbidity during well purging. When these parameters stabilized and four well casing volumes of water had been removed from each well, groundwater samples were collected. Following purging, each well was allowed to recharge before sampling.

Each well was sampled using a new, disposable polyethylene bailer attached to new string. From each monitoring well, laboratory supplied sample vials and bottles were filled to overflowing and sealed so that no air was trapped in the vial or bottle. Once filled, vials were inverted and tapped to test for air bubbles. Sample containers were labeled with self-adhesive, pre-printed tags. All

samples were stored in pre-chilled, insulated containers pending delivery to Chromalab Inc. (Chromalab), a state-certified laboratory, for analysis.

Water purged during the sampling of the monitoring wells is temporarily stored on site in Department of Transportation approved 55-gallon drums pending receipt of laboratory analytical results and proper disposal.

4.0 RESULTS OF GROUNDWATER SAMPLING

Groundwater samples collected from monitoring wells MW-1 through MW-3 were submitted to Chromalab following chain of custody protocol. The samples were analyzed for TPHg, BTEX, and methyl tertiary butyl ether (MTBE) using Method SW846 8020A Nov 1990/8015M, and total extractable petroleum hydrocarbons as mineral spirits (TEPH as mineral spirits) using EPA Method 8015M. A copy of the chain of custody record and laboratory analytical reports is included as Appendix 2. Groundwater sample analytical results are summarized in Table 3.

TABLE 3 - GROUNDWATER SAMPLE ANALYTICAL RESULTS

Well / Date	Mineral Spirits	TPHg	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE
MW-1							
04/29/93	600	290	31	1.9	2.7	5.4	--
12/13/93	820	1,700	170	22	19	48	--
03/15/94	1,200	2,100	250	12	27	38	--
06/16/94	430	700	35	6.8	8.7	10	--
09/13/94	73	170	6.6	1.6	2.4	3.3	--
12/08/94	170	420	16	3.0	2.9	2.7	--
03/14/95	65	630	39	ND	7.0	8.6	--
06/28/95	130	720	100	7.8	23	32	--
10/13/95	900	290	8.6	0.55	2.8	1.4	--
12/05/95	70	94	5.6	ND	0.67	0.53	--
05/30/96	<50	1,700 ⁽¹⁾	62	<0.5	16	18	<5
09/03/96	<50	570	1.8	0.61	8.5	7.3	<5
12/06/96	<51	2,600	84	2.8	30	23	--
06/12/97	<51	580	9.4	1.3	5.0	4.0	8.1
12/16/97	490	840	12	2.5	8.0	4.4	17
06/19/98	480	130	0.80	<0.50	1.8	0.52	<5.0

Well / Date	Mineral Spirits	TPHg	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE
MW-2							
04/29/93	4,100	11,000	2,400	51	76	160	--
12/13/93	2,600	11,000	1,400	66	150	94	--
06/16/94	11,000	18,000	2,100	ND	200	70	--
09/13/94	5,400	12,000	1,400	50	200	89	--
12/08/94	3,200	11,000	1,700	34	200	86	--
03/14/95	670	14,000	1,500	41	160	66	--
06/28/95	8,700	11,000	1,700	ND	230	78	--
10/13/95	1,500	9,400	1,200	41	200	61	--
12/05/95	24,000	150,000	890	200	720	500	--
05/30/96	<50	10,000 ⁽¹⁾	61	5.1	28	11	<5 ⁽²⁾
09/03/96	<50	7,400	960	19	130	37	<100 ⁽²⁾
09/03/96 ⁽³⁾	2,800	7,800	1,400	<0.5	210	91	300
12/06/96	<54	12,000	850	8	140	36	--
06/12/97	<50	5,100	810	25	6.8	13	<5
12/16/97	3,600 ⁽⁴⁾	3,000	400	9.2	26	10	44
06/19/98	7,200	5,900	760	15	100	33	<25
MW-3							
04/29/93	5,800	8,500	840	17	40	42	--
12/13/93	3,500	6,200	580	120	65	120	--
06/16/94	4,700	7,700	910	ND	86	50	--
09/13/94	8,700	6,800	430	14	45	37	--
12/08/94	2,100	1,500	820	ND	52	28	--
03/14/95	480	5,600	250	11	25	30	--
06/28/95	2,100	14,000	650	18	70	54	--
10/13/95	430	2,500	270	1.9	15	10	--
12/05/95	5,400	4,200	250	ND	26	ND	--
05/30/96	<50	5,300 ⁽¹⁾	65	1.5	9.0	5.1	<5 ⁽²⁾
09/03/96	<50	8,900	460	17	51	77	<25 ⁽²⁾
09/03/96 ⁽³⁾	7,100	4,800	800	14	39	39	120
12/06/96	<100	7,000	740	<5	60	17	--
06/12/97	<50	2,800	460	14	59	28	<50
12/16/97	4,000 ⁽⁴⁾	4,900	1,700	17	52	20	92
06/19/98	10,000	3,800	470	19	49	21	<25

Notes All water results are reported in µg/L = ppb

< = Not detected at laboratory reporting limit indicated

-- = Analysis not performed

¹ Value revised by Chromalab from May 1996 submission 9605835

² Confirmed by gas chromatography mass spectrometry (GC MS)

³ Duplicate sample analysis by Sequoia Analytical

⁴ Quantitation for this analysis is based on the response factor of diesel. Hydrocarbons reported do not match the pattern of the mineral spirit standard

5.0 DISCUSSION

Three groundwater monitoring wells are located at the site in proximity to the former USTs. Groundwater gradient and flow direction were 0.010 foot/foot to the southwest in June 1998. These values are consistent with previous sampling events performed during May or June, but seasonal variations in gradient and flow direction have been observed at the site.

Analytical results from the June 19, 1998 sampling event indicate that concentrations of TPHg and BTEX decreased in well MW-1 and increased in well MW-2. In well MW-3, TPHg, benzene, and ethylbenzene decreased while toluene and total xylenes increased slightly. Mineral spirits were reported in wells MW-1, MW-2, and MW-3 at 480 ppb, 7,200 ppb, and 10,000 ppb, respectively.

Since May 1996, there has been an observable correlation between groundwater elevation changes and changes in concentrations of gasoline and mineral spirit constituents in groundwater. Generally, petroleum hydrocarbon concentrations increased after seasonal changes in groundwater elevations in December 1995, December 1996, and December 1997. This correlation is normally observed at sites with similar hydrogeological conditions and a residual source of petroleum hydrocarbons in soil not removed during UST removal. After evaluating analytical results and the monitoring well locations, it appears that some residual petroleum hydrocarbons exist in soil located under the building which could not be removed during UST removal and overexcavation.

Historical groundwater analytical results indicate generally decreasing concentrations of petroleum hydrocarbon constituents indicating that natural biodegradation processes are occurring. Dissolved-phase petroleum hydrocarbon concentrations mimic fluctuations in groundwater elevation. Since the monitoring wells are located in such close proximity to the former USTs, these fluctuations are observed in the wells during periodic monitoring events.

5.1 Dissolved Oxygen

DO levels in wells MW-1 through MW-3 appear to vary with the degree of groundwater recharge. Past DO levels have ranged from 0.4 to 3.4 ppm and DO levels in June 1998 ranged from 2.58 to 3.01 ppm, with minor differences between wells. Generally, DO appears to be low in all three wells due to presumed utilization during biodegradation processes.

DO is considered the limiting factor in biodegradation of petroleum hydrocarbons in shallow groundwater. While natural recharge supplies continual DO in groundwater, DO levels can be enhanced with the use of oxygen releasing compounds such as ORC². The use of oxygen releasing compounds and subsequent DO transport in groundwater can be monitored and evaluated using existing well MW-2 should oxygen releasing compounds be introduced in wells MW-1 and MW-3.

6.0 CONCLUSIONS

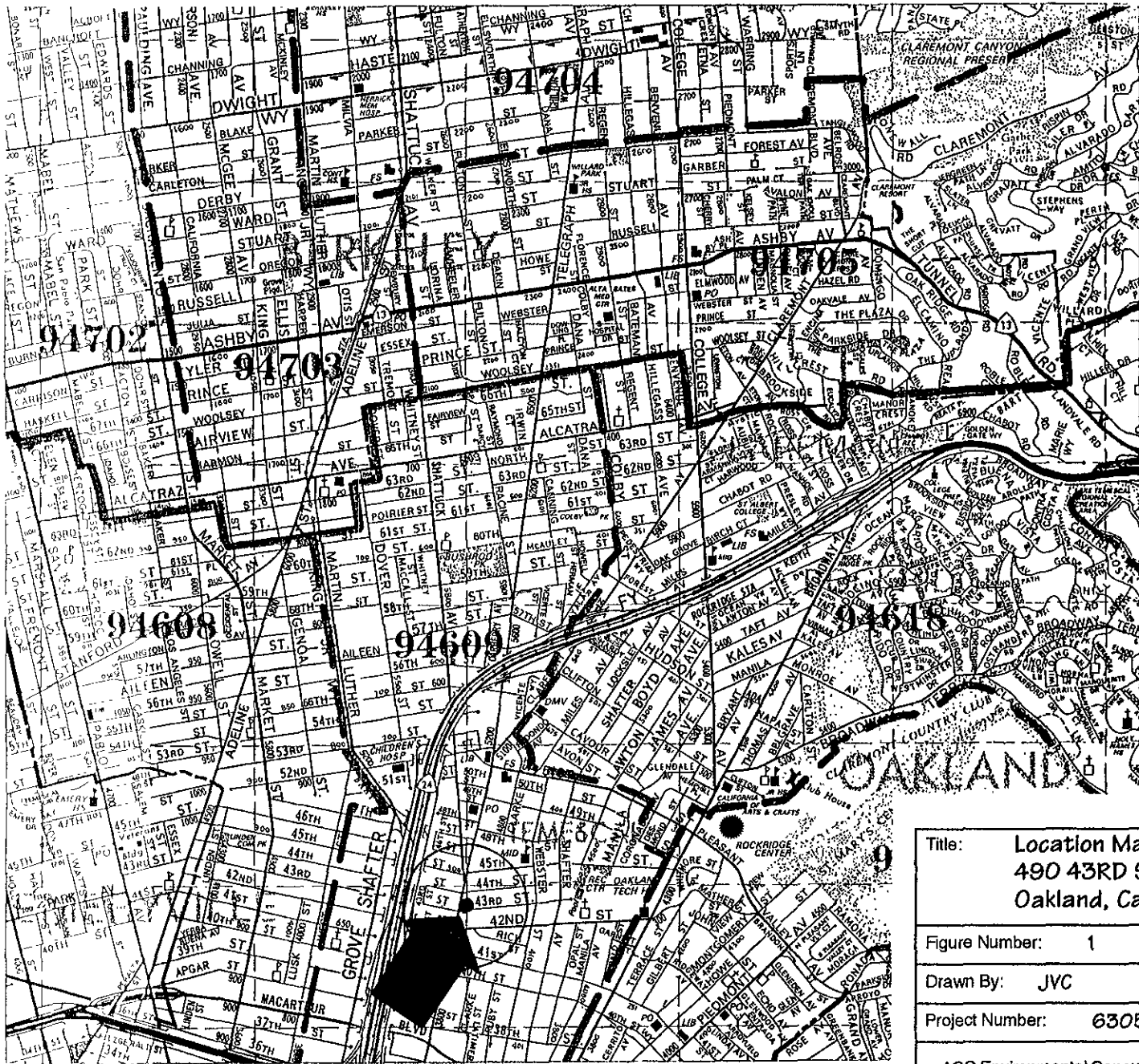
Based on historical data and current analytical results of this sampling and monitoring event, we conclude the following:

- Dissolved TPHg, BTEX, and mineral spirits continue to be detected in groundwater in the immediate vicinity of wells MW-1 through MW-3, and the ongoing presence of these constituents appears to be due to periodic contact between fluctuating groundwater and residual petroleum hydrocarbon concentrations in soil;
- Petroleum hydrocarbon concentrations are being slowly degraded through natural biodegradation processes with a measurable preference for BTEX constituents; and
- Groundwater flow direction and gradient were calculated to the southwest at 0.010 foot/foot and these values are consistent with seasonally influenced values for the site.

7.0 RECOMMENDATIONS

Groundwater monitoring and sampling data has characterized groundwater conditions at the site. Natural bioremedial processes are slowly degrading petroleum hydrocarbon residues and these processes can be assisted by enhancing DO levels through introduction of oxygen releasing compound. Therefore, as discussed in the Work Plan dated July 16, 1998, ACC recommends the following:

- Artificially introduce ORC[®] into shallow groundwater utilizing monitoring wells MW-1 and MW-3 and directly injecting ORC[®] at selected boring locations using a Geoprobe[®] to enhance DO concentrations and stimulate natural bioremediation processes;
- Measure DO concentrations in the wells during the next monitoring event to evaluate the DO levels and DO migration potential;
- Conduct quarterly well monitoring and sampling for six to twelve months to further characterize groundwater conditions, monitor DO levels, confirm decreasing concentrations of petroleum hydrocarbon constituents, and evaluate the site for regulatory closure and "no further action" status; and
- If necessary, perform a Tier 1 Risk Assessment for the site



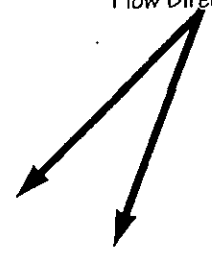
SOURCE: THOMAS BROTHERS GUIDE

Title: Location Map	
490 43RD Street	
Oakland, California	
Figure Number: 1	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

EXISTING BUILDING

Approximate Groundwater Flow Direction



LOADING DOCK

EQUIPMENT STORAGE

ASPHALT SURFACE

EXISTING BUILDING

EXISTING FENCE

MW-1

SB2

Storm Sewer

Former Excavation Boundary

SB1

SIDEWALK

6" Water Line

B7

EB2

MW-2

MW-3

EB1

43RD STREET

Former 1,000-Gallon Gasoline UST

Former 350-Gallon Paint Thinner UST

B6

Gas Line

B5

B4

B3

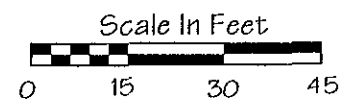
Storm Sewer



Former 1,000-Gallon Gasoline UST (489 43rd Street)

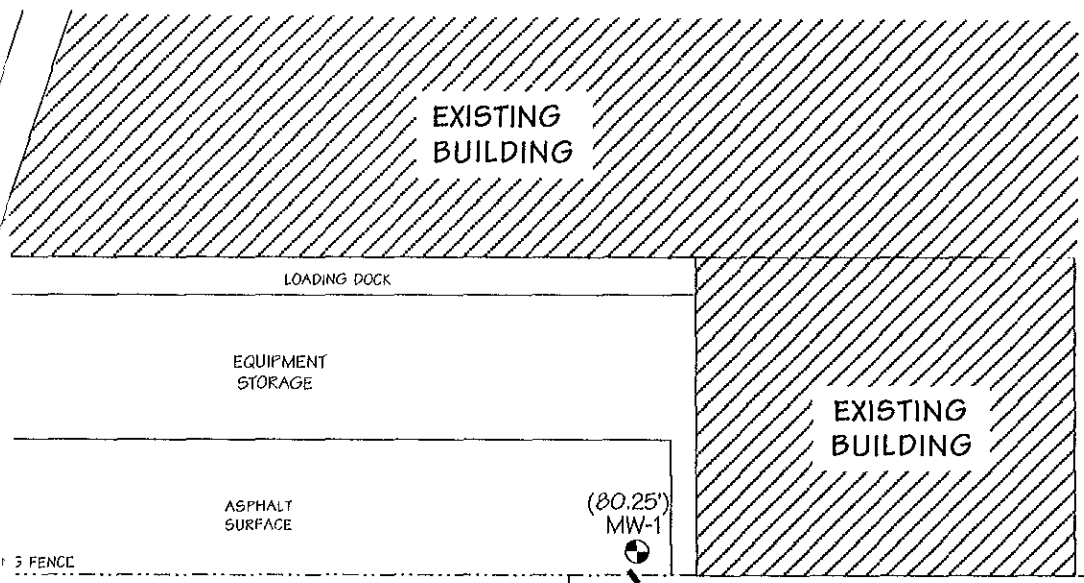
Legend

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



Title: Site Plan 490 43rd Street Oakland, California	
Figure Number: 2	Scale: 1" = 30"
Drawn By: JYC/DRD	Date: 6/24/97
Project Number: 6305-001.01	
ACC Environmental Consultants 7977 Capwell Drive, Suite 100 Oakland, California 94621 (510) 638-8400 Fax: (510) 638-8404	

TELEGRAPH AVENUE



Storm Sewer

SIDEWALK

6" Water Line

43RD STREET

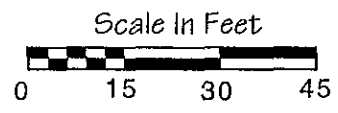
Gas Line

Storm Sewer

Legend

- MW ? - Existing Groundwater Monitoring Well
- Calculated Groundwater Flow Direction
- Calculated Groundwater Elevation Contour

Groundwater Elevation Data
collected on July 18, 1998



Title: Gradient Map 490 43rd Street Oakland, California	
Figure Number: 3	Scale: 1" = 30"
Drawn By: JYC/DRD	Date: 7/17/98
Project Number: 6305-001.01	
ACC Environmental Consultants 7977 Capwell Drive, Suite 100 Oakland, California 94621 (510) 638-8400 Fax: (510) 638-8404	

WELL MONITORING WORKSHEETS

JOB NAME: <u>Blumert Paint Company</u>	PURGE METHOD: <u>Manual Bailing</u>
SITE ADDRESS: <u>490 43rd Street</u>	SAMPLED BY: <u>Eloy Cisneros</u>
JOB #: <u>6305-001.01</u>	LABORATORY: <u>Chromalab</u>
DATE: <u>6/19/98</u>	ANALYSIS: <u>TPHg, BTEX, MTBE, Mineral Spirits</u>
Onsite Drum Inventory SOIL:	MONITORING <input checked="" type="checkbox"/> DEVELOPING <input type="checkbox"/>
EMPTY: WATER: <u>1=100%</u>	SAMPLING <input checked="" type="checkbox"/>

	PURGE	PURGE WATER READINGS						OBSERVATIONS	
	VOL.	pH	Temp.(C)	Cond.	Sal.	Turb.	D.O.		
WELL: MW-1	(Gal)							<input type="checkbox"/>	Froth
DEPTH OF BORING: <u>22.39'</u>	<u>2.0</u>	<u>7.68</u>	<u>20.2</u>	<u>0.400</u>	<u>0.01</u>	<u>837</u>	<u>2.78</u>	<input type="checkbox"/>	Sheen
DEPTH TO WATER: <u>10.77'</u>	<u>4.0</u>	<u>7.59</u>	<u>19.8</u>	<u>0.397</u>	<u>0.01</u>	<u>887</u>	<u>2.95</u>	<input checked="" type="checkbox"/>	Odor Type <u>gas</u>
WATER COLUMN: <u>11.62'</u>	<u>6.0</u>	<u>7.58</u>	<u>19.6</u>	<u>0.388</u>	<u>0.01</u>	<u>691</u>	<u>3.01</u>	<input type="checkbox"/>	Free Product
WELL DIAMETER: <u>2"</u>	<u>8.0</u>	<u>7.57</u>	<u>19.5</u>	<u>0.389</u>	<u>0.01</u>	<u>791</u>	<u>2.87</u>		Amount _____ Type _____
WELL VOLUME: <u>≈ 2.0 gal</u>								<input type="checkbox"/>	Other
COMMENTS:									
WELL: MW-2	(Gal)							<input type="checkbox"/>	Froth
DEPTH OF BORING: <u>21.09'</u>	<u>1.8</u>	<u>7.59</u>	<u>20.0</u>	<u>0.499</u>	<u>0.02</u>	<u>236</u>	<u>2.75</u>	<input checked="" type="checkbox"/>	Sheen
DEPTH TO WATER: <u>10.49'</u>	<u>3.6</u>	<u>7.57</u>	<u>19.7</u>	<u>0.502</u>	<u>0.02</u>	<u>326</u>	<u>2.78</u>	<input checked="" type="checkbox"/>	Odor Type <u>gas</u>
WATER COLUMN: <u>10.60'</u>	<u>5.4</u>	<u>7.58</u>	<u>19.6</u>	<u>0.495</u>	<u>0.02</u>	<u>461</u>	<u>2.64</u>	<input type="checkbox"/>	Free Product
WELL DIAMETER: <u>2"</u>	<u>7.2</u>	<u>7.58</u>	<u>19.6</u>	<u>0.498</u>	<u>0.02</u>	<u>440</u>	<u>2.58</u>		Amount _____ Type _____
WELL VOLUME: <u>≈ 1.8 gal</u>								<input type="checkbox"/>	Other
COMMENTS:									
WELL: MW-3	(Gal)							<input type="checkbox"/>	Froth
DEPTH OF BORING: <u>21.48'</u>	<u>1.8</u>	<u>7.53</u>	<u>19.9</u>	<u>0.594</u>	<u>0.02</u>	<u>69</u>	<u>2.73</u>	<input checked="" type="checkbox"/>	Sheen
DEPTH TO WATER: <u>10.66'</u>	<u>3.6</u>	<u>7.54</u>	<u>19.8</u>	<u>0.599</u>	<u>0.02</u>	<u>161</u>	<u>2.87</u>	<input checked="" type="checkbox"/>	Odor Type <u>gas</u>
WATER COLUMN: <u>10.82'</u>	<u>5.4</u>	<u>7.52</u>	<u>19.5</u>	<u>0.600</u>	<u>0.02</u>	<u>286</u>	<u>2.92</u>	<input type="checkbox"/>	Free Product
WELL DIAMETER: <u>2"</u>	<u>7.2</u>	<u>7.51</u>	<u>19.4</u>	<u>0.600</u>	<u>0.02</u>	<u>248</u>	<u>2.76</u>		Amount _____ Type _____
WELL VOLUME: <u>≈ 1.8 gal</u>								<input type="checkbox"/>	Other
COMMENTS:									

ANALYTICAL RESULTS AND CHAIN OF CUSTODY RECORD

CHROMALAB, INC.

Environmental Services (SDB)

June 29, 1998

Submission #: 9806356

ACC ENVIRONMENTAL CONSULTANTS

Atten: David DeMent

Project: 490 43RD ST.

Project#: 6305-001.01

Received: June 22, 1998

re: One sample for TEPH analysis.
Method: EPA 8015M

Client Sample ID: MW-1

Spl#: 192316

Matrix: WATER


Extracted: June 26, 1998


Sampled: June 19, 1998

Run#:13501

Analyzed: June 29, 1998

ANALYTE	RESULT (ug/L)	REPORTING LIMIT (ug/L)	BLANK RESULT (ug/L)	BLANK SPIKE (%)	DILUTION FACTOR
MINERAL SPIRITS	480	50	N.D.	--	1


Bruce Havlik
Analyst


Michael Verona
Operations Manager

CHROMALAB, INC.

Environmental Services (SDB)

June 29, 1998

Submission #: 9806356

ACC ENVIRONMENTAL CONSULTANTS

Atten: David DeMent

Project: 490 43RD ST.
Received: June 22, 1998

Project#: 6305-001.01

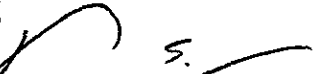
re: One sample for TEPH analysis.
Method: EPA 8015M

Client Sample ID: MW-2
Spl#: 192317
Sampled: June 19, 1998

Matrix: WATER
Run#:13501

Extracted: June 26, 1998
Analyzed: June 29, 1998

ANALYTE	RESULT (ug/L)	REPORTING LIMIT (ug/L)	BLANK RESULT (ug/L)	BLANK SPIKE (%)	DILUTION FACTOR
MINERAL SPIRITS	7200	500	N.D.	--	10


Bruce Havlik For
Analyst


Michael Verona
Operations Manager

CHROMALAB, INC.

Environmental Services (SDB)

June 29, 1998

Submission #: 9806356

ACC ENVIRONMENTAL CONSULTANTS

Atten: David DeMent

Project: 490 43RD ST.
Received: June 22, 1998

Project#: 6305-001.01


re: One sample for TEPH analysis.
Method: EPA 8015M

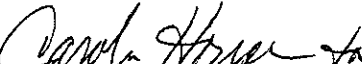
Client Sample ID: MW-3
Spl#: 192318
Sampled: June 19, 1998

Matrix: WATER
Run#:13501

Extracted: June 26, 1998
Analyzed: June 29, 1998

<u>ANALYTE</u>	<u>RESULT</u> <u>(ug/L)</u>	<u>REPORTING</u> <u>LIMIT</u> <u>(ug/L)</u>	<u>BLANK</u> <u>RESULT</u> <u>(ug/L)</u>	<u>BLANK</u> <u>SPIKE</u> <u>(%)</u>	<u>DILUTION</u> <u>FACTOR</u>
MINERAL SPIRITS	10000	250	N.D.	--	5


Bruce Havlik *For*
Analyst


Michael Verona
Operations Manager

CHROMALAB, INC.

Environmental Services (SDB)

July 9, 1998

Submission #: 9806356

ACC ENVIRONMENTAL CONSULTANTS

Atten: David DeMent

Project: 490 43RD ST.
Received: June 22, 1998

Project#: 6305-001.01

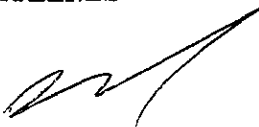
re: One sample for Gasoline BTEX MTBE analysis.
Method: SW846 8020A Nov 1990 / 8015Mod

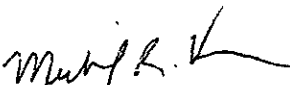
Client Sample ID: MW-1
Spl#: 192316
Sampled: June 19, 1998

Matrix: WATER
Run#:13594

Analyzed: July 1, 1998

ANALYTE	RESULT (ug/L)	REPORTING LIMIT (ug/L)	BLANK RESULT (ug/L)	BLANK SPIKE (%)	DILUTION FACTOR
GASOLINE	130	50	N.D.	82	1
MTBE	N.D.	5.0	N.D.	100	1
BENZENE	0.80	0.50	N.D.	87	1
TOLUENE	N.D.	0.50	N.D.	86	1
ETHYL BENZENE	1.8	0.50	N.D.	86	1
XYLENES	0.52	0.50	N.D.	87	1


Vincent Vancil
Analyst


Michael Verona
Operations Manager

510-638-8404

CHROMALAB, INC.

Environmental Services (SDB)

July 9, 1998

Submission #: 9806356

ACC ENVIRONMENTAL CONSULTANTS

Atten: David DeMent

Project: 490 43RD ST.
Received: June 22, 1998

Project#: 6305-001.01

re: One sample for Gasoline BTEX MTBE analysis.
Method: SW846 8020A Nov 1990 / 8015Mod

Client Sample ID: MW-2

Spl#: 192317

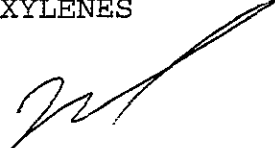
Sampled: June 19, 1998

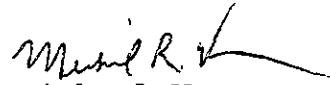
Matrix: WATER

Run#:13613

Analyzed: July 1, 1998

ANALYTE	RESULT (ug/L)	REPORTING LIMIT (ug/L)	BLANK RESULT (ug/L)	BLANK SPIKE (%)	DILUTION FACTOR
GASOLINE	5900	250	N.D.	82	5
MTBE	N.D.	25	N.D.	112	5
BENZENE	760	2.5	N.D.	91	5
TOLUENE	15	2.5	N.D.	91	5
ETHYL BENZENE	100	2.5	N.D.	90	5
XYLENES	33	2.5	N.D.	91	5


Vincent Vancil
Analyst


Michael Verona
Operations Manager

510-638-8404

PM 1122 0: BTEXQC0220

CHROMALAB, INC.

Environmental Services (SDB)

July 9, 1998

Submission #: 9806356

ACC ENVIRONMENTAL CONSULTANTS

Atten: David DeMent

Project: 490 43RD ST.
Received: June 22, 1998

Project#: 6305-001.01

re: One sample for Gasoline BTEX MTBE analysis.
Method: SW846 8020A Nov 1990 / 8015Mod

Client Sample ID: MW-3

Spl#: 192318

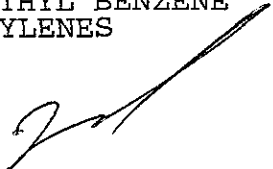
Sampled: June 19, 1998

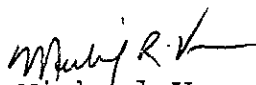
Matrix: WATER

Run#:13613

Analyzed: July 1, 1998

ANALYTE	RESULT (ug/L)	REPORTING LIMIT (ug/L)	BLANK RESULT (ug/L)	BLANK SPIKE (%)	DILUTION FACTOR
GASOLINE	3800	250	N.D.	82	5
MTBE	N.D.	25	N.D.	112	5
BENZENE	470	2.5	N.D.	91	5
TOLUENE	19	2.5	N.D.	91	5
ETHYL BENZENE	49	2.5	N.D.	90	5
XYLENES	21	2.5	N.D.	91	5


Vincent Vancil
Analyst


Michael Verona
Operations Manager

510-638-8404

PWV320:BTEXQC0220

0635/192316 - 192318
CHROMALAB, INC.

Environmental Services (SDB) (DOHS 1094)

ORDER #: 9086336 REF: DN
 CLIENT: ACC
 OUF: 06/20/98
 REF #: 40490

40490
 Chain of Custody

DATE 6/29/98 PAGE 1 OF 1

ANALYSIS REPORT

PROJ. MGR Dave DeMent
 COMPANY ACC Environmental
 ADDRESS 7977 Carwell Dr, Suite 100
Oakland, CA 94621
 SAMPLERS (SIGNATURE) Ely Cisneros (PHONE NO.) (510) 638-8400
 (FAX NO.) (510) 638-8404

SAMPLE ID.	DATE	TIME	MATRIX	PRESERV.
MW-1	6/19/98	14:00	H ₂ O	HCL
MW-2	6/19/98	14:50	H ₂ O	HCL
MW-3	6/19/98	15:35	H ₂ O	HCL

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, 5242)	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)	MTBE	LUFT METALS: Cd, Cr, Pb, Zn, Ni	SEM METALS	PRIORITY POLLUTANT METALS	TOTAL LEAD	EXTRACTION (COP, STC)	Mineral Spirits
	X										X						X
	X										X						X
	X										X						X

PROJECT INFORMATION

PROJECT NAME 490 43rd Street

PROJECT NUMBER 6305-001.01

P.O. # 6305-001.01

TAT STANDARD 5-DAY

24 48 72 OTHER

SAMPLE RECEIPT

TOTAL NO. OF CONTAINERS 12

HEAD SPACE

REC'D GOOD CONDITION/COLD

CONFORMS TO RECORD

SPECIAL INSTRUCTIONS/COMMENTS:
UST Fund Billing

RELINQUISHED BY 1

Ely Cisneros 17:15
 (SIGNATURE) (TIME)

Ely Cisneros 6/22/98
 (PRINTED NAME) (DATE)

ACC Environmental
 (COMPANY)

RECEIVED BY 1

Carly Cole 17:15
 (SIGNATURE) (TIME)

G Cook 6/22/98
 (PRINTED NAME) (DATE)

Chromalab
 (COMPANY)

RELINQUISHED BY 2

(SIGNATURE)

(DATE)

(COMPANY)

RECEIVED BY 2

(SIGNATURE)

(DATE)

(COMPANY)

RECEIVED BY (LABORATORY)

Carly Cole 18:00
 (SIGNATURE) (TIME)

G Cook 6/21/98
 (PRINTED NAME) (DATE)

Chromalab
 (COMPANY)

CHROMALAB, INC.

Environmental Service (SDB)

Sample Receipt Checklist

Client Name: ACC ENVIRONMENTAL CONSULTANTS Date/Time Received: 06/22/98 | 1715

Reference/Submis: 40490 9806356 Received by: AC

Checklist completed by: Chris Rowley Signature Date: 6/23/98 Reviewed by: _____ Initials | Date

Matrix: H2O Carrier name: Client - C/L

Shipping container/cooler in good condition? Yes No Not Present

Custody seals intact on shipping container/cooler? Yes No Not Present

Custody seals intact on sample bottles? Yes No Not Present

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

Sample containers intact? Yes No

Sufficient sample volume for indicated test? Yes No

All samples received within holding time? Yes No

Container/Temp Blank temperature in compliance? Temp: 3.8 °C Yes No

Water - VOA vials have zero headspace? No VOA vials submitted Yes No

Water - pH acceptable upon receipt? YB Adjusted? Checked by AC chemist for VOAs

Any No and/or NA (not applicable) response must be detailed in the comments section below.

Client contacted: _____ Date contacted: _____ Person contacted: _____

Contacted by: _____ Regarding: _____

Comments: _____

Corrective Action: _____