



Private Client Services
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345 California Street, 10th Floor
P.O. Box 63939
San Francisco, CA 94163
Fax (415) 983-0701

January 16, 1998

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

COPIES TO
PAMELA EVANS
1/16/98

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

Dear Ms. Evans:

Enclosed you will find a copy of the December 1997 Groundwater Monitoring 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,

Heather Fairfull
Vice President & Manager
(415) 396-5721

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

A·C·C

**ENVIRONMENTAL
CONSULTANTS**

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

January 14, 1998

Prepared by .

Carolyn Mulvihill

Carolyn Mulvihill
Technical Editor

Reviewed by

D. DeMent

David R. DeMent, RG
Senior Geologist

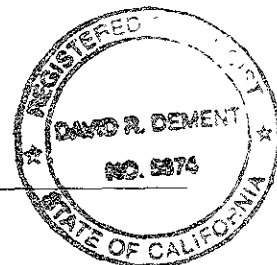


TABLE OF CONTENTS

	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.

3.0 GROUNDWATER MONITORING AND SAMPLING

ACC monitored and sampled wells MW-1 through MW-3 on December 16, 1997. 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
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
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

Notes *Depth to water measured in feet below top of casing
(91.02') = Surveyed elevations to the top of the well casing

3.2 Groundwater Gradient

The groundwater flow direction as determined from monitoring well data collected on December 16, 1997, is illustrated on Figure 3. Based on groundwater elevation calculations, groundwater flow is predominantly toward the southwest at an average gradient of 0.026 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

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 temperature, pH, and conductivity of the water stabilized and a minimum of 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 ⁽¹⁾	840	12	2.5	8.0	4.4	17

Well / Date	Mineral Spirits	TPHg	Benzene	Toluene	Ethyl-benzene	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
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

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

< = Not detected at laboratory, reporting unit 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 analyte 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 0.026 foot/foot to the southwest in December 1997. These values are consistent with the majority of previous sampling events, but seasonal variations in gradient and flow direction have been observed at the site. Since June 1997, groundwater elevation increased in the three wells from 2.9 to 3.3 feet due to recent precipitation. This groundwater elevation represents the highest level ever recorded at the site.

Analytical results from the December 16, 1997, sampling event indicate that concentrations of TPHg and BTEX increased slightly in well MW-1, TPHg and most of the BTEX constituents decreased slightly in well MW-2, and TPHg and some BTEX constituents increased in well MW-3. Mineral spirits were reported in wells MW-1, MW-2, and MW-3 at 490 ppb, 3,600 ppb, and 4,000 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 December 1997 ranged from 0.7 to 1.3 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. Natural recharge supplies ongoing DO to groundwater and DO levels can be enhanced with the use of oxygen releasing compounds such as ORC³ or hydrogen peroxide. 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 and current analytical results of the fourth consecutive sampling and monitoring event, we conclude the following:

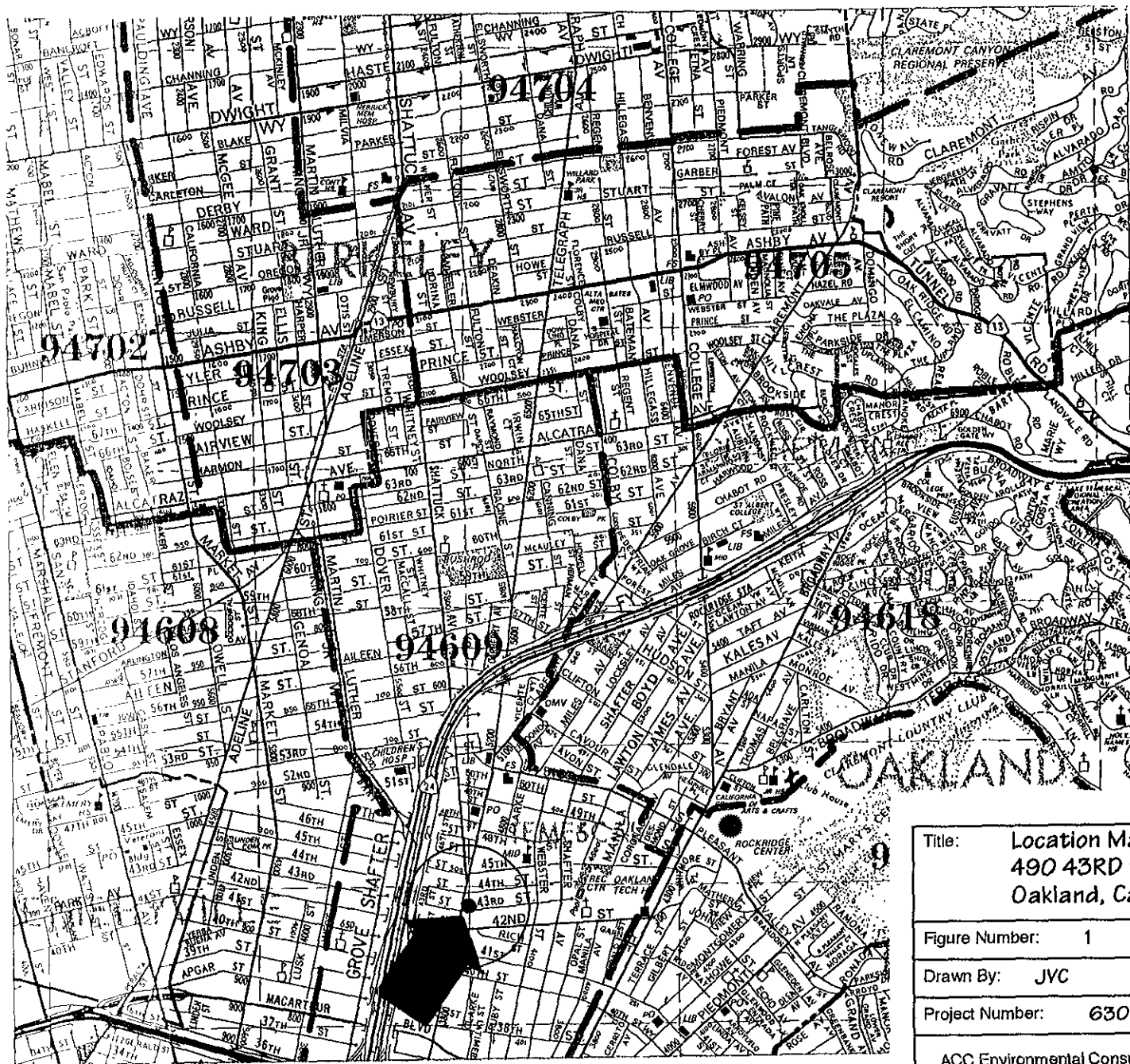
- Dissolved TPHg, BTEX, and mineral spirits continue to be detected in groundwater in the immediate vicinity of wells MW-1 through MW-3, and the ongoing presence of these constituents appears to be due to periodic contact between fluctuating groundwater and residual petroleum hydrocarbon concentrations 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 0.026 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 by introducing oxygen releasing compound. Therefore, ACC recommends the following:

- Submit a Work Plan discussing ORC[®] introduction for approval by the ACHCSA;
- Artificially introduce ORC[®] into shallow groundwater utilizing monitoring wells MW-1 and MW-3 to enhance DO concentrations and stimulate natural bioremediation processes;
- Measure the DO concentration in well MW-2 during the next monitoring event to evaluate the DO level and DO migration potential; and
- Continue biannual well monitoring and sampling for one year 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.

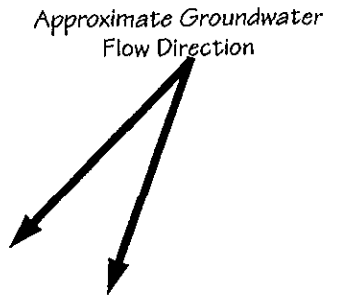
ACC would like to introduce ORC³ in February 1998, and requests that the ACHCSA respond to the recommendations in this report by January 28, 1998. The next sampling event is scheduled for June 1998.



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

LOADING DOCK

EQUIPMENT STORAGE

ASPHALT SURFACE

EXISTING BUILDING

MW-1

SB2

Storm Sewer

Former Excavation Boundary

SB1

SIDEWALK

6" Water Line

B7

EB2

MW-2

MW-3

Former 350-Gallon Paint Thinner UST

43RD STREET

Former 1,000-Gallon Gasoline UST

B6

Gas Line

B5

B4

B3

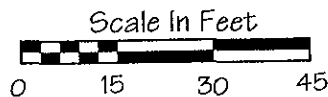
Storm Sewer

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

- Detectable in soil - Area
 # - Detectable in groundwater

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: JVC/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

EXISTING BUILDING

LOADING DOCK

EQUIPMENT STORAGE

ASPHALT SURFACE

EXISTING BUILDING

FENCE

Storm Sewer

SIDEWALK

(82.15')
MW-1

(81.80')
MW-2

(82.36')
MW-3

81.9
82.0
82.1
82.2
82.3

43RD STREET




Water Line

Gas Line

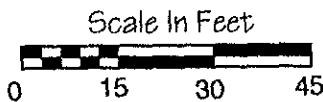
Storm Sewer

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

Legend

- MW 2  Existing Groundwater Monitoring Well
-  - Calculated Groundwater Flow Direction
-  - Calculated Groundwater Elevation Contour

Groundwater Elevation Data
collected on December 16, 1997



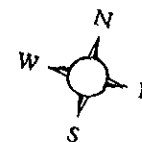
Title: **Gradient Map**
490 43rd Street
Oakland, California

Figure Number: **3** Scale: **1" = 30"**

Drawn By: **JVC/DRD** Date: **12/22/97**

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: Blumert Paint Company PURGE METHOD: Manual bailing
 SITE ADDRESS: 490 43rd St. Oak. SAMPLED BY: Dave Dement
 JOB #: 6305-001.01 LABORATORY: Chromalab
 DATE: 12/16/97 ANALYSIS: TPH_g/BTEX/MTBE/Min. Spirits
 Onsite Drum Inventory SOIL: MONITORING DEVELOPING
 EMPTY: WATER: e 60% SAMPLING

	PURGE VOL.	PURGE WATER READINGS						OBSERVATIONS
	(Gal)	pH	Temp.(C)	Cond.	Sal.	Turb.	D.O.	
WELL: <u>1</u>								<input type="checkbox"/> Froth
DEPTH OF BORING: <u>22.35'</u>	<u>2.1</u>	<u>6.34</u>	<u>20.2</u>	<u>.437</u>	<u>0.01</u>	<u>30</u>	<u>0.6</u>	<input type="checkbox"/> Sheen <u>Slight</u>
DEPTH TO WATER: <u>8.87'</u>	<u>4.2</u>	<u>6.37</u>	<u>19.4</u>	<u>.452</u>	<u> </u>	<u>53</u>	<u>0.7</u>	<input checked="" type="checkbox"/> Odor Type <u>gas</u>
WATER COLUMN: <u>13.48'</u>	<u>6.3</u>	<u>6.45</u>	<u>19.8</u>	<u>.457</u>	<u> </u>	<u>74</u>	<u>0.7</u>	<input type="checkbox"/> Free Product
WELL DIAMETER: <u>2"</u>	<u>8.4</u>	<u>6.48</u>	<u>20.2</u>	<u>.450</u>	<u>↓</u>	<u>270</u>	<u>0.9</u>	Amount _____ Type _____
WELL VOLUME: <u>2.1 gal</u>								<input type="checkbox"/> Other
COMMENTS: <u>Sampled 8:50</u>								
WELL: <u>2</u>								<input type="checkbox"/> Froth
DEPTH OF BORING: <u>21.10'</u>	<u>2</u>	<u>6.57</u>	<u>20.4</u>	<u>.650</u>	<u>0.02</u>	<u>20</u>	<u>0.8</u>	<input checked="" type="checkbox"/> Sheen <u>slight</u>
DEPTH TO WATER: <u>8.74'</u>	<u>4</u>	<u>6.59</u>	<u>20.7</u>	<u>.655</u>	<u> </u>	<u>36</u>	<u>0.9</u>	<input checked="" type="checkbox"/> Odor Type <u>gas</u>
WATER COLUMN: <u>12.26'</u>	<u>6</u>	<u>6.57</u>	<u>21.1</u>	<u>.660</u>	<u> </u>	<u>39</u>	<u>1.0</u>	<input type="checkbox"/> Free Product
WELL DIAMETER: <u>2"</u>	<u>8</u>	<u>6.62</u>	<u>21.2</u>	<u>.661</u>	<u>↓</u>	<u>43</u>	<u>0.9</u>	Amount _____ Type _____
WELL VOLUME: <u>2 gal</u>								<input type="checkbox"/> Other
COMMENTS: <u>Sampled 10:10</u>								<u>Trace sheen</u>
WELL: <u>3</u>								<input type="checkbox"/> Froth
DEPTH OF BORING: <u>21.48'</u>	<u>2.1</u>	<u>6.24</u>	<u>20.4</u>	<u>.768</u>	<u>0.02</u>	<u>20</u>	<u>0.9</u>	<input checked="" type="checkbox"/> Sheen <u>slight</u>
DEPTH TO WATER: <u>8.54'</u>	<u>4.2</u>	<u>6.25</u>	<u>20.8</u>	<u>.763</u>	<u>0.03</u>	<u>27</u>	<u>0.9</u>	<input checked="" type="checkbox"/> Odor Type <u>gas</u>
WATER COLUMN: <u>12.94'</u>	<u>6.3</u>	<u>6.22</u>	<u>20.5</u>	<u>.744</u>	<u> </u>	<u>23</u>	<u>1.2</u>	<input type="checkbox"/> Free Product
WELL DIAMETER: <u>2"</u>	<u>8.4</u>	<u>6.40</u>	<u>20.4</u>	<u>.745</u>	<u>↓</u>	<u>29</u>	<u>1.3</u>	Amount _____ Type _____
WELL VOLUME: <u>2.1 gal</u>								<input type="checkbox"/> Other
COMMENTS: <u>Sampled 9:30</u>								<u>Trace sheen reduced with bailing</u>

ANALYTICAL RESULTS AND CHAIN OF CUSTODY RECORD

CHROMALAB, INC.

Environmental Services (SDB)

December 30, 1997

Submission #: 9712350

ACC ENVIRONMENTAL CONSULTANTS

Atten: David DeMent

Project: 490 43RD STREET
Received: December 17, 1997

Project#: 6305-001.01

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

Client Sample ID: MW-1

Spl#: 163388

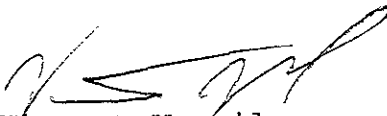
Matrix: WATER


Sampled: December 16, 1997

Run#:10342

Analyzed: December 22, 1997

ANALYTE	RESULT (ug/L)	REPORTING LIMIT (ug/L)	BLANK RESULT (ug/L)	BLANK SPIKE (%)	DILUTION FACTOR
GASOLINE	840	50	N.D.	97	1
MTBE	17	5.0	N.D.	106	1
BENZENE	12	0.50	N.D.	99	1
TOLUENE	2.5	0.50	N.D.	94	1
ETHYL BENZENE	8.0	0.50	N.D.	97	1
XYLENES	4.4	0.50	N.D.	95	1


Vincent Vancil
Chemist


Michael Verona
Operations Manager

CHROMALAB, INC.

Environmental Services (SDB)

December 30, 1997

Submission #: 9712350

ACC ENVIRONMENTAL CONSULTANTS

Atten: David DeMent

Project: 490 43RD STREET
Received: December 17, 1997

Project#: 6305-001.01

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

Client Sample ID: MW-2

Spl#: 163389

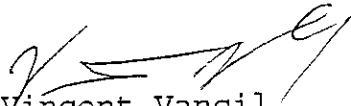
Matrix: WATER


Sampled: December 16, 1997

Run#:10342

Analyzed: December 22, 1997

ANALYTE	RESULT (ug/L)	REPORTING LIMIT (ug/L)	BLANK RESULT (ug/L)	BLANK SPIKE (%)	DILUTION FACTOR
GASOLINE	3000	250	N.D.	97	5
MTBE	44	25	N.D.	106	5
BENZENE	400	2.5	N.D.	99	5
TOLUENE	9.2	2.5	N.D.	94	5
ETHYL BENZENE	26	2.5	N.D.	97	5
XYLENES	10	2.5	N.D.	95	5


Vincent Vancil
Chemist


Michael Verona
Operations Manager

CHROMALAB, INC.

Environmental Services (SDB)

December 30, 1997

Submission #: 9712350

ACC ENVIRONMENTAL CONSULTANTS

Atten: David DeMent

Project: 490 43RD STREET
Received: December 17, 1997

Project#: 6305-001.01

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

Client Sample ID: MW-3

Spl#: 163390


Matrix: WATER

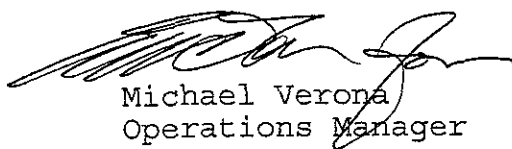
Sampled: December 16, 1997

Run#:10342

Analyzed: December 22, 1997

ANALYTE	RESULT (ug/L)	REPORTING LIMIT (ug/L)	BLANK RESULT (ug/L)	BLANK SPIKE (%)	DILUTION FACTOR
GASOLINE	4900	500	N.D.	97	10
MTBE	92	50	N.D.	106	10
BENZENE	1700	5.0	N.D.	99	10
TOLUENE	17	5.0	N.D.	94	10
ETHYL BENZENE	52	5.0	N.D.	97	10
XYLENES	20	5.0	N.D.	95	10


Vincent Vancil
Chemist


Michael Verona
Operations Manager

CHROMALAB, INC.

Environmental Services (SDB)

December 24, 1997

Submission #: 9712350

ACC ENVIRONMENTAL CONSULTANTS

Atten: David DeMent

Project: 490 43RD STREET
Received: December 17, 1997

Project#: 6305-001.01

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

Client Sample ID: MW-1

Spl#: 163388

Matrix: WATER

Extracted: December 18, 1997

Sampled: December 16, 1997

Run#:10286

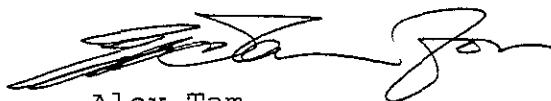
Analyzed: December 19, 1997

ANALYTE	RESULT (ug/L)	REPORTING LIMIT (ug/L)	BLANK RESULT (ug/L)	BLANK SPIKE (%)	DILUTION FACTOR
MINERAL SPIRITS	490	50	N.D.	--	1

Note: Quantitation for the above Analyte is based on the response factor of Diesel. Hydrocarbon reported does not match the pattern of our Mineral Spirits Standard.



Bruce Havlik
Chemist



Alex Tam
Semivolatiles Supervisor

CHROMALAB, INC.

Environmental Services (SDB)

December 24, 1997

Submission #: 9712350

ACC ENVIRONMENTAL CONSULTANTS

Atten: David DeMent

Project: 490 43RD STREET
Received: December 17, 1997

Project#: 6305-001.01

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

Client Sample ID: MW-2

Spl#: 163389
Sampled: December 16, 1997

Matrix: WATER
Run#: 10328

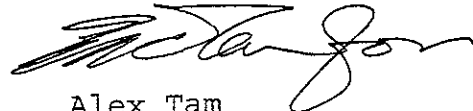
Extracted: December 22, 1997
Analyzed: December 23, 1997

ANALYTE	RESULT (ug/L)	REPORTING LIMIT (ug/L)	BLANK RESULT (ug/L)	BLANK SPIKE (%)	DILUTION FACTOR
MINERAL SPIRITS	3600	50	N.D.	--	1

Note: Quantitation for the above Analyte is based on the response factor of Diesel. Hydrocarbon reported does not match the pattern of our Mineral Spirits Standard.



Bruce Havlik
Chemist



Alex Tam
Semivolatiles Supervisor

CHROMALAB, INC.

Environmental Services (SDB)

December 24, 1997

Submission #: 9712350

ACC ENVIRONMENTAL CONSULTANTS

Atten: David DeMent

Project: 490 43RD STREET
Received: December 17, 1997

Project#: 6305-001.01

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

Client Sample ID: MW-3

Spl#: 163390

Matrix: WATER

Extracted: December 22, 1997

Sampled: December 16, 1997

Run#:10328

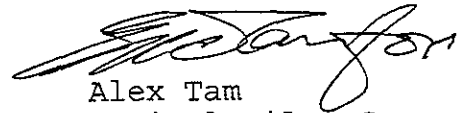
Analyzed: December 23, 1997

ANALYTE	RESULT (ug/L)	REPORTING LIMIT (ug/L)	BLANK RESULT (ug/L)	BLANK SPIKE (%)	DILUTION FACTOR
MINERAL SPIRITS	4000	50	N.D.	--	1

Note: Quantitation for the above Analyte is based on the response factor of Diesel. Hydrocarbon reported does not match the pattern of our Mineral Spirits Standard.



Bruce Havlik
Chemist



Alex Tam
Semivolatiles Supervisor

12350/163388-163390

CHROMALAB, INC.

Environmental Services (SDB) (DOHS 1094)

SURN #: 9712350 REP: PM
CLIENT: ACC
DUE: 12/24/97
REF #: 37333

37333
Chain of Custody

DATE 12/17/97 PAGE 1 OF 1

ANALYSIS REPORT

PROJ MGR Dave DeMent
COMPANY ACC Environmental
ADDRESS 7977 Copwell Drive
Oakland CA 94621

SAMPLERS (SIGNATURE) D. DeMent (PHONE NO.) (90) 638-8400 (FAX NO.)

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)	Mineral Spirits	LUFT METALS: Cd, Cr, Pb, Zn, Ni	CAM METALS (17)	PRIORITY POLLUTANT METALS '13	TOTAL LEAD	EXTRACTION (ICLP, STLC)	NUMBER OF CONTAINERS
MW-1	12/16/97	8:50	Water	Cold/11cc	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	4
MW-2	↓	10:10	↓	↓	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	4
MW-3	↓	9:30	↓	↓	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	4

PROJECT INFORMATION		SAMPLE RECEIPT	
PROJECT NAME 490 43rd Street	TOTAL NO OF CONTAINERS	HEAD SPACE	REC'D GOOD CONDITION/COLD
PROJECT NUMBER 6305-001.01			CONFORMS TO RECORD
P.O.# 6305-1.1			

SPECIAL INSTRUCTIONS/COMMENTS:
Site has documented mix of gasoline and mineral spirits - please take appropriate precautions !!

RELINQUISHED BY 1
D. DeMent (SIGNATURE) (TIME)
David DeMent 12/17/97 (DATE)
ACC Environmental (COMPANY)

RECEIVED BY 1
MUSA ARIPI (SIGNATURE) (TIME)
MUSA ARIPI 12-17-97 (DATE)
ACC Environmental (COMPANY)

RELINQUISHED BY 2
MUSA ARIPI (SIGNATURE) (TIME)
MUSA ARIPI 12-17-97 (DATE)
ACC Environmental (COMPANY)

RECEIVED BY 2
MUSA ARIPI (SIGNATURE) (TIME)
MUSA ARIPI 12-17-97 (DATE)
ACC Environmental (COMPANY)

RELINQUISHED BY 3
MUSA ARIPI (SIGNATURE) (TIME)
MUSA ARIPI 12-17-97 (DATE)
ACC Environmental (COMPANY)

RECEIVED BY LABORATORY 3
Chris Rowley 12/17/97 (SIGNATURE) (TIME)
Chris Rowley 12/17/97 (DATE)
ACC Environmental (COMPANY)

CHROMALAB, INC.

Environmental Service (SDB)

Sample Receipt Checklist

Client Name: ACC ENVIRONMENTAL CONSULTANTS Date/Time Received: 12/17/97 | 1525

Reference/Submis: 37333 | 9712350 Received by: MA

Checklist completed by: [Signature] 12/18/97 Reviewed by: CL 12/18/97
Signature Date Initials Date

Matrix: WATER 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: 7.5°C Yes ___ No
- Water - VOA vials have zero headspace? No VOA vials submitted ___ Yes No ___
- Water - pH acceptable upon receipt? Adjusted? ___ Checked by: 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: Samples were rec'd out of standard temp: Range of 2-6°C.

Corrective Action: _____