

ENVIRONMENTAL
PROTECTION
00 APR 20 PM 3:21

April 17, 2000

H252

Mr. John Ward
Wells Fargo Trust
Asset Management Division
Trust Real Estate Department
P.O. Box 63939
San Francisco, California 94163

- No significant decrease in
TPH, BTEX
- No increase in [O₂] observed

RE: Groundwater Monitoring Report
Blumert Trust, 490 43rd Street, Oakland, California
ACC Project No. 96-6305-001.01

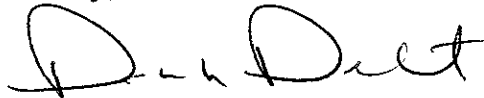
Dear Mr. Ward:

The enclosed report summarizes results of groundwater monitoring at 490 43rd Street, Oakland, California, performed by ACC Environmental Consultants, Inc., (ACC) on March 29, 2000. The next groundwater sampling event is scheduled for June 2000.

On your behalf, ACC is forwarding a copy of this report to the Alameda County Health Care Services Agency, Department of Environmental Health (ACHCSA).

If you have any comments regarding this report, please call me at (510) 638-8400.

Sincerely,



David R. DeMent, RG
Environmental Division Manager

/drd:clm

Enclosures

cc: Mr. Kenneth Cheitlin, McShane, Schnack & Cheitlin
Mr. Barney Chan, ACHCSA

GROUNDWATER MONITORING REPORT

**490 43rd Street
Oakland, California**

ACC Project No. 96-6305-001.01

Prepared for:

Mr. John Ward
Wells Fargo Trust
525 Market Street, 18th Floor
San Francisco, California

April 17, 2000

Prepared by:



Neil H. Doran
Staff Geologist

Reviewed by:



David R. DeMent, RG
Environmental Division Manager

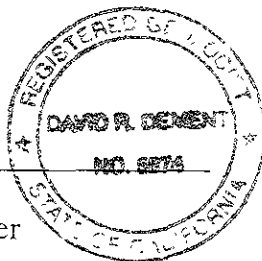


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GROUNDWATER MONITORING REPORT
490 43rd Street
Oakland, California

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 spirits UST, which were removed on December 11, 1991. Laboratory analysis of soil samples collected underneath the gasoline UST indicated concentrations of 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 of 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 was 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 groundwater samples collected from borings B3 and B8 to 46,000 ppb in a sample collected from boring B6. Concentrations of mineral spirits ranged from nondetectable in samples collected from borings B3 and B8 to 16,000 ppb in a sample from 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 degradation processes. In July 1999, one additional groundwater monitoring well was installed downgradient of the former USTs and ORC was introduced through a series of soil borings. Biannual groundwater monitoring and sampling has been conducted at the site since December 1996.

3.0 GROUNDWATER MONITORING AND SAMPLING

ACC monitored and sampled wells MW-1 through MW-4 on March 29, 2000. This sampling event was performed to further 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 DEPTH INFORMATION

Well No.	Well Elevation* (above MSL)	Date Measured	Depth to Groundwater	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
		12/17/98	10.04	80.98
		06/22/99	11.60	79.42
12/20/99	11.26	79.76		
03/29/00	10.12	80.90		
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
		12/17/98	9.99	80.56
		06/22/99	11.74	78.81
12/20/99	11.46	79.09		
03/29/00	10.40	80.15		

Notes All measurements in feet

*Well elevation measured to top of casing

TABLE 1 - CONTINUED

Well No.	Well Elevation* (above MSL)	Date Measured	Depth to Groundwater	Groundwater Elevation
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
		12/17/98	9.98	80.92
		06/22/99	11.76	79.14
12/20/99	11.50	79.40		
03/29/00	10.10	80.80		
MW-4	90.16'	12/20/99	12.28	77.80
		03/29/00	11.14	79.02

Notes: All measurements in feet

*Well elevation measured to top of casing

3.2 Groundwater Gradient

The groundwater flow direction as determined from monitoring well data collected on March 29, 2000, is illustrated on Figure 3. Based on groundwater elevation calculations, groundwater flow is toward the southwest at an average gradient of 0.036 foot/foot. Historical groundwater gradients and flow directions are 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
12/17/98	0.016	Southwest
06/22/99	0.026	Southwest
12/20/99	0.035*	South-southwest*
03/29/00	0.036	Southwest

Notes: *Gradient and flow direction calculated using data from wells MW-1, MW-2, and MW-3 only

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 rope. 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-4 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. Copies of the chain of custody record and laboratory analytical reports are included as Appendix 2. Groundwater sample analytical results are summarized in Table 3.

TABLE 3 - GROUNDWATER SAMPLE ANALYTICAL RESULTS

Well / Date	Mineral Spirits (µg/L)	TPHg (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-Benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)
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 ⁽⁴⁾	840	12	2.5	8.0	4.4	17
06/19/98	480	130	0.80	<0.50	1.8	0.52	<5.0
12/17/98	300 ⁽⁴⁾	89	1.9	<0.50	<0.50	0.69	<5.0
06/22/99	<50	220	6.7	<0.50	4.5	<0.50	<5.0
12/20/99	<50	130	1.5	<0.50	0.71	<0.50	<5.0
03/29/00	<50	360	7.0	2.0	4.7	3.5	<5.0
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
12/17/98	3,400 ⁽⁴⁾	7,300	850	33	200	22	<25
06/22/99	1,200	7,800	660	<10	140	<10	<100
12/20/99	4,600 ⁽⁴⁾	9,400	650	24	92	21	<100
03/29/00	3,600	11,000	590	130	250	440	<250

Well / Date	Mineral Spirits (µg/L)	TPHg (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-Benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)
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
12/17/98	240 ⁽⁴⁾	5,000	450	18	100	4.8	<25
06/22/99	790	3,100	190	<1.0	52	<1.0	<10
12/20/99	6,400 ⁽⁴⁾	4,500	230	12	47	38	<100
03/29/00	2,900	7,900	330	<2.5	58	30	<25
MW-4							
06/22/99	1,900	3,200	410	<2.5	54	12	90
12/20/99	2,000 ⁽⁴⁾	2,000	160	7.4	8.0	7.0	25
03/29/00	<50	4,200	600	15	26	24	74

Notes: All water results are reported in µg/L, approximately equal to 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 analyte is based on the response factor of diesel. Hydrocarbons reported do not match the pattern of the mineral spirit standard.

5.0 DISCUSSION

Groundwater gradient and flow direction were calculated to be 0.036 foot/foot to the southwest in March 2000. These values are consistent with previous sampling events.

Analytical results from the March 2000 sampling event indicate that concentrations of TPHg and BTEX increased in well MW-1 and mineral spirits were not reported above the laboratory detection limit. Concentrations of mineral spirits decreased in downgradient wells MW-2 and MW-3, and were not detected above laboratory reporting limits in well MW-4. Concentrations of TPHg increased in wells MW-2, MW-3 and MW-4, with an overall increase in concentrations of BTEX constituents. The highest reported concentration of TPHg was 11,000 ppb in the sample

from MW-2, and the highest concentration of benzene was 600 ppb in the sample from well MW-4. MTBE was reported in well MW-4 only at a concentration of 74 ppb.

Dissolved-phase petroleum hydrocarbon concentrations continue to follow seasonal fluctuations in groundwater elevation, resulting in higher concentrations of dissolved phase constituents during periods of high precipitation. This behavior is typically the result of shallow groundwater coming into contact with soil impacted by petroleum hydrocarbons.

not true!

Levels of dissolved oxygen do not appear to have increased significantly since introduction of ORC in July 1999. The concentration of oxygen dissolved in groundwater generally reaches its peak approximately 12 months following introduction of ORC. ACC will continue to monitor levels of dissolved oxygen during the next monitoring event scheduled for June 2000.

*I don't know about this
Subsidence also
~6 mos.*

6.0 CONCLUSIONS

*ORC injected w/ source area : [CPH]
May take long time to decrease*

Based on historical data and analytical results of this sampling and monitoring event, ACC concludes the following:

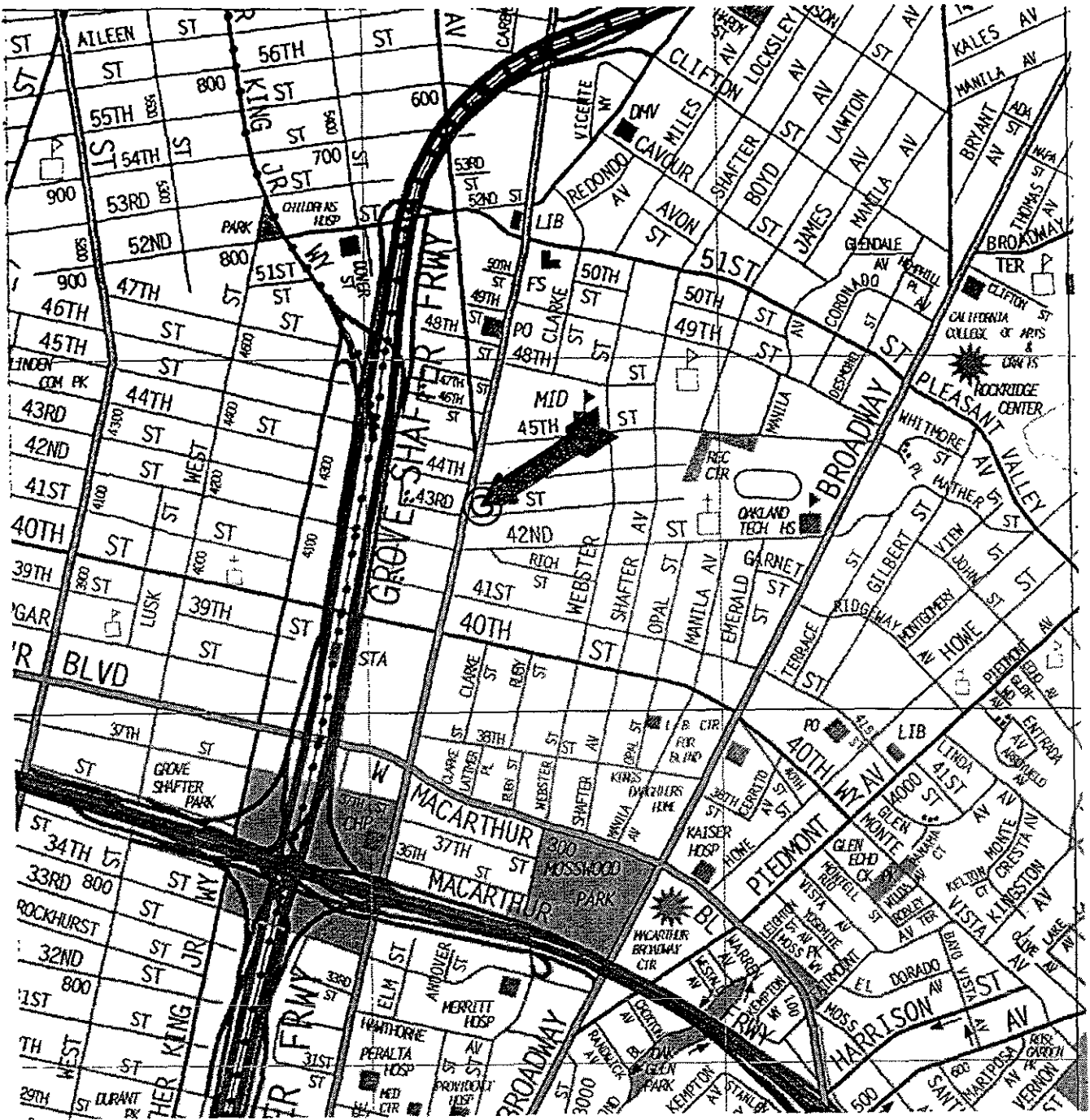
- Groundwater flow direction and gradient are consistent with those of previous sampling events;
- Dissolved TPHg, BTEX, and mineral spirits continue to be detected in groundwater in the immediate vicinity of wells MW-1 through MW-4; and
- Dissolved oxygen levels appear to be consistent with measurements obtained prior to ORC introduction.

7.0 RECOMMENDATIONS

Based on the analytical results and conclusions presented above, ACC recommends the following:

- Continue quarterly groundwater monitoring at the subject site; and
- Continue to monitor levels of DO in groundwater to evaluate the effectiveness of ORC introduction.

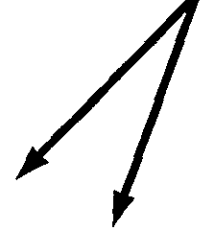
The next monitoring event is scheduled for June 2000.



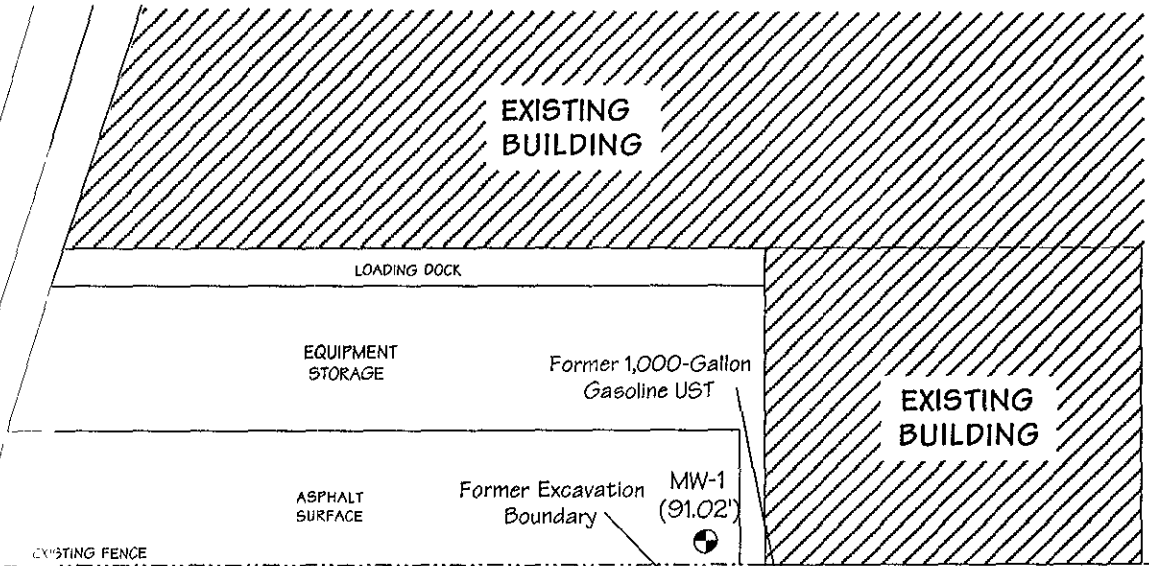
SOURCE Thomas Guide CD ROM, '99/

Title: Location Map 490 43rd Street Oakland, California	
Figure Number 1	Scale 1" = 1/4 Mile
Project Number 6305-01.01	Drawn By NHD
A.C.C. ENVIRONMENTAL CONSULTANTS	
7977 Capwell Drive, Suite 100 Oakland, California 94621 (510) 638 8400 Fax (510) 638 8404	

Approximate Groundwater Flow Direction



TELEGRAPH AVENUE




6" Water Line



43RD STREET

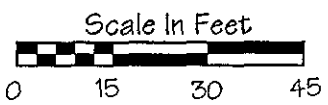
Gas Line

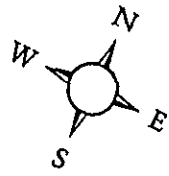
Storm Sewer

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

Legend

- MW-2  - Existing Groundwater Monitoring Well (PVC Casing Elevation, in Feet Above MSL)
-  - Former Underground Storage Tank



Title: Site Plan 490 43rd Street Oakland, California	
Figure Number: 2	Scale: 1" = 30'
Project Number: 6305-01.01	Drawn By: NHD
A.C.C. 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
(80.90)

EXISTING FENCE

Storm Sewer

SIDEWALK

6" Water Line

43RD STREET

Gas Line

Storm Sewer

MW-4
(79.02')

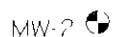
MW-2

MW-3

(80.80')

79.25
79.50
79.75
80.00
80.25
80.50

Legend



Existing Groundwater Monitoring Well
(Groundwater Elevation in Feet Above MSL)



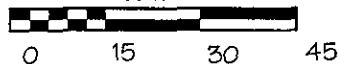
Calculated Groundwater Flow Direction



Groundwater Elevation Contour
(Contour Interval = 0.25')

Groundwater Elevation Data
collected on March 29, 2000

Scale In Feet



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

Figure Number: 3

Scale: 1" = 30'

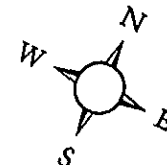
Project Number: 6305-01.01

Drawn By: NHD

A.C.C
ENVIRONMENTAL
CONSULTANTS

Date: 04/14/00

7977 Capwell Drive, Suite 100
Oakland, California 94621
(510) 638-8400 Fax: (510) 638-8404



WELL MONITORING WORKSHEET

JOB NAME: <u>Blumert Paint Co.</u>		PURGE METHOD: <u>Manual Bailing</u>	
SITE ADDRESS: <u>490 43rd St. Oakland</u>		SAMPLED BY: <u>Neil Doran</u>	
JOB #: <u>6305-001.01</u>		LABORATORY: <u>Chromalab</u>	
DATE: <u>3/29/00</u>		ANALYSIS: <u>TPH, BTEX, MTBE, TEPH</u>	
Onsite Drum Inventory SOIL:		MONITORING <input checked="" type="checkbox"/> DEVELOPING <input type="checkbox"/>	
EMPTY: WATER: <u>1 ~ 95%</u>		SAMPLING <input checked="" type="checkbox"/>	

	PURGE VOL.	PURGE WATER READINGS						OBSERVATIONS
	(Gal)	pH	Temp.(C)	Cond.	Sal.	Turb.	D.O.	
WELL: MW-1								<input type="checkbox"/> Froth
DEPTH OF BORING: <u>22.36'</u>	<u>2.0</u>	<u>5.85</u>	<u>16.8</u>	<u>0.569</u>	<u>0.02</u>	<u>123</u>	<u>0.81</u>	<input type="checkbox"/> Sheen
DEPTH TO WATER: <u>10.12'</u>	<u>4.0</u>	<u>5.98</u>	<u>17.2</u>	<u>0.505</u>	<u>0.02</u>	<u>392</u>	<u>0.97</u>	<input type="checkbox"/> Odor Type _____
WATER COLUMN: <u>12.24'</u>	<u>6.0</u>	<u>6.30</u>	<u>17.4</u>	<u>0.480</u>	<u>0.01</u>	<u>500</u>	<u>1.33</u>	<input type="checkbox"/> Free Product
WELL DIAMETER: <u>2"</u>	<u>8.0</u>	<u>6.23</u>	<u>17.7</u>	<u>0.475</u>	<u>0.01</u>	<u>821</u>	<u>1.52</u>	<input type="checkbox"/> Amount _____ Type _____
WELL VOLUME:								<input type="checkbox"/> Other
COMMENTS: <u>2.0 gal</u>								
WELL: MW-2								<input type="checkbox"/> Froth
DEPTH OF BORING: <u>21.10'</u>	<u>1.8</u>	<u>6.69</u>	<u>18.0</u>	<u>0.683</u>	<u>0.02</u>	<u>106</u>	<u>0.94</u>	<input checked="" type="checkbox"/> Sheen
DEPTH TO WATER: <u>10.40'</u>	<u>3.6</u>	<u>6.55</u>	<u>18.2</u>	<u>0.676</u>	<u>0.02</u>	<u>250</u>	<u>0.95</u>	<input checked="" type="checkbox"/> Odor Type <u>gas(?)</u>
WATER COLUMN: <u>10.70'</u>	<u>5.4</u>	<u>6.62</u>	<u>18.4</u>	<u>0.640</u>	<u>0.02</u>	<u>390</u>	<u>1.20</u>	<input type="checkbox"/> Free Product
WELL DIAMETER: <u>2"</u>	<u>7.2</u>	<u>6.58</u>	<u>18.5</u>	<u>0.624</u>	<u>0.02</u>	<u>880</u>	<u>0.90</u>	<input type="checkbox"/> Amount _____ Type _____
WELL VOLUME: <u>1.8 gal</u>								<input type="checkbox"/> Other
COMMENTS:								
WELL: MW-3								<input type="checkbox"/> Froth
DEPTH OF BORING: <u>21.50'</u>	<u>1.8</u>	<u>6.28</u>	<u>17.6</u>	<u>0.815</u>	<u>0.03</u>	<u>185</u>	<u>1.13</u>	<input type="checkbox"/> Sheen
DEPTH TO WATER: <u>10.10'</u>	<u>3.6</u>	<u>6.19</u>	<u>17.9</u>	<u>0.817</u>	<u>0.03</u>	<u>164</u>	<u>0.79</u>	<input checked="" type="checkbox"/> Odor Type <u>gas(?)</u>
WATER COLUMN: <u>11.40'</u>	<u>5.4</u>	<u>6.29</u>	<u>17.9</u>	<u>0.840</u>	<u>0.03</u>	<u>194</u>	<u>1.31</u>	<input type="checkbox"/> Free Product
WELL DIAMETER: <u>2"</u>	<u>7.2</u>	<u>6.21</u>	<u>18.1</u>	<u>0.827</u>	<u>0.03</u>	<u>385</u>	<u>1.20</u>	<input type="checkbox"/> Amount _____ Type _____
WELL VOLUME: <u>1.8 gal</u>								<input type="checkbox"/> Other
COMMENTS:								

JOB NAME: <u>Blumert Paint Co.</u>	PURGE METHOD: <u>Manual Bailing</u>
SITE ADDRESS: <u>490 43rd St., Oakland</u>	SAMPLED BY: <u>Neil Doran</u>
JOB #: <u>6305-001.01</u>	LABORATORY: <u>Chromalab</u>
DATE: <u>3/29/00</u>	ANALYSIS: <u>TPH, BTEX, MTBE, TEPH</u>
Onsite Drum Inventory SOIL:	MONITORING <input checked="" type="checkbox"/> DEVELOPING <input type="checkbox"/>
EMPTY: WATER: <u>1 ~ 95%</u>	SAMPLING <input checked="" type="checkbox"/>

	PURGE VOL.	PURGE WATER READINGS						OBSERVATIONS	
	(Gal)	pH	Temp.(C)	Cond.	Sal.	Turb.	D.O.	<input type="checkbox"/> Froth	<input type="checkbox"/> Sheen
WELL: <u>MW-4</u>								<input type="checkbox"/>	
DEPTH OF BORING: <u>19.90'</u>	<u>1.5</u>	<u>6.57</u>	<u>17.4</u>	<u>0.890</u>	<u>0.03</u>	<u>586</u>	<u>0.93</u>	<input type="checkbox"/>	
DEPTH TO WATER: <u>11.14'</u>	<u>3.0</u>	<u>6.42</u>	<u>17.5</u>	<u>0.880</u>	<u>0.03</u>	<u>686</u>	<u>0.80</u>	<input checked="" type="checkbox"/>	Odor Type <u>gas (?)</u>
WATER COLUMN: <u>8.76'</u>	<u>4.5</u>	<u>6.43</u>	<u>17.6</u>	<u>0.870</u>	<u>0.03</u>	<u>796</u>	<u>1.15</u>	<input type="checkbox"/>	Free Product
WELL DIAMETER: <u>2"</u>	<u>6.0</u>	<u>6.37</u>	<u>17.6</u>	<u>0.875</u>	<u>0.03</u>	<u>999</u>	<u>1.03</u>	<input type="checkbox"/>	Amount _____ Type _____
WELL VOLUME: <u>1.5 gal</u>								<input type="checkbox"/>	Other
COMMENTS:									<u>Redox ?</u>
WELL:	(Gal)	pH	Temp.(C)	Cond.	Sal.	Turb.	D.O.	<input type="checkbox"/>	Froth
DEPTH OF BORING:								<input type="checkbox"/>	Sheen
DEPTH TO WATER:								<input type="checkbox"/>	Odor Type _____
WATER COLUMN:								<input type="checkbox"/>	Free Product
WELL DIAMETER:								<input type="checkbox"/>	Amount _____ Type _____
WELL VOLUME:								<input type="checkbox"/>	Other
COMMENTS:									
WELL:	(Gal)	pH	Temp.(C)	Cond.	Sal.	Turb.	D.O.	<input type="checkbox"/>	Froth
DEPTH OF BORING:								<input type="checkbox"/>	Sheen
DEPTH TO WATER:								<input type="checkbox"/>	Odor Type _____
WATER COLUMN:								<input type="checkbox"/>	Free Product
WELL DIAMETER:								<input type="checkbox"/>	Amount _____ Type _____
WELL VOLUME:								<input type="checkbox"/>	Other
COMMENTS:									

ANALYTICAL RESULTS AND CHAIN OF CUSTODY RECORD

ACC Environmental Consultants

7977 Capwell Drive, Suite 100
Oakland, CA 94621

Attn.: Mr. Dave DeMent

Project: 6305-001.01
490 43rd Street

Dear Mr. DeMent,

Attached is our report for your samples received on Friday March 31, 2000
This report has been reviewed and approved for release. Reproduction of this report
is permitted only in its entirety.

Please note that any unused portion of the samples will be discarded after April 30, 2000
unless you have requested otherwise. We appreciate the opportunity to be of service to you.
If you have any questions, please call me at (925) 484-1919. You can also contact me via email.
My email address is: vvancil@chromalab.com

Sincerely,



Vincent Vancil

Total Extractable Petroleum Hydrocarbons (TEPH)

ACC Environmental Consultants

✉ 7977 Capwell Drive, Suite 100
Oakland, CA 94621

Attn: Dave DeMent

Phone: (510) 638-8400 Fax: (510) 638-8404

Project #: 6305-001.01

Project. 490 43rd Street

Samples Reported

Sample ID	Matrix	Date Sampled	Lab #
MW-1	Water	03/29/2000 08:40	1
MW-2	Water	03/29/2000 09:55	2
MW-3	Water	03/29/2000 09:20	3
MW-4	Water	03/29/2000 10:25	4

CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-04-0011

To: ACC Environmental Consultants

Test Method: 8015m

Attn.: Dave DeMent

Prep Method: 3510/8015M

Total Extractable Petroleum Hydrocarbons (TEPH)

Sample ID: MW-1	Lab Sample ID: 2000-04-0011-001
Project: 6305-001.01 490 43rd Street	Received: 03/31/2000 18:00
Sampled: 03/29/2000 08:40	Extracted: 04/06/2000 08:00
Matrix: Water	QC-Batch: 2000/04/06-01.10

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Diesel	170	50	ug/L	1.00	04/06/2000 15:19	edr
Mineral spirits	ND	50	ug/L	1.00	04/06/2000 15:19	
Surrogate(s) o-Terphenyl	76.2	60-130	%	1.00	04/06/2000 15:19	

CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-04-0011

To: ACC Environmental Consultants

Test Method: 8015m

Attn.: Dave DeMent

Prep Method: 3510/8015M

Total Extractable Petroleum Hydrocarbons (TEPH)

Sample ID: MW-2	Lab Sample ID: 2000-04-0011-002
Project: 6305-001.01 490 43rd Street	Received: 03/31/2000 18:00
Sampled: 03/29/2000 09:55	Extracted: 04/06/2000 08:00
Matrix: Water	QC-Batch: 2000/04/06-01.10

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Diesel	ND	50	ug/L	1.00	04/06/2000 15:58	
Mineral spirits	3600	50	ug/L	1.00	04/06/2000 15:58	
Surrogate(s) o-Terphenyl	70.8	60-130	%	1.00	04/06/2000 15:58	

CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-04-0011

To: ACC Environmental Consultants

Test Method: 8015m

Attn.: Dave DeMent

Prep Method: 3510/8015M

Total Extractable Petroleum Hydrocarbons (TEPH)

Sample ID: MW-3	Lab Sample ID: 2000-04-0011-003
Project: 6305-001.01 490 43rd Street	Received: 03/31/2000 18:00
Sampled: 03/29/2000 09:20	Extracted: 04/06/2000 08:00
Matrix: Water	QC-Batch: 2000/04/06-01.10

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Diesel	ND	50	ug/L	1.00	04/06/2000 16:37	
Mineral spirits	2900	50	ug/L	1.00	04/06/2000 16:37	
Surrogate(s) o-Terphenyl	73.5	60-130	%	1.00	04/06/2000 16:37	

1220 Quarry Lane * Pleasanton, CA 94566-4756

Telephone (925) 484-1919 * Facsimile (925) 484-1096

CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-04-0011

To: ACC Environmental Consultants

Test Method: 8015m

Attn.: Dave DeMent

Prep Method: 3510/8015M

Total Extractable Petroleum Hydrocarbons (TEPH)

Sample ID: MW-4	Lab Sample ID: 2000-04-0011-004
Project: 6305-001.01 490 43rd Street	Received: 03/31/2000 18:00
Sampled: 03/29/2000 10:25	Extracted: 04/06/2000 08:00
Matrix: Water	QC-Batch: 2000/04/06-01.10

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Diesel	720	50	ug/L	1.00	04/06/2000 17:16	edr
Mineral spirits	ND	50	ug/L	1.00	04/06/2000 17:16	
<i>Surrogate(s)</i> o-Terphenyl	77.5	60-130	%	1.00	04/06/2000 17:16	

To: ACC Environmental Consultants
Attn.: Dave DeMent

Test Method: 8015m
Prep Method: 3510/8015M

Batch QC Report
Total Extractable Petroleum Hydrocarbons (TEPH)

Method Blank	Water	QC Batch # 2000/04/06-01.10
MB: 2000/04/06-01.10-001		Date Extracted: 04/06/2000 08:00

Compound	Result	Rep.Limit	Units	Analyzed	Flag
Diesel	ND	50	ug/L	04/06/2000 10:27	
Mineral spirits	ND	50	ug/L	04/06/2000 10:27	
Surrogate(s) o-Terphenyl	96.5	60-130	%	04/06/2000 10:27	

To: ACC Environmental Consultants

Test Method: 8015m

Attn: Dave DeMent

Prep Method: 3510/8015M

Batch QC Report

Total Extractable Petroleum Hydrocarbons (TEPH)

Laboratory Control Spike (LCS/LCSD)	Water	QC Batch # 2000/04/06-01.10
LCS: 2000/04/06-01.10-002	Extracted: 04/06/2000 08:00	Analyzed 04/06/2000 18:13
LCSD: 2000/04/06-01.10-003	Extracted: 04/06/2000 08:00	Analyzed 04/06/2000 18:57

Compound	Conc. [ug/L]		Exp.Conc. [ug/L]		Recovery [%]		RPD [%]	Ctrl. Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD		Recovery	RPD	LCS	LCSD
Diesel	1120	1090	1250	1250	89.6	87.2	2.7	60-130	25		
Surrogate(s)											
o-Terphenyl	19.6	18.3	20.0	20.0	98.0	91.5		60-130			

To: ACC Environmental Consultants

Attn: Dave DeMent

Test Method: 8015m

Prep Method: 3510/8015M

Legend & Notes

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte Flags

edr

Hydrocarbon reported is in the early Diesel range, and does not match our Diesel standard

Gas/BTEX and MTBE

ACC Environmental Consultants

✉ 7977 Capwell Drive, Suite 100
Oakland, CA 94621

Attn: Dave DeMent

Phone: (510) 638-8400 Fax: (510) 638-8404

Project #: 6305-001.01

Project: 490 43rd Street

Samples Reported

Sample ID	Matrix	Date Sampled	Lab #
MW-1	Water	03/29/2000 08:40	1
MW-2	Water	03/29/2000 09:55	2
MW-3	Water	03/29/2000 09:20	3
MW-4	Water	03/29/2000 10:25	4

CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-04-0011

To: ACC Environmental Consultants

Test Method: 8020
8015M

Attn.: Dave DeMent

Prep Method: 5030

Gas/BTEX and MTBE

Sample ID: MW-1	Lab Sample ID: 2000-04-0011-001
Project: 6305-001.01 490 43rd Street	Received: 03/31/2000 18:00
Sampled: 03/29/2000 08:40	Extracted: 04/11/2000 11:13
Matrix: Water	QC-Batch: 2000/04/11-01.04

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Gasoline	360	50	ug/L	1.00	04/11/2000 11:13	
Benzene	7.0	0.50	ug/L	1.00	04/11/2000 11:13	
Toluene	2.0	0.50	ug/L	1.00	04/11/2000 11:13	
Ethyl benzene	4.7	0.50	ug/L	1.00	04/11/2000 11:13	
Xylene(s)	3.5	0.50	ug/L	1.00	04/11/2000 11:13	
MTBE	ND	5.0	ug/L	1.00	04/11/2000 11:13	
Surrogate(s)						
Trifluorotoluene	108.0	58-124	%	1.00	04/11/2000 11:13	
4-Bromofluorobenzene-FID	88.3	50-150	%	1.00	04/11/2000 11:13	

CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-04-0011

To: ACC Environmental Consultants

Test Method: 8020
8015M

Attn.: Dave DeMent

Prep Method: 5030

Gas/BTEX and MTBE

Sample ID: MW-2	Lab Sample ID: 2000-04-0011-002
Project: 6305-001.01 490 43rd Street	Received: 03/31/2000 18:00
Sampled: 03/29/2000 09:55	Extracted: 04/11/2000 13:43
Matrix: Water	QC-Batch: 2000/04/11-01.04

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Gasoline	11000	2500	ug/L	50.00	04/11/2000 13:43	
Benzene	590	25	ug/L	50.00	04/11/2000 13:43	
Toluene	130	25	ug/L	50.00	04/11/2000 13:43	
Ethyl benzene	250	25	ug/L	50.00	04/11/2000 13:43	
Xylene(s)	440	25	ug/L	50.00	04/11/2000 13:43	
MTBE	ND	250	ug/L	50.00	04/11/2000 13:43	
Surrogate(s)				S *		
Trifluorotoluene	113.2	58-124	%	1.00	04/11/2000 13:43	
4-Bromofluorobenzene-FID	112.4	50-150	%	1.00	04/11/2000 13:43	

CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-04-0011

To: ACC Environmental Consultants

Test Method: 8020
8015M

Attn.: Dave DeMent

Prep Method: 5030

Gas/BTEX and MTBE

Sample ID: MW-3	Lab Sample ID: 2000-04-0011-003
Project: 6305-001.01 490 43rd Street	Received: 03/31/2000 18:00
Sampled: 03/29/2000 09:20	Extracted: 04/11/2000 11:42
Matrix: Water	QC-Batch: 2000/04/11-01.04

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Gasoline	7900	250	ug/L	5.00	04/11/2000 11:42	
Benzene	330	2.5	ug/L	5.00	04/11/2000 11:42	
Toluene	ND	2.5	ug/L	5.00	04/11/2000 11:42	
Ethyl benzene	58	2.5	ug/L	5.00	04/11/2000 11:42	
Xylene(s)	30	2.5	ug/L	5.00	04/11/2000 11:42	
MTBE	ND	25	ug/L	5.00	04/11/2000 11:42	
Surrogate(s)						
Trifluorotoluene	115.5	58-124	%	1.00	04/11/2000 11:42	
4-Bromofluorobenzene-FID	96.3	50-150	%	1.00	04/11/2000 11:42	

CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-04-0011

To: ACC Environmental Consultants

Test Method: 8020
8015M

Attn.: Dave DeMent

Prep Method: 5030

Gas/BTEX and MTBE

Sample ID: MW-4	Lab Sample ID: 2000-04-0011-004
Project: 6305-001.01 490 43rd Street	Received: 03/31/2000 18:00
Sampled: 03/29/2000 10:25	Extracted: 04/11/2000 13:14
Matrix: Water	QC-Batch: 2000/04/11-01.04

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Gasoline	4200	250	ug/L	5.00	04/11/2000 13:14	
Benzene	600	2.5	ug/L	5.00	04/11/2000 13:14	
Toluene	15	2.5	ug/L	5.00	04/11/2000 13:14	
Ethyl benzene	26	2.5	ug/L	5.00	04/11/2000 13:14	
Xylene(s)	24	2.5	ug/L	5.00	04/11/2000 13:14	
MTBE	74	25	ug/L	5.00	04/11/2000 13:14	
Surrogate(s)						
Trifluorotoluene	88.0	58-124	%	1.00	04/11/2000 13:14	
4-Bromofluorobenzene-FID	89.9	50-150	%	1.00	04/11/2000 13:14	

~
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5

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To: ACC Environmental Consultants

Test Method: 8015M

8020

Attn.: Dave DeMent

Prep Method: 5030

Batch QC Report
Gas/BTEX and MTBE

Method Blank

Water

QC Batch # 2000/04/11-01.04

MB: 2000/04/11-01.04-001

Date Extracted: 04/11/2000 08:58

Compound	Result	Rep.Limit	Units	Analyzed	Flag
Gasoline	ND	50	ug/L	04/11/2000 08:58	
Benzene	ND	0.5	ug/L	04/11/2000 08:58	
Toluene	ND	0.5	ug/L	04/11/2000 08:58	
Ethyl benzene	ND	0.5	ug/L	04/11/2000 08:58	
Xylene(s)	ND	0.5	ug/L	04/11/2000 08:58	
MTBE	ND	5.0	ug/L	04/11/2000 08:58	
<i>Surrogate(s)</i>					
Trifluorotoluene	102.6	58-124	%	04/11/2000 08:58	
4-Bromofluorobenzene-FID	92.0	50-150	%	04/11/2000 08:58	

To: ACC Environmental Consultants

Test Method: 8015M
8020

Attn: Dave DeMent

Prep Method: 5030

Batch QC Report

Gas/BTEX and MTBE

Laboratory Control Spike (LCS/LCSD)

Water

QC Batch # 2000/04/11-01.04

LCS: 2000/04/11-01.04-002

Extracted: 04/11/2000 06:49

Analyzed 04/11/2000 06:49

LCSD: 2000/04/11-01.04-003

Extracted: 04/11/2000 07:18

Analyzed 04/11/2000 07:18

Compound	Conc. [ug/L]		Exp. Conc. [ug/L]		Recovery [%]		RPD	Ctrl. Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD		Recovery	RPD	LCS	LCSD
Gasoline	476	443	500	500	95.2	88.6	7.2	75-125	20		
Benzene	99.2	89.4	100.0	100.0	99.2	89.4	10.4	77-123	20		
Toluene	99.0	89.6	100.0	100.0	99.0	89.6	10.0	78-122	20		
Ethyl benzene	98.3	90.3	100.0	100.0	98.3	90.3	8.5	70-130	20		
Xylene(s)	296	274	300	300	98.7	91.3	7.8	75-125	20		
Surrogate(s)											
Trifluorotoluene	481	433	500	500	96.2	86.6		58-124			
4-Bromofluorobenzene-Fl	476	446	500	500	95.2	89.2		50-150			