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PROTECTION

99 JAN 19 PM 3:43

January 12, 1999

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

4252

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 December 17, 1998. The next groundwater sampling event is scheduled for June 1999.

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
Senior Geologist

/drd:clm

Enclosures

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

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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

January 12, 1999

Prepared by: Carolyn Mulvihill

Carolyn Mulvihill
Technical Editor

Reviewed by:

David R. DeMent, RG
Senior Geologist

REGISTERED GEOLOGIST
DAVID R. DEMENT
NO. 5974

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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 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 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 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 and is currently being revised.

3.0 GROUNDWATER MONITORING AND SAMPLING

ACC monitored and sampled wells MW-1 through MW-3 on December 17, 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
	12/17/98	10.04	80.98
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
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

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 December 17, 1998, is illustrated on Figure 3. Based on groundwater elevation calculations, groundwater flow is predominantly toward the southwest at an average gradient of 0.016 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
12/17/98	0.016	Southwest

3.3 Groundwater Sampling

SIB prepurge

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 (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

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-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
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

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

Three groundwater monitoring wells are located at the site in proximity to the former USTs. Groundwater gradient and flow direction were 0.016 foot/foot to the southwest in December 1998. These values are consistent with previous sampling events; however, seasonal variations in gradient and flow direction have been observed at the site.

Analytical results from the December 17, 1998 sampling event indicate that concentrations of TPHg and BTEX fluctuated in the wells while concentrations of mineral spirits decreased.

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 while DO levels in December 1998 ranged from 5.4 to 6.4 ppm, with minor differences between wells. These DO concentrations are suspect due to the small variation between wells and the high DO levels in wells with elevated concentrations of petroleum hydrocarbons.

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 ORC®. 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, or by monitoring the DO levels in the three monitoring wells if oxygen releasing compounds are directly injected into groundwater in the vicinity of the wells.

6.0 CONCLUSIONS

Based on historical data and analytical results of this sampling and monitoring event, ACC concludes 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 0.016 foot/foot which is consistent with previous sampling events.

7.0 RECOMMENDATIONS

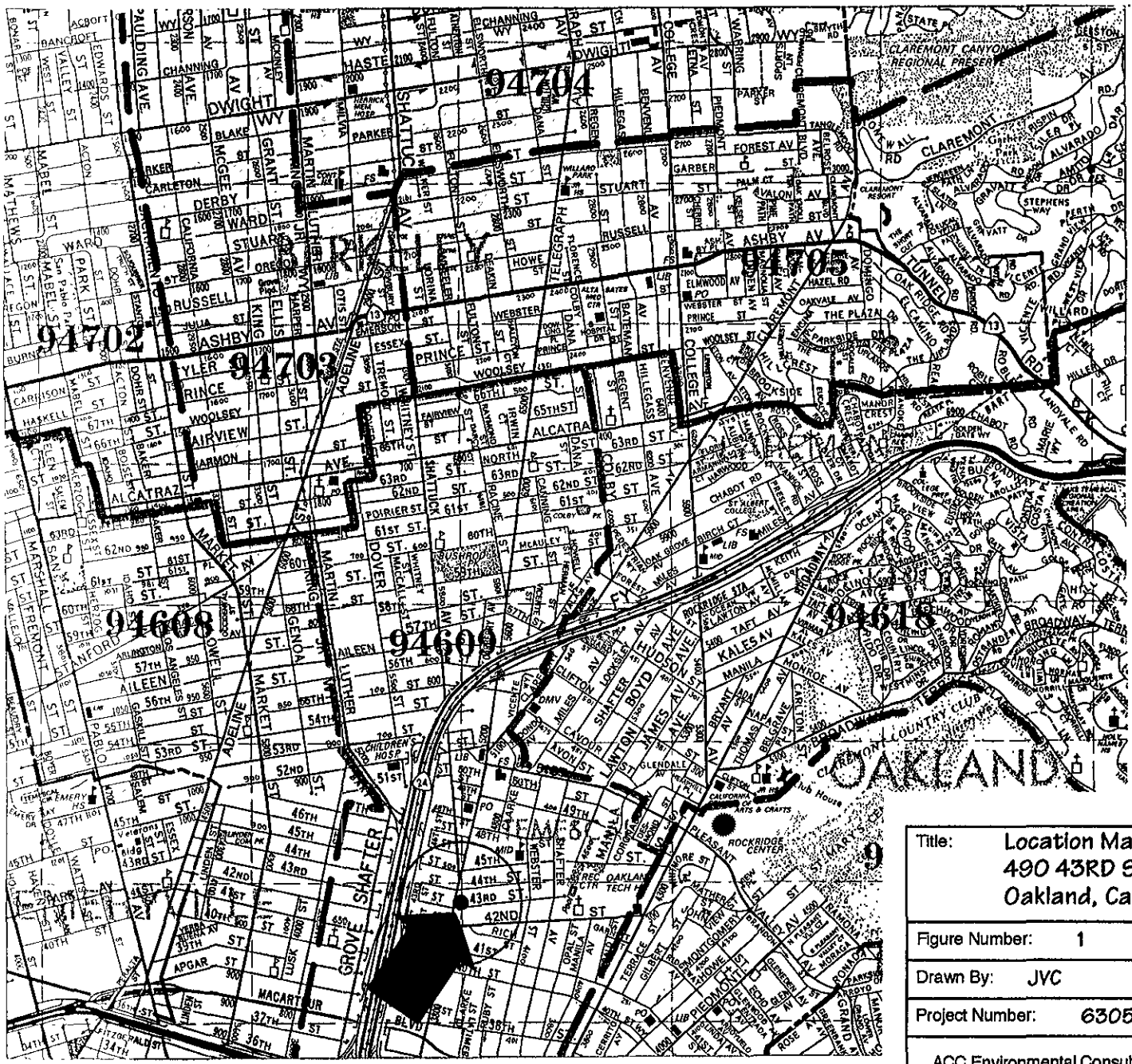
Groundwater monitoring and sampling data has characterized groundwater conditions at the site. Natural bioremedial processes are slowly degrading petroleum hydrocarbon residues and these processes can be assisted by enhancing DO levels through introduction of oxygen releasing compound. Therefore, as discussed in the Revised Work Plan dated January 12, 1999, ACC recommends the following:

- 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; how about chemical analysis for D.O.

- Measure DO concentrations in the wells during the next monitoring event to evaluate the DO levels and DO migration potential with both a portable meter and by collecting confirmation samples for DO analysis by an analytical laboratory; ← not advisable

- 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

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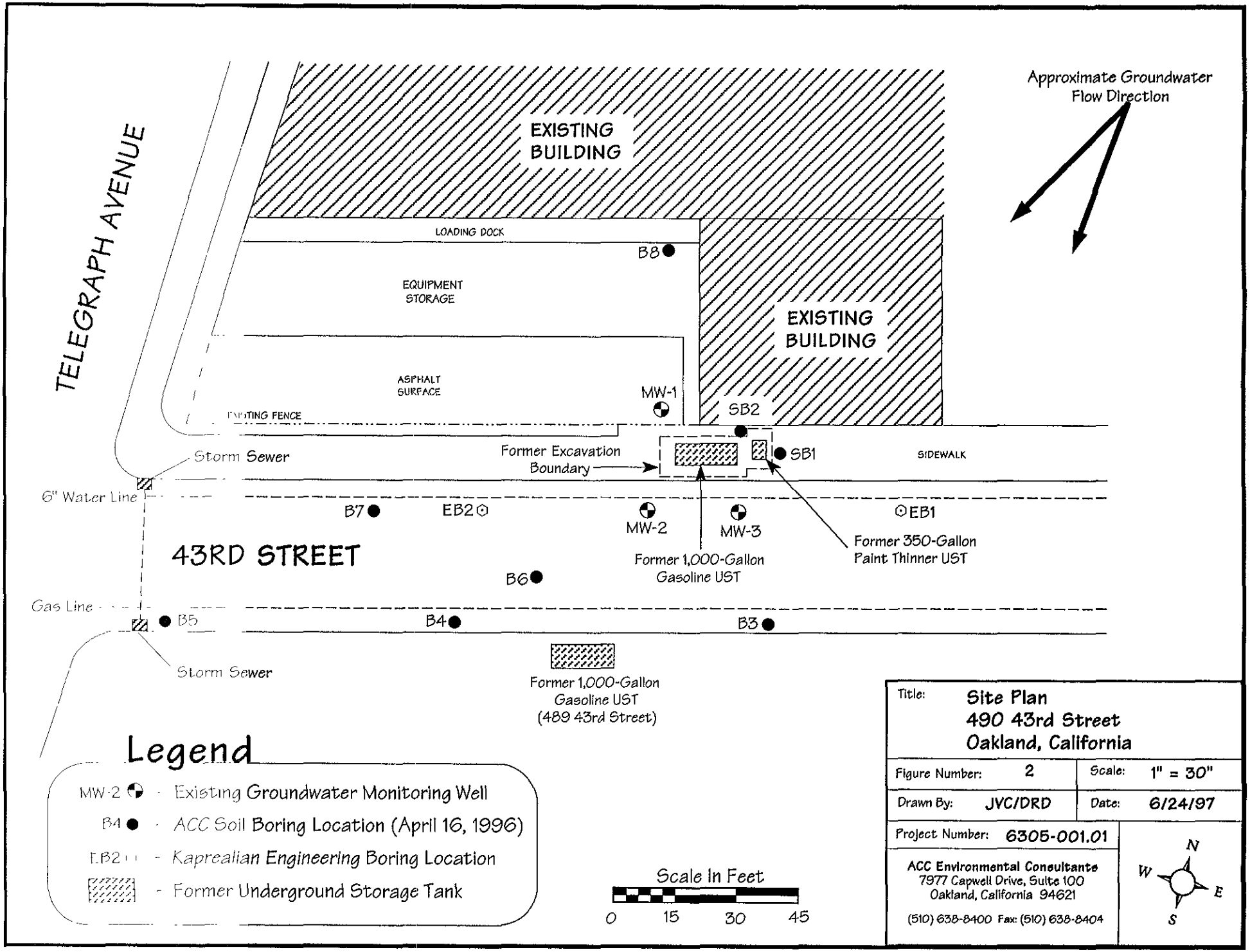
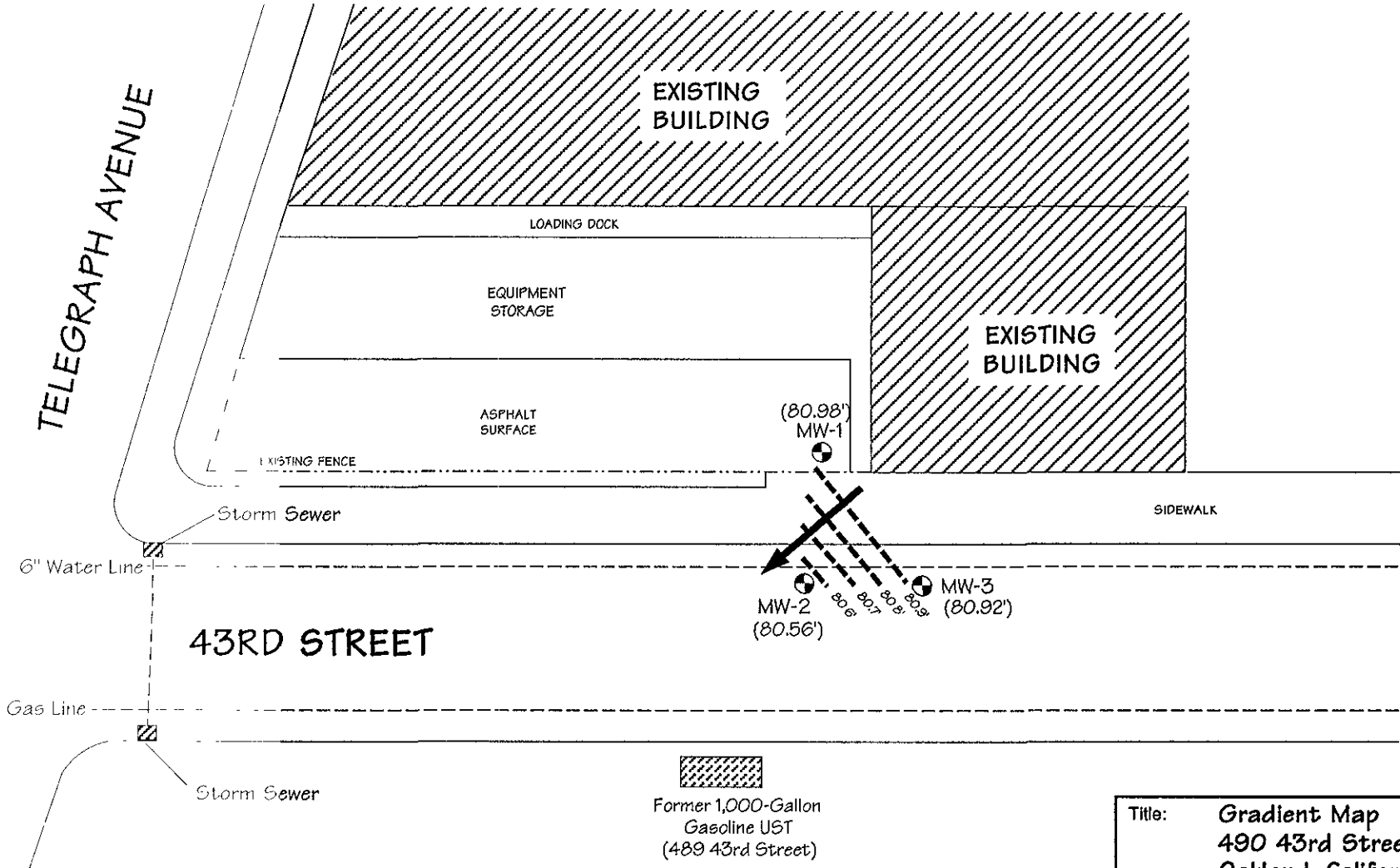


Title:	**Site Plan** **490 43rd Street** **Oakland, California**
Figure Number: 2	Scale: 1" = 30"
Drawn By: JVC/DRD	Date: 6/24/97
Project Number: 6305-001.01	

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



Legend

MW-2 - Existing Groundwater Monitoring Well

- Calculated Groundwater Flow Direction

- Calculated Groundwater Elevation Contour

Groundwater Elevation Data collected on December 17, 1998

Scale In Feet

0 15 30 45

Title:	Gradient Map 490 43rd Street Oakland, California		
Figure Number:	3	Scale:	1" = 30"
Drawn By:	JVC/DRD	Date:	1/11/99
Project Number:	6305-001.01		

ACC Environmental Consultants
7977 Capwell Drive, Suite 100
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N W E S

WELL MONITORING WORKSHEETS

ACC ENVIRONMENTAL CONSULTANTS

ACC MONITORING WELL WORKSHEET

JOB NAME: Blumert Paint Co.	PURGE METHOD: Manual Bailing
SITE ADDRESS: 490 43rd Street	SAMPLED BY: E. Cisneros
JOB #: 6305-001.01	LABORATORY: Chromalab
DATE: 12/17/98	ANALYSIS: TPHg, BTEX, MTBE, Mineral Spirits
Onsite Drum Inventory SOIL:	MONITORING ☒ DEVELOPING ☐
EMPTY: WATER: 1=100% 1=40%	SAMPLING ☒

WELL: MW-1

DEPTH OF BORING: 22.38'
DEPTH TO WATER: 10.04'
WATER COLUMN: 12.34'
WELL DIAMETER: 2"
WELL VOLUME: ≈2.0gal
COMMENTS:

PURGE VOL. (Gal)	pH	Temp.(C)	Cond.	Sal.	Turb.	D.O.
2.0	5.96	21.0	.426	0.01	291	5.84
4.0	6.31	20.6	.433	0.01	747	5.45
6.0	6.35	20.6	.424	0.01	531	6.40
8.0	6.35	20.8	.426	0.01	642	5.86

OBSERVATIONS: ☐ Froth ☐ Sheen ☒ Odor Type gas ☐ Free Product Amount_____ Type_____ ☐ Other

WELL: MW-2

DEPTH OF BORING: 21.08'
DEPTH TO WATER: 9.99'
WATER COLUMN: 11.09'
WELL DIAMETER: 2"
WELL VOLUME: ≈1.8gal
COMMENTS:

PURGE VOL. (Gal)	pH	Temp.(C)	Cond.	Sal.	Turb.	D.O.
1.8	6.55	20.4	.613	0.02	112	5.62
3.6	6.48	20.6	.631	0.02	304	5.66
5.4	6.49	20.5	.635	0.02	288	5.42
7.2	6.48	20.5	.635	0.02	312	5.60

OBSERVATIONS: ☐ Froth ☐ Sheen ☒ Odor Type gas ☐ Free Product Amount_____ Type_____ ☐ Other

WELL: MW-3

DEPTH OF BORING: 21.48'
DEPTH TO WATER 9.98'
WATER COLUMN 11.50'
WELL DIAMETER 2"
WELL VOLUME ≈1.9 gal
COMMENTS

PURGE VOL. (Gal)	pH	Temp.(C)	Cond.	Sal.	Turb.	D.O.
1.9	6.51	20.6	.834	0.03	110	5.67
3.8	6.54	20.6	.867	0.03	187	5.59
5.7	6.60	20.5	.840	0.03	236	5.70
7.6	6.59	20.5	.841	0.03	229	5.68

OBSERVATIONS: ☐ Froth ☐ Sheen ☒ Odor Type Gas ☐ Free Product Amount_____ Type_____ ☐ Other

ANALYTICAL RESULTS AND CHAIN OF CUSTODY RECORD

CHROMALAB, INC.

Environmental Services (SDB)

December 28, 1998 *Submission #:* 9812330

ACC ENVIRONMENTAL CONSULTANTS

Atten: David DeMent

Project: 490 43RD ST. *Project#:* 6305-001.01
Received: December 18, 1998

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

Client Sample ID: **MW-1**
Spl#: 222262 *Matrix:* WATER *Extracted:* December 22, 1998
Sampled: December 17, 1998 *Run#:*16637 *Analyzed:* December 24, 1998

ANALYTE	RESULT (ug/L)	REPORTING LIMIT (ug/L)	BLANK RESULT (ug/L)	BLANK SPIKE (%)	DILUTION FACTOR
MINERAL SPIRITS	300	50	N.D.	--	1

Note: Quantitation for the above Analyte is based on the response factor of Diesel.

Carolyn House
Analyst

Bruce Havlik
Analyst

1220 Quarry Lane • Pleasanton, California 94566 4756
(925) 484-1919 • Facsimile (925) 484 1096

CHROMALAB, INC.

Environmental Services (SDB)

December 28, 1998 *Submission #:* 9812330

ACC ENVIRONMENTAL CONSULTANTS

Atten: David DeMent

Project: 490 43RD ST. *Project#:* 6305-001.01
Received: December 18, 1998

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

Client Sample ID: **MW-2**
Spl#: 222263 *Matrix:* WATER *Extracted:* December 22, 1998
Sampled: December 17, 1998 *Run#:*16637 *Analyzed:* December 24, 1998

ANALYTE	RESULT (ug/L)	REPORTING LIMIT (ug/L)	BLANK RESULT (ug/L)	BLANK SPIKE (%)	DILUTION FACTOR
MINERAL SPIRITS	3400	50	N.D.	--	1

Note: Quantitation for the above Analyte is based on the response factor of Diesel.

Carolyn House
Analyst

Bruce Havlik
Analyst

1220 Quarry Lane • Pleasanton, California 94566-4756
(925) 484-1919 • Facsimile (925) 484-1096

CHROMALAB, INC.

Environmental Services (SDB)

December 28, 1998 *Submission #:* 9812330

ACC ENVIRONMENTAL CONSULTANTS

Atten: David DeMent

Project: 490 43RD ST. *Project#:* 6305-001.01
Received: December 18, 1998

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

Client Sample ID: **MW-3**
Spl#: 222264 *Matrix:* WATER *Extracted:* December 22, 1998
Sampled: December 17, 1998 *Run#:*16637 *Analyzed:* December 24, 1998

ANALYTE	RESULT (ug/L)	REPORTING LIMIT (ug/L)	BLANK RESULT (ug/L)	BLANK SPIKE (%)	DILUTION FACTOR
MINERAL SPIRITS	240	50	N.D.	--	1

Note: Quantitation for the above Analyte is based on the response factor of Diesel.

Carolyn House
Analyst

Bruce Havlik
Analyst

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CHROMALAB, INC.

Environmental Services (SDB)

January 5, 1999 *Submission #:* 9812330

ACC ENVIRONMENTAL CONSULTANTS

Atten: David DeMent

Project: 490 43RD ST. *Project#:* 6305-001.01
Received: December 18, 1998

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

Client Sample ID: **MW-1**
Spl#: 222262 *Matrix:* WATER
Sampled: December 17, 1998 *Run#:*16709 *Analyzed:* December 28, 1998

ANALYTE	RESULT (ug/L)	REPORTING LIMIT (ug/L)	BLANK RESULT (ug/L)	BLANK SPIKE (%)	DILUTION FACTOR
GASOLINE	89	50	N.D.	95	1
MTBE	N.D.	5.0	N.D.	90	1
BENZENE	1.9	0.50	N.D.	98	1
TOLUENE	N.D.	0.50	N.D.	94	1
ETHYL BENZENE	N.D.	0.50	N.D.	96	1
XYLENES	0.69	0.50	N.D.	92	1

Vincent Vancil
Analyst

Michael Verona
Operations Manager

CHROMALAB, INC.

Environmental Services (SDB)

January 5, 1999 *Submission #:* 9812330

ACC ENVIRONMENTAL CONSULTANTS

Atten: David DeMent

Project: 490 43RD ST. *Project#:* 6305-001.01
Received: December 18, 1998

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

Client Sample ID: MW-2
Spl#: 222263 *Matrix:* WATER
Sampled: December 17, 1998 *Run#:*16709 *Analyzed:* December 28, 1998

ANALYTE	RESULT (ug/L)	REPORTING LIMIT (ug/L)	BLANK RESULT (ug/L)	BLANK SPIKE (%)	DILUTION FACTOR
GASOLINE	7300	250	N.D.	95	5
MTBE	N.D.	25	N.D.	90	5
BENZENE	850	2.5	N.D.	98	5
TOLUENE	33	2.5	N.D.	94	5
ETHYL BENZENE	200	2.5	N.D.	96	5
XYLENES	22	2.5	N.D.	92	5

Vincent Vancil
Analyst

Michael Verona
Operations Manager

CHROMALAB, INC.

Environmental Services (SDB)

January 5, 1999 *Submission #:* 9812330

ACC ENVIRONMENTAL CONSULTANTS

Atten: David DeMent

Project: 490 43RD ST. *Project#:* 6305-001.01
Received: December 18, 1998

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

Client Sample ID: **MW-3**
Spl#: 222264 *Matrix:* WATER
Sampled: December 17, 1998 *Run#:*16709 *Analyzed:* December 28, 1998

ANALYTE	RESULT (ug/L)	REPORTING LIMIT (ug/L)	BLANK RESULT (ug/L)	BLANK SPIKE (%)	DILUTION FACTOR
GASOLINE	5000	250	N.D.	95	5
MTBE	N.D.	25	N.D.	90	5
BENZENE	450	2.5	N.D.	98	5
TOLUENE	18	2.5	N.D.	94	5
ETHYL BENZENE	100	2.5	N.D.	96	5
XYLENES	4.8	2.5	N.D.	92	5

Vincent Vancil
Analyst

Michael Verona
Operations Manager

CHROMALAB, INC.

Environmental Services (SDB) (DOHS 1094)

1220 Quarry Lane • Pleasanton, California 94566-4756
510/484-1919 • Facsimile 510/484-1096

Chain of Custody

DATE 12/18/98 PAGE 1 OF 1

PROJ MGR Dave DeMent
COMPANY ACC Environmental
ADDRESS 7977 Capwell Dr, Suite 100
Oakland, CA 94621

SAMPLERS (SIGNATURE) Eloy Cisneros

(PHONE NO.) (510) 638-8400
(FAX NO.) (510) 638-8404

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)		LUFT METALS: Cd, Cr, Pb, Zn, Ni	CAM METALS (17)	PRIORITY POLLUTANT METALS (13)	TOTAL LEAD	EXTRACTION (TCLP, STLC)	Mineral Spirits	MTBE		NUMBER OF CONTAINERS
MW-1	12/17/98		H2O	HCL/COLD		X																X	X		4
MW-2	12/17/98		H2O	HCL/COLD		X																X	X		4
MW-3	12/17/98		H2O	HCL/COLD		X																X	X		4

PROJECT INFORMATION

PROJECT NAME 490 43rd St.
PROJECT NUMBER 6305-001.01
P.O.# 6305-001.01

SAMPLE RECEIPT

TOTAL NO. OF CONTAINERS	12
HEAD SPACE	
REC'D GOOD CONDITION/COLD	
CONFORMS TO RECORD	

TAT: STANDARD 5-DAY | 24 | 48 | 72 | OTHER

SPECIAL INSTRUCTIONS/COMMENTS

UST FUND BILLING

RELINQUISHED BY 1.	RELINQUISHED BY 2.	RELINQUISHED BY 3
(SIGNATURE) Eloy Cisneros (TIME)	(SIGNATURE) (TIME)	(SIGNATURE) (TIME)
(PRINTED NAME) (DATE)	(PRINTED NAME) (DATE)	(PRINTED NAME) G. Moran 12/18/98 (DATE)
(COMPANY) ACC Environmental	(COMPANY)	(COMPANY)
RECEIVED BY 1	**RECEIVED BY 2.**	**RECEIVED BY (LABORATORY) 3**
(SIGNATURE) (TIME)	(SIGNATURE) (TIME)	(SIGNATURE) (TIME)
(PRINTED NAME) (DATE)	(PRINTED NAME) (DATE)	(PRINTED NAME) (DATE)
(COMPANY)	(COMPANY)	(LAB)