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CONSULTANTS

GROUNDWATER MONITORING REPORT

August 21, 1998

Peralta Maintenance Yard
501 5th Avenue
Oakland, California

Prepared For:
Mr. Robert Mibach
Peralta Community College District

ACC Project No. 6045-014.00

OAKLAND ▪ SACRAMENTO
SEATTLE ▪ LOS ANGELES

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Peralta Community College District Maintenance Yard
501 5th Avenue
Oakland, California

ACC Project No. 6045-014.00

Prepared for:

Mr. Robert Mibach
Peralta Community College District
333 East 8th Street
Oakland, California

August 21, 1998

Prepared by:

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Senior Environmental Assessor

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Senior Geologist

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OAKLAND • LOS ANGELES • SACRAMENTO • SEATTLE

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GROUNDWATER MONITORING REPORT
Peralta Community College District Maintenance Yard
501 5th Avenue
Oakland, California

1.0 INTRODUCTION

This report presents the procedures and findings of groundwater investigation conducted by ACC Environmental Consultants, Inc., (ACC) on behalf of the Peralta Community College District (District), site owner at 501 5th Avenue, Oakland, California (Figure 1). The project objective was to evaluate the extent of groundwater impact from the previous underground storage of petroleum products using analysis of groundwater samples collected from two onsite monitoring wells.

2.0 BACKGROUND

Five underground storage tanks (USTs) were installed at the subject property prior to the 1960s. The tanks were used for storage of fuel and waste oil for the City of Oakland Corporation Yard. The tanks consisted of two 6,000-gallon gasoline tanks, one 2,000-gallon diesel tank, one 2,000-gallon ethyl (premium) gasoline tank, and one 550-gallon waste-oil tank. In 1980, the District acquired the property. The District abandoned the five USTs by filling them with water and installed three new fiberglass USTs. The new tanks consisted of two 6,000-gallon and one 4,000-gallon fiberglass tanks used to store gasoline fuel. The new tanks were installed approximately 150 feet from the original tanks.

2.1 UST Removal

In 1992, the five original USTs were removed by R.S. Eagan. During removal, eight soil samples and one grab groundwater sample were collected from the excavation. Laboratory analysis of the soil samples indicated concentrations up to 228 parts per million (ppm) total petroleum hydrocarbons as diesel (TPHd), 134 ppm total petroleum hydrocarbons as gasoline (TPHg), 2,407 parts per billion (ppb) benzene, 4,617 ppb toluene, 7,170 ppb ethylbenzene, 6,147 ppb total xylenes, and 5,477 ppm oil and grease. Laboratory analysis of the water sample collected from the excavation indicated concentrations of 170,000 ppb TPHd, 15,000 ppb TPHg, 286 ppb benzene, 698 ppb toluene, 300 ppb ethylbenzene, 808 ppb total xylenes, and 284,000 ppb oil and grease.

2.2 Previous Assessments

In September 1992, a preliminary study was performed by Environ of Emeryville, California, to evaluate soil and groundwater conditions at the site and at neighboring sites as part of a due diligence investigation associated with the sale of the property. This study indicated that hydrocarbon constituents reported in the soil and grab groundwater samples at the District Maintenance Yard were possibly a result of regional impact.

In November 1992, ACC performed a subsurface environmental site assessment of the soil around the former tank excavation. Concentrations of TPHg and motor oil were detected in the soil and

groundwater samples collected from the borings. Laboratory analysis of the soil samples indicated concentrations up to 370 ppm TPHg, 12 ppm TPHd, 5,342 ppm motor oil, 76.94 ppm benzene, 73.9 ppm toluene, 30.4 ppm ethylbenzene, and 95.41 ppm xylenes.

In November 1993, the three fiberglass gasoline USTs were removed from the property. Soil samples collected from the excavation indicated concentrations up to 1.3 ppm TPHg, 0.019 ppm benzene, and 0.018 ppm toluene. Initial groundwater samples collected from the excavation indicated 27,000 ppb TPHg, 1,200 ppb benzene, 5,100 ppb toluene, 690 ppb ethylbenzene, and 5,700 ppb xylenes. During removal of the tanks, approximately 3,500 gallons of water were removed from the excavation. Analysis of subsequent groundwater samples from the excavation indicated concentrations of 210 ppb TPHg and 14 ppb xylenes. Due to the detectable levels of constituents reported in the soil and groundwater samples, additional groundwater investigation was requested by the Alameda County Health Care Services Agency (ACHCSA).

In February 1994, four additional borings were drilled on site and converted into 2-inch-diameter monitoring wells (MW-1, MW-2, MW-3, and MW-4). The monitoring wells were used to evaluate the extent of groundwater impact from the two former excavations (Figure 2). Laboratory analysis of the groundwater samples collected in February 1994 from monitoring wells MW-1 and MW-4 (downgradient from the tank excavations) indicated no detectable levels of the constituents evaluated. The groundwater results from monitoring well MW-1 indicated a downgradient extent of groundwater impact. Laboratory analysis of groundwater samples collected from monitoring wells MW-2 and MW-3 (upgradient of the former tank excavations) indicated detectable levels of constituents. Groundwater samples collected from borings MW-2 and MW-3 indicated detectable levels of TPHd, TPHg, and benzene, toluene, ethylbenzene, and total xylenes (BTEX). Motor oil was reported in the soil sample collected from boring MW-2. However, motor oil was not detected in the groundwater sample collected from monitoring well MW-2. A concentration of TPHd was detected only in the soil sample from boring MW-2.

An additional soil and groundwater investigation was conducted on May 9, 1994, to evaluate possible upgradient sources of petroleum hydrocarbons on site. The investigation included drilling five borings upgradient (east) of existing monitoring wells MW-2 and MW-3. Laboratory analysis of the soil samples collected during the additional investigation indicated detectable concentrations of TPHd up to 11 ppm and motor oil up to 100 ppm. No detectable concentrations of TPHg or BTEX were reported in the soil samples analyzed. Groundwater was encountered at a depth of approximately 5 to 6 feet below ground surface (bgs) during the additional investigation. Laboratory analysis of grab groundwater samples collected from the boreholes indicated no detectable concentrations of TPHd, motor oil, or BTEX. A concentration of TPHg of 61 ppb was reported in one grab groundwater sample collected from one boring. Motor oil was not detected in the groundwater samples collected from the borings and monitoring wells. Results of the analytical data from previous investigations indicate that upgradient sources of TPHg and motor oil exist. Fine-grained fill material and Bay Mud appear to restrict the mobility of the petroleum hydrocarbons from impacting groundwater; however, groundwater flow direction data suggest that constituent movement is to the west, away from monitoring wells MW-2 and MW-3.

2.3 Interim Remedial Action

Based on the findings of the subsurface investigations, elevated concentrations of petroleum hydrocarbons in the soil and groundwater indicated that a source of impact still existed on site. To remediate the source, overexcavation of the area around the former tank excavation was recommended as a cost-effective means. The proposed scope of work, approved by the lead regulatory agency, ACHCSA, included excavating impacted soil in the vicinity of the former tank excavation, actively purging the groundwater during excavation, and destroying well MW-2 during excavation activity.

Interim remedial action as overexcavation of impacted soil around the former tank excavation (removed in 1992) was performed in the summer of 1995. The work consisted of source removal including overexcavation and removal of approximately 2,250 cubic yards of impacted soil and removal of approximately 14,888 gallons of excavation water. During soil removal, four previously unknown USTs were discovered, three of which were removed. One UST still exists at the site. In order to protect the adjacent portable building's integrity, the tank was not removed at the time of remedial action. The UST will be removed after relocation of the adjacent building. The proposed remedial action and UST removal is tentatively scheduled for September 1998.

Based on previous investigations conducted on site, the extent of impact in the soil and groundwater was in the immediate vicinity of former monitoring well MW-2 and the existing UST, adjacent to the portable buildings. Due to the findings of the interim remedial action and the existence of previously unknown USTs, groundwater monitoring of the existing three wells (MW-1, MW-3, and MW-4) was reinstated after the interim remedial action.

In preparation for UST removal and excavation activity, well MW-3 was destroyed on March 18, 1998.

3.0 FIELD PROCEDURES

3.1 Groundwater Monitoring

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

TABLE 1 - GROUNDWATER DEPTH INFORMATION

Well No.	Date Monitored	Well Elevation* (above MSL)	Depth to Groundwater	Groundwater Elevation
MW-1	02/14/94	6.78	3.69	3.09
	05/16/94		6.80	-0.02
	08/25/94		7.05	-0.27
	11/16/94		3.50	3.28
	02/14/95		3.91	2.87
	05/18/95		6.46	0.32
	03/27/96		4.32	2.46
	10/08/96		6.96	-0.18
	01/13/97		3.36	3.42
	07/17/97		6.21	0.57
	01/19/98		3.41	3.37
	07/21/98		5.58	1.20
MW-2	02/14/94	8.70	4.70	4.00
	05/16/94		4.74	3.96
	08/25/94		5.49	3.21
	11/16/94		5.03	3.67
	02/14/95		4.55	4.15
	05/18/95		4.77	3.93
	Destroyed		---	---
MW-3	02/14/94	8.83	4.57	4.26
	05/16/94		4.78	4.05
	08/25/94		5.93	2.90
	11/16/94		4.04	4.79
	02/14/95		4.55	2.72
	05/18/95		4.49	4.34
	03/27/96		4.51	4.32
	10/08/96		6.60	2.23
	01/13/97		4.12	4.71
	07/17/97		6.60	2.23
	01/19/98		4.16	4.67
	Destroyed		---	---

Well No.	Date Monitored	Well Elevation* (above MSL)	Depth to Groundwater	Groundwater Elevation
MW-4	02/14/94	5.45	1.69	3.76
	05/16/94		2.36	3.09
	08/25/94		3.25	2.20
	11/16/94		1.01	4.44
	02/14/95		6.11	2.72
	05/18/95		2.32	3.13
	03/27/96		2.35	3.10
	10/08/96		3.75	1.70
	01/13/97		1.69	3.76
	07/17/97		3.48	1.97
	01/19/98		1.73	3.72
	07/21/98		3.08	2.37

*Notes: *All measurements are reported in feet; well elevation measured to top of casing*

3.2 Groundwater Gradient

Groundwater elevations were calculated from water level measurements collected in the wells on July 21, 1998. Groundwater gradient and flow direction could not be calculated because only two wells remain to be monitored. Historic groundwater flow direction on site is summarized in Table 2.

TABLE 2 - GROUNDWATER GRADIENT AND FLOW DIRECTION

Date Monitored	Gradient (foot/foot)	Direction
02/14/94	0.01	west
05/16/94	0.025	west
08/25/94	0.031	west
11/16/94	0.013	west
02/14/95	0.014	northwest
05/18/95	0.033	west
03/27/96	0.033	west-northwest
10/08/96	0.05	west
01/13/97	0.028	west
07/17/97	0.043	west
01/19/98	0.031	west
07/21/98	---	---

3.3 Groundwater Sampling

After water level measurements were collected, groundwater pH, temperature, dissolved oxygen (DO), turbidity, salinity, and electrical conductivity were monitored. The wells were not purged upon the written recommendation of the ACHCSA in their September 11, 1997 letter. The well monitoring worksheet is included as Appendix 1.

After the groundwater level had recovered to a minimum of approximately 85 percent of its static level, water samples were obtained from wells MW-1 and MW-4 using disposable polyethylene bailers. Three 40-milliliter laboratory-supplied VOA vials, without headspace, and one amber liter jar were filled with the water collected from each monitoring well. Sample containers were labeled with self-adhesive, preprinted tags. The samples were stored in a pre-chilled, insulated container pending delivery to Chromalab, Inc. (Chromalab), a state-certified laboratory for analysis.

4.0 FINDINGS

Groundwater samples were collected from monitoring wells MW-1 and MW-4 and submitted to Chromalab for analysis of TPHg, BTEX, and methyl tertiary butyl ether (MTBE) by EPA Method SW846 8020A Nov 1990/8015 Mod and total extractable petroleum hydrocarbons (TEPH) as diesel, kerosene, and motor oil by EPA Method 8015M. Analytical results from the groundwater samples are summarized in Table 3. A copy of the analytical results and chain of custody record is included as Appendix 2.

TABLE 3 - GROUNDWATER SAMPLE ANALYTICAL RESULTS

Well No.	Date Sampled	TPHg (µg/L)	TEPH (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)
MW-1	02/14/94	<50	<50	<0.5	<0.5	<0.5	<0.5	---
	05/23/94	<50	<50	<0.5	<0.5	<0.5	<0.5	---
	08/25/94	<50	---	<0.5	<0.5	<0.5	<0.5	---
	11/16/94	<50	---	<0.5	<0 5	<0.5	<0.5	---
	02/14/95	<50	---	<0.5	<0.5	<0.5	<0.5	---
	05/18/95	<50	---	<0.5	<0.5	<0.5	<0.5	---
	03/27/96	<50	120(d)	<0.5	<0.5	<0.5	<0.5	---
	10/08/96	<50	570(d)/670(m)*	<0.5	<0.5	<0.5	<0.5	---
	01/13/97	<50	720(d)/1,000(m)*	<0.5	<0.5	<0.5	<0.5	---
	07/17/97	<50	500(d)*/760(m)	<0.5	<0.5	<0.5	<0.5	<5.0
	01/19/98	<50	340(d)*/740(m)*	<0.5	<0.5	<0.5	<0.5	<5.0
	07/21/98	<50	54(d)*	<0.5	<0.5	<0.5	<0.5	<5.0
MW-2	02/14/94	200	<50	1.7	<0.5	1.1	1.1	---
	05/23/94	600	<50	1.8	0.9	0.7	2.1	---
	08/25/94	70	---	<50	<0.5	<0.5	0.5	---
	11/16/94	<50	---	<50	<0.5	<0.5	0.6	---
	02/14/95	160	---	0.7	0.6	<0.5	1.0	---
	05/18/95	50	---	<0.5	<0.5	<0.5	0.6	---
	Destroyed	---	---	---	---	---	---	---

Well No.	Date Sampled	TPHg (µg/L)	TEPH (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)
MW-3	02/14/94	780	<50	0.6	0.6	1.7	2.7	---
	05/23/94	680	<50	<0.5	<0.5	2.2	2.2	---
	08/25/94	310	---	6.4	2.7	1.9	4.1	---
	11/16/94	650	---	1.6	1.5	<0.5	2.7	---
	02/14/95	70	---	<0.5	<0.5	<0.5	<0.5	---
	05/18/95	470	---	<0.5	1.1	0.7	0.6	---
	03/27/96	740	390(d)*	7.9	19	3.0	8.0	---
	10/08/96	640	640(d)/680(m)	7.6	3.8	3.9	5.6	---
	01/13/97	640	1,300(k)/1,200(m)*	4.4	2.2	2.6	4.0	---
	07/17/97	600	1,400(d)*/1,100(m)	7.3	11	3.6	4.8	<5.0
	01/19/98	<50	520(d)*/1,000(m)*	<0.5	<0.5	<0.5	<0.5	<5.0
	Destroyed	---	---	---	---	---	---	---
MW-4	02/14/94	<50	<50	<0.5	<0.5	<0.5	<0.5	---
	05/23/94	93	<50	<0.5	<0.5	<0.5	<0.5	---
	08/29/94	<50	---	<0.5	<0.5	<0.5	<0.5	---
	11/16/94	100	---	2.7	<0.5	<0.5	1.0	---
	02/14/95	60	---	<0.5	<0.5	<0.5	<0.5	---
	05/18/95	<50	---	<0.5	<0.5	<0.5	<0.5	---
	03/27/96	<50	<50	<0.5	<0.5	<0.5	<0.5	---
	10/08/96	<50	430(d)*	<0.5	<0.5	<0.5	<0.5	---
	01/13/97	<50	830(d)/950(m)*	0.8	<0.5	<0.5	<0.5	---
	07/17/97	<50	190(d)*	<0.5	<0.5	<0.5	<0.5	<5.0
	01/19/98	53	200(d)*/550(m)*	2.2	<0.5	<0.5	<0.5	<5.0
	07/21/98	<50	53(d)*	<0.5	<0.5	<0.5	<0.5	<5.0

Notes: µg/L = *micrograms per liter (approximately equivalent to ppb)*
< = *Less than laboratory reporting limit indicated*
d = The noted concentration is TEPH as diesel
m = The noted concentration is TEPH as motor oil
k = The noted concentration is TEPH as kerosene
**Hydrocarbons do not match laboratory's standard profile*

5.0 DISCUSSION

The concentrations of TEPH as diesel decreased since the last sampling event in the wells sampled. The concentrations of TEPH as motor oil were no longer detectable above laboratory reporting limits. Because only two wells remain at the site, groundwater gradient and flow direction can no longer be evaluated, but it is assumed that it is similar to previous sampling events. No concentrations of TPHg, BTEX, or MTBE were detected above the reporting limits in either of the wells.

6.0 CONCLUSIONS

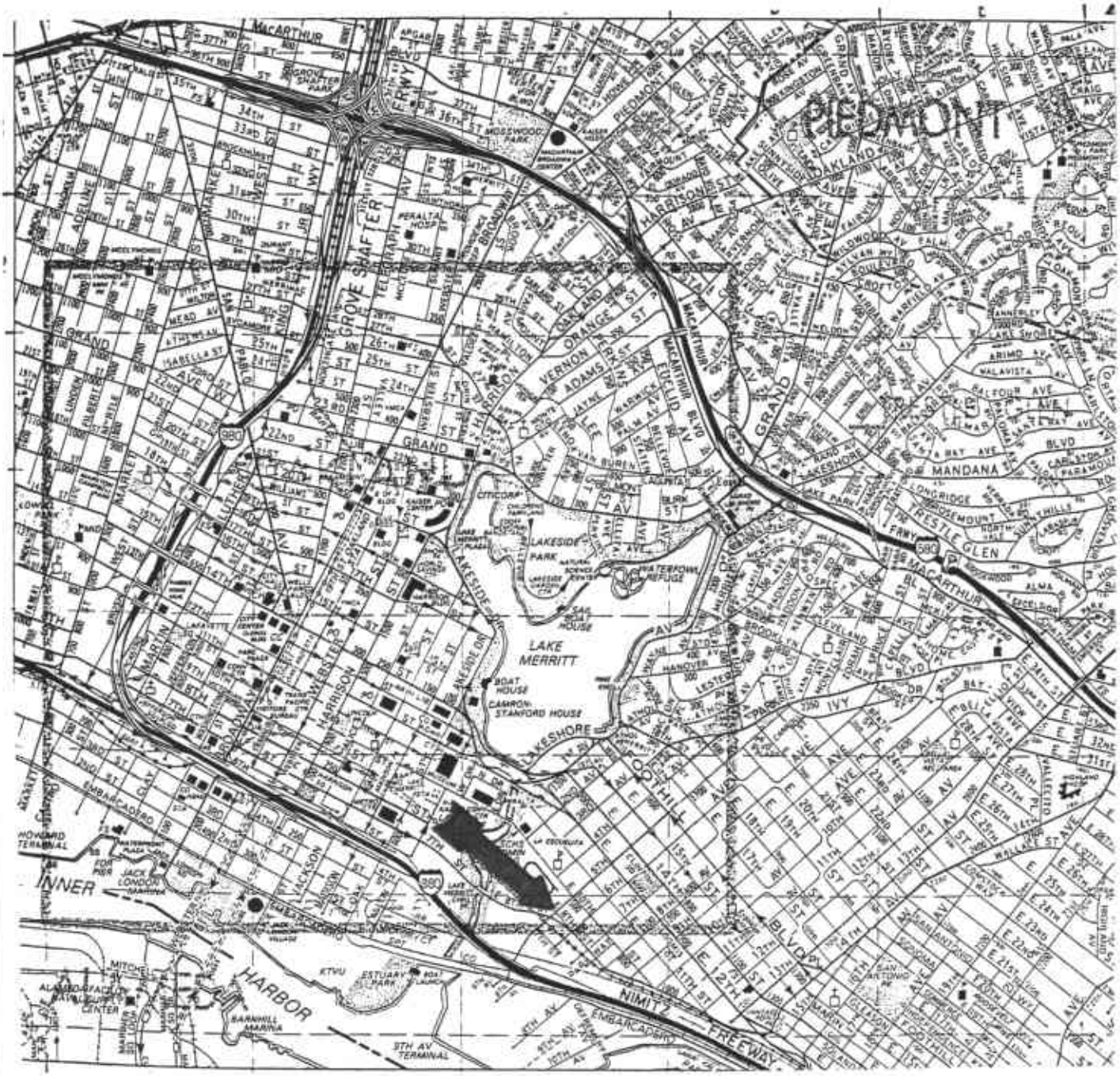
Based on groundwater monitoring and sampling, ACC has the following conclusions:

- Results of the groundwater investigation indicated detectable concentrations of hydrocarbons in the diesel range in monitoring wells MW-1 and MW-4. The laboratory reported that the hydrocarbons detected did not match the standard profile.

- TPHg, BTEX, MTBE were not detected during this sampling event.

- The concentrations of TEPH decreased from the previous sampling event in both of the wells.

Remedial action and UST removal is tentatively scheduled for September 1998. Remedial action proposed includes removing the existing UST and removing impacted soil surrounding it and former well MW-3, which was not removed during the 1995 interim remedial action. ACC recommends meeting with ACHCSA to review results of the remedial action and deciding what, if any, groundwater monitoring would be appropriate to evaluate the effectiveness of the remedial action.



SOURCE: Thomas Bros. Guide, 1994

Title: Location Map
Peralta Community College District
Maintenance Yard
501 5th Avenue, Oakland, California

Figure Number: 1	Scale: 1" = 1/4 mi
Drawn By: CLM	Date: 2/6/98
Project Number: 6045-14	

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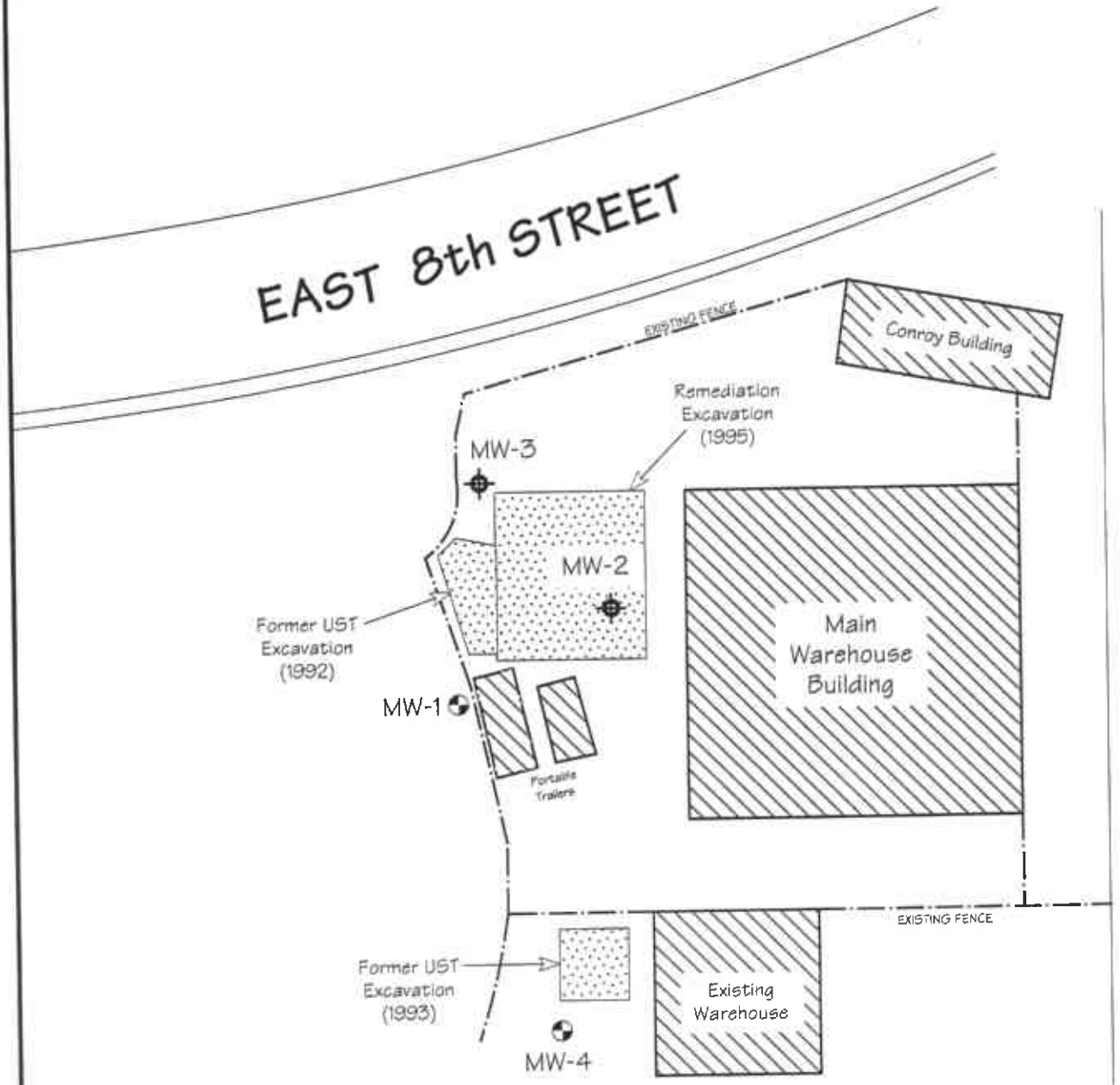

Scale In Feet

0 50 100 150

Legend

MW-3 - Existing Groundwater Monitoring Well

MW-2 - Former Groundwater Monitoring Well (destroyed)

Site Plan
Peralta Community College District
Maintenance Yard
501 5th Avenue, Oakland, California

Figure Number: 2	Scale: 1" = 100'
Drawn By: JVC	Date: 3/25/98
Project Number: 6045-014.00	

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WELL MONITORING WORKSHEETS

A·C·C ENVIRONMENTAL CONSULTANTS

ACC MONITORING WELL WORKSHEET

JOB NAME: Peralta Corp. Yard	PURGE METHOD: Manual Bailing
SITE ADDRESS: 501 5th Ave	SAMPLED BY: Elog Cisneros
JOB #: 6045-004.00	LABORATORY: Chromalab
DATE: 7/21/98	ANALYSIS: TPHg, BTEX, MTBE, TEPH
Onsite Drum Inventory SOIL:	MONITORING ☒ DEVELOPING ☐
EMPTY: WATER: 1=100% 1≈70%	SAMPLING ☒

WELL: MW-1

DEPTH OF BORING: 14.33'
DEPTH TO WATER: 5.58'
WATER COLUMN: 8.75'
WELL DIAMETER: 2"
WELL VOLUME: ≈1.5gal
COMMENTS:

PURGE VOL. (Gal)	PURGE WATER READINGS pH	Temp.(C)	Cond.	Sal.	Turb.	D.O.	OBSERVATIONS
1.5	6.49	20.0	4.92	0.25	47	1.74	☐ Froth ☐ Sheen ☐ Odor Type ☐ Free Product Amount Type ☐ Other

WELL: MW-4

DEPTH OF BORING: 14.34'
DEPTH TO WATER: 3.08'
WATER COLUMN: 11.26'
WELL DIAMETER: 2"
WELL VOLUME: ≈1.8gal
COMMENTS:

(Gal)	pH	Temp.(C)	Cond.	Sal.	Turb.	D.O.	OBSERVATIONS
1.8	6.50	23.8	4.15	0.21	597	1.46	☐ Froth ☐ Sheen ☐ Odor Type ☐ Free Product Amount Type ☐ Other

WELL:

DEPTH OF BORING:
DEPTH TO WATER:
WATER COLUMN:
WELL DIAMETER:
WELL VOLUME:
COMMENTS:

(Gal)	pH	Temp.(C)	Cond.	Sal.	Turb.	D.O.	OBSERVATIONS
							☐ Froth ☐ Sheen ☐ Odor Type ☐ Free Product Amount Type ☐ Other

ANALYTICAL RESULTS AND CHAIN OF CUSTODY

CHROMALAB, INC.

Environmental Services (SDB)

July 28, 1998 *Submission #:* 9807283

ACC ENVIRONMENTAL CONSULTANTS

Atten: Stephen Southern

Project: 501 5TH AVE *Project#:* 98-6045-004.00
Received: July 21, 1998

re: 2 samples for TEPH analysis.
Method: *EPA 8015M*

Matrix: WATER *Extracted:* July 23, 1998
Sampled: July 21, 1998 *Run#:* 13874 *Analyzed:* July 24, 1998

Spl#	CLIENT SPL ID	Kerosene (ug/L)	Diesel (ug/L)	Motor Oil (ug/L)
196294	MW 1	N.D.	54	N.D.

Note: Hydrocarbon reported does not match the pattern of our Diesel Standard.

Matrix: WATER *Extracted:* July 23, 1998
Sampled: July 21, 1998 *Run#:* 13874 *Analyzed:* July 28, 1998

Spl#	CLIENT SPL ID	Kerosene (ug/L)	Diesel (ug/L)	Motor Oil (ug/L)
196295	MW 4	N.D.	53	N.D.

Note: Hydrocarbon reported is in the late Diesel Range and does not match our Diesel Standard.

Reporting Limits	50	50	500
Blank Result	N.D.	N.D.	N.D.
Blank Spike Result (%)	--	--	--

Carolyn House
Analyst

Bruce Havlik
Analyst

510-638-8404 PM 07/28

1220 Quarry Lane • Pleasanton, California 94566-4756
(925) 484-1919 • Facsimile (925) 484-1096
Federal ID #68-0140157

S013 0:0C0405 CMH 17:04

CHROMALAB, INC.

Environmental Services (SDB)

July 30, 1998 *Submission #:* 9807283

ACC ENVIRONMENTAL CONSULTANTS

Atten: Stephen Southern

Project: 501 5TH AVE *Project#:* 98-6045-004.00
Received: July 21, 1998

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

Client Sample ID: **MW 1**
Spl#: 196294 *Matrix:* WATER
Sampled: July 21, 1998 *Run#:*13892 *Analyzed:* July 23, 1998

ANALYTE	RESULT (ug/L)	REPORTING LIMIT (ug/L)	BLANK RESULT (ug/L)	BLANK SPIKE (%)	DILUTION FACTOR
GASOLINE	N.D.	50	N.D.	82	1
MTBE	N.D.	5.0	N.D.	91	1
BENZENE	N.D.	0.50	N.D.	91	1
TOLUENE	N.D.	0.50	N.D.	91	1
ETHYL BENZENE	N.D.	0.50	N.D.	91	1
XYLENES	N.D.	0.50	N.D.	93	1

Vincent Vancil
Analyst

Michael Verona
Operations Manager

1220 Quarry Lane • Pleasanton, California 94566-4756
(925) 484-1919 • Facsimile (925) 484-1096
Federal ID #68-0140157

CHROMALAB, INC.

Environmental Services (SDB)

July 30, 1998 *Submission #:* 9807283

ACC ENVIRONMENTAL CONSULTANTS

Atten: Stephen Southern

Project: 501 5TH AVE *Project#:* 98-6045-004.00
Received: July 21, 1998

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

Client Sample ID: **MW 4**
Spl#: 196295 *Matrix:* WATER
Sampled: July 21, 1998 *Run#:*13892 *Analyzed:* July 23, 1998

ANALYTE	RESULT (ug/L)	REPORTING LIMIT (ug/L)	BLANK RESULT (ug/L)	BLANK SPIKE (%)	DILUTION FACTOR
GASOLINE	N.D.	50	N.D.	82	1
MTBE	N.D.	5.0	N.D.	91	1
BENZENE	N.D.	0.50	N.D.	91	1
TOLUENE	N.D.	0.50	N.D.	91	1
ETHYL BENZENE	N.D.	0.50	N.D.	91	1
XYLENES	N.D.	0.50	N.D.	93	1

Vincent Vancil
Analyst

Michael Verona
Operations Manager

510-638-0404

1220 Quarry Lane • Pleasanton, California 94566-4756
(925) 484-1919 • Facsimile (925) 484-1096
Federal ID #68-0140157

PM V132 O:BTEXQC0220
BUBBA 14:30

0728?/196294 - 196295

40973

CHROMALAB, INC.

Environmental Services (SDB) (DOHS 1094)

CIOF #: 9807283 REP: PR
CLIENT: ACC
DUE: 07/28/98
REF #: 40973

Chain of Custody

DATE 7/21/98 PAGE 1 OF 1

PROJ. MGR Stephen Southern
COMPANY ACC Environmental
ADDRESS 7977 Capwell Dr, Suite 100
Oakland, CA 94621

SAMPLERS (SIGNATURE) Elgli (PHONE NO.) (510) 638-8400 (FAX NO.) (510) 638-8404

ANALYSIS REPORT

SAMPLE ID.	DATE	TIME	MATRIX	PRESERV.	TPH - Gasoline (EPA 5030, 8015)	TPH - Gasoline (5030, 8015) w/BTEX (EPA 602, 8020)	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)	MTBE	LUFT METALS: Cd, Cr, Pb, Zn, Ni	CAM METALS (17)	PRIORITY POLLUTANT METALS (13)	TOTAL LEAD	EXTRACTION (TCLP, STLC)				NUMBER OF CONTAINERS
	7/21/98	13:30	H₂O	HCL		X	X									X									4
	7/21/98	14:00	H₂O	HCL		X	X									X									4

PROJECT INFORMATION

PROJECT NAME 501 5th Avenue
PROJECT NUMBER 98-6045-004.00
P.O. # 98-6045-004.00

TAT (STANDARD 5-DAY) | 24 | 48 | 72 | OTHER

SPECIAL INSTRUCTIONS/COMMENTS:

SAMPLE RECEIPT

TOTAL NO. OF CONTAINERS	8
HEAD SPACE	
REC'D GOOD CONDITION/COLD	
CONFORMS TO RECORD	

RELINQUISHED BY 1.
(SIGNATURE) Elgli (TIME)
(PRINTED NAME) Eloy Cisneros (DATE) 7/21/98
(COMPANY) ACC Environmental

RELINQUISHED BY 2.
(SIGNATURE) (TIME)
(PRINTED NAME) (DATE)
(COMPANY)

RELINQUISHED BY
(SIGNATURE) 1814
(PRINTED NAME) 7-21-98
(COMPANY)

RECEIVED BY 1.
(SIGNATURE) (TIME) 1310
(PRINTED NAME) (DATE) 7-21-98
(COMPANY)

RECEIVED BY 2.
(SIGNATURE) (TIME)
(PRINTED NAME) (DATE)
(COMPANY)

RECEIVED BY (LABORATORY)
(SIGNATURE) C. Cassidy 18:?
(PRINTED NAME) C. Cassidy 7-21-98
(LAB) C/C

CHROMALAB, INC.

Environmental Service (SDB)

Sample Receipt Checklist

Client Name: ACC ENVIRONMENTAL CONSULTANTS Date/Time Received: 07/21/98 | 1570

Reference/Submis: 40973 | 9807283 Received by: BM

Checklist completed by: Chris Rowley 7/22/98 (Signature | Date) Reviewed by: [illegible] 7/22/98 (Initials | Date)

Matrix: H2O Carrier name: Client - (C/L)

Shipping container/cooler in good condition?	Yes ✓	No ___	Not Present ___
Custody seals intact on shipping container/cooler?	Yes ___	No ___	Not Present ✓
Custody seals intact on sample bottles?	Yes ___	No ___	Not Present ✓
Chain of custody present?	Yes ✓	No ___	
Chain of custody signed when relinquished and received?	Yes ✓	No ___	
Chain of custody agrees with sample labels?	Yes ___	No ✓	
Samples in proper container/bottle?	Yes ✓	No ___	
Sample containers intact?	Yes ✓	No ___	
Sufficient sample volume for indicated test?	Yes ✓	No ___	
All samples received within holding time?	Yes ✓	No ___	
Container/Temp Blank temperature in compliance? Temp: 3.3 °C	Yes ✓	No ___	
Water - VOA vials have zero headspace? No VOA vials submitted ___	Yes ✓	No ___	

Water - pH acceptable upon receipt? Yes Adjusted? ____ Checked by [illegible] (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: No sample ID's listed on COC

Corrective Action: Sample ID's taken from containers