



ENVIRONMENTAL
PROTECTION

97 JAN 15 PM 3:16

GROUNDWATER MONITORING REPORT

January 15, 1997

Various City of Alameda Facilities
Alameda, California

Prepared For:
Mr. Lance Bryant
City of Alameda

OAKLAND ■ SACRAMENTO
SEATTLE ■ LOS ANGELES

ACC Project No. 96-6209-8.0

SEMIANNUAL GROUNDWATER MONITORING REPORT

City of Alameda Facilities

ACC Project No. 96-6209-8.0

Prepared for:
Mr. Lance Bryant
City of Alameda
Maintenance Service Center
1616 Fortmann Way
Alameda, California 94501

January 15, 1997

Prepared by:



Misty Kaltreider
Project Geologist

Reviewed by :



David R. DeMent, RG
Senior Geologist

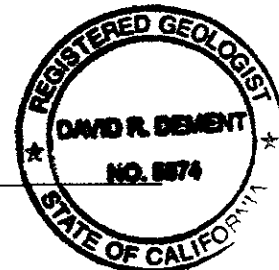


TABLE OF CONTENTS

	Page
1.0 INTRODUCTION	1
2.0 BACKGROUND	1
3.0 GROUNDWATER MONITORING AND SAMPLING	1
4.0 RESULTS OF GROUNDWATER SAMPLING	2
5.0 DISCUSSION CONCLUSIONS	5
5.0 CONCLUSIONS AND RECOMMENDATIONS	5

TABLES

1 - Groundwater Sample Analytical Results	2
---	---

FIGURES

- 1 - Location Map
- 2 - Site Plan (Fire Station No. 3)
- 3 - Site Plan (City Hall and Police Station)

APPENDICES

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

SEMIANNUAL MONITORING GROUNDWATER REPORT
City of Alameda Facilities

1.0 INTRODUCTION

This report presents the observations and findings of the groundwater monitoring investigation conducted by ACC Environmental Consultants, Inc., (ACC) on behalf of the City of Alameda for two facilities located within Alameda, California (Figure 1). The project objective was to evaluate the groundwater conditions on each site with the use of the groundwater monitoring wells available adjacent to the former tank excavations.

2.0 BACKGROUND

Semiannual groundwater monitoring has been conducted on four City of Alameda facilities since 1987 to satisfy the underground fuel storage compliance requirements for the Alameda County Health Care Services Agency (ACHCSA). Groundwater wells located at each facility include:

Fire Station No. 3	FS3-MW1 and FS3-MW2
City Hall	CH-MW1 and CH-MW2 → 2263 Santa Clara? ⇒ closed
Police Station	PS-MW1
Fire Station No. 2	FS2-MW1, FS2-MW2, FS2-MW3, and FS2-MW4 ⇒ closed

Groundwater monitoring and sampling of the Fire Station No. 2 well FS2-MW1 was discontinued in October 1993, as approved by Ms. Juliet Shin of ACHCSA. Groundwater monitoring and sampling of the City Hall wells CH-MW1 and CH-MW2 has been discontinued because the wells have been destroyed.

3.0 GROUNDWATER MONITORING AND SAMPLING

ACC conducted semiannual groundwater monitoring on November 20, 1996. Work at each site included measuring depth to water, subjectively evaluating groundwater in the wells, and purging and sampling the wells for laboratory analysis.

Before groundwater sampling, the water level in each well was measured from the top of the polyvinyl chloride well casing using a Solinst water level meter. The water level measurements were recorded to the nearest 0.01 foot. Groundwater monitoring data recorded on the well monitoring worksheet is included as Appendix 1. Information regarding well elevations and groundwater levels are summarized in Table 1.

Each well was purged using a disposable polyethylene bailer. Groundwater samples were collected when temperature, pH, and conductivity of the water stabilized and a minimum of four well casing volumes of water had been removed. Following purging, each well was allowed to recharge before sampling. When recovery to 80 percent of the static water level was observed, a sample was

collected for analysis. Groundwater conditions were monitored during purging and sampling. A copy of the well monitoring worksheet is presented as Appendix 1.

Wells were sampled using disposable polyethylene bailers attached to new string. From each monitoring well, approved, laboratory-supplied sample vials were filled to overflowing and sealed so that no air was trapped in the vial. Once filled, sample vials were inverted and tapped to test for air bubbles. Sample containers were labeled with self-adhesive, preprinted tags. The samples were stored in a pre-chilled, insulated container pending delivery to a state-certified laboratory for analysis.

Water purged during the development and sampling of the monitoring wells was temporarily stored on site in Department of Transportation approved 55-gallon drums pending laboratory analysis and proper disposal.

4.0 RESULTS OF GROUNDWATER SAMPLING

Groundwater samples collected from each well were submitted to Chromalab, Inc., following chain of custody protocol. Groundwater samples collected from wells FS3-MW1, FS3-MW2, and PS-MW1 were analyzed for total petroleum hydrocarbons as gasoline (TPHg) and benzene, toluene, ethylbenzene, and total xylenes (BTEX) by EPA Method 5030/8015M/8020A. Copies of the chain of custody record and laboratory analysis reports are included as Appendix 2. A summary of the groundwater results obtained from each monitoring well is presented in Table 1.

TABLE 1 - GROUNDWATER SAMPLE ANALYTICAL RESULTS

Well No.	Date Sampled	Water Level (foot)	TPHd (µg/L)	TPHg (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)
FS2-MW1	05/05/87	---	120	---	---	---	---	---
	02/16/88	---	< 50	---	---	---	---	---
	08/24/88	---	< 50	---	---	---	---	---
	02/08/89	---	< 50	---	---	---	---	---
	08/07/89	---	< 50	---	---	---	---	---
	02/06/90	---	< 50	---	---	---	---	---
	08/28/90	---	< 50	---	---	---	---	---
	02/08/91	---	< 50	---	---	---	---	---
	03/04/92	---	< 50	---	---	---	---	---
	09/08/92	---	< 50	---	---	---	---	---
	03/11/93	---	< 50	---	---	---	---	---
	09/29/93	Discontinued	---	---	---	---	---	---

Well No.	Date Sampled	Water Level (foot)	TPHd (µg/L)	TPHg (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)
FS3-MW1	08/05/87	---	---	<20	<0.7	<0.7	<0.7	<0.7
	02/16/88	---	<0.5	<50	<0.5	<0.5	<0.5	<0.5
	08/24/88	---	---	36	<0.1	<0.1	<0.1	<0.1
	02/08/89	---	---	<50	<0.5	<0.5	0.86	<0.5
	08/07/89	---	---	93	3.0	<0.3	<0.3	0.38
	02/06/90	---	---	<30	<0.3	<0.3	<0.3	<0.3
	08/28/90	---	<50	<30	<0.3	<0.3	<0.3	<0.3
	02/08/91	---	---	<30	<0.3	<0.3	<0.3	<0.3
	03/04/92	---	---	<50	<0.5	<0.5	<0.5	<0.5
	09/08/92	---	---	<50	---	---	---	---
	03/11/93	---	---	<50	<0.5	<0.5	<0.5	<0.5
	09/29/93	---	---	<50	<0.5	<0.5	<0.5	<0.5
	03/30/94	---	---	<50	<0.5	<0.5	<0.5	<0.5
	09/20/94	---	---	<50	<0.5	<0.5	<0.5	<0.5
	03/31/95	---	---	<50	<0.5	<0.5	<0.5	<0.5
11/20/96	5.97	---	<50	<0.5	<0.5	<0.5	<0.5	
FS3-MW2	08/05/87	---	<10	---	---	---	---	---
	02/16/88	---	<50	---	---	---	---	---
	08/07/89	---	<50	---	---	---	---	---
	02/06/90	---	<50	<30	<0.3	<0.3	<0.3	<0.3
	08/28/90	---	<50	<30	<0.3	<0.3	<0.3	<0.3
	02/08/91	---	<50	---	---	---	---	---
	03/04/92	---	<100	<50	<0.5	<0.5	<0.5	<0.5
	09/08/92	---	<50	<50	---	---	---	---
	03/11/93	---	<50	<50	<0.5	<0.5	<0.5	<0.5
	09/29/93	---	<50	<50	<0.5	<0.5	<0.5	<0.5
	03/30/94	---	<50	<50	<0.5	<0.5	<0.5	<0.5
	09/20/94	---	<50	<50	<0.5	<0.5	<0.5	<0.5
	03/31/95	---	<50	<50	<0.5	<0.5	<0.5	<0.5
11/20/96	5.74	<50	<50	<0.5	<0.5	<0.5	<0.5	

Well No.	Date Sampled	Water Level (foot)	TPHd (µg/L)	TPHg (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)
CH-MW1	08/05/87	---	---	<20	<0.4	<0.4	<0.4	<0.4
	02/16/88	---	---	<50	<0.5	<0.5	<0.5	<0.5
	08/24/88	---	---	<7	<0.1	<0.1	<0.1	<0.1
	02/08/89	---	---	<50	<0.5	<0.5	<0.5	<0.5
	08/07/89	---	---	<30	<0.3	<0.3	<0.3	<0.3
	02/06/90	---	---	<30	<0.3	<0.3	<0.3	<0.3
	08/28/90	---	---	<30	<0.3	<0.3	<0.3	<0.3
	02/08/91	---	---	<30	<0.3	<0.3	<0.3	<0.3
	03/04/92	---	---	<50	<0.5	<0.5	<0.5	<0.5
	09/08/92	---	---	<50	---	---	---	---
	03/11/93	---	---	<50	<0.5	<0.5	<0.5	<0.5
	09/29/93	---	---	<50	<0.5	<0.5	<0.5	<0.5
	03/30/94	---	---	<50	<0.5	<0.5	<0.5	<0.5
	09/20/94	---	---	<50	<0.5	<0.5	<0.5	<0.5
03/31/95	Destroyed	---	<50	<0.5	<0.5	<0.5	<0.5	
CH-MW2	08/05/87	---	---	<20	<0.4	<0.4	<0.4	0.4
	02/16/88	---	---	<50	<0.5	<0.5	<0.5	<0.5
	08/24/88	---	---	36	<0.1	<0.1	<0.1	<0.1
	02/08/89	---	---	<50	0.55	<0.5	<0.5	<0.5
	08/07/89	---	---	<30	<0.3	<0.3	<0.3	<0.3
	02/06/90	---	---	<30	<0.3	<0.3	<0.3	<0.3
	08/28/90	---	---	<30	<0.3	<0.3	<0.3	<0.3
	02/08/91	---	---	<30	<0.3	<0.3	<0.3	<0.3
	03/04/92	---	---	<50	<0.5	<0.5	<0.5	<0.5
	09/08/92	---	---	<50	---	---	---	---
	03/11/93	---	---	<50	<0.5	<0.5	<0.5	<0.5
	09/29/93	---	---	<50	<0.5	<0.5	<0.5	<0.5
	03/30/94	---	---	<50	<0.5	<0.5	<0.5	<0.5
	09/20/94	---	---	<50	<0.5	<0.5	<0.5	<0.5
03/31/95	Destroyed	---	<50	<0.5	<0.5	<0.5	<0.5	

Well No.	Date Sampled	Water Level (foot)	TPHd (µg/L)	TPHg (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)
PS-MW1	08/05/87	---	160	---	---	---	---	---
	02/16/88	---	<50	---	---	---	---	---
	08/24/88	---	<60	---	---	---	---	---
	02/08/89	---	<50	---	---	---	---	---
	08/07/89	---	<50	---	---	---	---	---
	02/06/90	---	<50	---	---	---	---	---
	08/28/90	---	<50	---	---	---	---	---
	02/08/91	---	---	---	---	---	---	---
	03/04/92	---	<100	---	---	---	---	---
	09/08/92	---	57	---	---	---	---	---
	03/11/93	---	<50	---	---	---	---	---
	09/29/93	---	470	---	---	---	---	---
	03/30/94	---	110	---	---	---	---	---
	09/20/94	---	540	---	---	---	---	---
	03/31/95	---	130	---	---	---	---	---
11/20/96	9.11	<50	110	<50	<50	<50	<50	

Notes: µg/L = micrograms per liter (approximately equivalent to parts per billion)

5.0 DISCUSSION

This report documents consecutive semiannual monitoring conducted on the City of Alameda Facilities since 1987. Groundwater sample results indicated detectable concentrations of TPHg in well PS-MW1. No concentrations of TPHg and BTEX above reporting limits were detected in the wells located at Fire Station No. 3.

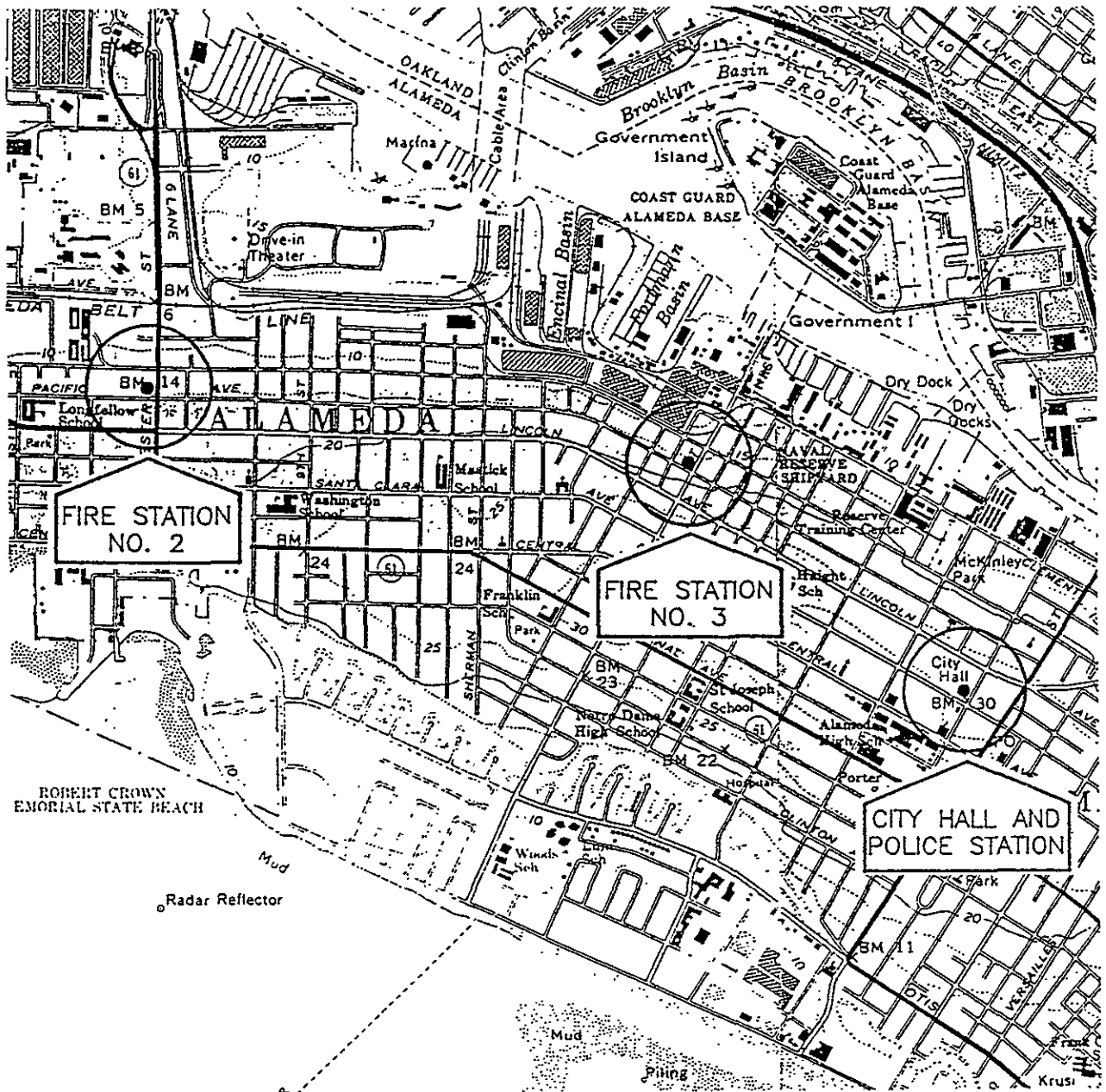
6.0 CONCLUSIONS AND RECOMMENDATIONS

Data and observations discussed herein and in previous work conducted on site indicate that groundwater in the vicinity of the former tank excavation located at the Police Station has been impacted due to a release of gasoline associated with onsite storage of fuel within the former underground storage tank (UST). Based on the work completed at the site to date, the following conclusions can be made:

- Wells located at each facility have been monitored monthly in accordance with the ACHCSA UST monitoring program. ACC believes that biannual sampling and analysis is sufficient to document whether a release has occurred at each site. Therefore, ACC recommends that the monthly monitoring program be discontinued and semiannual monitoring and sampling be continued for future documentation of the groundwater conditions.

- Low concentrations of petroleum hydrocarbons were reported in the well located at the Police Station; however, no concentrations of BTEX have been detected in the well since monitoring was initiated in 1987. ACC recommends that semiannual monitoring of the Police Station well continue.
- No concentrations of petroleum hydrocarbons were reported in the wells located at Fire Station No 3. Further monitoring is not recommended because no evidence of a release has been illustrated. ACC recommends that the wells located at Fire Station No. 3 and the wells located at Fire Station No. 2 be destroyed in accordance with ACHCSA guidelines upon approval of no further action on either site.

Wells located at City Hall have apparently been destroyed. No further work is required for this site. Pursuant to the Tri-Regional Water Quality Control Board guidelines, groundwater sampling and monitoring of the well located at the Alameda Police Station should continue on a semiannual basis. Upon acceptance of these modifications from ACHCSA, the next groundwater sampling will be conducted in May 1997.



Title: Location Map Various Sites Alameda, California	
Figure Number: 1	Scale: 1" = 1/4 mi
Drawn By: MCR	Date: 1/15/96
Project Number: 96-6209-8.0	
ACC Environmental Consultants 7977 Capwell Drive, Suite 100 Oakland, California 94621 (510) 638-8400 Fax: (510) 638-8404	

Fire Station No. 3

FS3-MW1

FS3-MW1

Sidewalk

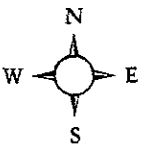
Sidewalk

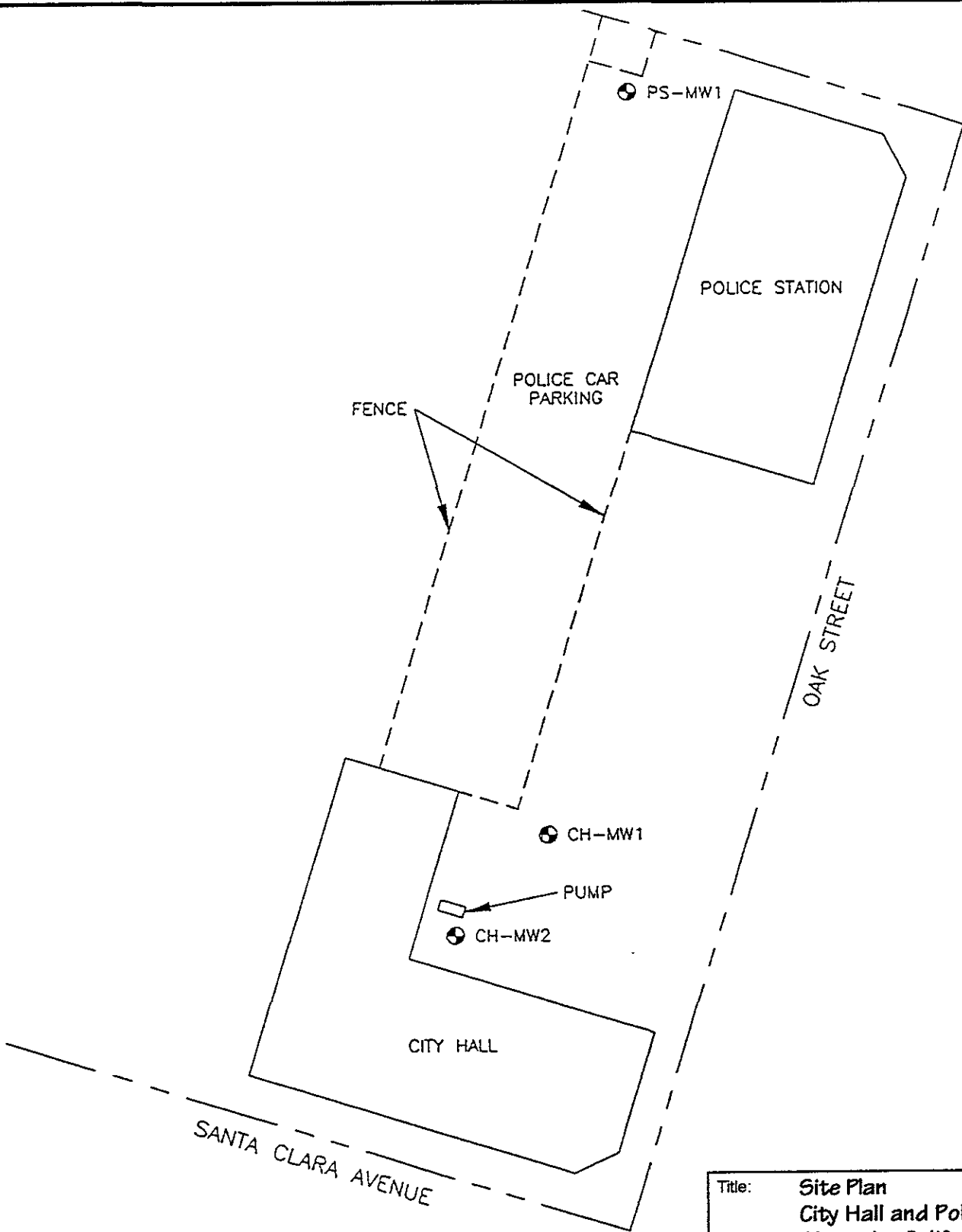
PACIFIC AVENUE

GRAND AVENUE

Legend

FS3-MW1  Groundwater Monitoring Well

Title: Site Plan Fire Station No. 3 Alameda, California	
Figure Number: 2	Scale: Not to Scale
Drawn By: MCR	Date: 1/15/96
Project Number: 96-6209-B.0	
ACC Environmental Consultants 7977 Capwell Drive, Suite 100 Oakland, California 94621 (510) 638-8400 Fax: (510) 638-8404	
	



Legend

CH-MW1 ⊕ Groundwater Monitoring Well

Title: Site Plan City Hall and Police Station Alameda, California	
Figure Number: 3	Scale: Not to Scale
Drawn By: MCR	Date: 1/15/96
Project Number: 96-6209-8.0	
ACC Environmental Consultants 7977 Capwell Drive, Suite 100 Oakland, California 94621 (510) 638-8400 Fax: (510) 638-8404	

JOB NAME: <i>City of Alameda</i>	PURGE METHOD: <i>Manual Bailing</i>
SITE ADDRESS: <i>Various Addresses in Alameda</i>	SAMPLED BY: <i>Eloy Cisneros</i>
JOB #: <i>6209-8.0</i>	LABORATORY: <i>Chromalab</i>
DATE: <i>11/20/96</i>	ANALYSIS: <i>TPHg & BTEX</i>
Onsite Drum Inventory SOIL:	MONITORING <input checked="" type="checkbox"/> DEVELOPING <input type="checkbox"/>
EMPTY: WATER: <i>1 ≈ 50% full at City Hall</i>	SAMPLING <input checked="" type="checkbox"/>

	PURGE		HYDRA READINGS		OBSERVATIONS
	VOLUME				
WELL: <i>FS3-MW1</i>	(Gal)	pH	Temp. (F)	X1000 Cond. un/cm	<input type="checkbox"/> Froth
DEPTH OF BORING: <i>18.98'</i>	<i>2.1</i>		<i>66.7</i>	<i>.29</i>	<input type="checkbox"/> Sheen
DEPTH TO WATER: <i>5.97'</i>	<i>4.2</i>		<i>67.1</i>	<i>.23</i>	<input type="checkbox"/> Odor Type _____
WATER COLUMN: <i>13.01</i>	<i>6.3</i>		<i>67.1</i>	<i>.21</i>	<input type="checkbox"/> Free Product
WELL DIAMETER: <i>2"</i>					Amount _____ Type _____
WELL VOLUME: <i>≈ 2.1 gal</i>					<input type="checkbox"/> Other
COMMENTS: <i>No odor</i>	↓				
	<i>8.4</i>		<i>67.2</i>	<i>.21</i>	
WELL: <i>FS3-MW2</i>	(Gal)	pH	Temp. (F)	X1000 Cond. un/cm	<input type="checkbox"/> Froth
DEPTH OF BORING: <i>17.44'</i>	<i>1.9</i>		<i>65.7</i>	<i>.08</i>	<input type="checkbox"/> Sheen
DEPTH TO WATER: <i>5.74'</i>	<i>3.8</i>		<i>65.2</i>	<i>.08</i>	<input type="checkbox"/> Odor Type _____
WATER COLUMN: <i>11.70</i>	<i>5.7</i>		<i>66.3</i>	<i>.07</i>	<input type="checkbox"/> Free Product
WELL DIAMETER: <i>2"</i>					Amount _____ Type _____
WELL VOLUME: <i>≈ 1.9 gal</i>					<input type="checkbox"/> Other
COMMENTS: <i>No odor</i>	↓				
	<i>7.6</i>		<i>66.3</i>	<i>.08</i>	
WELL: <i>PS-MW1</i>	(Gal)	pH	Temp. (F)	X1000 Cond. un/cm	<input type="checkbox"/> Froth
DEPTH OF BORING: <i>15.70'</i>	<i>1.1</i>		<i>68.1</i>	<i>.41</i>	<input type="checkbox"/> Sheen
DEPTH TO WATER: <i>9.11'</i>	<i>2.2</i>		<i>67.8</i>	<i>.42</i>	<input type="checkbox"/> Odor Type _____
WATER COLUMN: <i>6.59'</i>	<i>3.3</i>		<i>67.8</i>	<i>.43</i>	<input type="checkbox"/> Free Product
WELL DIAMETER: <i>2"</i>					Amount _____ Type _____
WELL VOLUME: <i>≈ 1.1 gal</i>					<input type="checkbox"/> Other
COMMENTS: <i>No odor</i>	↓				
	<i>4.4</i>		<i>67.7</i>	<i>.42</i>	

CHROMALAB, INC.

Environmental Services (SOB)

November 27, 1996

Submission #: 9611252

ACC ENVIRONMENTAL CONSULTANTS

Atten: Misty Kaltreider

Project: CITY OF ALAMEDA
Received: November 20, 1996

Project#: 6209-8.0

re: 3 samples for Gasoline and BTEX compounds analysis.
Method: EPA 5030/8015M/8020A

Sampled: November 20, 1996 Matrix: WATER Run#: 4219

Analyzed: November 25, 1996

Spl#	CLIENT SPL ID	Gasoline (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethyl Benzene (ug/L)	Total Xylenes (ug/L)
108070	FS3-MW2	N.D.	N.D.	N.D.	N.D.	N.D.

Sampled: November 20, 1996 Matrix: WATER Run#: 4219

Analyzed: November 26, 1996

Spl#	CLIENT SPL ID	Gasoline (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethyl Benzene (ug/L)	Total Xylenes (ug/L)
108069	FS3-MW1	N.D.	N.D.	N.D.	N.D.	N.D.


Sampled: November 20, 1996 Matrix: WATER Run#: 4239

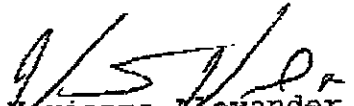
Analyzed: November 26, 1996

Spl#	CLIENT SPL ID	Gasoline (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethyl Benzene (ug/L)	Total Xylenes (ug/L)
108071	PS-MW1	110	N.D.	N.D.	N.D.	N.D.

Note: Hydrocarbon found in Gasoline Range is uncharacteristic of Gasoline Profile. Concentration was quantified by using Gasoline's response factor.

Reporting Limits	50	0.50	0.50	0.50	0.50
Blank Result	N.D.	N.D.	N.D.	N.D.	N.D.
Blank Spike Result (%)	113	105	108	107	112


Kayvan Kimyai
Chemist


Marianne Alexander
Gas/BTEX Supervisor

CHROMALAB, INC.

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

Chain of Custody

DATE 11/20/96 PAGE 1 of 1

Environmental Services (SDB) (DOHS 1094)

PROJ MGR Misty Kaltreider
COMPANY ACC Environmental
ADDRESS 7777 Capwell Dr, Suite 100
Oakland, Ca. 94621

SAMPLERS (SIGNATURE) [Signature] (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/8BTEX (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)	NUMBER OF CONTAINERS	
✓ FS3-MW1	11/20/96	11:00	H ₂ O		X	X																W
✓ FS3-MW2	11/20/96	11:30	H ₂ O		X	X																W
✓ PS-MW1	11/20/96	10:00	H ₂ O		X	X																W

PROJECT INFORMATION		SAMPLE RECEIPT			
PROJECT NAME: <u>City of Alameda</u>	TOTAL NO. OF CONTAINERS <u>9</u>				
PROJECT NUMBER <u>6209-8.0</u>	HEAD SPACE				
P.O.# <u>6209-8.0</u>	REC'D GOOD CONDITION/COLD				
TAT	STANDARD 5-DAY	24	48	72	OTHER
SPECIAL INSTRUCTIONS/COMMENTS:					

RELINQUISHED BY 1. <u>Misty Kaltreider</u> (SIGNATURE) (TIME) <u>Misty Kaltreider</u> 11/20/96 (PRINTED NAME) (DATE) <u>ACC Environmental</u> (COMPANY)	RELINQUISHED BY 2.	RELINQUISHED BY
RECEIVED BY 1. <u>[Signature]</u> 11/20/96 (SIGNATURE) (TIME) <u>[Signature]</u> 11-20-96 (PRINTED NAME) (DATE) <u>Chromalab</u> (COMPANY)	RECEIVED BY 2.	RECEIVED BY (LABORATORY)

CHROMALAB, INC.

Environmental Services (SDB)

January 6, 1997

Submission #: 9612358

ACC ENVIRONMENTAL CONSULTANTS

Atten: Misty Kaltreider

Project: CITY OF ALAMEDA

Project#: 6209-8.0

Received: December 27, 1996

re: 2 samples for TPH - Diesel analysis.

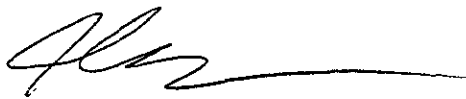
Method: EPA 8015M

Matrix: WATER
Sampled: December 27, 1996 Run#: 4715

Extracted: December 31, 1996
Analyzed: December 31, 1996

Spl#	CLIENT SPL ID	DIESEL (ug/L)	REPORTING LIMIT (ug/L)	BLANK RESULT (ug/L)	BLANK SPIKE (%)	DILUTION FACTOR
112414	PS-MW1	N.D.	50	N.D.	63.5	1
112415	FS3-MW2	N.D.	50	N.D.	63.5	1


Bruce Havlik
Chemist


Alex Tam
Semivolatiles Supervisor

CHROMALAB, INC.

Environmental Services (SDB)

January 3, 1997

Submission #: 9612358

ACC ENVIRONMENTAL CONSULTANTS

Atten: Misty Kaltreider

Project: CITY OF ALAMEDA
Received: December 27, 1996

Project#: 6209-8.0


re: 1 sample for Gasoline and BTEX compounds analysis.
Method: EPA 8015M SW846 8020A Nov 1990


Matrix: WATER

Sampled: December 27, 1996 Run#: 4723

Analyzed: January 2, 1997

Spl#	CLIENT SPL ID	Gasoline (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethyl Benzene (ug/L)	Total Xylenes (ug/L)
112415	FS3-MW2	N.D.	N.D.	N.D.	N.D.	N.D.
Reporting Limits		50	0.50	0.50	0.50	0.50
Blank Result		N.D.	N.D.	N.D.	N.D.	N.D.
Blank Spike Result (%)	115	94.7	92.7	95.4	95.3	


Kayvan Kimyai
Chemist


Marianne Alexander
Gas/BTEX Supervisor

358 112414 - 112415

213916

CHROMALAB, INC.

Environmental Services (SDB) (DOHS 1094)

SUBM #: 9612358 REPT PM
CLIENT: ACC
DUE: 01/06/97
REF #: 31396

Chain of Custody

DATE 12/27/96 PAGE 1 OF 1

ANALYSIS REPORT

PROJ. MGR Misty Kaltreder
 COMPANY ACC Environmental
 ADDRESS 7977 Capwell Dr, Suite 100
Bahland, Ca. 94621

SAMPLERS (SIGNATURE) Elygin (PHONE NO.) (90) 638-8400
 (FAX NO.) (510) 638-8401

SAMPLE ID.	DATE	TIME	MATRIX	PRESERV.	TPH - Gasoline (EPA 5030, 8015)	TPH - Gasoline (5030, 8015) w/BTEX (EPA 602, 8020)	TPH - Diesel, JP8H (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)	NUMBER OF CONTAINERS	
PS-MW1	12/27/96	5:00	H ₂ O	NA																		1
FS3-MW2	11	4:30	H ₂ O	HCL																		4

Added Diesel 12/27/96 - 18:30 EFL

PROJECT INFORMATION

PROJECT NAME: City of Alameda
 PROJECT NUMBER: 6209-8.0
 P.O. #: 6209-8.0

SAMPLE RECEIPT

TOTAL NO. OF CONTAINERS: 5
 HEAD SPACE: _____
 REC'D GOOD CONDITION/COLD: _____
 CONFORMS TO RECORD: _____

TAT: STANDARD 5-DAY 24 48 72 OTHER

SPECIAL INSTRUCTIONS/COMMENTS:

RELINQUISHED BY

1. Elygin 17:00 (SIGNATURE) (TIME)
Elygin 12/27/96 (PRINTED NAME) (DATE)
ACC Environmental (COMPANY)

2. Jeff Lindberg 17:50 (SIGNATURE) (TIME)
Jeff Lindberg 12/27/96 (PRINTED NAME) (DATE)
Chromalab (COMPANY)

RECEIVED BY

1. Jeff Lindberg 17:00 (SIGNATURE) (TIME)
Jeff Lindberg 12/27/96 (PRINTED NAME) (DATE)
Chromalab (COMPANY)

2. Sammprant (SIGNATURE) (TIME)
S. Antone (PRINTED NAME) (DATE)
Chromalab (LAB)



ENVIRONMENTAL
PROTECTION

97 JAN 16 PM 3:16

January 15, 1997

Mr. Lance Bryant
City of Alameda
Maintenance Service Center
1616 Fortmann Way
Alameda, California 94501

RE: Semiannual Groundwater Monitoring Report
City of Alameda Facilities
ACC Project No. 96-6209-8.0

Dear Mr. Bryant:

Enclosed please find the Semiannual Groundwater Monitoring Report for the Police Station and Fire Station No. 3 for the City of Alameda. Groundwater sampling and monitoring was not performed for the wells located at City Hall, because they have been destroyed and for the well located at Fire Station No. 2, because it has not been required since October 1993 in accordance with Ms. Juliet Shin of Alameda County Health Care Services Agency (ACHCSA).

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

Sincerely,

Misty C. Kaltreider
Project Geologist

/mck:mcr

Enclosures

cc: Ms. Juliet Shin, ACHCSA