

A REPORT DOCUMENTING THE PURGING AND SAMPLING OF THREE GROUNDWATER MONITORING WELLS ON THREE CONSECUTIVE QUARTERS AND THE DETERMINATION OF GROUNDWATER GRADIENT FOR NINE CONSECUTIVE MONTHS:

AT:

ALAMEDA FIRE STATION #2 635 PACIFIC STREET ALAMEDA, CALIFORNIA

prepared by:

ENVIRONMENTAL TECHNICAL SERV Helen A. Mawhinney

Senior Environmental Specialist

TABLE OF CONTENTS

1.0	INTRODUCTION
2.0	PREVIOUS ENVIRONMENTAL INVESTIGATIONS
2.1	TANK REMOVAL
2.2	EXCAVATION OF CONTAMINATED SOIL
2.3	ORIGINAL TANK REMOVAL, ANALYTICAL RESULTS
	TABLE 1A, ORIGINAL EXCAVATION, TANK PIT SOIL ANALYTICAL RESULTS, 8/17/92
	TABLE 1B, ADDITIONAL EXCAVATION ANALYTICAL RESULTS, 8/18/92
3.0	SCOPE OF SERVICES
3.1	GROUNDWATER PURGING & SAMPLING
3.2	GROUNDWATER ANALYSIS
3.3	GROUNDWATER ANALYTICAL RESULTS
	TABLE II, GROUNDWATER ANALYTICAL RESULTS 1ST QUARTER SAMPLING, 9/5/92
	TABLE III, GROUNDWATER ANALYTICAL RESULTS 2ND QUARTER SAMPLING, 1/11/934
	TABLE IV, GROUNDWATER ANALYTICAL RESULTS 3RD QUARTER SAMPLING, 5/3/93
3.4	GROUNDWATER GRADIENT5
4.0	REPORT

TABLE OF CONTENTS - continued

APPENDICES

APPENDIX A

MAPS

Figure 1. Site Location Map

Figure 2. Monitoring Well and Former Tank Location Map

Appendix B

Groundwater Analytical Results 1st Quarter, September 5, 1992

Appendix C

Groundwater Analytical Results 2nd Quarter, January 11, 1993

Appendix D

Groundwater Analytical Results 3rd Quarter, May 3, 1993

Appendix E

Groundwater Development Reports

1.0 INTRODUCTION

The following report documents the sampling of three groundwater monitoring wells and the determination of groundwater gradient at the Alameda Fire Station #2, 635 Pacific Street, Alameda, California.

Groundwater was sampled on three consecutive quarters and groundwater gradient determined for nine consecutive months.

The work was performed in reponse to the discovery of petroleum hydrocarbons beneath the site and has been requested by the Alameda County Environmental Health Department, Hazardous Materials Division.

2.0 PREVIOUS ENVIRONMENTAL INVESTIGATIONS

2.1 TANK REMOVAL

On November 15 1991, one 285-gallon gasoline underground storage tank (UST) was removed from the subject site. The tank had previously contained diesel.

One soil sample was collected from the native soil beneath the tank. The sample contained a detectable amount of toluene at 6.5 ppb and total xylenes at 4.4 ppb.

A soil sample was collected from stockpiled fill materials removed from the tank pit. This had a detectable amount of total petroleum hydrocarbons as diesel at 220 ppm and xylenes at 52 ppb.

2.2 EXCAVATION OF CONTAMINATED SOIL

Excavation of contaminated soil was performed on August 17, 1992 and four soil samples were collected. A sample was collected from each sidewall vadose/capillary zone. These samples were designated as FSX-1 and FSX-4. Soil sample FSX2-A was collected subsequent to excavation of material around sample FSX2, and confirms removal of the slight contamination present around FSX2. See Table 1A for analytical results.

2.3 ORIGINAL TANK REMOVAL, ANALYTICAL RESULTS

TABLE 1A

ORIGINAL EXCAVATION SOIL ANALYTICAL RESULTS

Total Petroleum Hydrocarbons as Gasoline with Benzene, Toluene, Ethylbenzene, and Xylenes Total Petroleum Hydrocarbons as Diesel August 17, 1992

Results reported in ppm

Sample #	TPH-G	B	T	E	X	TPH-D
FSX-1	ND	ND	ND	ND	ND	ND
FSX-2	ND	ND	ND	ND	ND	7.1
FSX-3	ND	ND	ND	ND	ND	ND
FSX-4	ND	ND	ND	ND	ND	ND

FSSP1-FSSP4..This stockpile sample was composited with FSSP5 and FSSP6 which was collected on August 18, 1992. See Table 1B for analytical results.

ND=Not detected at lower detection limit for this compound

To ensure that all of the contaminated soil was excavated, additional excavation was performed on August 18, 1992 due to the 7.1 ppm detection of diesel in sidewall sample FSX2. The stockpile sample collected on August 17, FSSP1-FSSP4, was composited with FSSP5 and FSSP6 collected on August 18, 1992 for one analysis. Refer to Table 1B for analytical results.

TABLE 1B

ADDITIONAL EXCAVATION SOIL ANALYTICAL RESULTS

Total Petroleum Hydrocarbons as Gasoline and Diesel

August 18, 1992

Results reported in ppm

Sample #	TPH-g	TPH-d
FSX2-A (2FSX2)*	NA	ND
FSSP1-FSSP6	ND	3.0

NA = Not analyzed for this compound

ND = Not detected at lower detection limit for this compound *As listed on Chain of Custody

An existing 2-inch groundwater monitoring well is located adjacent to and within 1.5' of the tank pit cavity. The well was constructed by Aqua Science Engineering on June 3, 1986. The well was constructed in compliance with Assembly Bill 1362 and the Groundwater Monitoring Guidelines for Hazardous Materials Storage drafted by the Alameda County Water District in May 1984. The well was placed in the assumed local down gradient direction. Gradient direction information differed within the area.

3.0 SCOPE OF SERVICES

3.1 Groundwater Purging & Sampling

The three existing groundwater monitoring wells were purged and sampled on September 5, 1992, January 11, 1993, and May 3, 1993. The wells were purged using a clean stainless steel bailer (1.5" diameter by 3' length). Subsequent to purging each well was sampled using a clean stainless steel bailer. A separate bailer was dedicated to each well for the sampling event. At consistent intervals throughout sampling groundwater parameters (conductivity and temperature) were monitored to evaluate stabilization of the wells.

A water sample was decanted from the sampling bailer into two one-liter amber bottles and two 40-ml volatile organics analysis vials (VOAs) to a positive meniscus eliminating headspace.

The samples were transported to a certified analytical laboratory under chain of custody for analysis.

Refer to Appendix E, Groundwater Development Report.

3.2 Groundwater Analysis

Each groundwater sample was analyzed for total petroleum hydrocarbons as gasoline, benzene, toluene, ethylbenzene, and total xylenes (TPHg & BTEX, using EPA Method 5030/602), and total petroleum hydrocarbons as diesel (TPHd using EPA Method 3510)

3.3 Groundwater Analytical Results

TABLE II

GROUNDWATER ANALYTICAL RESULTS FIRST QUARTER SAMPLING

September 5, 1992

Results reported in ug/L

Sample #	TPH-G	<u>B</u>	T	E	<u>X</u>	TPH-D
MW-2	ND	ND	ND	ND	ND	ND
MW-3	ND	ND	ND	ND	ND	ND
MW-4	ND	ND	ND	ND	ND	ND

ND=Not detected at lower detection limit for this compound

TABLE III

GROUNDWATER ANALYTICAL RESULTS

SECOND QUARTER JANUARY 11, 1993

Results reported in ug/L

Sample #	TPH-G	В	Ţ	E	X	TPH-D
MW-2	ND	ИD	ND	ND	ND	ND
MW-3	ND	ND	ND	ND	ND	ND
MW-4	ND	ND	ND	ND	ND	ND

ND=Not detected at lower detection limit for this compound

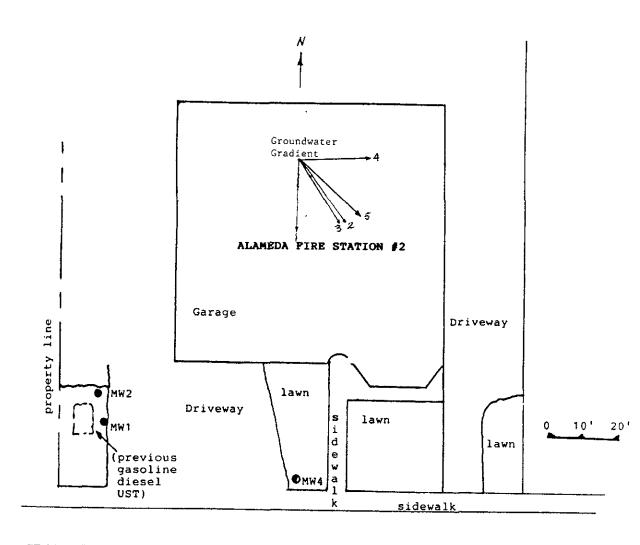
TABLE IV GROUNDWATER ANALYTICAL RESULTS THIRD QUARTER MAY 3, 1993

Results reported in ug/L

Sample #	TPH-G	<u>B</u>	T	E	<u>X</u>	TPH-D
MW-2	ND	ND	ND	ND	ND	ND
MW-3	ND	ND	ND	ND	ND	ND
MW-4	ND	ND	ND	ND	ND	ND

ND=Not detected at lower detection limit for this compound

3.4 Groundwater Gradient



GROUNDWATER GRADIENT DATA

<u>Key#</u>	<u>Date</u>	<u>E4</u>	Flow	<u>Grad.</u>
1 2	10/14/92 11/10/92	3.02 3.06	183 143	.0020
3	12/11/92	3.98	146	.0027
4	01/11/93	5.36	89	.0082
5	05/03/93	6.26	133	.0007

NOTES

- (1) Water elevation in MW4
- (2) Flow Azimuth (°east of N)
- (3) Gradient (ft/ft)

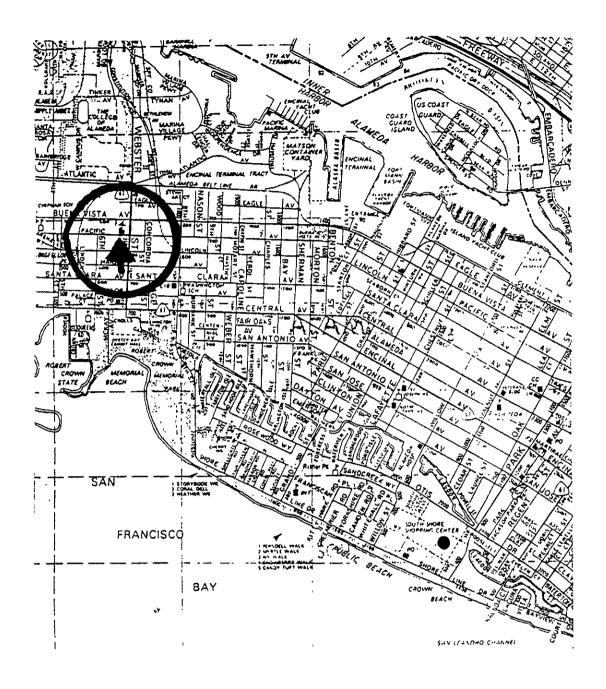
4.0 REPORT

Please forward copies of this report, chain of custody documentation, and laboratory analytical reports to the San Francisco Regional Water Quality Control Board, and the Alameda County Department of Environmental Health Hazardous Materials Division.

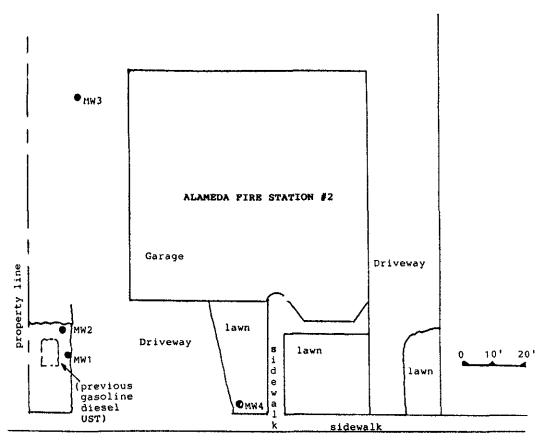
The following addresses have been included for your convenience:

Water Quality Control Board San Francisco Bay Region 2101 Webster Street Room 500 Oakland, CA 94621

Alameda County Department of Environmental Health Hazardous Materials Division 80 Swan Way, Room 200 Oakland, CA 94612 APPENDIX A



	Environmental	ALAMEDA FIRE STATION	Figure 1
(2)	Technical	635 PACIFIC STREET	SITE LOCATION MAP
	S ervices	ALAMEDA, CALIF.	





Environmental	ALAMEDA FIRE STATION	Figure 2
T echnical	635 PACIFIC STREET	MONITORING WELL AND
S ervices	ALAMEDA, CALIF	FORMER TANK LOCATION

APPENDIX B

GROUNDWATER ANALYTICAL RESULTS FIRST QUARTER



Drinking Water
Waste Water
Asbestos
Hazardous Waste
Soil
Calderon Testing
Air

14072 W. Park Avenue Boulder Creek, CA 95006 (408) 338-3053

Laboratory Report

Client
Erwicorusevital Tech. Services 09/29/92
1548 Jacob Ave.
San Jose CA 95118

Sample Site
Alam Fire Dept
635 Pacific Street
Alameda
Alam Fire #2

Date Received 09/05/92

Analysis Requested
Total Hydrocarbons - Gam
Total Hydrocarbons - Dissel
BTEX

Procedure EPA 5030 EPA 3510 EPA 602

Date Analyzed 0명/0품/동안

S&W Ref. #	Client Ref. #	Matrix/Analysis	Concentration	De	tection Limit
2492-ET1-A	MU-2	Water/TPH-G	*	50	
2492-ET1-A	MW-2	Water/TPH-D	*		
492-ET1-A	MH-B	Water/BTEX	*	50	ppb
		Benzene	*	0. 5	ppb
		Toluene	*	0.5	PPb
		Ethylberizerie	*		ppb
		Xylerms	*		ppb
492-ET1-B	MH-4	Hater/TPH-G	*	50	ppb
492-ET1-B	Mi	Hate~/TPH~D	*	50	, . ·
492-ET1-R	M4-4	Hater/BTEX			معوم
		Berizerie	*	0.5	ppb
		Tolumne	*		ppb
		Ethylbenzene	#	0.5	
		Xylwnws	#	0.5	

* No detectable amount @ detection limit

Analyst Signature

O. W. Larray



Drinking Water
Waste Water
Asbestos
Hazardous Waste
Soil
Calderon Testing
Air

14072 W. Park Avenue Boulder Creek, CA 95006 (408) 338-3053

Analysis Requested

Total Hydrocarbons - Gas

Total Hydrocarbons - Diesel

BTEX

Laboratory Report

Client Report Date
Environmental Tech. Services 09/10/92
1548 Jacob Ave.
San Jose CA 95118

Sample Site
Alameda Fire Det.
635 Pacific St.
Alameda, CA
Alam Fire #2

Date Received 09/05/92

Date Analyzed

09/06/92

Procedure
EPA 5030
EPA 3510
EPA 602

S&W Ref. #	Client Ref. #	Matrix/Analysis	Concentration	Detection Limit		
2492-ET1-C	MM-3	Water/TPH-G	19 -	50 ppb		
2492-ET1-C	MW-3	Water/TPH-D	*	50 ppb		
2492-ET1-C	MM-3	Water/BTEX		, F. G		
		Benzene	₩-	0.5 ppb		
		Toluene	*	0.5 ppb		
		Ethylbenzene	₩-	0.5 ppb		
		Xylenes	*	0.5 ppb		

^{*} No detectable amount @ detection limit

Analyst Signature

R. M. Lomoy

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APPENDIX C

GROUNDWATER ANALYTICAL RESULTS SECOND QUARTER

Soil and Water Environmental Laboratory

Drinking Water Waste Water • Asbestos Hazardous Waste — Soil Calderon Testing — Air

14072 W. Park Avenue Boulder Creek, CA 95006 (408) 338-3053

Laboratory Report

Chent Report Date
Einviorrangertal Tech. Services 01/15/93
1548 Jacob Ave.
Slavy Jose CA 95118

Semple Site
Allam Fire Station #2
635 Pacific Ave
Alameda
2MWALAMFIRE2

Date Received 01/12/93

Analysis Requested Total Hydrocarbons - Gas		Procedure EPA 5030		Date Analyzed 01/14/93		
•	arbons - Diesel	EPA 3510				
Total Oil &	Grease	EPA 503e				
TEX		E:PA 602				
S&W Ref. #	Client Ref. #	Motrix/Analysis	Concentration	De	tection Limit	
)123 - ET2-A	MU-2	Water/TPH-G	₩-	50	ppb	
123-ET2-A	MU-2	Hatem/TPH-D	*	50	bbp	
)123-ET2-A	MN-B	Wetnr/TOG	*	5	ppm	
123-ET2-A	MH-2	Western/BTEX				
		Berizerie	*		ppb	
		Tolluene	#-		ppb	
		Ethylbenzene	*	0.5	ppb	
		XYII writes	*	0.5	bbp	
)123-ET2-B		Water/TPH-G	**	50	daq	
0123-ET2-B	MW-3	Water/TPH-D	*		ppb	
123-ET2-B	MH-3	Hater/TOG	*		ppm	
0123-ET2-B	MW-3	以回すほかくおす巨メ				
		Barrzene	*	0.5	ppb	
		Tollware	*	೧. 5	ppb	
		Ethylberizene	*	0.5	pp b	
		Xylenes	*	0.5	ppb	
)123-ET2-C	 MU-4	Wetmr/TPH-8	*	50	daq	
0123-ET2-C	MH-4	Water/TPH-D	*		ppb	
123-ET2-C	MH-4	Water/TOG			PPM	
)123-ET2-C	MH-4	Water/RTEX			- 	
		Berre	₩.	0.5	ppb	
		Tolluerse	*		ppb	
		Ethylberizene	*		ppb	
		XYImmes	*		ppb	

* No detectable amount & detection limit

Amalyst Signature

R. H. Lamon

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APPENDIX D

GROUNDWATER ANALYTICAL RESULTS
THIRD QUARTER



Drinking Water
Waste Water • Asbestos
Hazardous Waste — Soil
Calderon Testing — Air

14072 W. Park Avenue Boulder Creek, CA 95006 (408) 338-3053

Laboratory Report

Client

Envionmental Tech. Services 05/13/93

1548 Jacob Ave.

San Jose CA 95118

Sample Site

Date Received/05/93

Alameda Fire Station #2

Park Street, Alameda

AFS #2

Analysis Requested

Procedure

Date Analyzed / 05/06/93

Total Hydrocarbons - Gas Total Hydrocarbons - Diesel EPA 5030 EPA 3510 EPA 602

BTEX

&W Ref. #	Cliant Ref. #	Matrix/Ahalysis	Concentration	Detection L	-lmit
1253-ET2-	-A MW-2	Water/TPH-G		* 50	ppb
1253-ET2-		Nater/TPH-D			ppb
1253-ET2-	-A MW-2	Water/BTEX			
		Benzene		* 0,5	ppb
		Toluene		* 0.5	ppb
		Ethylbenzer	3 @	* 0,5	ppb
		Xylenes		* 0.5	bbp
1253-ET2-	-E MW-3	Water/TPH-G		* 50	dqq
1253-ET2-		Water/TPH-D			ppb
1253-ET2-		Water/BTEX			F1 F1 111
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	E 114 5	Benzene		* 0.5	ppb
		Toluene			ppb
		Ethylbenzer	1 æ		ppb
		Xylenes			ppb
		Water/TPH-B		* 50	dag
1253-ET2-					ppb bpb
1253-ET2		Water/TPH-D Water/BTEX		- 50	hpu
1253-ET2-	-C MW-4	Water/Bick Benzene		* 0.5	gag
		Toluene			i ppb
		Ethylbenze	~=		ppb dqq
		Xylenes	1 1 765		ppb

* No detectable amount @ detection limit

Analyst Signature

Or. D. Komon

Soil and Water Environmental Laboratory

14072 West Park Avenue Boulder Creek, CA 95006

(408) 338-3053/4466

CHAIN - OF - CUSTODY

roject Number AFS#2 Vitnessing Agency/	Site N	ame and Ad	ldress Park 5	t, Alameda # 2	Type and Number of	Δ	unalys	is Rec	juired		Laboratory ID	Comments
	Inspector Na	<i>1EOA</i> ne and Dat	FIRE S	TATION	Containers	TPH-G + BTEX	TPH-D + BHIX				Condition of Samples	
ample ID Da	ate Time	Matrix	Sample Location			TP.H	HH	ğ			1 - Good 2 - See Reverse	
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APPENDIX E GROUNDWATER DEVELOPMENT REPORTS

MONITORING WELL SAMPLING DATA MW-2

Project Name:		·	Well#	
ALAMEDA FIRE ST	CATION		MW-2	
DATE: May 3, 1	.993			
NAME: Mawhinney			Time Beg 12:29p	
DEPTH OF WELL	DEPTH	TO WAT	ER	WELL DIAM.
17.7'	4	.87′		2"
Time Gallons	<u>Salinity</u>	рН	Temp.	Cond.
12:34 1	*	*	63.5 F	5.53
12:38 3	*	*	63.7 F	5.34
12:42 5	*	*	63.7 F	5.34
12:50 7	*	*	63.7 F	5.34
Volume Evacuated	Purg Equi		Sampling Equip.	
7 gallons	Stainles Steel Bai			Stainless Steel Bailer
Depth of Well U	pon Completion	of Sam	pling:	
17.7' Good Rec	harge			
Sheen	Floating Prod	uct	Sample Co	olor Odor
no	no		gold	no
Sediment/Foreig	n Matter: ver	y silty		
Sample ID#	Analy	sis		Laboratory
MW-2	TPHg, BTEX	, TPHd		S & W Lab
Sample Containe	rs	····	· · · · · · · · · · · · · · · · · · ·	······································
2/40-ml VOAs 2 amber one lite	er bottles			

MONITORING WELL SAMPLING DATA MW-3

Project	Name:			Well#	····	
ALAMEDA	A FIRE STATI	ION		MW-3		
DATE:	May 3, 1993	3		**************************************		
NAME: Mawhinr	ney			Time Bec	an:	
DEPTH C	F WELL	DEPTH	TO WAT	PER	WEL	L DIAM.
17.62'		į	5.54′			2"
Time	<u>Gallons</u>	Salinity	рН	Temp.		Cond.
1:05	1	*	*	64.7 F		7.62
1:08	3	*	*	64.4 F		7.84
1:12	5	*	*	64.2 F		12.1
1:16	7	*	*	59.3 F		12.94
Volume Evacuat	:ed	Purg Equi		7-7		Sampling Equip.
7 gallo	ons	Stainless Steel Bail	_			inless Bailer
Depth t	o Water Upo	on Completion	of Sa	mpling:		
17.7′ a	t completion	n				
Sheen	<u>Fl</u>	oating Produ	ıct	Sample C	olor	Odor
no		no		gold		no
Sedimen	t/Foreign M	atter: very	littl	e silt	<u> </u>	
Sample	ID#	Analys	is		Labo	ratory
MM-3		TPHg, BTEX,	TPHd		S &	W Lab
Sample	Containers	· · · · · · · · · · · · · · · · · · ·			····	
2/40-ml 2 amber	VOAs one liter	bottles				

MONITORING WELL SAMPLING DATA MW-4

Project	Name:			Well#	!				
ALAMEDA	FIRE STAT	PION		MW-4					
DATE: M	ay 3, 199	93							
NAME: Mawhinne	у		<u>Time Began:</u> 11:41						
DEPTH OF	WELL	DEPTH	TO WAT	ER	WELL DIAM.				
14.8		4	. 8		2"				
Time o	Gallons	Salinity	На	Temp.	Cond.				
11:48	1	*	*	61.2 F	5.61				
11:54	3	*	*	60.7 F	7.09				
12:00	5	*	*	60.7 F	7.30				
12:05	7	*	*	60.7 F	7.29				
12:24	9	*	*	60.7 F	7.29				
Volume Evacuated	<u>d</u>	Purg Eguir		· · · · · · · · · · · · · · · · · · ·	Sampling Equip.				
9 gallons	5	Stainless Steel Bail		S	Stainless teel Bailer				
Depth of	Well Upo	n Completion	of Sam	pling:	11.11				
19.00' I	Recharge	good							
Sheen	F	loating Produ	ıct	Sample Co	lor <u>Odor</u>				
no		no		gold	no				
Sediment,	/Foreign	Matter: very	littl	e silty					
Sample II	<u>D#</u>	Analys	sis		Laboratory				
MW-4		TPHg, BTEX,	TPHd		S & W Lab				
Sample Co	ntainers								
2/40-ml V 2 amber o		bottles							

MONITORING WELL SAMPLING DATA MONITORING WELL NO.1

		MONITORING	METE MO'I	
PROJECT	NAME:		WELJ	<u></u> #
ALAMEDA	FIRE STATIO	N #2	MW-	-1
DATE:				
	JANUARY 1	1, 1993		
NAME:			TIMI	BEGAN:
Helen Ma	whinney		12:4	15
DEPTH OF	WELL(FT.)	DEPTH OF	WATER(FT.)	WELL DIAM.
19.2		5.	7	2"
TIME	<u>GALLONS</u>	На	TEMP.	COND.
10:45	1	7.3	61.0	1.49
10:50	2	7.2	61.0	1.48
10:55	3	7.3	61.0	1.49
11:05	4	7.2	59.0	1.49
11:15	5	7.2	61.0	1.49
11:19	7	7.2	61.0	1.49
VOLUME EVACUATE	2	PURGING EQU	IP. SA	MPLING EQUIP.
8 gallons	5	Stainless Stailer	·	inless Steel ler
DEPTH TO	WATER UPON	COMPLETION (OF SAMPLING	
Not meas	ured. Recha	arge very god	od	
SHEEN	FLOATIN	IG PRODUCT	SAMPLE CO	LOR ODOR
no	no)	golđ	no
SEDIMENT	FOREIGN MAT	TER: Sample	clear	
SAMPLE II	D#	ANALYSIS	LABO	RATORY
MW-1		TPHg, BTEX	S &	W Lab.
SAMPLE CO 3/ 40-ml				VATIVE 24 hr.analysis)

MONITORING	WELL	SAMPLING	DATA
MONTTO	DRING	WELL NO.	2

	MONI	FORING WELL S. MONITORING W		ГА
PROJECT	NAME:		WE)	LL #
ALAMEDA	FIRE STATION	N #2	М	√ -2
DATE:	JANUARY 1	L, 1993	T. 11	
NAME:			TII	ME BEGAN:
Helen Ma	whinney		11	: 25
DEPTH OF	WELL(FT.)	DEPTH OF I	WATER (FT.)	WELL DIAM.
17.7		5.3		2 ¹¹
TIME	GALLONS	На	TEMP.	COND.
11:25	1	7.96	60.4	3.47
11:30	2	7.94	60.5	3.47
11:35	3	7.93	60.5	3.48
11:40	4	7.90	60.5	3.51
11:45	5	7.90	60.4	3.53
11:50	7	7.90	60.4	3.53
VOLUME EVACUATE	D	PURGING EQUII	P. <u>s</u>	SAMPLING EQUIP.
8 gallon	S	Stainless Ste Bailer		Stainless Steel Bailer
DEPTH TO Not meas	WATER UPON ured.	COMPLETION OF	F SAMPLING	
SHEEN no		IG PRODUCT	<u>SAMPLE</u> go	COLOR ODOR no
SEDIMENT	/FOREIGN MAT	TER: sample o	clear	
SAMPLE I MW-2	D#	ANALYSIS TPHg, BTEX		ORATORY W Lab
SAMPLE C	ONTAINERS VOAS			RVATIVE 24 hr. analysis)

MONITORING WELL SAMPLING DATA MONITORING WELL NO.3

PROJECT N	IAME:		WELL #					
ALAMEDA F	TRE STATION	1 #2	М	MW-3				
DATE:	JANUARY 11	, 1993						
NAME:			TI	ME BEGAN:				
Helen Maw	hinney		12	: 00p				
DEPTH OF	WELL(FT.)	DEPTH OF I	WATER (FT.)	WELL DIAM.				
17.6		6.0		2"				
LIME	GALLONS	На	TEMP.	COND.				
12:00	1	7.68	57.1	1.53				
12:05	2	7.68	57.3	1.52				
L2:10	3	7.67	57.3	1.52				
12:15	4	7.63	57.4	1.53				
12:20	5	7.65	57.5	1.53				
L 2: 25	7	7.65	57.5	1.53				
OLUME VACUATED		PURGING EQUII	<u>.</u>	SAMPLING EQUIP.				
gallons		Stainless Ste Bailer		tainless Steel ailer				
EPTH TO	WATER UPON	COMPLETION OF	SAMPLING					
ot measu	red. Recha	rge very good	ı					
HEEN	FLOATIN	G PRODUCT	SAMPLE (COLOR ODOR				
10	no		gold	no				
EDIMENT/	FOREIGN MAT	TER: very lit	tle silt					
AMPLE ID	#	ANALYSIS	LAF	BORATORY				
IM−3		TPHg, BTEX	S 8	W Lab.				
AMPLE CO	NTAINERS VOAS			ERVATIVE (24 hr.analysis				

MONITORING WELL SAMPLING DATA/MW-2

Project	Name:		Well#		
ALAMEDA	FIRE STATIO	ON# 2		HW-2	
Date:	Septem	ber 4, 199	92		
Name:			Time B	P.7.9.9.	
Mawhinn	ey		3:12	SAGH!	
DEPTH O	P WELL(ft.)	משפת			
17.7	, , ,	DEFIN	TO WATER(ft. 7.33		
Time	Gallons			2†	•
		Salinit	Y pH	Temp.	Cond.
3:12	1	.05	7.5	25 C	1.46
3:30	3	.05	7.3	23 C	1.00
3:41	5	.04	7.0	23 C	1.26
3:54	8	.04	7.3	23 C	
4:11	10	.04		_	1.20
		•••	7.3	23 C	1.24
Volume	Purgin	g Equip.	Con		
Evacuate	ed		Sala	pling Equi	p.
10 gallo	ons Stainle	ess Steel	Bailer Sta	inless Ste	el Bailer
Depth to	Water Upon	Completio	on of Samplin	a	
iot meas	_	charge ver		3	
heen	Floating	Product	Sample	Color	Odor
no	no		gold		
ediment	/Foreign Mat	ter: samp	le clear	·	no
ample II		lysis			
W-2			I	aboratory	
		g, BTEX	S	& W Lab.	
ambie Co	ontainers		Pres	ervative	
/ 40-ml					

MONITORING WELL SAMPLING DATA/MW-3

Project	name:		Well#				
ALAMEDA 1	FIRE STATI	ON# 2	MW- 3				
Date:	Septem	ber 4, 1992					
Name:			Time Began:				
Mawhinney	7		4:29				
DEPTH OF	WELL(ft.)	DEPTH TO	WATER(ft.)	tator r			
17.73		7.93		WELL DIAM.			
Time	Gallons	Salinity					
		AGTTHITCA	Hq	Temp.	Cond.		
12:21	1	.04	7.6	26 C	1.25		
12:34	3	.05	7.5	25 C	1.38		
12:48	5	.04	7.3	23 C	1.26		
1:01	8	.04	7.2	24 C	1.26		
1:15	10	.04	7.3	23 C	1.24		
Volume Evacuated	Purgin	g Equip.	Sampling Equip.				
10 gallons		ess Steel Bai	ler Stain	nless Ste	el Baile		
Depth to W	Water Upon	Completion o	f Sampling				
Recharge v			• • • •				
heen	Floating	Product	Sample Color		Odor		
no 	no		gold		no		
ediment/r	oreign Mat	ter: sample o	clear				
ample ID#	Ana	lysis	Laboratory				
W-3	TPH	g, BTEX	S & W Lab.				
ample Con	tainers						
/ 40-ml VOAs			Preservative None (24 hr analysis)				

MONITORING WELL SAMPLING DATA/MW-4

Project Name:			Well#			
ALAMEDA FIRE STATION		ON# 2		W-4		
Date:	Septem	ber 4, 1992		· · · · · · · · · · · · · · · · · · ·		
Name:			Time Be	70.00		
Mawhinney			4:29	4 311 :		
DEPTH OF	WELL(ft.)	DEPTH TO	WATER(ft.)	Wmr v		
19.81			.26	WELL DIAM.		
Time	Gallons	Salinity	На		·	
2:01	1		-	Temp.	Cond.	
2:16	3	.04	7.6	26 C	1.25	
2:25		.05	7.5	25 C	1.38	
	5	.04	7.3	23 C	1.26	
2:45	8	.04	7.2	24 C	1.26	
3:01	10	.04	7.3	23 C	1.24	
Volume Purging Equip.			Sampling Equip.			
.0 gallons	Stainle	ess Steel Ba:		nless Ste		
epth to W	ater Upon	Completion o	of Comple	11622 206	er ggilei	
echarge v	ery good		or sembring			
heen	Floating	Product	Cample			
no	no		Sample C	olor	Odor	
ediment/Fo		ter: sample	gold		no	
mple To			clear			
imple ID#	Analysis		Lab	pratory		
V-4		g, BTEX	S & W Lab.			
ample Containers / 40-ml VOAs			Preservative None (24 hr analysis)			