



ENVIRONMENTAL
PROTECTION

September 27, 1995

95 OCT -6 PM 2:44

Mr. Steve Chrissanthos
Alameda Cellars
1702 Lincoln Avenue
Alameda, CA 94501

RE: Results of Quarterly Groundwater Sampling at
2425 Encinal Avenue, Alameda, California

Dear Mr. Chrissanthos:

The enclosed report describes the materials and procedures used during the quarterly groundwater investigation performed at 2425 Encinal Avenue, Alameda, California. This work was performed to evaluate the areal extent of groundwater impact.

Analysis of the groundwater samples from monitoring wells MW-1, MW-2a, MW-3, and MW-4 indicated elevated concentrations of hydrocarbons. Analytical results of groundwater samples from monitoring wells MW-5 and MW-6 indicated below detectable levels of constituents indicating a lateral extent of groundwater impact.

If you have any comments regarding this report, please call me.

Sincerely,

Misty C. Kaltreider
Geologist

cc: Ms. Juliet Shin - Alameda County Health Care Services
Division of Hazardous Materials

QUARTERLY GROUNDWATER INVESTIGATION

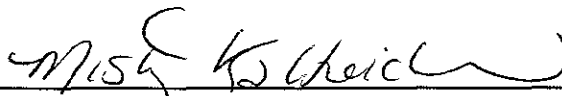
2425 ENCINAL AVENUE
ALAMEDA, CALIFORNIA

Job Number 6039-5

September 1995

Prepared for:
Mr. Steve Chrissanthos
Alameda Cellars
1702 Lincoln Avenue
Alameda, CA 94501

Prepared by:



Misty Kaltreider
Project Geologist

Reviewed by:



David R. DeMent, RG #5874
Registered Geologist

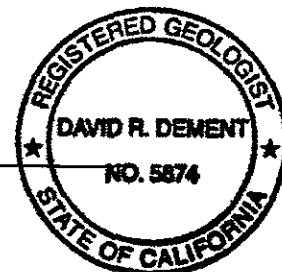


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- Figure 2 Groundwater Gradient Map

- Appendix A Notes of Well Sampling
- Appendix B Analytical Results/Chain of Custody

1.0 INTRODUCTION

This report presents the procedures and findings of the quarterly groundwater investigation conducted by ACC Environmental Consultants, Inc., (ACC) on behalf of Mr. Steve Chrissanthos and Alameda Cellars, site owner at 2425 Encinal Avenue, Alameda, California. The project objective, as described in the Work Plan prepared on November 5, 1993, was to evaluate the extent of groundwater impact from the previous underground storage of gasoline.

2.0 BACKGROUND

The site is presently occupied by Alameda Cellars, a commercial liquor store. In March, 1990, two 10,000-gallon gasoline tanks were removed from the above-referenced site. Analysis of the soil samples collected from beneath the two gasoline tanks indicated up to 710 parts per million (ppm) of Total Petroleum Hydrocarbons as gasoline (TPHg). Soil samples collected from beneath the diesel tank indicated less than detectable levels of TPH as diesel (TPHd).

In December 1992, five borings were drilled onsite. Three of the borings were converted into monitoring wells MW-1, MW-2a, and MW-3. Analytical results of the soil collected during drilling and soil sampling indicated a maximum soil concentration of TPHg as 1,365 ppm. Benzene concentration was 18.9 ppm in the same sample.

Initial groundwater samples collected in January, 1993, from the monitoring wells indicated a maximum TPHg concentration of 5,680 ppb (MW-2a) and a maximum benzene concentration of 1,560 ppb (MW-1).

Additional soil investigation was conducted in May, 1993 to evaluate petroleum hydrocarbon impact in the soil and groundwater. Findings of the additional investigation indicated the lateral extent of hydrocarbon impacted soil did not appear to extend beyond the property boundaries along the northern, western, and eastern sides. However, along the southern side, the impacted soil appears to extend into Park and Encinal Avenues. Field observations made during the additional investigation and soil sample analysis indicated impacted soil exists primarily around the former tank excavation and the former dispenser island. The vertical limit of hydrocarbons in the soil is estimated to occur at the present groundwater table.

Analysis of "grab" groundwater samples collected from borings drilled during the additional investigation indicate the residual hydrocarbons from the former tank excavation and dispenser island are migrating offsite via the groundwater.

This preliminary site assessment was conducted to further evaluate the groundwater impact from a gasoline release onsite upon request of Alameda County Health Care Services - Hazardous Materials Division.

In December 1993, three additional monitoring wells (MW-4, MW-5, and MW-6) were installed to further evaluate the extent of hydrocarbon groundwater impact. Laboratory analysis of the soil collected from each boring indicated below detectable levels of constituents which verifies the lateral extent of soil impact.

Laboratory analysis of the groundwater samples collected from monitoring well MW-5 and MW-6 indicated below detectable levels of constituents evaluated. The groundwater results indicated a lateral extent of groundwater impact. Laboratory analysis of groundwater collected from monitoring well MW-4 indicated detectable levels of constituents. The location of the southern edge of the groundwater impact is just off site to the south, as results from monitoring well MW-4 indicate. This "cross" gradient movement is attributed to the relatively flat gradient and possible recharge into the excavated area.

3.0 FIELD PROCEDURES

3.1 Groundwater Sampling

Groundwater samples were collected on September 14, 1995 from monitoring wells MW-1, MW-2a, MW-3, MW-4, MW-5, and MW-6. Prior to groundwater sampling, the depth to the surface of the water table was measured from the top of the PVC casing using a Solinst Water Level Meter. Information regarding elevations and groundwater level measurements for each well is summarized in Table 1.

TABLE 1 - GROUNDWATER DEPTH INFORMATION

Groundwater Depth MW-1 Elevation of Top of Casing: 27.61 MSL		
Date Sampled	Depth to Groundwater (in feet)	Groundwater Elevation MSL
01/09/93	6.75	20.86
02/09/93	6.41	21.20
03/10/93	6.34	21.27
04/12/93	6.52	21.09
05/17/93	7.38	20.23
06/28/93	8.42	19.19
07/13/93	8.68	18.93
08/10/93	8.25	19.36
09/10/93	8.73	18.88
10/12/93	9.04	18.57

Groundwater Depth MW-1 Elevation of Top of Casing: 27.61 MSL		
Date Sampled	Depth to Groundwater (in feet)	Groundwater Elevation MSL
12/20/93	7.87	19.74
03/18/94	6.96	20.65
04/08/94	7.69	19.92
06/22/94	8.55	19.06
12/07/94	6.92	20.69
03/16/95	5.54	22.07
06/23/95	7.17	20.44
09/14/95	8.17	19.44

Groundwater Depth MW-2a Elevation of Top of Casing: 27.98 MSL		
Date Sampled	Depth to Groundwater (in feet)	Groundwater Elevation MSL
01/09/93	7.06	20.92
02/09/93	6.63	21.35
03/10/93	6.57	21.41
04/12/93	6.77	21.21
05/17/93	7.61	20.37
06/28/93	8.68	19.30
07/13/93	8.94	19.04
08/10/93	8.66	19.32
09/10/93	8.95	19.03
10/12/93	9.36	18.62
12/20/93	8.24	19.74
03/18/94	7.80	20.18
04/08/94	7.67	20.31
06/22/94	7.82	20.16

Groundwater Depth MW-2a Elevation of Top of Casing: 27.98 MSL		
Date Sampled	Depth to Groundwater (in feet)	Groundwater Elevation MSL
12/07/94	7.23	20.75
03/16/95	5.62	22.36
06/23/95	7.35	20.63
09/14/95	8.41	19.57

Groundwater Depth MW-3 Elevation of Top of Casing: 27.89 MSL		
Date Sampled	Depth to Groundwater (in feet)	Groundwater Elevation MSL
01/09/93	6.68	21.21
02/09/93	6.25	21.64
03/10/93	6.18	21.71
04/12/93	6.41	21.48
05/17/93	7.37	20.52
06/28/93	8.47	19.42
07/13/93	8.74	19.15
08/10/93	8.45	19.44
09/10/93	8.52	19.37
10/12/93	9.20	18.69
12/20/93	7.95	19.94
03/18/94	6.60	21.29
04/08/94	7.70	20.19
06/22/94	8.62	19.27
12/07/94	6.92	20.97
03/16/95	5.25	22.64
06/23/95	6.99	20.90
09/14/95	8.11	19.78

Groundwater Depth MW-4 Elevation of Top of Casing: 26.97 MSL		
Date Sampled	Depth to Groundwater (in feet)	Groundwater Elevation MSL
12/20/93	7.25	19.72
03/18/94	6.64	20.33
04/08/94	7.12	19.85
06/22/94	7.96	19.01
12/07/94	6.32	20.65
03/16/95	5.08	21.89
06/23/95	6.65	20.32
09/14/95	7.61	19.36

Groundwater Depth MW-5 Elevation of Top of Casing: 27.34 MSL		
Date Sampled	Depth to Groundwater (in feet)	Groundwater Elevation MSL
12/20/93	8.01	19.33
03/18/94	7.80	19.54
04/08/94	7.82	19.52
06/22/94	8.51	18.83
12/07/94	7.08	20.26
03/16/95	5.72	21.62
06/23/95	7.38	19.96
09/14/95	8.27	19.07

Groundwater Depth MW-6 Elevation of Top of Casing: 28.03 MSL		
Date Sampled	Depth to Groundwater (in feet)	Groundwater Elevation MSL
12/20/93	8.00	20.03
03/18/94	---	---
04/08/94	7.72	20.31
06/22/94	8.68	19.35
12/07/94	---	---
12/13/94	6.73	21.30
03/16/95	5.04	22.99
06/23/95	6.90	21.13
09/14/95	8.07	19.96

Notes: All measurements in feet
MSL = Mean Sea Level

After water-level measurements were collected, each onsite well was purged by hand using a designated disposable Teflon bailer for each well. Groundwater pH, temperature and electrical conductivity were monitored during well purging. Each well was considered to be purged when these parameters stabilized. Three to four well volumes were removed to purge each well. Worksheets of conditions monitored during purging are attached in Appendix A.

After the groundwater level had recovered to a minimum of approximately 80 percent of its static level, water samples were obtained using designated disposable Teflon bailers. Two 40 ml VOA vials, without headspace, were filled from the water collected from each monitoring well. The samples were preserved in a pre-chilled insulated container and submitted to Chromalab Inc. under chain of custody protocol. Laboratory results with chain of custody forms are attached in Appendix B.

4.0 FINDINGS

4.1 Analytical Results - Groundwater

One groundwater sample each, from monitoring wells MW-1, MW-2a, MW-3, MW-4, MW-5, and MW-6, was collected and submitted for analysis for TPHg by EPA test method 5030 and BTEX by EPA test method 602. Analysis results from the groundwater samples are summarized in Table 2 and Figure 2. Analytical results are attached in Appendix B.

TABLE 2 - Analytical Results - Groundwater

MW-1					
Date Collected	TPHg (ug/L)	Benzene (ug/L)	Toluene (ug/L)	E. Benzene (ug/L)	Xylenes (ug/L)
01/09/93	5,360	1,560.0	1,026.6	641.0	2,706.2
04/12/93	12,000	750.0	100.0	500.0	1,400.0
07/13/93	720	119.6	32.7	70.8	262.0
10/12/93	8,400	420.0	39.0	280.0	880.0
12/20/93	5,200	270.0	58.0	170.0	590.0
03/18/94	18,000	570.0	180.0	270.0	1,500.0
04/08/94	NT	NT	NT	NT	NT
06/22/94	4,800	160.0	56.0	130.0	310.0
12/07/94	9,100	530.0	200.0	350.0	1,300.0
03/16/95	230	15.0	4.5	9.4	38.0
06/23/95	2700	170.0	19.0	40.0	180.0
09/14/95	1700	160.0	12.0	69.0	100.0

MW-2a					
Date Collected	TPHg (ug/L)	Benzene (ug/L)	Toluene (ug/L)	E. Benzene (ug/L)	Xylenes (ug/L)
01/09/93	5,680	801.6	598.6	840.2	2,196.1
04/12/93	12,000	460.0	110.0	240.0	1,600.0
07/13/93	550	145.2	47.5	126.8	127.4
10/12/93	2,000	280.0	17.0	100.0	120.0
12/20/93	3,300	450.0	40.0	200.0	350.0
03/18/94	7,900	370.0	53.0	190.0	530.0
04/08/94	NT	NT	NT	NT	NT
06/22/94	3,800	420.0	37.0	140.0	290.0
12/07/94	6,800	640.0	100.0	370.0	950.0
03/16/95	6,500	590.0	96.0	360.0	1,000.0
06/23/95	4,300	170.0	58.0	33.0	810.0
09/14/95	1,700	270.0	17.0	76.0	160.0

MW-3					
Date Collected	TPHg (ug/L)	Benzene (ug/L)	Toluene (ug/L)	E.Benzene (ug/L)	Xylenes (ug/L)
01/09/93	<50	<0.5	<0.5	<0.5	<0.5
04/12/93	1,500	95.0	30.0	46.0	85.0
07/13/93	540	18.3	106.2	75.7	128.0
10/12/93	3,500	290.0	230.0	210.0	460.0
12/20/93	690	31.0	10.0	31.0	25.0
03/18/94	450	9.6	11.0	5.5	23.0
04/08/94	NT	NT	NT	NT	NT
06/22/94	2,500	150.0	130.0	81.0	280.0
12/07/94	420	16.0	8.3	26.0	37.0
03/16/95	490	19.0	2.7	24.0	46.0
06/23/95	860	41.0	5.4	32.0	110.0
09/14/95	720	43.0	3.7	50.0	86.0

MW-4					
Date Collected	TPHg (ug/L)	Benzene (ug/L)	Toluene (ug/L)	E.Benzene (ug/L)	Xylenes (ug/L)
12/20/93	580	2.3	<0.5	1.4	1.1
03/18/94	2,100	11.0	1.5	2.3	6.0
04/08/94	NT	NT	NT	NT	NT
06/22/94	1,600	39.0	7.5	13.0	16.0
12/07/94	2,100	82.0	9.6	4.7	14.0
03/16/95	3,400	140.0	12.0	45.0	29.0
06/23/95	1,800	140.0	13.0	13.0	28.0
09/14/95	3,900	250.0	6.1	3.8	11.0

MW-5					
Date Collected	TPHg (ug/L)	Benzene (ug/L)	Toluene (ug/L)	E. Benzene (ug/L)	Xylenes (ug/L)
12/20/93	<50	<0.5	<0.5	<0.5	<0.5
03/18/94	<50	<0.5	<0.5	<0.5	<0.5
04/08/94	NT	NT	NT	NT	NT
06/22/94	<50	<0.5	<0.5	<0.5	<0.5
12/07/94	<50	<0.5	<0.5	<0.5	<0.5
03/16/95	<50	<0.5	<0.5	<0.5	<0.5
06/12/95	<50	<0.5	<0.5	<0.5	<0.5
09/14/95	<50	<0.5	<0.5	<0.5	<0.5

MW-6					
Date Collected	TPHg (ug/L)	Benzene (ug/L)	Toluene (ug/L)	E. Benzene (ug/L)	Xylenes (ug/L)
12/20/93	<50	<0.5	<0.5	<0.5	<0.5
03/13/94	NT	NT	NT	NT	NT
04/08/94	<50	<0.5	<0.5	<0.5	<0.5
06/22/94	<50	<0.5	<0.5	<0.5	<0.5
12/13/94	<50	<0.5	<0.5	<0.5	<0.5
03/16/95	<50	<0.5	<0.5	<0.5	<0.5
06/23/95	<50	<0.5	<0.5	<0.5	<0.5
09/14/95	<50	<0.5	<0.5	<0.5	<0.5

Note: TPHg = Total Petroleum Hydrocarbons as gasoline
 ug/L = parts per billion (ppb)
 E. Benzene = Ethylbenzene
 NT = Not Tested

4.2 Groundwater Gradient

Prior to calculating the groundwater gradient, elevations for the onsite monitoring wells were surveyed by Ron Archer Civil Engineer, Inc. to an accuracy of one-hundredth of a foot. The well elevation was surveyed at the top of the PVC well casing. The elevations of the monitoring wells were established relative to a nearby benchmark located in the curb on the northwest corner of the intersection of Park and Encinal Avenues in Alameda, California.

The groundwater gradient was calculated using the onsite monitoring wells. The location of the wells is shown on Figure 1 - Site Plan. Groundwater elevations were collected from monitoring wells MW-1, MW-2a, MW-3, MW-4, MW-5, and MW-6 on September 14, 1995 and are illustrated in Figure 3. The gradient was evaluated by triangulation using the elevation of the potentiometric surface measured with respect to Mean Sea Level datum. Groundwater flow direction and gradient is consistent with previous sampling events as summarized in Table 3.

TABLE 3 - Historic Groundwater Gradient

Date Monitored	Gradient (foot/foot)	Direction
01/09/93	0.01	west
02/09/93	0.01	southwest
03/10/93	0.01	west/southwest
04/12/93	0.01	west/southwest
05/17/93	0.01	south/southwest
06/28/93	0.01	southwest
07/13/93	0.01	southwest
08/10/93	0.004	west
09/10/93	0.02	southwest
10/12/93	0.004	southwest
12/20/93	0.01	west
03/18/94	0.02	west
04/08/94	0.01	west
06/22/94	0.03	south/southwest
12/07/94	0.01(average)	west/southwest
03/16/95	0.01	southwest
06/23/95	0.01-0.013 (varies)	southwest
09/14/95	0.008	southwest

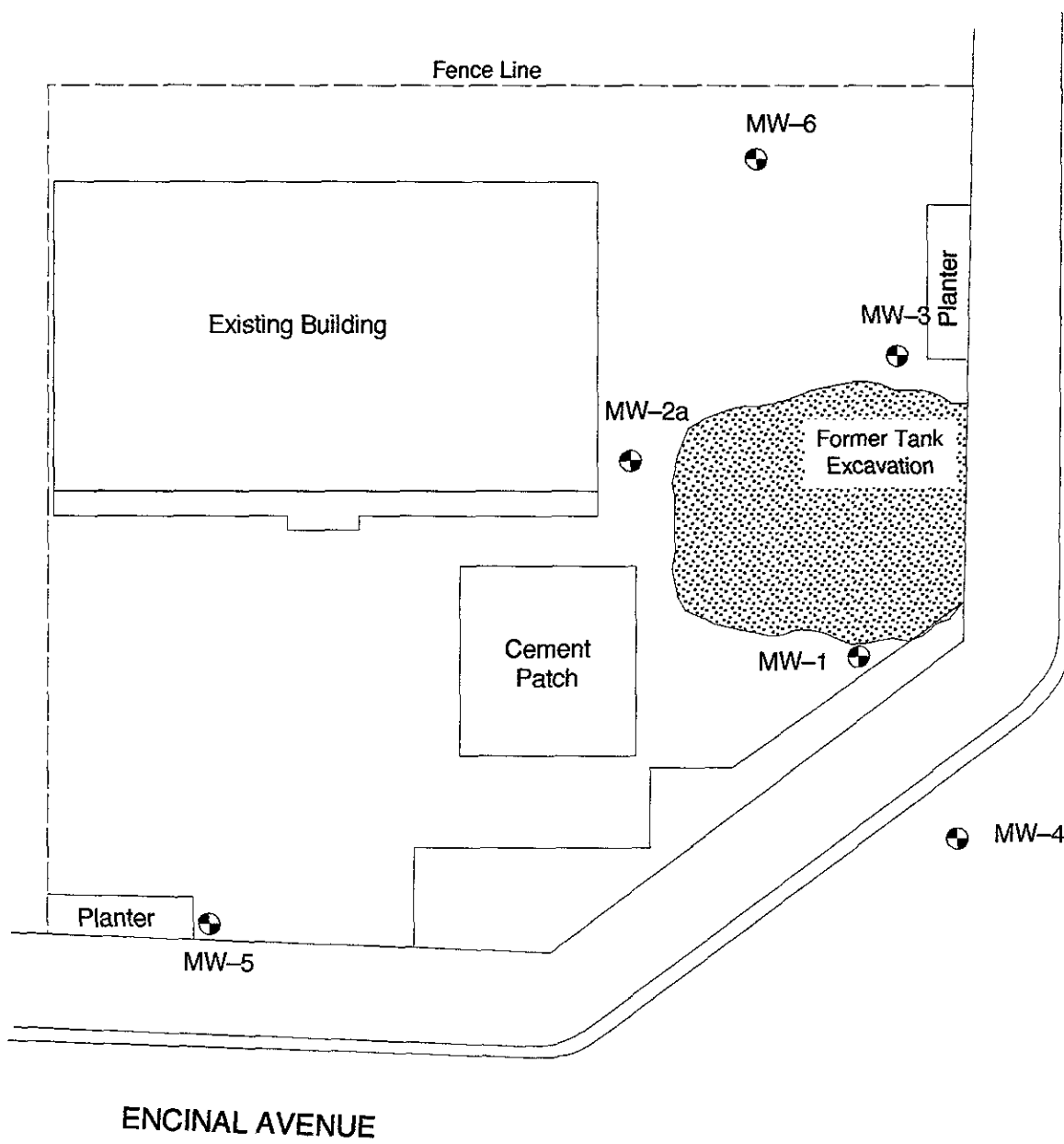
5.0 CONCLUSION

The data and observations discussed herein indicate that groundwater has been impacted due to an unauthorized hydrocarbon release. The analytical parameters used for soil and groundwater sampling was performed in accordance with the guidance document "Tri-Regional Water Quality Control Boards Staff Recommendations for Preliminary Evaluation and Investigation of Underground Tank Sites", dated August 10, 1990, for gasoline tanks and ACC protocols.

The most recent groundwater sampling indicated detectable concentrations of petroleum hydrocarbons in monitoring wells MW-1 through MW-4. TPHg concentrations have decreased in wells MW-1, MW-2, and MW-3. TPHg concentrations have increased in monitoring well MW-4. Varying concentrations of hydrocarbons in wells MW-1 through MW-4 appear to be a result of residual hydrocarbons from the former excavation that continue to be impacting the groundwater through fluctuating groundwater levels.

6.0 RECOMMENDATIONS

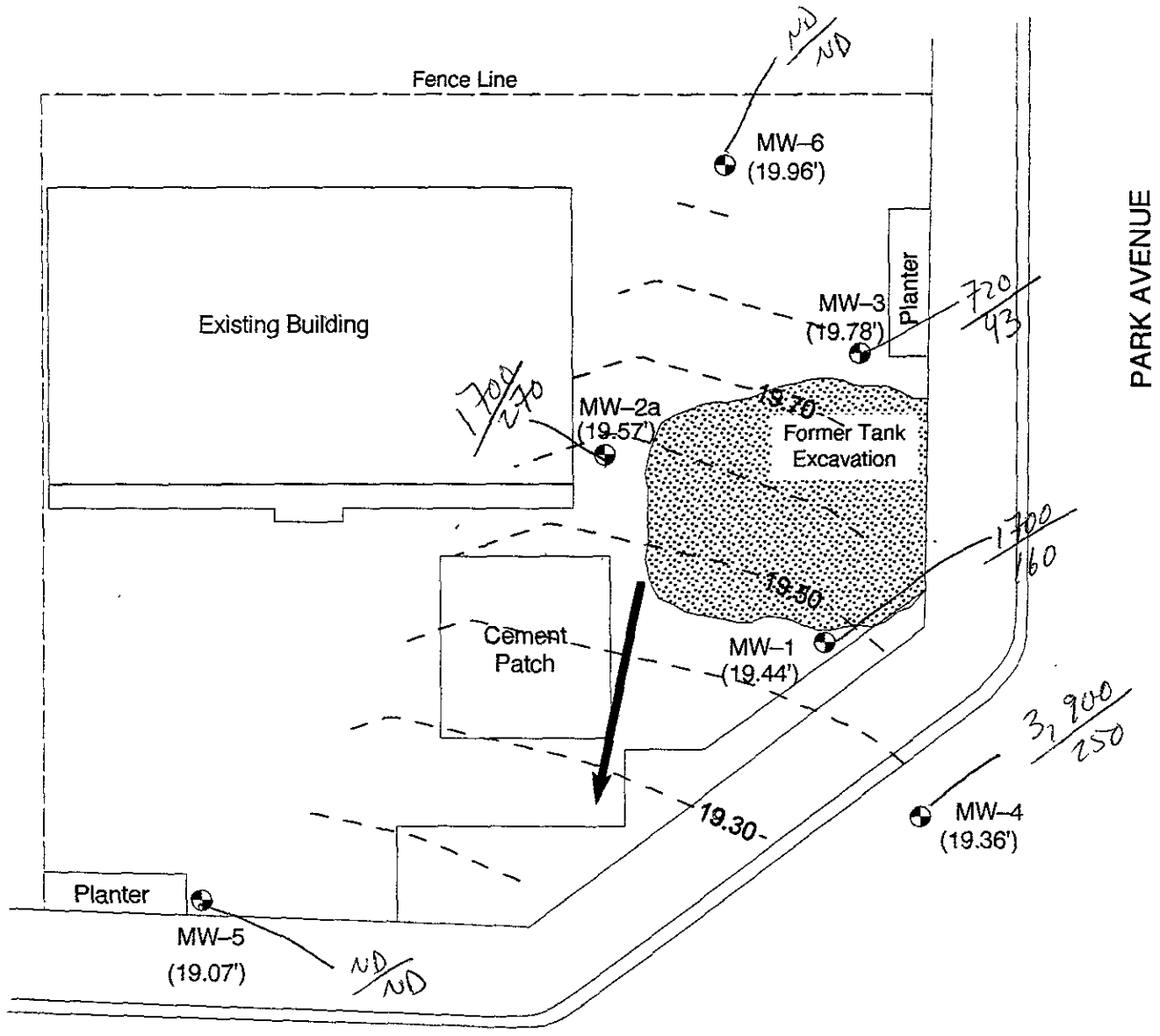
In accordance with the Alameda County Health Care Service Agency's Letter dated August 11, 1995 and pursuant to the Tri-Regional Board guidelines, groundwater sampling and monitoring of the onsite wells would continue on a quarterly basis and will include wells MW-1 through MW-5. Well number MW-6 will be monitored for groundwater levels on a quarterly basis, and sampled biannually. The next quarterly groundwater sampling will be conducted in December 1995.



Legend

● Monitoring Well




Title: Site Plan 2425 Encinal Ave Alameda, California	
Figure Number: 1	Scale: 1" = 20"
Drawn By: TRF	Date: 9/23/95
Project Number: 6039-5	
ACC Environmental Consultants 1000 Atlantic Avenue, Suite 110 Alameda, CA 94501 (510) 522-8188 Fax: (510) 865-5731	



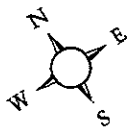
ENCINAL AVENUE

PARK AVENUE

Legend

-  Monitoring Well
-  Groundwater Elevation Contour
(Contour interval = 0.1 feet)
-  Approximate Groundwater Flow
Direction 9/14/95

*79Hg (ppb)
B*

Title: Groundwater Gradient Map 2425 Encinal Ave Alameda, California	
Figure Number: 2	Scale: 1" = 20"
Drawn By: TRF	Date: 9/23/95
Project Number: 6039-5	
ACC Environmental Consultants 1000 Atlantic Avenue, Suite 110 Alameda, CA 94501 (510) 522-8188 Fax: (510) 865-5731	
	

APPENDIX A

NOTES OF WELL SAMPLING

JOB NAME: ALAMEDA CELLARS	PURGE METHOD: MANUAL BAILING
SITE ADDRESS: 2425 ENCINAL	SAMPLED BY: JOHN V. CONKLIN
JOB #: 6039-5	LABORATORY: CHROMALAB
DATE: 9-14-95	ANALYSIS: TPH - GAS w/BTEX
Onsite Drum Inventory SOIL: <input checked="" type="checkbox"/> EMPTY: <input checked="" type="checkbox"/> WATER: 2-100%, 1-10%	MONITORING <input checked="" type="checkbox"/> DEVELOPING <input type="checkbox"/> SAMPLING <input checked="" type="checkbox"/>

NEED NUT/BOLT FOR 2 OF THE DRUMS	PURGE VOLUME				HYDAC READINGS				OBSERVATIONS
	(Gal)	pH	Temp. (F)	Cond. un/cm ^{X/100}					
WELL: MW-1 DEPTH OF BORING: 17.29' DEPTH TO WATER: 8.17' WATER COLUMN: 9.12' WELL DIAMETER: 2" WELL VOLUME: ≈ 1.6 gal COMMENTS:					<input type="checkbox"/>	Froth			
	1.6	7.68	69.6	5.56	<input type="checkbox"/>	Sheen			
	3.2	7.67	70.0	4.35	<input checked="" type="checkbox"/>	Odor Type <u>gas</u>			
	4.8	7.71	69.4	3.82	<input type="checkbox"/>	Free Product			
		7.49	69.7	3.64		Amount _____ Type _____			
		7.48	70.2	3.61	<input type="checkbox"/>	Other			
		7.48	70.1	3.55					
	6.4	7.49	70.1	3.55					
WELL: MW-2A DEPTH OF BORING: 14.17' DEPTH TO WATER: 8.41' WATER COLUMN: 5.76' WELL DIAMETER: 2" WELL VOLUME: ≈ 1 gal COMMENTS:					<input type="checkbox"/>	Froth			
	1.0	8.33	71.4	4.01	<input type="checkbox"/>	Sheen			
	2.0	8.01	71.7	3.93	<input checked="" type="checkbox"/>	Odor Type <u>gas</u>			
	3.0	8.00	71.3	3.78	<input type="checkbox"/>	Free Product			
		8.01	71.2	3.79		Amount _____ Type _____			
		7.83	71.3	3.76	<input type="checkbox"/>	Other			
		7.65	71.3	3.75					
	4.0	7.64	71.3	3.75					NEAR DUMPSTER
WELL: MW-3 DEPTH OF BORING: 13.97' DEPTH TO WATER: 8.11' WATER COLUMN: 5.86' WELL DIAMETER: 2" WELL VOLUME: ≈ 1.0 gal COMMENTS:					<input type="checkbox"/>	Froth			
	1.0	7.95	70.2	4.59	<input type="checkbox"/>	Sheen			
	2.0	7.75	70.3	4.16	<input checked="" type="checkbox"/>	Odor Type <u>gas</u>			
	3.0	7.74	70.3	4.14	<input type="checkbox"/>	Free Product			
		7.75	70.2	4.25		Amount _____ Type _____			
		7.70	70.3	4.29	<input type="checkbox"/>	Other			
		7.65	70.5	4.21					
	4.0	7.64	70.4	4.20					* NEEDS FLUSH WELL CAP SEE COMMENTS MW-2A

MW-3
 WELL CAP PREVENTS COVER FROM CLOSING FULLY - ONE SHATTERED REPAIRED

JOB NAME: ALAMEDA CELLARS	PURGE METHOD:
SITE ADDRESS: 2425 ENCINAL	SAMPLED BY:
JOB #: 6039-5	LABORATORY:
DATE: 9-14-95	ANALYSIS:
Onsite Drum Inventory SOIL:	MONITORING <input type="checkbox"/> DEVELOPING <input type="checkbox"/>
EMPTY: WATER:	SAMPLING <input type="checkbox"/>

	PURGE	HYDRA READINGS			OBSERVATIONS
	VOLUME	pH	Temp. (F)	X/100 Cond. un/cm	
WELL: MW-4	(Gal)	pH	Temp. (F)	X/100 Cond. un/cm	<input type="checkbox"/> Froth
DEPTH OF BORING: 17.50'	1.6	7.73	71.1	4.19	<input type="checkbox"/> Sheen
DEPTH TO WATER: 7.61'	3.2	7.39	72.0	4.08	<input checked="" type="checkbox"/> Odor Type <u>gas</u>
WATER COLUMN: 9.89'	4.8	7.36	71.9	3.97	<input type="checkbox"/> Free Product
WELL DIAMETER: 2"		7.30	72.5	3.91	Amount _____ Type _____
WELL VOLUME: ≈ 1.6 gal		7.20	72.4	3.94	<input type="checkbox"/> Other
COMMENTS:		7.10	73.0	3.76	
IN STREET	6.4	7.09	72.5	3.75	
WELL: MW-5	(Gal)	pH	Temp. (F)	X/100 Cond. un/cm	<input type="checkbox"/> Froth
DEPTH OF BORING: 17.99'	1.6	8.95	69.4	3.48	<input type="checkbox"/> Sheen
DEPTH TO WATER: 8.27'	3.2	8.85	70.0	3.36	<input type="checkbox"/> Odor Type _____
WATER COLUMN: 9.72'	4.8	8.76	71.0	3.34	<input type="checkbox"/> Free Product
WELL DIAMETER: 2"		8.71	71.4	3.26	Amount _____ Type _____
WELL VOLUME: ≈ 1.6 gal		8.69	71.9	3.34	<input type="checkbox"/> Other
COMMENTS:		8.62	71.2	3.33	
		8.62	71.8	3.32	
	6.4	8.61	71.9	3.32	
WELL: MW-6	(Gal)	pH	Temp. (F)	Cond. un/cm	<input type="checkbox"/> Froth
DEPTH OF BORING: 17.53'	1.6	10.12	69.4	2.48	<input type="checkbox"/> Sheen
DEPTH TO WATER: 8.07'	3.2	9.56	68.8	2.40	<input type="checkbox"/> Odor Type _____
WATER COLUMN: 9.46'	4.8	9.31	67.5	2.33	<input type="checkbox"/> Free Product
WELL DIAMETER: 2"		9.27	66.8	2.29	Amount _____ Type _____
WELL VOLUME: ≈ 1.6 gal		9.26	66.7	2.35	<input type="checkbox"/> Other
COMMENTS:		8.89	66.2	2.42	
		8.89	66.3	2.42	
	6.4	8.89	66.3	2.41	

APPENDIX B

ANALYTICAL RESULTS

CHAIN OF CUSTODY

CHROMALAB, INC.

Environmental Services (SOB)

September 22, 1995

Submission #: 9509178

ACC ENVIRONMENTAL CONSULTANTS

Atten: Misty Kaltreider

Project: 2425 ENCINAL
Received: September 15, 1995

Project#: 6039-5

re: 6 samples for Gasoline and BTEX analysis.
Method: EPA 5030/8015M/602/8020Sampled: September 14, 1995 Matrix: WATER
Run: 8554-4

Analyzed: September 21, 1995

Spl #	Sample ID	Gasoline (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethyl Benzene (ug/L)	Total Xylenes (ug/L)
102911	MW-1	1700	160	12	69	100
102912	MW-2A	1700	270	17	76	160
102913	MW-3	720	43	3.7	50	86
102914	MW-4	3900	250	6.1	3.8	11
102915	MW-5	N.D.	N.D.	N.D.	N.D.	N.D.

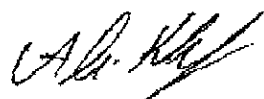
Sampled: September 14, 1995 Matrix: WATER
Run: 8554-4

Analyzed: September 21, 1995

Spl #	Sample ID	Gasoline (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethyl Benzene (ug/L)	Total Xylenes (ug/L)
102916	MW-6	N.D.	N.D.	N.D.	N.D.	N.D.

Reporting Limits	50	0.5	0.5	0.5	0.5
Blank Result	N.D.	N.D.	N.D.	N.D.	N.D.
Blank Spike Result (%)	95	103	103	104	102

Surinder Sidhu
Surinder Sidhu
Analyst


Ali Kharrazi
Organic Manager

CHROMALAB, INC.

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

Chain of Custody

Environmental Services (SDB) (DOHS 1094)

DATE 9/14/95 PAGE 1 OF 1

PROJ. MGR <u>MISTY KALTREIDER</u> COMPANY <u>ACC ENVIRONMENTAL</u> ADDRESS <u>7977 CAPWELL DR. STE 100</u> <u>OAKLAND, CA 94621</u>					ANALYSIS REPORT																NUMBER OF CONTAINERS			
					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, 8+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 (ICLP, STLC)				
SAMPLERS (SIGNATURE) <i>John Conklin</i> (PHONE NO.) <u>(510) 638-8400</u> (FAX NO.)																								
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, 8+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 (ICLP, STLC)			NUMBER OF CONTAINERS	
MW-1	9/14/95	9A	H ₂ O	COLD		X																		3
MW-2A	"	10A	"	"		X																		3
MW-3	"	11A	"	"		X																		3
MW-4	"	12NDON	"	"		X																		3
MW-5	"	1P	"	"		X																		3
MW-6	"	2P	"	"		X																		3
PROJECT INFORMATION					SAMPLE RECEIPT					RELINQUISHED BY 1.			RELINQUISHED BY 2.			RELINQUISHED BY 3.								
PROJECT NAME: <u>2425 ENCINAL</u>					TOTAL NO. OF CONTAINERS <u>118</u>					<i>John Conklin</i> (SIGNATURE) (TIME)														
PROJECT NUMBER: <u>6039-5</u>					HEAD SPACE <u> </u>					<u>JOHN CONKLIN</u> (PRINTED NAME) (DATE)														
P.O. # <u>6039-5</u>					REC'D GOOD CONDITION/COLD <input checked="" type="checkbox"/>					ACC ENVIRONMENTAL (COMPANY)														
TAT <input checked="" type="checkbox"/> STANDARD 5-DAY					CONFORMS TO RECORD					RECEIVED BY 1.			RECEIVED BY 2.			RECEIVED BY (LABORATORY) 3.								
SPECIAL INSTRUCTIONS/COMMENTS.										<i>[Signature]</i> 1535 (SIGNATURE) (TIME)														
										<u>B. Morrow 9-15-95</u> (PRINTED NAME) (DATE)														
										<u>Chromalab</u> (COMPANY)														