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September 18, 1995

ENVIRONMENTAL
PROTECTION
95 SEP 25 PM 4:39

Mr. Steve Chrissanthos
Alameda Cellars
1709 Otis Drive
Alameda, CA 94501

RE: Biannual Quarterly Groundwater Sampling, and Request for Site Closure
901 Lincoln Avenue, Alameda, California

Dear Mr. Chrissanthos:

The enclosed report describes the procedures used during quarterly groundwater sampling at 901 Lincoln Avenue, Alameda, California. This work was performed to evaluate the presence or absence of residual hydrocarbon concentrations in groundwater by obtaining samples from two of the existing four monitoring wells onsite.

Groundwater samples obtained from monitoring wells MW-1 and MW-4 were submitted to ChromaLab, Inc. for petroleum hydrocarbon analysis, in accordance with the "Tri-Regional Guidelines for Underground Storage Tank Sites".

The results of the groundwater analysis indicated non-detectable concentrations in monitoring well MW-4. Sample analysis results from monitoring well MW-1 indicated detectable levels of Total Petroleum Hydrocarbons as gasoline (TPHg), Benzene, and Total Xylenes (BTEX).

Laboratory analysis results indicated similar concentrations with the previous sampling events. Overall concentrations have decreased with time indicating a degrading and/or dissipating source. Based on all previous work performed on the site to date, groundwater and soil impact appears to be isolated in the immediate vicinity around MW-1. Further groundwater monitoring and sampling should produce no added benefit. ACC surmises that the concentrations of hydrocarbons within the groundwater around MW-1 will continue to degrade, and requests that the site be closed from further action and ground monitoring.

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

Sincerely,

Misty C. Kaltreider
Project Geologist

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

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BIANNUAL GROUNDWATER SAMPLING AND REQUEST FOR SITE CLOSURE

901 LINCOLN AVENUE
ALAMEDA, CALIFORNIA

September 1995

Prepared for:
Mr. Steve Chrissanthos
Alameda Cellars
1709 Otis Drive
Alameda, CA 94501

Project Number 6039-2b

Prepared by: _____
Misty Kaltreider
Project Geologist

Reviewed by: _____
David R. DeMent, RG #5874
Registered Geologist

REGISTERED GEOLOGIST
DAVID R. DEMENT
NO. 5874
STATE OF CALIFORNIA

7977 Capwell Drive, Suite 100 • Oakland, CA 94621 • (510) 638-8400 • FAX: (510) 638-8404
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TABLE OF CONTENTS

ATTACHMENTS

1.0 INTRODUCTION

This summary report presents the observations and findings of biannual groundwater monitoring conducted by ACC Environmental Consultants, Inc., (ACC) on behalf of the Mr. Steve Chrissanthos and Alameda Cellars, site owner at 901 Lincoln Avenue, Alameda, California (Figure 1). The project objective is to evaluate extent of petroleum hydrocarbons in the groundwater by obtaining samples from the existing monitoring wells.

Based on the information provided within this report, and on behalf of Mr. Steve Chrissanthos and Alameda Cellars, ACC requests no further investigation and site closure.

2.0 BACKGROUND

In March, 1990, two 10,000-gallon gasoline tanks and one 2,000-gallon diesel tank 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 Total Petroleum Hydrocarbons as diesel (TPHd).

According to a request from the Alameda County Health Care Services - Hazardous Materials Division, a preliminary Site Assessment was conducted to further evaluate soil contamination from the gasoline release onsite. ACC was retained by Mr. Chrissanthos to perform the work requested by the Alameda County Health Care Services.

On December 4, 1992, three monitoring wells were installed onsite. Analytical results of soil collected during drilling indicated 56 parts per million (ppm) of TPHg with benzene, toluene, ethylbenzene, and total xylenes (BTEX) from monitoring well MW-1, adjacent to the former tank excavation. Soil samples collected from the other borings indicated constituents of concern were below detectable levels.

Initial groundwater samples collected from the onsite monitoring wells on December 15, 1992, indicated below detectable levels of constituents. In February 24, 1993, ACC performed a soil investigation on the property to evaluate the lateral and vertical extent of soil contamination adjacent to monitoring well MW-1. Analytical results of soil samples collected indicated below detectable levels of hydrocarbon constituents in the soil. It was concluded that hydrocarbon impact onsite is limited to soil around monitoring well MW-1.

In October 1993, monitoring well MW-4 was installed downgradient of monitoring well MW-1 onsite. Laboratory analysis of soil samples collected during drilling indicated below detectable levels of constituents. Laboratory analysis of groundwater samples collected from the onsite monitoring wells indicated below detectable levels of constituents in monitoring wells MW-2, MW-3, and MW-4.

In December 1993, Alameda County Health Care Services Agency approved a reduction in groundwater sampling. The revised groundwater sampling and monitoring program included performing monitoring on all four wells onsite and collecting groundwater samples from only monitoring wells MW-1 and MW-4 on a biannual basis. Groundwater samples from these wells were analyzed for TPHg with BTEX.

3.0 SITE DESCRIPTION

The site consists of one single story building surrounding by asphalt parking and landscaping. Prior to 1980 the property was operated as a fuel station. The site is currently owned by Mr. Steve Chrissanthos and is presently occupied by E-Z Liquors, a commercial liquor store. The site is located within Alameda, at approximately 19 feet above mean sea level.

4.0 FIELD PROCEDURES

4.1 Groundwater Sampling

Groundwater samples were collected from monitoring wells MW-1 and MW-4 on February 15, 1995. Prior to groundwater monitoring the depth to the surface of the water table was measured from the top of the PVC casing in each onsite monitoring well using a Solinst Water Level Meter. Information regarding depths of wells, well elevations and groundwater levels are summarized in Table 1.

TABLE 1 - Groundwater Depth Information

Well No./ Well Elevation	Sample Date	Depth to Groundwater (Ft.)	Groundwater Elevation (MSL)
MW-1 / 18.99	12/15/92	10.27	8.72
	01/06/93	8.67	10.32
	02/09/93	6.67	12.01
	03/20/93	6.94	12.05
	04/08/93	7.25	11.74
	05/17/93	8.67	10.32
	06/23/93	9.58	9.41
	07/13/93	10.21	8.78
	08/10/93	10.78	8.21
	09/10/93	11.21	7.78
	10/25/93	11.58	7.41
	11/12/93	11.74	7.25
	02/16/94	8.94	10.05
	03/10/94	8.71	10.32
	05/16/94	9.76	9.23
	08/29/94	11.28	7.71
	02/15/95	6.76	12.23
	08/23/95	10.03	8.96

Well No./ Well Elevation	Sample Date	Depth to Groundwater (Ft.)	Groundwater Elevation (MSL)
MW-2 / 19.03	12/15/92	10.14	8.89
	01/06/93	8.50	10.53
	02/09/93	6.66	12.37
	03/20/93	6.53	12.50
	04/08/93	6.83	12.20
	05/17/93	8.34	10.69
	06/23/93	9.36	9.67
	07/13/93	9.99	9.04
	08/10/93	10.54	8.49
	09/10/93	11.08	7.95
	10/25/93	11.41	7.62
	11/12/93	11.58	7.45
	02/16/94	8.71	10.32
	03/10/94	7.93	11.10
	05/16/94	9.58	9.45
	08/29/94	11.16	7.87
	02/15/95	6.32	12.71
	08/23/95	9.75	9.28
MW-3 / 19.35	12/15/92	10.44	8.91
	01/06/93	8.91	10.44
	02/09/93	7.26	12.09
	03/20/93	7.16	12.19
	04/08/93	7.49	11.86
	05/17/93	9.01	10.34
	06/23/93	10.22	9.13
	07/13/93	10.58	8.77
	08/10/93	11.12	8.23
	09/10/93	11.68	7.67
	10/25/93	11.98	7.37
	11/12/93	12.12	7.23
	02/16/94	9.18	10.17
	03/10/94	8.32	10.83
	05/16/94	10.28	9.07
	08/29/94	11.77	7.58
	02/15/95	6.87	12.50
	08/23/95	10.27	9.08
MW-4 / 18.51	08/23/93	10.27	9.08
	10/25/93	11.43	7.08
	11/12/93	11.59	6.92
	02/16/94	7.80	10.71
	03/10/94	8.36	10.15
	05/16/94	9.66	8.85
	08/29/94	11.11	7.40
	02/15/95	6.75	11.76
	08/23/95	9.95	8.56

Notes: All measurements in feet; MSL = Mean Sea Level

During sampling, after water-level measurements were taken, monitoring well MW-1 and MW-4 were 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. Four well volumes were removed to purge each well. Worksheets of groundwater conditions monitored during purging are attached in Appendix A.

After the groundwater had recovered to a minimum of approximately 80 percent of its static level, water samples were obtained using the designated disposable Teflon bailer. Two 40 ml VOA vials, without headspace, were filled from the water collected from each monitoring well to be sampled.

The samples were preserved on ice and submitted to ChromaLab Inc. under chain of custody protocol. Laboratory results with chain of custody forms are attached in Appendix B.

5.0 FINDINGS

5.1 Analytical Results - Groundwater

Groundwater samples were collected from monitoring wells MW-1 and MW-4 on August 28, 1995. The sample were analyzed for TPHg and BTEX by EPA test method 8015/8020. Laboratory analytical results are summarized in Table 2 and attached in Appendix B.

TABLE 2 - Analytical Results - Groundwater

Well No.	Date Sampled	TPHg (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Xylenes (ug/L)
MW-1	12/15/92	<50	<0.5	<0.5	<0.5	<0.5
	03/10/93	100	0.86	<0.5	<0.5	6.3
	06/23/93	6,800	2,500	1,100	100	560
	09/10/93	15,000	4.400	620	850	630
	10/25/93	NT	NT	NT	NT	NT
	11/12/93	5,400	1,900	1.1	700	20
	02/16/94	69	1.5	<0.5	<0.5	3.1
	03/10/94	NT	NT	NT	NT	NT
	05/16/94	520	14	1.1	9.0	8.9
	08/29/94	500	12	1.3	2.2	4.6
	02/15/95	80	1.9	<0.5	<0.5	3.6
	08/28/95	2,400	650	7.4	68	19

Well No.	Date Sampled	TPHg (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Xylenes (ug/L)
MW-2	12/15/95	<50	<0.5	<0.5	<0.5	<0.5
	03/10/93	<50	<0.5	<0.5	<0.5	<0.5
	06/23/93	<50	<0.5	<0.5	<0.5	<0.5
	09/10/93	<50	<0.5	<0.5	<0.5	<0.5
	10/25/93	NT	NT	NT	NT	NT
	11/12/93	<50	<0.5	<0.5	<0.5	<0.5
	02/16/94	NT	NT	NT	NT	NT
	03/10/94	NT	NT	NT	NT	NT
	05/16/94	NT	NT	NT	NT	NT
	08/29/94	NT	NT	NT	NT	NT
	02/15/95	NT	NT	NT	NT	NT
	08/28/95	NT	NT	NT	NT	NT
MW-3	12/15/95	<50	<0.5	<0.5	<0.5	<0.5
	03/10/93	<50	<0.5	<0.5	<0.5	<0.5
	06/23/93	<50	<0.5	<0.5	<0.5	<0.5
	09/10/93	<50	<0.5	<0.5	<0.5	<0.5
	10/25/93	NT	NT	NT	NT	NT
	11/12/93	<50	<0.5	<0.5	<0.5	<0.5
	02/16/94	NT	NT	NT	NT	NT
	03/10/94	NT	NT	NT	NT	NT
	05/16/94	NT	NT	NT	NT	NT
	08/29/94	NT	NT	NT	NT	NT
	02/15/95	NT	NT	NT	NT	NT
	08/28/95	NT	NT	NT	NT	NT
MW-4	10/25/93	<50	<0.5	<0.5	<0.5	<0.5
	11/12/93	<50	<0.5	<0.5	<0.5	<0.5
	02/16/94	<50	<0.5	<0.5	<0.5	<0.5
	03/10/94	<50	<0.5	<0.5	<0.5	<0.5
	05/16/94	<50	<0.5	<0.5	<0.5	<0.5
	08/29/94	<50	<0.5	<0.5	<0.5	<0.5
	02/15/95	<50	<0.5	<0.5	<0.5	<0.5
	08/28/95	<50	<0.5	<0.5	<0.5	<0.5

Notes: ug/L = micrograms per liter (ppb)
NT = Not tested

5.2 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 Ninth Street and Pacific Avenue in Alameda, California.

The groundwater gradient was calculated using measurements from the onsite monitoring wells. The location of the wells is shown in Figure 1 - Site Plan.

Groundwater elevations were collected from the wells on August 23, 1995 and are illustrated on Figure 2, Groundwater Gradient Map. The gradient was evaluated by triangulation using the elevation of the potentiometric surface measured with respect to Mean Sea Level datum. Table 3 summarizes the historic groundwater gradient and the direction of groundwater flow onsite.

TABLE 3 - Historic Groundwater Gradient

Date Monitored	Gradient (foot/foot)	Direction
12/15/92	0.002	west-southwest
01/06/93	0.004	northwest
02/09/93	0.008	northwest
03/10/93	0.009	northwest
04/08/93	0.011	northwest
05/17/93	0.008	northwest
06/23/93	0.008	north-northwest
07/13/93	0.006	northwest
08/10/93	0.006	northwest
09/10/93	0.006	northwest
10/25/93	0.007	northwest
11/12/93	0.006	northwest
02/16/94	0.01	northwest
03/10/94	0.01	northwest
05/16/94	0.016	northwest
08/29/94	0.006	northwest
02/15/95	0.009	northwest
08/23/95	0.008	northwest

6.0 HYDROLOGY

6.1 Beneficial Uses of Groundwater

Discharge from the shallow groundwater aquifer onsite consists of natural and artificial discharge. Natural discharge includes evapotranspiration, groundwater discharge to streams, and underflow to San Francisco Bay. Artificial discharge comprises pumping from wells. Water pumped from wells is used for irrigation and industrial use. Domestic water to the site is supplied by the East Bay Municipal Utility District from surface water sources located outside of the San Francisco area and include the Hetch-Hetchy Reservoir system.

6.2 Regional Geology and Hydrogeology

The site rests on relatively flat terrain that slopes gently to the northwest, according to the United States Geological Survey (USGS) San Francisco Quadrangle Map. Elevation is approximately 19 feet above mean sea level. According to the USGS map of the area, regional geology consists of surficial, unconsolidated Quaternary age sand dunes locally known as Merritt Sand Formation. A report by the Alameda county Flood Control and Water Conservation District Geohydrology and Groundwater - Quality Overview, East Bay Plain Area, Alameda County, California, 205 (J) Report, June 1988, describes the Merritt Sand as consisting of loose well-sorted, fine to medium grained sand and silt, with lenses of sandy clay and clay. The sand was a wind and water deposited beach and near-shore deposit and is exposed only in the Alameda and Oakland areas.

Lithologic conditions beneath the site appear consistent and uniform laterally to the extent of the depth of exploration. Dune sands are present to a depth of approximately 26.5 feet bags and contain approximately 5-15 percent silts and clays. Soils are poorly consolidated and appeared to lack cohesion in saturated zones.

Asphalt or concrete pavement covers the entire site. Below the baserock, soils consist of light to dark yellowish brown silty sand (SM) grading to a sand (SP) with silt, fine to medium grain, poorly graded, medium dense, and unconsolidated, down to a depth of eight feet bgs. From eight feet bgs to the total depth of exploration, approximately 26.5 feet bgs, soils were consistently brown, gray, or olive sand (SM/SP) with silt, fine to medium grain, uniform poorly graded, medium dense, and unconsolidated.

7.0 REMNANT CONTAMINANT RISK POTENTIAL

7.1 Contaminant Fate Transport

The contaminant of concern at the site is gasoline which is a volatile, flammable liquid that has various constituents and up to 200 petroleum-derived chemical additives. Analysis of gasoline reveals various components including benzene, toluene, ethylbenzene, and xylene (BTEX). The BTEX components pose the most serious threat to human health. The components have the potential to move through soil and contaminate groundwater. Benzene is derived from crude oil, tar, or coal. It is a clear, colorless, highly flammable liquid that exhibits a characteristic odor and is only slightly soluble in water, up to 111,000 ppb (according to ASTM Document ES 38-94). Benzene is highly toxic and exposure to acute levels can irritate mucous membranes, cause restlessness, convulsions, excitement, depression and even death from respiratory failure. Chronic levels of benzene can cause bone marrow depression or leukemia. The Department of Health Services Action Levels for benzene is 0.7 mg/kg and the Maximum Contaminant Level (MCL) for drinking water is 1 ug/l. Toluene, ethylbenzene and xylene are slightly less toxic than benzene with MCLs at 100 ug/kg, 680 ug/kg and 1,750 ug/kg respectively. Eight connective quarters of groundwater results show no reportable quantities of TPHg or BTEX in

monitoring well MW-4, located 40 feet directly downgradient of monitoring well MW-1.

7.1.1 Persistence

The solubility of benzene in water at 23.1°C is 0.188% (w/w) with a boiling point of 80°C. Toluene, ethylbenzene and xylene are slightly more soluble in water. These elements volatilize quickly in air. A large body of evidence indicates petroleum hydrocarbons are subject to degradation by the action of bacteria. Through the tank removal and interim remedial actions completed onsite, all assessible petroleum hydrocarbon source material was removed. Remanent petroleum hydrocarbons within the soil and groundwater around MW-1 will likely degrade overtime through natural biodegradation. Constituents reported in monitoring well MW-1 have shown to be decreasing based on an overall record of results. This indicates that the main constituents are degrading.

7.1.2 Potential for Residual Contaminate Migration

The lighter fractions of gasoline (benzene, toluene, ethylbenzene and xylenes) are more mobile than other fractions. BTEX can therefore migrate or dissipate away from the main body of contamination. The absence of the lighter fractions in the onsite release reduces the risk of rapid mobility.

Since the density of gasoline is less than water, the movement of petroleum hydrocarbons into lower aquifers will to occur. Any potential hydrocarbon migration will be in the groundwater but hydraulic forces of this site restricts contaminant migration. Based on evidence of groundwater results from monitoring well MW-4, the constituents do not appear to be migrating.

7.2 Sources of Drinking Water Policy Determination

The "Sources of Drinking Water" Policy, Resolution 88-63 was adopted by the State Water Board in 1988. This Resolution specifies that except under specifically defined circumstances, ground and surface waters of the state are either existing or potential sources of municipal and domestic supply. Waters not considered as existing or potential sources include water with high total dissolved solids concentrations (greater than 3000 mg/L), low sustainable yield (less than 200 gallons per day for a single well), water within agricultural drains, and geothermal water. All water within the site area is an existing or potential source for domestic or municipal water supply. According to the California State Water Resources Board, no potable water wells exist at the site.

7.3 Present Exposure Assessment

Exposure routes for workers and public could be via dermal contact, inhalation of volatilized contaminants and windblown dust. Exposure is unlikely due to undetected concentrations of hydrocarbons in the soil and groundwater. The asphalt cap is generally impermeable and reduces the risk of exposures at this site.

7.4 Impact of Residual Hydrocarbons on Beneficial Uses

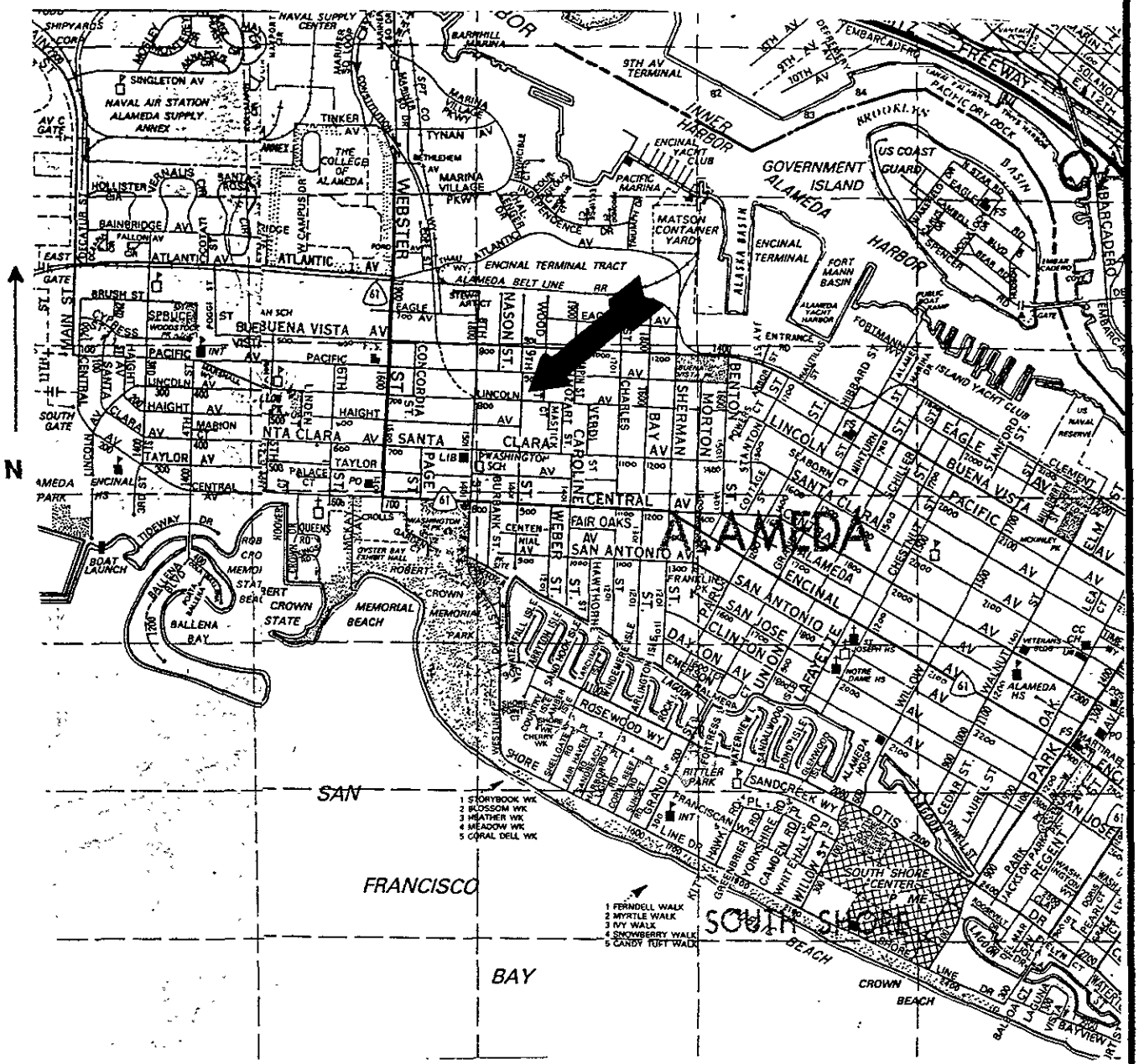
The physicochemical characteristics of the principal constituent of concern, benzene, indicate that this compound is subject to natural decomposition by biodegradation. While the constituent is a known human carcinogen, groundwater benzene concentrations are below drinking water standards in wells away from the immediate area of the former tank excavation. This indicates that the area remaining is naturally degrading. Therefore, because non-detectable levels of benzene were encountered in the groundwater downgradient of the former tank excavation, there is no detectable impact to the quality of nearby domestic groundwater from the release. Detection limits may change in the future, as may regulatory requirements. This closure report does not attempt to predict future regulatory detection limits, but summarizes compliance of the groundwater and soil hydrocarbon concentrations to current regulatory standards.

8.0 CONCLUSIONS

Laboratory analysis of groundwater samples collected from monitoring well MW-1 indicated detectable levels of TPHg and BTEX. Below detectable concentrations of TPHg and BTEX were reported in the groundwater samples collected from monitoring well MW-4 indicating a downgradient extent of hydrocarbons. In addition, overall results of TPHg/BTEX constituents reported in monitoring well MW-1 indicated decreasing levels of contaminants overtime. Therefore, the constituents remaining from the original tank removal are degrading and will continue to degrade and dissipate with time. Based on site investigation and three years of groundwater monitoring conducted at this site, ACC feels that the remaining impact around the vicinity of monitoring well MW-1 will not pose a significant threat to groundwater quality in the area.

9.0 RECOMMENDATIONS

The general concentrations within well MW-1 have risen since February 1995. However, the overall trend of the concentrations of TPHg and BTEX have declined since the initial investigation. Due to the natural soil makeup of this site, migration of hydrocarbons is unlikely. Based on experience with similar site conditions, with minor hydrocarbon residues in soil overlying a shallow, poor quality aquifer, ACC believes the hydrocarbon concentrations will degrade over time. Based on these facts ACC is requesting site closure with no further action with respect to the former underground storage tanks.



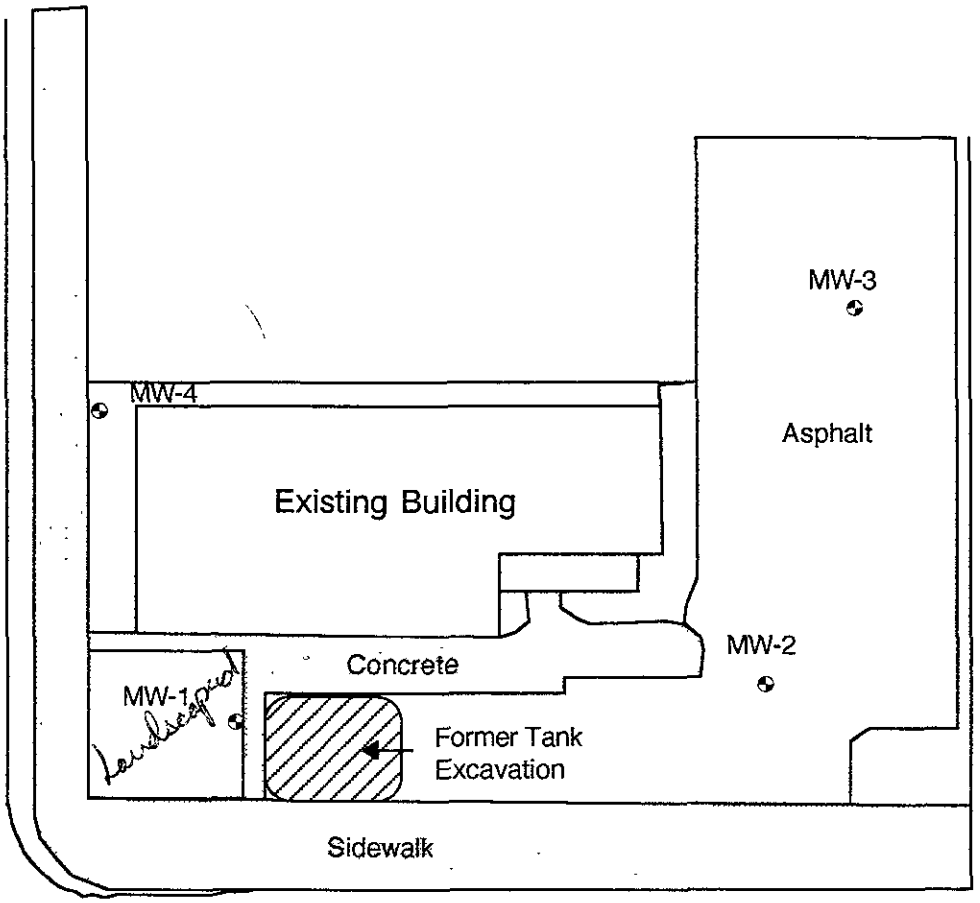
(Source: Thomas Bros.)

Vicinity Map

Scale: 1" = 2200'

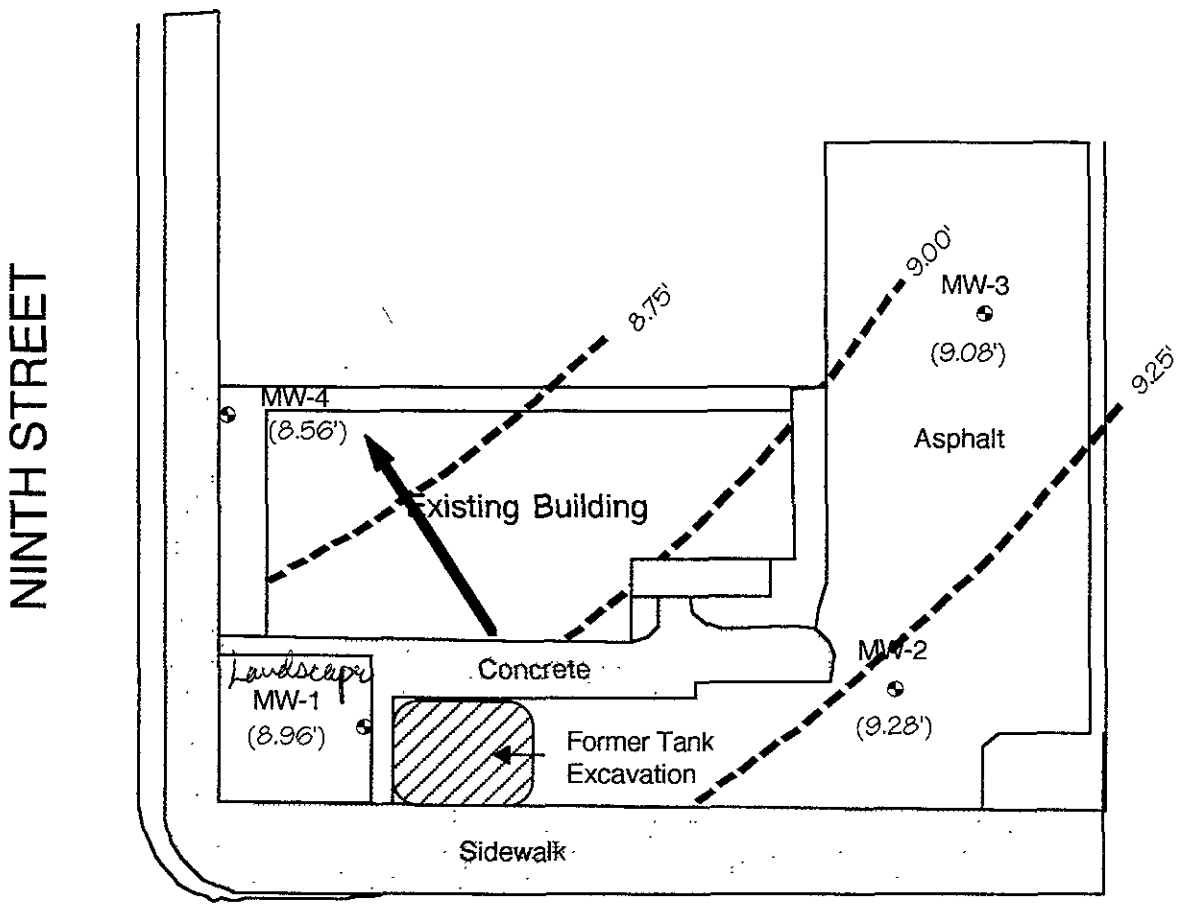
ACC Environmental Consultants, Inc. 1000 Atlantic Avenue, Suite 110 Alameda, California 94501		Vicinity Map 901 Lincoln Ave. Alameda, California	
Project No. 6039-2b	Date: 7/16/93	Dn by: CS	Figure 1

NINTH STREET



LINCOLN AVENUE

Title: Site Plan 901 Lincoln Avenue Alameda, California	
Figure Number: 2.0	Scale: 1"=30'
Drawn By: JVC	Date: 8/23//95
Project Number: 6039-2b	
ACC Environmental Consultants 7977 Capwell Drive, Suite 100 Oakland, CA 94621 (510) 638-8400 Fax: (510) 638-8404	N W E S



LEGEND

----- 9.25' Groundwater Contours

Groundwater Flow Direction

Elevations in Feet Above Mean Sea Level
Measured on August 23,1995

Title: Groundwater Gradient 901 Lincoln Avenue Alameda, California	
Figure Number: 3.0	Scale: 1"=30'
Drawn By: JVC	Date: 8/23//95
Project Number: 6039-2b	

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

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APPENDIX A

LITHOLOGIC LOGS AND

UNIFIED SOIL

CLASSIFICATION SYSTEM

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ACC MONITORING WELL WORKSHEET

JOB NAME:	PURGE METHOD: MANUAL BAILING
SITE ADDRESS: 901 LINCOLN AVE.	SAMPLED BY: JOHN V. CONKLIN
JOB #: 6039-26	LABORATORY: CHROMALAB
DATE: 8-23-95	ANALYSIS: TPH-GAS W/ BTEX
Onsite Drum Inventory SOIL: ☒	MONITORING ☒ DEVELOPING ☐
EMPTY: ☒ WATER: 1-40%	SAMPLING ☒

WELL: MW-1

DEPTH OF BORING: 13.92'
9:30AM
DEPTH TO WATER: 10.03'
WATER COLUMN: 3.89'
WELL DIAMETER: 2"
WELL VOLUME: ≈0.8 gal
COMMENTS: Clear purge water

PURGE VOLUME (Gal)	HYDAC READINGS pH	Temp. (F)	Cond. un/cm (X1000)
1.0	8.45	71.1	0.32
2.0	8.55	71.7	0.40
3.0	8.30	71.6	.42
	8.01	71.4	0.44
	7.79	71.3	0.45
	7.78	71.3	0.44
↓	7.77	71.2	0.45
4.0	7.78	71.3	0.46

OBSERVATIONS: ☐ Froth ☐ Sheen ☐ Odor Type_____ ☐ Free Product Amount_____Type_____ ☐ Other

WELL: MW-4

DEPTH OF BORING: 18.95'
9:30AM
DEPTH TO WATER: 9.95'
WATER COLUMN: 9.00'
WELL DIAMETER: 2"
WELL VOLUME: 1.5 gal
COMMENTS:

(Gal)	pH	Temp. (F)	Cond. un/cm
1.5	8.12	68.8	0.49
3.0	8.45	66.6	0.56
4.5	8.35	66.0	0.51
	8.36	65.8	0.49
	8.09	66.0	0.48
	8.08	66.0	0.49
↓	8.09	66.0	0.49
6.0	8.08	65.9	0.49

OBSERVATIONS: ☐ Froth ☐ Sheen ☐ Odor Type_____ ☐ Free Product Amount_____Type_____ ☐ Other

WELL: MW-3

DEPTH OF BORING: 17.15'
9:30AM
DEPTH TO WATER: 10.27'
WATER COLUMN:
WELL DIAMETER:
WELL VOLUME:
COMMENTS:

MW-2 9:30AM

(Gal)	pH	Temp. (F)	Cond. un/cm
16.07'	DEPTH	OF BORING	
9.75'	DEPTH	TO WATER	

OBSERVATIONS: ☐ Froth ☐ Sheen ☐ Odor Type_____ ☐ Free Product Amount_____Type_____ ☐ Other

APPENDIX B

CHAIN OF CUSTODY FORMS

AND

ANALYTICAL RESULTS

CHROMALAB, INC.

Environmental Services (SDB)

August 28, 1995 *Submission #:* 9508340

ACC ENVIRONMENTAL CONSULTANTS

Atten: Misty Kaltreider

Project: 901 LINCOLN AVE. *Project#:* 6039-2b
Received: August 23, 1995

re: 2 samples for Gasoline and BTEX analysis.
Method: EPA 5030/8015M/602/8020

Sampled: August 23, 1995 *Matrix:* WATER
Run: 8208-3 *Analyzed:* August 25, 1995

Spl #	Sample ID	Gasoline (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethyl Benzene (ug/L)	Total Xylenes (ug/L)
100447	MW-1	2400	650	7.4	68	19
	For above sample:	*Detection limit: btex=2.5ug/l & gasoline=0.25mg/l*				
100448	MW-4	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 (%)	91	104	102	106	102

Billy Thach
Chemist

Ali Kharrazi
Organic Manager

1220 Quarry Lane • Pleasanton, California 94566-4756
(510) 484-1919 • Facsimile (510) 484-1096
Federal ID #68-0140157

CHROMALAB, INC.
SAMPLE RECEIPT CHECKLIST

Client Name ACC ENV.

Project 6039-26

Reference/Subm # 23539/9508340

Checklist completed by: A Crowley 8/24/95 (Signature / Date)

Date/Time Received 8/23/95 (Date) 1424 (Time)

Received by B Monroe

Carrier name

Logged in by RN 8/23/95 (Initials / Date)

Matrix H2O

Shipping container in good condition?		NA___	Yes___ No___
Custody seals present on shipping container?	Intact___ Broken___		Yes___ No___
Custody seals on sample bottles?	Intact___ Broken___		Yes___ No___
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___
Samples intact?			Yes✓ No___
Sufficient sample volume for indicated test?			Yes✓ No___
VOA vials have zero headspace?		NA___	Yes✓ No___
Trip Blank received?		NA___	Yes___ No✓
All samples received within holding time?			Yes✓ No___

Container temperature? _____

pH upon receipt _____ pH adjusted _____ Check performed by: _____ NA✓

Any NO response must be detailed in the comments section below. If items are not applicable, they should be marked NA.

Client contacted? _____ Date contacted? _____

Person contacted? _____ Contacted by? _____

Regarding? _____

Comments: pH checked by chemist

Corrective Action: _____

340/100447-100448

SUBM #: 9508340 REP: PM
CLIENT: ACC
DUE: 08/30/95
REF #:23539

2 35 39

CHROMALAB, INC.

DOHS 1094

Chain of Custody

DATE 8/23/95 PAGE 1 OF 1

PROJ. MGR. MISTY KALTREIDER
COMPANY ACC ENVIRONMENTAL
ADDRESS 7977 CAPWELL DR. STE 100
OAKLAND, CA 94621

SAMPLERS (SIGNATURE) (PHONE NO.)
John Conklin (510) 638-8400

ANALYSIS REPORT

SAMPLE ID.	DATE	TIME	MATRIX	PRESERV.	TPH - Gasoline (EPA 5030, 8015)	TPH - Gasoline (5030, 8015) w/BTEX (EPA 602, 8020)	TPH - Diesel (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)		METALS: Cd, Cr, Pb, Zn, Ni	CAM METALS (17)	PRIORITY POLLUTANT METALS (13)	TOTAL LEAD	EXTRACTION (TCLP, STLC)			NUMBER OF CONTAINERS
MW-1	8/23/95		H_2O	COLD		X																		3
MW-4	"		"	"		X																		3

PROJECT INFORMATION

PROJECT NAME: 6039-26
PROJECT NUMBER: 901 LINCOLN AVE
P.O.# 6039-26

SAMPLE RECEIPT

TOTAL NO. OF CONTAINERS	6
HEAD SPACE	Ø
REC'D GOOD CONDITION/COLD	
CONFORMS TO RECORD	

TAT	STANDARD 5-DAY			24	48	72	OTHER

SPECIAL INSTRUCTIONS/COMMENTS:

RELINQUISHED BY 1	RELINQUISHED BY 2.	RELINQUISHED BY 3.
John Conklin 1424 (SIGNATURE) (TIME)	(SIGNATURE) (TIME)	(SIGNATURE) (TIME)
JOHN CONKLIN 8/23/95 (PRINTED NAME) (DATE)	(PRINTED NAME) (DATE)	(PRINTED NAME) (DATE)
ACC ENVIRONMENTAL (COMPANY)	(COMPANY)	(COMPANY)
RECEIVED BY 1	**RECEIVED BY 2.**	**RECEIVED BY (LABORATORY) 3.**
(SIGNATURE) 1424 (TIME)	(SIGNATURE) (TIME)	(SIGNATURE) (TIME)
B. Moore 8-23-95 (PRINTED NAME) (DATE)	(PRINTED NAME) (DATE)	(PRINTED NAME) (DATE)
(COMPANY)	(COMPANY)	(LAB)