A·C·C
ENVIRONMENTAL
CONSULTANTS

03

ENVIRONMENTAL
PROTECTION

95 APR 21 PM 1:54

4/21/95

April 17, 1995

review for closure —

5/5/95. Len Good is currently demolish part of lot to make into parking area. He is waiting for Chevron site and offsite to delineate plume — if it is crossing his property. ie U of walk may not be necessary if up gradient site does full characterization — see 1725 and 1701 and 1726 Park St Site

Mr. Len Goode
Ron Goode Toyota
1825 Park Street
Alameda, CA 94501

RE: Report on Quarterly Groundwater Monitoring
1825 Park Street, Alameda, California
Project No. 94-6089-1.1

Dear Mr. Goode:

Enclosed, please fine three (3) copies of the Quarterly Groundwater Monitoring report for the above-referenced site. ACC recommends that a copy of this report be submitted to the following agency in a timely manner:

Ms. Juliet Shin
Alameda County Health Care Services Agency
Department of Environmental Health
1131 Harbor Bay Parkway, #250
Alameda, California 94502-6577

The San Francisco Bay Regional Water Quality Control Board does not need to be informed about activity at the site at this time.

If you have any comments regarding this report, please call me at (510) 522-8188.

Sincerely,

David DeMent, RG
Project Manager

cc: Files

1000 Atlantic Avenue, Suite 110 • Alameda, CA 94501 • (510) 522-8188 • FAX (510) 865-5731

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LETTER REPORT
QUARTERLY GROUNDWATER MONITORING
AT
1825 PARK STREET
ALAMEDA, CALIFORNIA

March 1995
Job Number 94-6089-1.1

Prepared for:

Ron Goode Toyota
1825 Park Street
Alameda, California

Prepared by: Linda Welch for Misty Kaltreider

Misty C. Kaltreider
Project Geologist

Reviewed by: Dan DeMent

David R. DeMent, RG #5874
Senior Project Geologist

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

1000 Atlantic Avenue, Suite 110 • Alameda, CA 94501 • (510) 522-8188 • FAX: (510) 865-5731

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QUARTERLY GROUNDWATER MONITORING
at
1825 Park Street
Alameda, California

1.0 Introduction

This report presents the procedures and findings of quarterly groundwater monitoring conducted by ACC Environmental Consultants, Inc. (ACC), on behalf of Mr. Len Goode, President of Ron Goode Toyota, 1825 Park Avenue, Alameda, California. The project objective, as described in the Consulting Services Agreement prepared on November 15, 1994, was to evaluate current groundwater conditions at the property by sampling existing groundwater monitoring wells.

The property is located in the northwestern corner of the intersection of Park and Clement Streets in Alameda, California and is currently being operated at an automobile dealership and showroom (Figure 1).

2.0 Background

Two underground storage tanks were removed from the site by Zaccor Corporation on December 27, 1990. One 300-gallon waste oil tank was located in the main building near the south exterior wall (Figure 2). Both tanks were constructed of single-walled steel. During removal, the waste oil tank was observed to have several holes near the bottom. The second 550-gallon gasoline tank was located outside the building. During removal, no holes were observed in the gasoline tank. Analytical results of soil samples collected from the waste oil tank excavation indicated detectable levels of total oil and grease and Total Petroleum Hydrocarbons (TPH) as both diesel and gasoline. Soil samples collected from the gasoline tank excavation indicated below detectable levels of TPH as gasoline.

On March 21 and April 11, 1991, a field program was conducted by Environmental Bio-Systems, Inc., under contract with Zaccor Corporation, to evaluate the horizontal and vertical extent of hydrocarbon impact in subsurface soil. Sixty-four (64) hand augured borings were advanced and field conditions described. Forty-one (41) soil samples were collected of which fourteen (14) samples were submitted for analysis. The extent of soil and groundwater impact was not defined. Concentrations of TPH as gasoline varied from below detection limits to a maximum of 1,900 parts per million (ppm). Total oil and grease concentrations varied from below the detection limit to 380 ppm.

On November 8, 1991, three groundwater monitoring wells were installed on and adjacent to the property by Environmental Bio-Systems. The approximate locations of monitoring wells are illustrated in Figure 2. Analytical results of soil samples collected during drilling MW-1 and MW-2 indicated TPH as gasoline concentrations below detection limits. Analysis of soil

collected from monitoring well MW-3 indicated 250 ppm of TPH as gasoline.

On November 18, 1991, the wells were developed and sampled by Environmental Bio-Systems. Analytical results of groundwater collected from monitoring wells indicated below detection levels of TPH as gasoline with benzene, toluene, ethylbenzene and total xylenes (BTEX). A maximum of 4.0 ppm total oil and grease was reported in the groundwater sample from MW-1. Analysis of groundwater collected in subsequent sampling events has indicated decreasing amounts of dissolved total oil and grease. Samples collected in February 4, 1993 contained below detectable levels of hydrocarbon constituents.

In April 1993 ACC performed a soil and groundwater investigation to help determine the onsite vertical and lateral extent impact of petroleum hydrocarbons in order to provide remediation options and associated costs. Seventeen exploratory soil borings were drilled and "grab" groundwater samples collected in each boring to help further evaluate groundwater conditions across the site. Results of the investigation were inconsistent with a pattern that might be expected from known sources at the site. The highest TPH as gasoline concentrations were noted in samples collected adjacent to Clement Avenue and in areas cross-gradient and approximately 70-120 feet from the former gasoline tank.

According to direction of the Regional Water Quality Control Board, a groundwater monitoring well (MW-4) was installed by ACC approximately twelve feet downgradient of the former waste oil tank. Groundwater monitoring of MW-4 and the three existing groundwater monitoring wells was conducted by ACC in November 1994.

3.0 Groundwater Monitoring and Sampling

ACC conducted quarterly monitoring on March 15, 1995. Work at the site included measuring depth to water, subjectively evaluating groundwater in the wells, purging, sampling the wells, and submitting the groundwater samples for laboratory analysis under formal chain-of-custody protocol.

3.1 Groundwater Monitoring

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. The water-level measurements were recorded to the nearest 0.01 foot with respect to mean sea level. Groundwater monitoring and sampling of wells MW-1, MW-2, and MW-4. Monitoring of MW-3 has been discontinued, with approval of Alameda County Health Care Agency, because ACC believes the screened interval may be incorrect for detecting hydrocarbons in the uppermost aquifer. Groundwater monitoring data obtained at the site is presented in Appendix A. Information regarding well elevations and groundwater levels are summarized in Table 1.

Historic groundwater levels at the site are unknown but previous groundwater sampling reports did contain calculated flow directions.

TABLE 1 - GROUNDWATER DEPTH INFORMATION				
Well #	Casing Elevation (MSL)	Date Measured	Groundwater Depth (feet)	Groundwater Elevation (MSL)
MW-1	14.57	12/09/94 03/15/95	4.00 3.41	10.57 11.16
MW-2	11.68	12/09/94 03/15/95	3.13 2.50	8.55 9.18
MW-3	11.75	12/09/94 03/15/95	2.61 2.38	9.14 9.37
MW-4*	13.00	12/09/94 03/15/95	3.42 2.16	9.58 10.84

Notes:
All measurements in feet relative to Mean Sea Level
* = Not used for gradient map (Figure 3)

The groundwater flow direction as determined from monitoring well data on March 15, 1995, is illustrated on Figure 3 - Groundwater Elevation Map. Based on groundwater elevation measurements, groundwater flow is toward the north at an average gradient of 0.011. This flow direction and gradient is consistent with calculated values from the last sampling event. Monitoring well MW-4 was not used in calculating flow direction and gradient due to its proximity to the former tank excavation and current parking lot drain. Based on the elevation of water in MW-4, some mounding appears to occur due to the proximity to the former tank excavation.

3.2 Groundwater Sampling

Prior to groundwater sampling, each well was purged using a submersible pump. 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 prior to sampling. When recovery to 80 percent of the static water level was estimated to exceed two hours, a sample was collected when sufficient volume was available to fill the sample containers.

Wells were sampled using a new, clean, disposable Teflon bailer attached to new, clean string. From each monitoring well, sample vials and bottles were filled to overflowing and sealed so that no air was trapped in the vial or bottle. Once filled, samples were inverted and tapped to test for air bubbles. Samples were contained in vials and bottles approved by the US EPA and the Regional Water Quality Control Board. Sample containers were labeled with self-adhesive, pre-printed tags. All samples were stored in ice filled coolers to be delivered to an state-certified laboratory for analysis.

Water purged during the development and sampling of the monitoring wells was temporarily stored onsite in Department of Transportation (DOT) 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 Sequoia Analytical under chain-of-custody protocol. Groundwater samples collected from wells MW-1, MW-2, and MW-4 were analyzed for TPHg and BTEX by Environmental Protection Agency (EPA) modified Methods 5030, 8015 and 8020. In addition, the groundwater sample collected from wells MW-4 was analyzed for halogenated volatile organics by EPA Method 8010, TPHd and motor oil by EPA Method 3510/3520/8015, and total oil and grease by SM5520 B&F. Copies of the chain-of-custody record and laboratory analysis reports are in Appendix B. Groundwater sample analyses results are summarized in Table 2.

TABLE 2 - LABORATORY RESULTS, GROUNDWATER ppb

WELL#/ Date	TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	TOG ppm	TPHd ppb
MW-1							
11/18/91	ND	ND	ND	ND	ND	4	ND
05/30/92	ND	ND	ND	ND	2.7	20	ND
09/10/92	ND	ND	ND	ND	ND	1.1	ND
02/04/93	ND	ND	ND	ND	ND	ND	ND
05/03/93	ND	ND	ND	ND	ND	ND	ND
12/09/94	ND	ND	ND	ND	ND	NA	NA
03/15/95	ND	ND	ND	ND	ND	NA	NA
MW-2							
11/18/91	ND	ND	ND	ND	ND	3.0	ND
05/30/92	ND	ND	ND	ND	2.0	<10	ND
09/10/92	ND	ND	ND	ND	ND	ND	ND
02/04/93	ND	ND	ND	ND	ND	ND	ND
05/03/93	ND	ND	ND	ND	ND	ND	ND
12/09/94	ND	ND	ND	ND	ND	NA	NA
03/15/95	ND	ND	ND	ND	ND	NA	NA
MW-3							
11/18/91	ND	ND	ND	ND	ND	1.0	ND
05/30/92	ND	ND	ND	ND	ND	20	ND
09/10/92	ND	ND	ND	ND	ND	0.4	ND
02/04/93	ND	ND	ND	ND	ND	ND	ND
05/03/93	ND	ND	ND	ND	ND	ND	ND
12/09/94	NA	NA	NA	NA	NA	NA	NA
03/15/95	140	ND	ND	ND	2.2	NA	NA

Screened water 4-15

TABLE 2 - LABORATORY RESULTS, GROUNDWATER ppb							
WELL#/ Date	TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	TOG ppm	TPHd
MW-4*							
05/14/93	ND	ND	ND	ND	ND	3.1	ND
12/09/94	ND	ND	ND	ND	ND	550	ND
03/15/95	ND	ND	ND	ND	ND	ND	ND

Notes:
TPHg = Total Petroleum Hydrocarbons as gasoline
TPHd = Total Petroleum Hydrocarbons as diesel
TOG = Total Oil and Grease
ppb = parts per billion
ND = below laboratory detection limit (see Appendix B)
NA = not analyzed
* = Halogenated Volatile Organics (EPA 8010) performed, 1,2-Dichloroethane detected at 5.7 ug/L (5/14/93), 1.3 ug/L (12/9/94), and 1.2 ug/L (03/15/95); all other analytes not detected at Det. Limits

MCL: 5ppb

5.0 Discussion

Well construction details for wells MW-1, MW-2 and MW-3 were obtained from Environmental Bio-Systems, Inc. showing that wells were screened from 2 feet below grade to total depth. Typical sampling protocol was altered to ensure that water samples in monitoring wells MW-1 through MW-3 were collected before the wells had recharged above the level of the screen. Four well volumes were removed and samples obtained from 4.25-5.00 feet below grade, as shown on sampling data sheets included in Appendix A.

Analytical results of the groundwater samples collected on March 15, 1995 revealed total petroleum hydrocarbons as gasoline and associated BTEX constituents were not detected in wells MW-1, MW-2, and MW-4. A sample from MW-3 revealed 140 ug/L (ppb) TPH as gasoline and 2.2 ppb total xylenes.

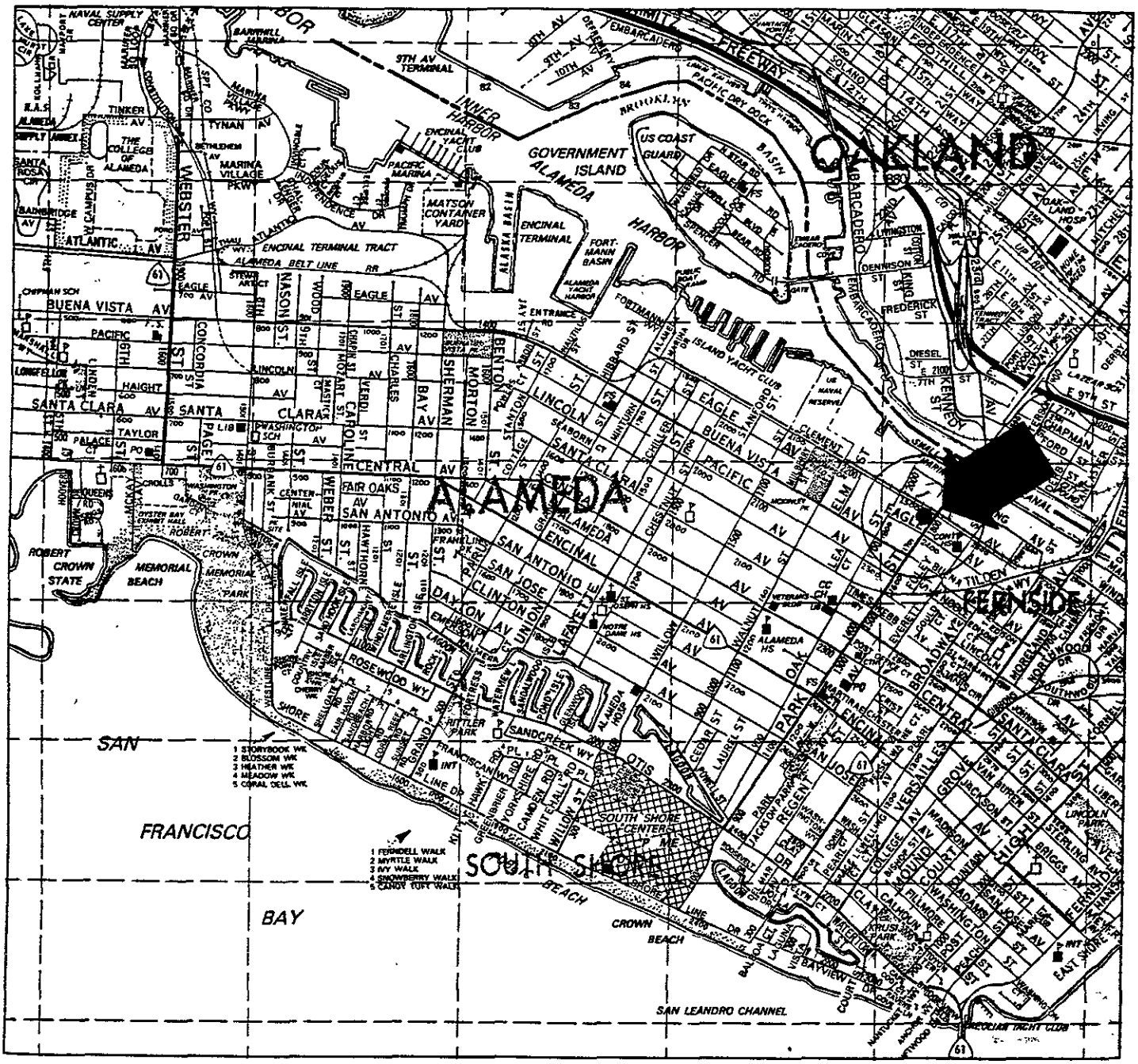
In the sample from MW-4, approximately ten feet downgradient of the former waste oil tank, total petroleum hydrocarbons as diesel and total oil and grease were not detected and halogenated volatile organics by EPA Method 8010 revealed 1.2 ug/L 1,2-Dichloroethane.

Minor hydrocarbon concentrations appear to be due primarily to hydrocarbon residues in soil in contact with fluctuating water levels. ACC believes these residual concentrations should naturally degrade with time.

6.0 Recommendations

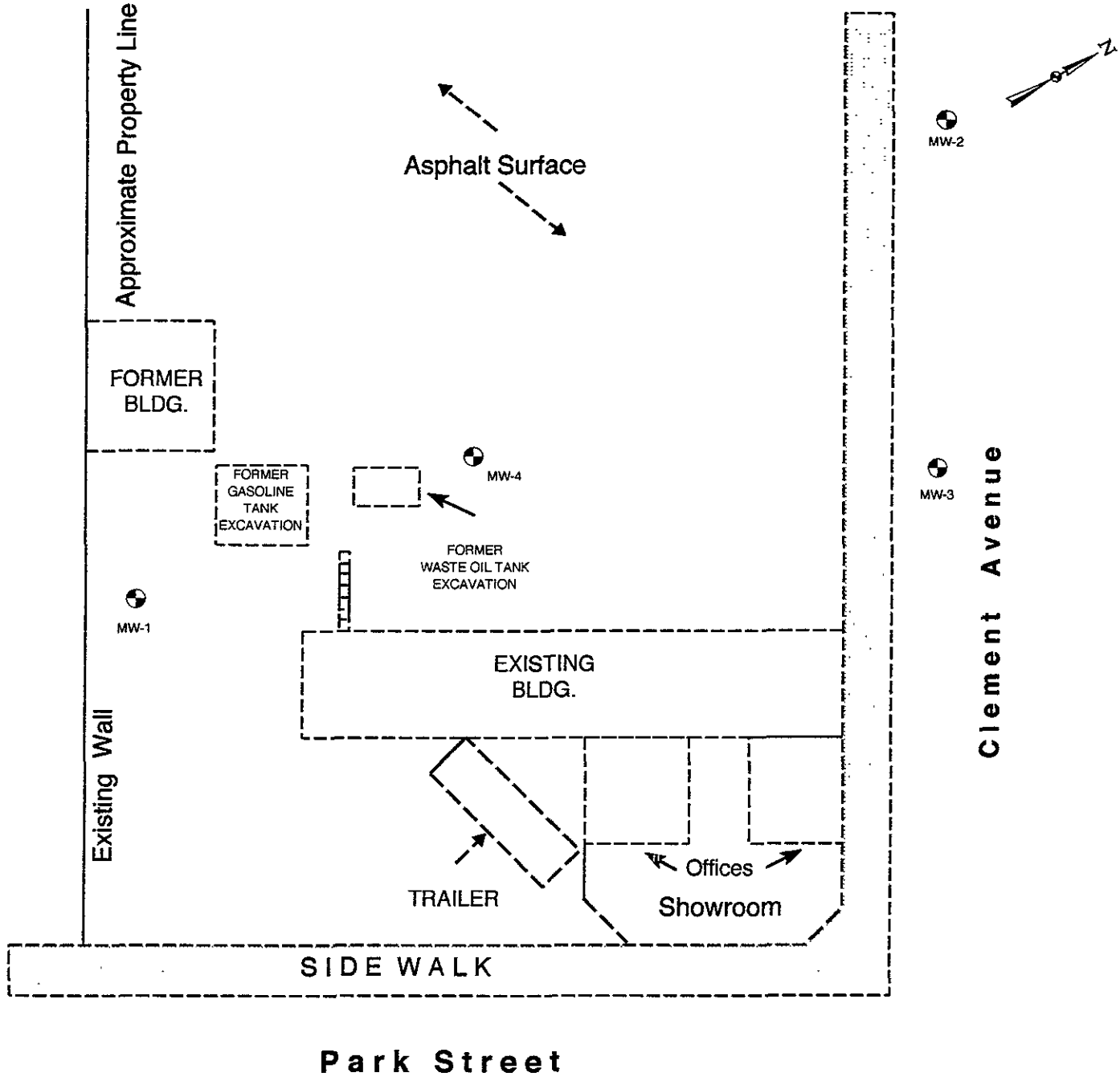
ACC recommends continuing quarterly groundwater monitoring of onsite wells to only analyze for chemicals of concern; TPH as gasoline, BTEX and TOG.

Water samples from monitoring wells MW-1 and MW-2 have consistently not contained detectable concentrations of TPH as gasoline, diesel, and BTEX compounds. ACC recommends evaluating the current sampling protocol in regards to future monitoring.

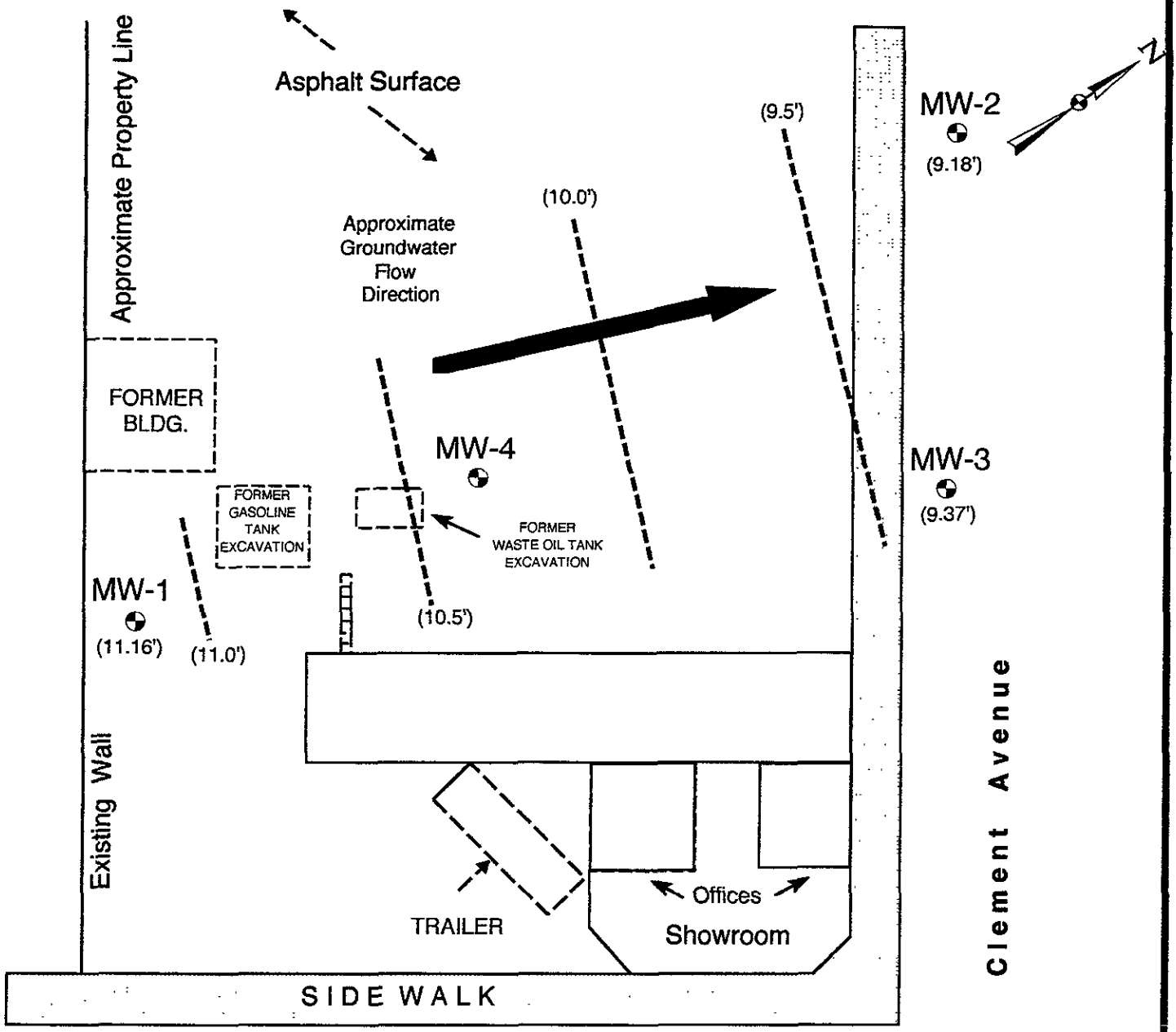


(Source: Thomas Brothers)

ACC Environmental Consultants, Inc. 1000 Atlantic Avenue, Suite 110 Alameda, California 94501		LOCATION MAP: Ron Goode Toyota Dealership 1825 Park Street Alameda, California	
Project No. 6089-1	Date: 1/20/95	Dn by: DRD	Figure No. 1



ACC Environmental Consultants, Inc. 1000 Atlantic Avenue, Suite 110 Alameda, California 94501		SITE PLAN: Ron Goode Toyota Dealership 1825 Park Street Alameda, California	
Project No. 6089-1	Date: 1/20/95	Dn by: DRD	Figure No. 2



Legend

MW-1 Approximate location of monitoring well

Storm water grate

SCALE 1" = 30'

Elevations measured on 3/15/95 in feet above mean sea level

ACC Environmental Consultants, Inc. 1000 Atlantic Avenue, Suite 110 Alameda, California 94501		GRADIENT MAP: Ron Goode Toyota Dealership 1825 Park Street Alameda, California	
Project No. 6089-1	Date: 3/15/95	Dn by: DRD	Figure No. 3

APPENDIX A

Groundwater Monitoring
and
Sampling Data

Well Sampling [X] Well Development [ ] check one

Well Number: MW1

Job Number: 60897

Job Name: 1825 Park St.

Date: 9/15/95

Sampler: ACE

14.57

Depth to Water (measured from TCC): 3.41

Inside Diameter of Casing: 2"

Depth of Boring: 14.77

Method of well development/purging: Bailing

Amount of Water Bailed/Pumped from well: 7.2 gallons

Depth to Water after well development: ———

Depth to water prior to sampling: 4.85

Bailed water stored on-site ? How ? Drums

Number of well volumes removed: 4

TSP wash, distilled rinse, new rope ? New Rope, New Bailer

Water Appearance:

	yes	no
froth		
irridesence		
oil		
smell		
product		
other, describe		↓

Gallons Removed	pH	E	Temp
~~5~~	1.8	7.64	2.78 63.9
~~10~~	3.6	7.54	2.78 63.8
~~15~~	5.41	7.52	2.79 63.7
20		7.49	2.77 63.8
25		7.47	2.78 63.8
30		7.49	2.77 63.7
35			
40			
45			
50			

Samples Obtained:

TPH (gasoline)	X
TPH (diesel)	
TPH (motor oil)	
BTXE	X
EPA 624	
EPA 625	
EPA 608	
PCBs only	
Metals	
Other, specify	
Field Blank	

Well Sampling [X] Well Development [ ] check one

2:05

Well Number: MW2

Job Number: 6089-1

Job Name: 1825 Park St.

Date: 3/15/95

Sampler: ACE

11.68

Depth to Water (measured from TCC): 2.50

Inside Diameter of Casing: 2"

Depth of Boring: 14.54

Method of well development/purging: Bailing

Amount of Water Bailed/Pumped from well: 8 gallons

Depth to Water after well development: ~~4.37~~

Depth to water prior to sampling: 4.37

Bailed water stored on-site ? How ? Drums

Number of well volumes removed: 4

TSP wash, distilled rinse, new rope ? New Rope, New Bailer

Water Appearance:

	yes	no
froth		
irridesence		
oil		
smell		
product		
other, describe		✓

Gallons Removed	pH	EC	Temp
~~5~~ 2	7.84	3.52	67.4
~~10~~ 4	7.25	3.57	66.8
~~15~~ 6	7.15	3.47	65.6
20	7.11	3.47	65.1
25	7.11	3.48	65.1
30	7.12	3.49	65.1
35			
40			
45			
50			

Samples Obtained:

TPH (gasoline)	X
TPH (diesel)	
TPH (motor oil)	
BTXE	X
EPA 624	
EPA 625	
EPA 608	
PCBs only	
Metals	
Other, specify	
Field Blank	

Well Sampling [X] Well Development [ ] check one

Well Number: MW3

Job Number: 6089-1

Job Name: 1825 Park St

Date: 3/15/95

Sampler: ACE

11.75

Depth to Water (measured from TOC): 2.38

Inside Diameter of Casing: 2"

Depth of Boring: 14.37

Method of well development/purging: Bailing

Amount of Water Bailed/Pumped from well: 8 gallons

Depth to Water after well development: ~~~~~

Depth to water prior to sampling: 4.98 ft.

Bailed water stored on-site ? How ? Drums

Number of well volumes removed: 4

TSP wash, distilled rinse, new rope ? New Rope, New Bailer

Water Appearance:

	yes	no
froth		
iridescence		
oil		
smell		
product		
other, describe		X

Gallons Removed	pH	EC	Temp
2	6.53	6.94	66.4
4	6.92	7.04	65.2
6	6.90	6.99	65.4
20	6.86	7.08	65.2
25	6.85	7.07	65.3
30	6.86	7.07	65.3
35			
40			
45			
50			

Samples Obtained:

TPH (gasoline)	X
TPH (diesel)	
TPH (motor oil)	
BTXE	X
EPA 624	
EPA 625	
EPA 608	
PCBs only	
Metals	
Other, specify	
Field Blank	

3:45

Well Sampling [X] Well Development [ ] check one

Well Number: MW 4

Job Number: 6089-1

Job Name: 1825 Park St.

Date: 3/15/95

Sampler: ACE

13.00

Depth to Water (measured from TOC): 2.16

Inside Diameter of Casing: 2"

Depth of Boring: 14.58

Method of well development/purging: Bailing

Amount of Water Bailed/Pumped from well: 9.2 gallons

Depth to Water after well development: ~~~~

Depth to water prior to sampling: 4.25

Bailed water stored on-site ? How ? Drums

Number of well volumes removed: 4

TSP wash, distilled rinse, new rope ? New Rope, New Bailer

Water Appearance:

	yes	no
froth		
irridesence		
oil		
smell		
product		
other, describe		

Gallons Removed	pH	EC	Temp
5	7.47	7.94	69.7
10	6.95	7.74	67.9
15	7.24	7.64	67.2
20	7.09	7.64	66.1
25	7.08	7.63	65.9
30	7.08	7.61	65.9
35			
40			
45			
50			

Samples Obtained:

TPH (gasoline)	
TPH (diesel)	
TPH (motor oil)	
BTXE	
EPA 624	
EPA 625	
EPA 608	
PCEs only	
Metals	
Other, specify	
Field Blank	

APPENDIX B

Laboratory Analysis Reports
and
Chain-of-Custody Record

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

ACC Environmental Consultants	Client Project ID:	1825 Park Street, Alameda	Sampled: Mar 15, 1995
1000 Atlantic Ave., #110	Sample Matrix:	Water	Received: Mar 16, 1995
Alameda, CA 94501	Analysis Method:	EPA 5030/8015/8020	Reported: Mar 27, 1995
Attention: Dave DeMent	First Sample #:	503-0744	

TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX DISTINCTION

Analyte	Reporting Limit µg/L	Sample I.D. 503-0744 MW 1	Sample I.D. 503-0745 MW 2	Sample I.D. 503-0746 MW 3	Sample I.D. 503-0747 MW 4
Purgeable Hydrocarbons	50	N.D.	N.D.	140	N.D.
Benzene	0.50	N.D.	N.D.	N.D.	N.D.
Toluene	0.50	N.D.	N.D.	N.D.	N.D.
Ethyl Benzene	0.50	N.D.	N.D.	N.D.	N.D.
Total Xylenes	0.50	N.D.	N.D.	2.2	N.D.
Chromatogram Pattern:		--	--	Gasoline	--

Quality Control Data

Report Limit Multiplication Factor:	1.0	1.0	1.0	1.0
Date Analyzed:	3/27/95	3/27/95	3/27/95	3/27/95
Instrument Identification:	HP-2	HP-2	HP-4	HP-4
Surrogate Recovery, %: (QC Limits = 70-130%)	104	107	103	94

Purgeable Hydrocarbons are quantitated against a fresh gasoline standard.
Analytes reported as N.D. were not detected above the stated reporting limit.

SEQUOIA ANALYTICAL, #1271

Alan B. Kemp
Project Manager

5030744.ACE <1>

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

ACC Environmental Consultants	Client Project ID:	1825 Park Street, Alameda	Sampled:	Mar 15, 1995
1000 Atlantic Ave., #110	Sample Matrix:	Water	Received:	Mar 16, 1995
Alameda, CA 94501	Analysis Method:	EPA 3510/8015	Reported:	Mar 27, 1995
Attention: Dave DeMent	First Sample #:	503-0747		

TOTAL EXTRACTABLE PETROLEUM HYDROCARBONS

Analyte	Reporting Limit µg/L	Sample I.D. 503-0747 MW 4
Extractable Hydrocarbons	50	N.D.
Chromatogram Pattern:		--

Quality Control Data

Report Limit Multiplication Factor:	1.0
Date Extracted:	3/20/95
Date Analyzed:	3/21/95
Instrument Identification:	HP-3A

Extractable Hydrocarbons are quantitated against a fresh diesel standard.
Analytes reported as N.D. were not detected above the stated reporting limit.

SEQUOIA ANALYTICAL, #1271

Alan B. Kemp
Project Manager

5030744.ACE <2>

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

ACC Environmental Consultants	Client Project ID:	1825 Park Street, Alameda	Sampled:	Mar 15, 1995
1000 Atlantic Ave., #110	Matrix Descript:	Water	Received:	Mar 16, 1995
Alameda, CA 94501	Analysis Method:	SM 5520 B&F (Gravimetric)	Extracted:	Mar 20, 1995
Attention: Dave DeMent	First Sample #:	503-0747	Analyzed:	Mar 21, 1995
			Reported:	Mar 27, 1995

TOTAL RECOVERABLE PETROLEUM OIL

Sample Number	Sample Description	Oil & Grease mg/L (ppm)	Detection Limit Multiplication Factor
503-0747	MW 4	N.D.	1.0

Detection Limits:	**5.0**

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL, #1271

Alan B. Kemp
Project Manager

Sequoia Analytical

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ACC Environmental Consultants	Client Project ID:	1825 Park Street, Alameda	Sampled:	Mar 15, 1995
1000 Atlantic Ave., #110	Sample Descript:	Water, MW 4	Received:	Mar 16, 1995
Alameda, CA 94501	Analysis Method:	EPA 5030/8010	Analyzed:	Mar 23, 1995
Attention: Dave DeMent	Lab Number:	503-0747	Reported:	Mar 27, 1995

HALOGENATED VOLATILE ORGANICS (EPA 8010)

Analyte	Detection Limit µg/L	Sample Results µg/L
Bromodichloromethane	0.50	N.D.
Bromoform	0.50	N.D.
Bromomethane	1.0	N.D.
Carbon tetrachloride	0.50	N.D.
Chlorobenzene	0.50	N.D.
Chloroethane	1.0	N.D.
2-Chloroethylvinyl ether	1.0	N.D.
Chloroform	0.50	N.D.
Chloromethane	1.0	N.D.
Dibromochloromethane	0.50	N.D.
1,3-Dichlorobenzene	0.50	N.D.
1,4-Dichlorobenzene	0.50	N.D.
1,2-Dichlorobenzene	0.50	N.D.
1,1-Dichloroethane	0.50	N.D.
1,2-Dichloroethane	**0.50**	**1.2**
1,1-Dichloroethene	0.50	N.D.
cis-1,2-Dichloroethene	0.50	N.D.
trans-1,2-Dichloroethene	0.50	N.D.
1,2-Dichloropropane	0.50	N.D.
cis-1,3-Dichloropropene	0.50	N.D.
trans-1,3-Dichloropropene	0.50	N.D.
Methylene chloride	5.0	N.D.
1,1,2,2-Tetrachloroethane	0.50	N.D.
Tetrachloroethene	0.50	N.D.
1,1,1-Trichloroethane	0.50	N.D.
1,1,2-Trichloroethane	0.50	N.D.
Trichloroethene	0.50	N.D.
Trichlorofluoromethane	0.50	N.D.
Vinyl chloride	1.0	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL, #1210

Alan B. Kemp
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

ACC Environmental Consultants
1000 Atlantic Ave., #110
Alameda, CA 94501
Attention: Dave DeMent

Client Project ID: 1825 Park Street, Alameda
Matrix: Liquid
QC Sample Group: 503-0747

Reported: Mar 28, 1995

QUALITY CONTROL DATA REPORT

ANALYTE	Oil & Grease
Method:	SM 5520B/B&F
Analyst:	D. Newcomb
MS/MSD Batch#:	BLK031995
Date Prepared:	3/19/95
Date Analyzed:	3/20/95
Instrument I.D.#:	--
Conc. Spiked:	5000 mg/L
Matrix Spike % Recovery:	95
Matrix Spike Duplicate % Recovery:	96
Relative % Difference:	1.1
LCS Batch#:	BLK031995
Date Prepared:	3/19/95
Date Analyzed:	3/20/95
Instrument I.D.#:	--
LCS % Recovery:	96
% Recovery Control Limits:	75-125

SEQUOIA ANALYTICAL, #1271

Alan B. Kemp
Project Manager

Please Note:
The LCS is a control sample of known, interferent free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

Sequoia Analytical

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ACC Environmental Consultants
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Alameda, CA 94501
Attention: Dave DeMent

Client Project ID: 1825 Park Street, Alameda
Matrix: Liquid
QC Sample Group: 503-0747

Reported: Mar 28, 1995

QUALITY CONTROL DATA REPORT

ANALYTE	1,1-Dichloro-ethene	Trichloro-ethene	Chloro-benzene
Method:	EPA 8010	EPA 8010	EPA 8010
Analyst:	T. Costello	T. Costello	T. Costello
MS/MSD Batch#:	9503D16-01	9503D16-01	9503D16-01
Date Prepared:	3/22/95	3/22/95	3/22/95
Date Analyzed:	3/22/95	3/22/95	3/22/95
Instrument I.D.#:	GCHP08	GCHP08	GCHP08
Conc. Spiked:	25 µg/L	25 µg/L	25 µg/L
Matrix Spike % Recovery:	112	104	104
Matrix Spike Duplicate % Recovery:	108	104	104
Relative % Difference:	3.6	0.0	0.0
LCS Batch#:	VBLK032295BS	VBLK032295BS	BLK032295BS
Date Prepared:	3/22/95	3/22/95	3/22/95
Date Analyzed:	3/22/95	3/22/95	3/22/95
Instrument I.D.#:	GCHP08	GCHP08	GCHP08
LCS % Recovery:	104	100	100
% Recovery Control Limits:	28-167	35-146	38-150

SEQUOIA ANALYTICAL, #1210

Alan B. Kemp
Project Manager

Please Note:
The LCS is a control sample of known, interferent free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

SEQUOIA ANALYTICAL
CHAIN OF CUSTODY

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☐ 819 West Striker Ave. • Sacramento, CA 95834 • (916) 921-9600 FAX (916) 921-0100
☒ 1900 Bates Ave., Suite LM • Concord, CA 94520 • (510) 686-9600 FAX (510) 686-9689

Company Name: ACC Environmental Consultants	Project Name: 1825 Park Street Alameda
Address: 1000 Atlantic Avenue Ste 110	Billing Address (if different):
City: Alameda State: CA Zip Code: 94501	
Telephone: (510) 522-8188 FAX #: 865-5731	P.O. #: 94-6089-1.1
Report To: Dave DeMent (1st & 2nd) Sampler: Alison Ekdale	QC Data: ☒ Level A (Standard) ☐ Level B ☐ Level C ☐ Level D

Turnaround Time:
☐ 10 Working Days ☐ 3 Working Days ☐ 2 - 8 Hours
☐ 7 Working Days ☐ 2 Working Days
☒ 5 Working Days ☐ 24 Hours

☐ Drinking Water
☐ Waste Water
☐ Other

Analyses Requested

Client Sample I.D.	Date/Time Sampled	Matrix Desc.	# of Cont.	Cont. Type	Sequoia's Sample #	TPH G/BTEX	8010	TPHD	TOG	Comments
1. MW 1	3/15/95	Water	3	40 ml VOA	5030744 AC	X				
2. MW 2	↓	↓	↓	↓	5030745 AC	X				
3. MW 3					5030746 AC	X				
4. MW4			↓	↓	5030747 AK	X				
5. MW4			4	40 ml VOA			X			
6. MW4			2	Amber Liter				X		
7. MW4	↓		2nd	↓				X		
8.										
9.										
10.										

Relinquished By: [signature]	Date: 3/16/95	Time: 10:10	Received By: [signature]	Date: 3-16-95	Time: 10:10
Relinquished By: [signature]	Date: 3-16-95	Time: 4:40	Received By:	Date:	Time:
Relinquished By:	Date:	Time:	Received By Lab: [signature]	Date: 3/16/95	Time: 1640

Were Samples Received in Good Condition? ☐ Yes ☐ No Samples on Ice? ☐ Yes ☐ No Method of Shipment

Pink - Client
Yellow - Sequoia
White - Sequoia