



E nvironmental

T echnical

S ervices

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

AT:

RON GOODE TOYOTA
1825 PARK AVENUE
ALAMEDA, CALIFORNIA

May 12, 1993

1548 Jacob Avenue San Jose, CA 95118
Phone/Fax (408) 267-6427 - Pager (415) 578-5947



Environmental
Technical
Services

June 3, 1993

Alameda County
Environmental Health
Hazardous Materials
80 Swan Way, Room 200
Oakland, CA 94621

Attn: Ms. Juliet Shen

Ms. Shen:

Enclosed please find the signature page for the fourth quarter report documenting the purging and sampling of the three existing monitoring wells at Ron Goode Toyota.

We have been notified by Ron Goode Toyota that the signature page was missing from his report and therefore we are sending a signature page to each entity that received a copy of the fourth quarter report.

We apologize for any inconvenience this may have caused your office. If you have any further questions, please do not hesitate to contact our office at 408-267-6427.

Sincerely,
ENVIRONMENTAL TECHNICAL SERVICES

Helen A. Mawhinney

Helen A. Mawhinney
Project Manager

HAM/ljs

cc: San Francisco Regional
Water Quality Control Board



Environmental
Technical
Services

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prepared by:

Helen Mawhinney
ENVIRONMENTAL TECHNICAL SERVICES
Helen A. Mawhinney
Senior Environmental Specialist

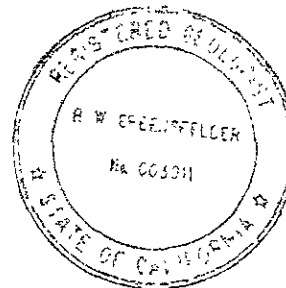
5-30-93

Date

Roger Greensfelder
Roger Greensfelder, PhD
CA Registered Geologist #3011

5-30-93

Date



1548 Jacob Avenue San Jose, CA 95118
Phone/Fax (408) 267-6427 - Pager (415) 578-5947



Environmental
Technical
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5-17-93
Date

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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 Ron Goode Toyota, 1825 Park Street, Alameda, California.

Groundwater was sampled on four consecutive quarters and groundwater gradient determined for twelve consecutive months.

The work was performed in response 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 SITE DESCRIPTION

The site is located in the City and County of Alameda. The area is primarily commercial and industrial with many auto and nautical related businesses. The site is occupied by Ron Goode Toyota an automobile dealership. A single building houses sales offices, a showroom, and an auto repair shop. The topography of the site is relatively level.

3.0 PREVIOUS ENVIRONMENTAL INVESTIGATIONS

3.1 TANK REMOVAL, SOIL BORING INSTALLATION, AND INSTALLATION OF MONITORING WELLS

On December 27, 1990 a 300-gallon motor oil underground storage tank (UST) and a 55-gallon gasoline UST were excavated and removed from the site. Total petroleum hydrocarbons were detected in soil samples collected from beneath the tanks.

On March 21, 1991 and April 11, 1991, soil borings were advanced and samples collected in an investigation of the contaminant migration in soil.

Three groundwater monitoring wells were installed on November 8, 1991 then developed and sampled on November 18, 1991.

TABLE 1
 INITIAL GROUNDWATER ANALYTICAL RESULTS
 Total Petroleum Hydrocarbons as Gasoline
 with Benzene, Toluene, Ethylbenzene, and Xylenes
 Total Petroleum Hydrocarbons as Diesel
 Total Oil and Grease
 November 18, 1991

Results for TPHg, TPHd, and BTEX are reported in ug/L
 Results for TOG are reported in kg/L

<u>Sample #</u>	<u>TPH-G</u>	<u>B</u>	<u>T</u>	<u>E</u>	<u>X</u>	<u>TPH-D</u>	<u>TOG</u>
MW-1	ND	ND	ND	ND	ND	ND	4.0
MW-2	ND	ND	ND	ND	ND	ND	3.0
MW-3	ND	ND	ND	ND	ND	ND	1.0

 ND=Not detected at lower detection limit for this compound

4.0 SCOPE OF SERVICES

4.1 Groundwater Purging & Sampling

The three existing groundwater monitoring wells were purged and sampled on May 30, 1992, September 10, 1992, February 4, 1993 and May 4, 1993. All well effluent was contained in Department of Transportation 17-H, 55-gallon drums, pending analysis of water samples. 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 F, Groundwater Development Report.

4.2 Groundwater Analysis

Each groundwater sample was analyzed for total petroleum hydrocarbons as diesel (TPHd, using EPA Method 3510 and TPH Luft), total petroleum hydrocarbons as gasoline, benzene, toluene, ethylbenzene, and total xylenes (TPHg & BTEX, using EPA Method 5030 and TPH Luft Method 602 for BTEX), and total oil and grease (TOG, using EPA Method 3550/5520).

4.3 Groundwater Analytical Results

TABLE II
GROUNDWATER ANALYTICAL RESULTS
FIRST QUARTER SAMPLING
May 30, 1992

Results for TPHg, TPHd, and BTEX are reported in ug/L
Results for TOG are reported in kg/L

<u>Sample #</u>	<u>TPH-G</u>	<u>B</u>	<u>T</u>	<u>E</u>	<u>X</u>	<u>TPH-D</u>	<u>TOG</u>
MW-1	ND	ND	ND	ND	2.7	ND	20
MW-2	ND	ND	ND	ND	2.0	ND	<10
MW-3	ND	ND	ND	ND	ND	ND	20

ND=Not detected at lower detection limit for this compound

TABLE III
GROUNDWATER ANALYTICAL RESULTS
SECOND QUARTER
SEPTEMBER 10, 1992

Results for TPHg, TPHd, and BTEX are reported in ug/L
Results for TOG are reported in kg/L

<u>Sample #</u>	<u>TPH-G</u>	<u>B</u>	<u>T</u>	<u>E</u>	<u>X</u>	<u>TPH-D</u>	<u>TOG</u>
MW-1	ND	ND	ND	ND	ND	ND	1.1
MW-2	ND	ND	ND	ND	ND	ND	ND
MW-3	ND	ND	ND	ND	ND	ND	0.4

ND=Not detected at lower detection limit for this compound

TABLE IV
GROUNDWATER ANALYTICAL RESULTS
THIRD QUARTER
FEBRUARY 4, 1993

Results for TPHg, TPHd, and BTEX are reported in ug/L
Results for TOG are reported in kg/L

<u>Sample #</u>	<u>TPH-G</u>	<u>B</u>	<u>T</u>	<u>E</u>	<u>X</u>	<u>TPH-D</u>	<u>TOG</u>
MW-1	ND	ND	ND	ND	ND	ND	ND
MW-2	ND	ND	ND	ND	ND	ND	ND
MW-3	ND	ND	ND	ND	ND	ND	ND

ND=Not detected at lower detection limit for this compound

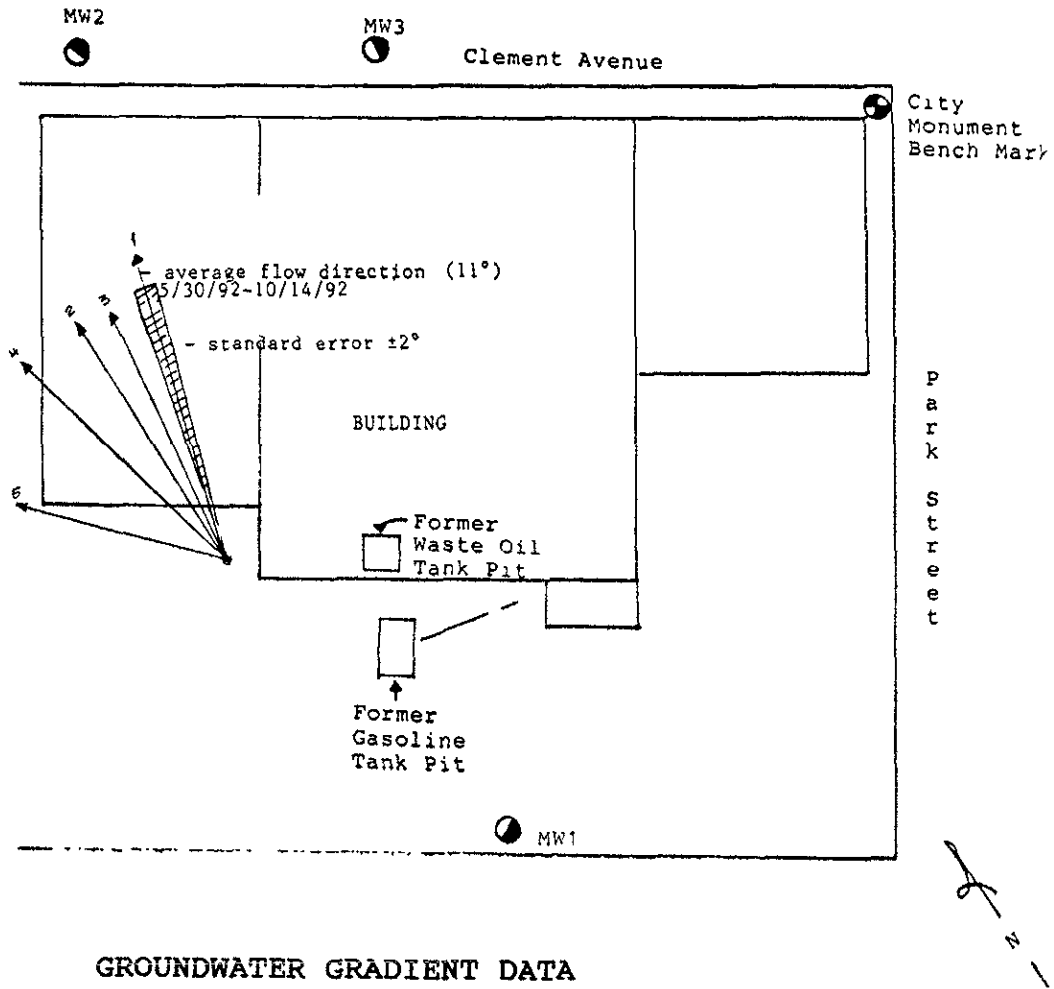
TABLE V
GROUNDWATER ANALYTICAL RESULTS
FOURTH QUARTER
MAY 3, 1993

Results for TPHg, TPHd, and BTEX are reported in ug/L
Results for TOG are reported in kg/L

<u>Sample #</u>	<u>TPH-G</u>	<u>B</u>	<u>T</u>	<u>E</u>	<u>X</u>	<u>TPH-D</u>	<u>TOG</u>
MW-1	ND	ND	ND	ND	ND	ND	ND
MW-2	ND	ND	ND	ND	ND	ND	ND
MW-3	ND	ND	ND	ND	ND	ND	ND

ND=Not detected at lower detection limit for this compound

4.4 Groundwater Gradient



GROUNDWATER GRADIENT DATA

<u>Map No.</u>	<u>Date</u>	<u>Flow Azimuth</u>	<u>Grad. (ft/ft)</u>	<u>H1* (ft.)</u>
1	05/30/92	9	.0074	5.33
	06/28/92	10	.0075	5.39
	07/28/92	12	.0059	4.36
	08/17/92	11	.0059	4.38
	09/11/92	11	.0059	4.34
	10/14/92	14	.0059	4.18
2	11/10/92	355	.0058	4.10
3	12/11/92	2	.0061	3.02
4	01/11/93	341	.0067	3.22
5	05/04/93	311	.011	5.68

*H1 = water elevation in MW1

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.

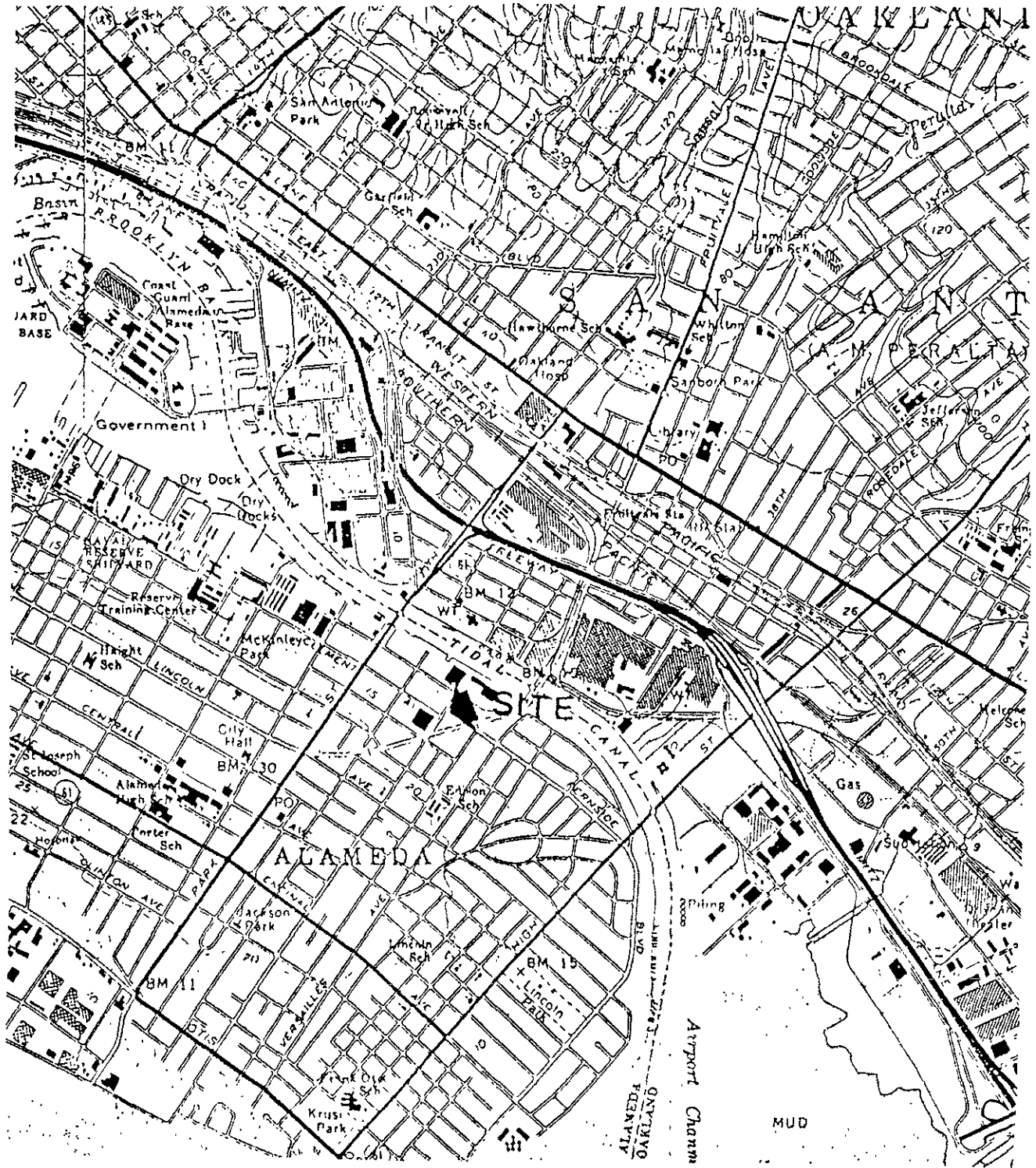
The following addresses have been included for your convenience:

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

MAPS



Environmental
 Technical
 Services

RON GOODE TOYOTA
 1825 PARK STREET
 ALAMEDA, CALIF

Figure 1
 SITE LOCATION MAP

MW2



MW3



Clement Avenue

City Monument Bench Mark

Park Street

Building

Former Waste Oil Tank Pit

Former Gasoline Tank Pit

MW1



Environmental
Technical
Services

RON GOODE TOYOTA

1825 PARK STREET

ALAMEDA, CALIF

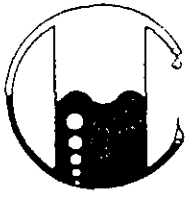
Figure 2

MONITORING WELL AND

FORMER TANK LOCATION

APPENDIX B

GROUNDWATER ANALYTICAL RESULTS
FIRST QUARTER



MOBILE CHEM LABS INC.

5021 Blum Road, Suite 3 • Martinez, CA 94553
Phone (415) 372-3700 • Fax (415) 372-6955

MWRon Goode\011939

Zaccor Corporation
791 Hamilton Avenue
Menlo Park, CA 94025
Attn: Gary Zaccor
Project Manager

Date Sampled: 05-30-92
Date Received: 06-01-92
Date Reported: 06-03-92

Sample Number

062001

Sample Description

Project # MW Ron Goode
Env. Technical Services
Ron Goode Toyota/Alameda
1825 Park Avenue
MW-1 WATER

ANALYSIS

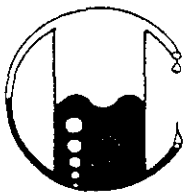
	Detection Limit ----- ppb	Sample Results ----- ppb
Total Petroleum Hydrocarbons as Gasoline	50	<50
Benzene	0.5	<0.5
Toluene	0.5	<0.5
Xylenes	0.5	2.7
Ethylbenzene	0.5	<0.5

QA/QC: Sample blank is none detected
Duplicate Deviation is 7.5%

Note: Analysis was performed using EPA methods 5030 and TPH LUFT
with method 602 used for BTX distinction.
(ppb) = (µg/L)

MOBILE CHEM LABS

Ronald G. Evans
Ronald G. Evans
Lab Director



MOBILE CHEM LABS INC.

5021 Blum Road, Suite 3 • Martinez, CA 94553
Phone (415) 372-3700 • Fax (415) 372-6955

Zaccor Corporation
791 Hamilton Avenue
Menlo Park, CA 94025
Attn: Gary Zaccor
Project Manager

MWRon Goode\011939

Date Sampled: 05-30-92
Date Received: 06-01-92
Date Reported: 06-03-92

Sample Number

062002

Sample Description

Project # MW Ron Goode
Env. Technical Services
Ron Goode Toyota/Alameda
1825 Park Avenue
MW-2 WATER

ANALYSIS

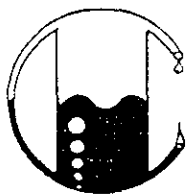
	<u>Detection Limit</u>	<u>Sample Results</u>
	ppb	ppb
Total Petroleum Hydrocarbons as Gasoline	50	<50
Benzene	0.5	<0.5
Toluene	0.5	<0.5
Xylenes	0.5	2.0
Ethylbenzene	0.5	<0.5

QA/QC: Sample blank is none detected

Note: Analysis was performed using EPA methods 5030 and TPH LUFT
with method 602 used for BTX distinction.
(ppb) = (µg/L)

MOBILE CHEM LABS

Ronald G. Evans
Lab Director



MOBILE CHEM LABS INC.

5021 Blum Road, Suite 3 • Martinez, CA 94553
Phone (415) 372-3700 • Fax (415) 372-6955

MWRon Goode\011939

Zaccor Corporation
791 Hamilton Avenue
Menlo Park, CA 94025
Attn: Gary Zaccor
Project Manager

Date Sampled: 05-30-92
Date Received: 06-01-92
Date Reported: 06-03-92

Sample Number

062003

Sample Description

Project # MW Ron Goode
Env. Technical Services
Ron Goode Toyota/Alameda
→ 1825 Park Avenue
MW-3 WATER

ANALYSIS

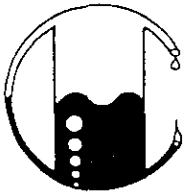
	Detection Limit ----- ppb	Sample Results ----- ppb
Total Petroleum Hydrocarbons as Gasoline	50	<50
Benzene	0.5	<0.5
Toluene	0.5	<0.5
Xylenes	0.5	<0.5
Ethylbenzene	0.5	<0.5

QA/QC: Sample blank is none detected

Note: Analysis was performed using EPA methods 5030 and TPH LUFT
with method 602 used for BTX distinction.
(ppb) = (µg/L)

MOBILE CHEM LABS

Ronald G. Evans
Lab Director



MOBILE CHEM LABS INC.

5021 Blum Road, Suite 3 • Martinez, CA 94553
Phone (415) 372-3700 • Fax (415) 372-6955

MW Ron Goode\011939

Zaccor Corporation
791 Hamilton Avenue
Menlo Park, CA 94025
Attn: Gary Zaccor
Project Manager

Date Sampled: 05-30-92
Date Received: 06-01-92
Date Reported: 06-03-92

<u>Sample Number</u>	<u>Sample Description</u>	<u>Detection Limit</u> ppm	<u>WATER</u> <u>Gravimetric Waste Oil</u> <u>as Petroleum Oil</u> ppm
----------------------	---------------------------	-------------------------------	--

Environmental Technical Services
Ron Goode Toyota
1825 Park Avenue
Alameda, CA

062001	MW-1	10	20
062002	MW-2	10	<10
062003	MW-3	10	20

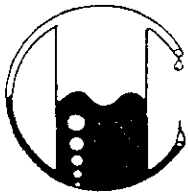
QA/QC: Freon Blank is none detected.

Note: Analysis was performed using EPA extraction method 3550 with Trichlorotrifluoroethane as solvent, and gravimetric determination by standard methods 5520
(ppm) = (mg/L)

MOBILE CHEM LABS

Hiram Cueto

for Ronald G. Evans
Lab Director



MOBILE CHEM LABS INC.

5021 Blum Road, Suite 3 • Martinez, CA 94553
Phone (415) 372-3700 • Fax (415) 372-6955

Zaccor Corporation
791 Hamilton Avenue
Menlo Park, CA 94025
Attn: Gary Zaccor
Project Manager

MWRon Goode\011939

Date Sampled: 05-30-92
Date Received: 06-01-92
Date Reported: 06-03-92

Sample Number	Sample Description	Detection Limit ppb	WATER
			Total Petroleum Hydrocarbons as Diesel ppb

Environmental Technical Services
Ron Goode Toyota
1825 Park Avenue
Alameda, CA

062001	MW-1	50	<50
062002	MW-2	50	<50
062003	MW-3	50	<50

QA/QC: Sample blank is none detected
Spike Recovery on 062002 is 98.9%
Duplicate Spike Deviation is 7.5%

Note: Analysis was performed using EPA method 3510 and TPH LUFT.
(ppb) = (µg/L)

MOBILE CHEM LABS

Ronald G. Evans

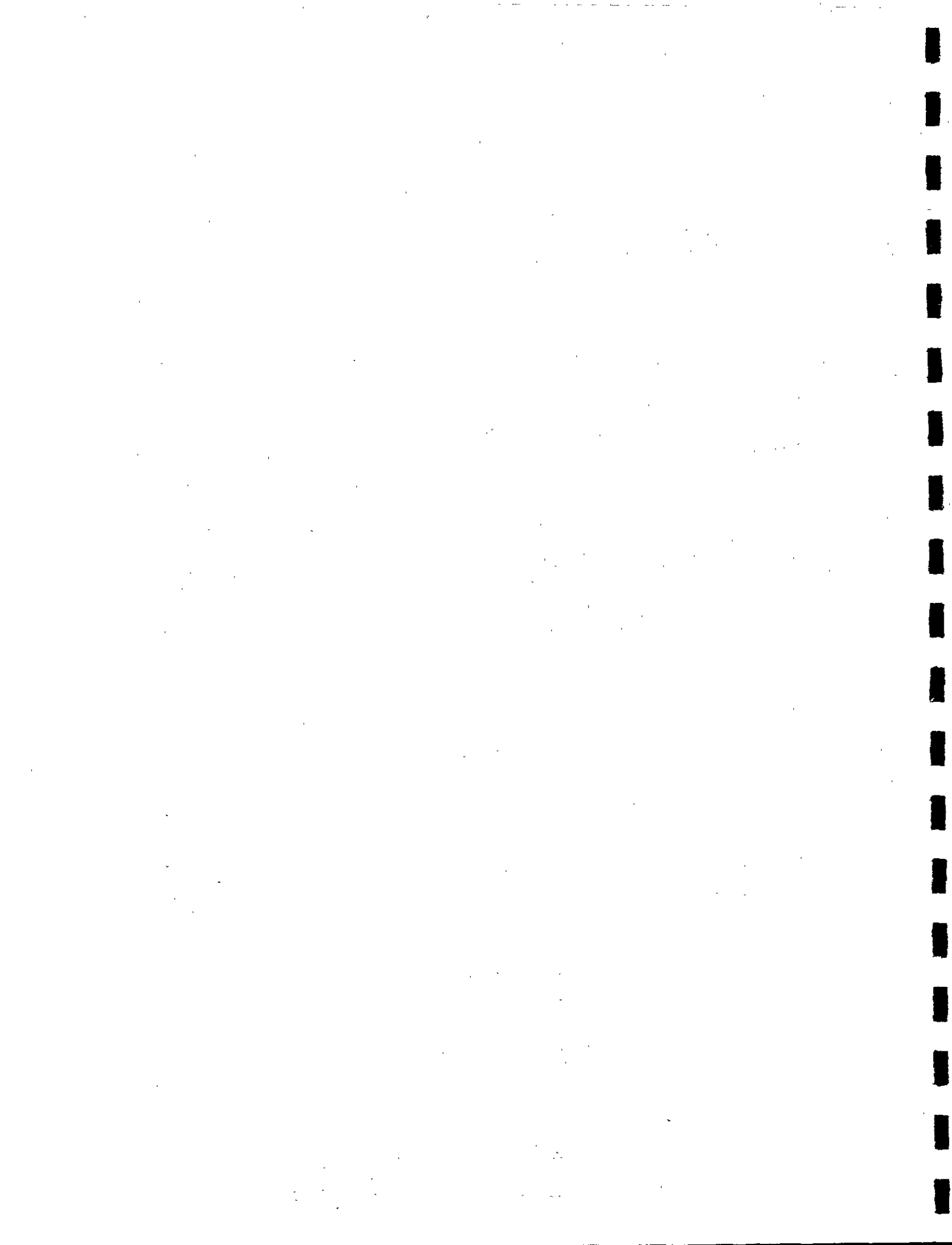
Ronald G. Evans
Lab Director

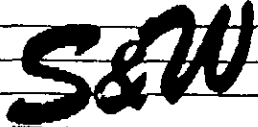
CHAIN OF CUSTODY RECORD

PROJECT NO.		SITE NAME & ADDRESS					ANALYSES REQUESTED (1)						REMARKS
15-5 Park		Akimeda Co. M... .. Toyota Akimeda, Ca											
WITNESSING AGENCY / INSPECTOR NAME / DATE													
ID. NO.	DATE	TIME	SOIL	WATER	SAMPLING LOCATION	TPH (Gasoline) & B, T, X, & E	TPH (Diesel) & B, T, X, & E	Total Oil & Grease	Halogenated HC's	B, T, X & E	Heavy Metals		
MW1	5/30			/		✓	✓	✓				340 mg concs / 3 liters	
MW2				✓		✓	✓	✓				↓	
MW3	↓			✓		✓	✓	✓				↓	
												(1) See attached "Table 2" for specific analysis method.	
Relinquished by: (Signature)			Date/Time		Received by: (Signature)			The following MUST BE completed by the laboratory accepting samples for analysis: 1. Have all samples received for analysis been stored in ice? 2. Will samples remain refrigerated until analyzed? 3. Did any samples received for analysis have head space? 4. Were samples in appropriate containers and properly packaged?					
[Signature]			5-30-92 11:40		E75 Refrigerator								
Relinquished by: (Signature)			Date/Time		Received by: (Signature)								
[Signature]			5-30-92 1:24:55		[Signature]								
Relinquished by: (Signature)			Date/Time		Received by: (Signature)								
Relinquished by: (Signature)			Date/Time		Rec'd for Laboratory by: (Signature)								
								Signature Title Date					

APPENDIX C

GROUNDWATER ANALYTICAL RESULTS
SECOND QUARTER





Laboratory Report

Soil and Water
Environmental
Laboratory

Client
Environmental Tech. Services
1548 Jacob Ave.
San Jose CA 95118

Report Date
10/02/92

Drinking Water
Waste Water - Asbestos
Hazardous Waste - Soil
Calderon Testing - Air

Sample Site
R.R. Goode Toyota
Alameda, CA

Date Received
09/11/92

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

R. G. Toyota

Analysis Requested	Procedure	Date Analyzed
Total Hydrocarbons - Gas	EPA 5030	09/15/92
Total Hydrocarbons - Diesel	EPA 3510	
Total Oil & Grease	EPA 503e	
BTEX	EPA 502	

S&W Ref #	Client Ref. #	Matrix/Analysis	Concentration	Detection Limit
2562-ET1-A	MW-1	Water/TPH-G	*	50 ppb
2562-ET1-A	MW-1	Water/TPH-D	*	50 ppb
2562-ET1-A	MW-1	Water/TOG	1.1	5 ppm
2562-ET1-A	MW-1	Water/BTEX		
		Benzene	*	0.5 ppb
		Toluene	*	0.5 ppb
		Ethylbenzene	*	0.5 ppb
		Xylenes	*	0.5 ppb

2562-ET1-B	MW-2	Water/TPH-G	*	50 ppb
2562-ET1-B	MW-2	Water/TPH-D	*	50 ppb
2562-ET1-B	MW-2	Water/TOG	*	5 ppm
2562-ET1-B	MW-2	Water/BTEX		
		Benzene	*	0.5 ppb
		Toluene	*	0.5 ppb
		Ethylbenzene	*	0.5 ppb
		Xylenes	*	0.5 ppb

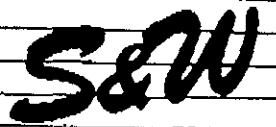
2562-ET1-C	MW-3	Water/TPH-G	*	50 ppb
2562-ET1-C	MW-3	Water/TPH-D	*	50 ppb
2562-ET1-C	MW-3	Water/TOG	0.4	5 ppm
2562-ET1-C	MW-3	Water/BTEX		
		Benzene	*	0.5 ppb
		Toluene	*	0.5 ppb
		Ethylbenzene	*	0.5 ppb
		Xylenes	*	0.5 ppb

* No detectable amount @ detection limit

Analyst Signature

APPENDIX D

GROUNDWATER ANALYTICAL RESULTS
THIRD 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

Client: Environmental Tech. Services
1548 Jacob Ave.
San Jose CA 95118
Report Date: 02/06/93

Sample Site: R. G. Toyota
Park St., Alameda
Date Received: 02/04/93

R. G. Toyota

Analysis Requested	Procedure	Date Analyzed
Total Hydrocarbons - Gas	EPA 5030	02/05/93
Total Hydrocarbons - Diesel	EPA 3510	
Total Oil & Grease	EPA 503	
BTEX	EPA 602	

S&W Ref. #	Client Ref. #	Matrix/Analysis	Concentration	Detection Limit
0353-ET1-A	MW-2	Water/TPH-G	*	50 ppb
0353-ET1-A	MW-2	Water/TPH-D	*	50 ppb
0353-ET1-A	MW-2	Water/TOG	*	5 ppm
0353-ET1-A	MW-2	Water/BTEX		
		Benzene	*	0.5 ppb
		Toluene	*	0.5 ppb
		Ethylbenzene	*	0.5 ppb
		Xylenes	*	0.5 ppb

0353-ET1-B	MW-3	Water/TPH-G	*	50 ppb
0353-ET1-B	MW-3	Water/TPH-D	*	50 ppb
0353-ET1-B	MW-3	Water/TOG	*	5 ppm
0353-ET1-B	MW-3	Water/BTEX		
		Benzene	*	0.5 ppb
		Toluene	*	0.5 ppb
		Ethylbenzene	*	0.5 ppb
		Xylenes	*	0.5 ppb

0353-ET1-C	MW-1	Water/TPH-G	*	50 ppb
0353-ET1-C	MW-1	Water/TPH-D	*	50 ppb
0353-ET1-C	MW-1	Water/TOG	*	5 ppm
0353-ET1-C	MW-1	Water/BTEX		
		Benzene	*	0.5 ppb
		Toluene	*	0.5 ppb
		Ethylbenzene	*	0.5 ppb
		Xylenes	*	0.5 ppb

* No detectable amount @ detection limit

Analyst Signature

Environmental Technical Services

(408) 267-6427

CHAIN - OF - CUSTODY

Project Number		Site Name and Address			Type and Number of Containers	Analysis Required					Laboratory ID	Comments
Witnessing Agency/Inspector Name and Date		Sample ID	Date	Time		Matrix	Sample Location	TPH-G + BTEX	TPH-D + BTEX	TOC		
RC Toyota		RC Toyota Park St., Alameda, CA			2 Liters 2 40ml vials							
2/4/93		MW- (A)	2/4/93			H ₂ O		✓	✓	✓		
2/4/93		MW- (B)	2/4/93			"		✓	✓	✓		
2/4/93		MW- (C)	2/4/93		"		✓	✓	✓			
Relinquished by: (Signature)		Date/Time			Received by: (Signature)		Date/Time		Remarks:			
<i>Helix Mackenzie</i>		2/4/93										
Relinquished by: (Signature)		Date/Time			Received by: (Signature)		Date/Time		COMPANY: ADDRESS:			
Relinquished by: (Signature)		Date/Time			Received by Lab: (Signature)		Date/Time		PHONE: FAX:			
					<i>R. J. Roman</i>		2/4/93 5:00 PM					

APPENDIX E
GROUNDWATER ANALYTICAL RESULTS
FOURTH QUARTER

S&W

**Soil and Water
Environmental
Laboratory**

Laboratory Report

Drinking Water
Waste Water ◦ Asbestos
Hazardous Waste - Soil
Calderon Testing - Air

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

Client: Environmental Tech. Services 05/16/93
1548 Jacob Ave.
San Jose CA 95118

Sample Site: Ron Goode Toyota
Park & Clement

Date Received: 05/05/93

RGT

Analysis Requested	Procedure	Date Analyzed
Total Hydrocarbons - Gas	EPA 5030	05/05/93
Total Hydrocarbons - Diesel	EPA 3510	
Total Oil & Grease	EPA 503e	
BTEX	EPA 502	

S&W Ref. #	Client Ref. #	Matrix/Analysis	Concentration	Detection Limit
1253-ET1-A	MW-1	Water/TPH-G	*	50 ppb
1253-ET1-A	MW-1	Water/TPH-D	*	50 ppb
1253-ET1-A	MW-1	Water/TOG	*	5 ppm
1253-ET1-A	MW-1	Water/BTEX		
		Benzene	*	0.5 ppb
		Toluene	*	0.5 ppb
		Ethylbenzene	*	0.5 ppb
		Xylenes	*	0.5 ppb

1253-ET1-B	MW-2	Water/TPH-G	*	50 ppb
1253-ET1-B	MW-2	Water/TPH-D	*	50 ppb
1253-ET1-B	MW-2	Water/TOG	*	5 ppm
1253-ET1-B	MW-2	Water/BTEX		
		Benzene	*	0.5 ppb
		Toluene	*	0.5 ppb
		Ethylbenzene	*	0.5 ppb
		Xylenes	*	0.5 ppb

1253-ET1-C	MW-3	Water/TPH-G	*	50 ppb
1253-ET1-C	MW-3	Water/TPH-D	*	50 ppb
1253-ET1-C	MW-3	Water/TOG	*	5 ppm
1253-ET1-C	MW-3	Water/BTEX		
		Benzene	*	0.5 ppb
		Toluene	*	0.5 ppb
		Ethylbenzene	*	0.5 ppb
		Xylenes	*	0.5 ppb

* No detectable amount @ detection limit

Analyst Signature: *R. H. Larson*

Soil and Water Environmental Laboratory

14072 West Park Avenue
 Boulder Creek, CA 95006
 (408) 338-3053/4466

CHAIN - OF - CUSTODY

Project Number		Site Name and Address				Type and Number of Containers	Analysis Required						Laboratory ID	Comments
Witnessing Agency/Inspector Name and Date		Sample Location					TPH-G + BTEX	TPH-D + BTEX	TOC					
Sample ID	Date	Time	Matrix	Sample Location										
RET	Park + Clement Alameda, Ca Ron Goode Toyota											1253		
MW-1	5/4/93		H2O			✓	✓	✓						
MW-2	↓		↓			✓	✓	✓						
MW-3	↓		↓			✓	✓	✓						
Relinquished by: (Signature)		Date/Time		Received by: (Signature)		Date/Time		Remarks:						
<i>Helen Mawhinney</i>		6:15 5/4/93		<i>TO ETS Fridge</i>										
Relinquished by: (Signature)		Date/Time		Received by: (Signature)		Date/Time		COMPANY: ADDRESS:						
<i>Helen Mawhinney</i>														
Relinquished by: (Signature)		Date/Time		Received by Lab: (Signature)		Date/Time		PHONE: FAX:						
<i>Helen Mawhinney</i>		6:23 5/5/93		<i>R. V. Lennon</i>		6:20 5/5/93								

APPENDIX F
GROUNDWATER DEVELOPMENT REPORTS

MONITORING WELL SAMPLING DATA/ MW-1

Project Name: RON GOODE TOYOTA Well# MW-1

Date: May 30, 1992

Name: Mawhinney Time Began: 12:45

DEPTH OF WELL(ft.) 14.76 DEPTH TO WATER(ft.) 4.97 WELL DIAM. 2"

<u>Time</u>	<u>Gallons</u>	<u>Salinity</u>	<u>pH</u>	<u>Temp.</u>	<u>Cond.</u>
12:45	1	.03	7.5	17 C	743.0
12:50	3	.03	7.9	18 C	720.0
12:57	5	.03	7.6	16 C	684.0
1:06	7	.04	7.5	16 C	859.0

Volume Evacuated 7 gallons Purging Equip. Stainless Steel Bailer Sampling Equip. Stainless Steel Bailer

Depth to Water Upon Completion of Sampling
Not measured

Sheen no Floating Product no Sample Color grey Odor no

Sediment/Foreign Matter: silt

Sample ID# MW-1 Analysis TPHg, BTEX, TPHd, TOG Laboratory Mobile Chem.

Sample Containers 3/ 40-ml VOAs
2 Liters Preservative None (48 hr analysis)

MONITORING WELL SAMPLING DATA/ MW-2

Project Name: Well#
 RON GOODE TOYOTA MW-2

Date: May 30, 1992

Name: Time Began:
 Mawhinney 1:10

DEPTH OF WELL(ft.) DEPTH TO WATER(ft.) WELL DIAM.
 14.70 3.51 2"

<u>Time</u>	<u>Gallons</u>	<u>Salinity</u>	<u>pH</u>	<u>Temp.</u>	<u>Cond.</u>
1:20	1	.03	7.7	15 C	284.0
1:31	3	.03	7.6	16 C	264.0
1:43	5	.03	7.7	16 C	262.0
1:55	7	.03	7.5	16 C	235.0

Volume Evacuated Purging Equip. Sampling Equip.
 7 gallons Stainless Steel Bailer Stainless Steel Bailer

Depth to Water Upon Completion of Sampling
 Not measured

Sheen Floating Product Sample Color Odor
 no no grey no

Sediment/Foreign Matter: silt

Sample ID# Analysis Laboratory
 MW-2 TPHg, BTEX, TPHd, TOG Mobile Chem

Sample Containers
 3/ 40-ml VOAs 2 Liters

MONITORING WELL SAMPLING DATA/ MW-3

Project Name: RON GOODE TOYOTA Well# MW-3

Date: May 30, 1992

Name: Mawhinney Time Began: 2:07

DEPTH OF WELL(ft.) 14.40 DEPTH TO WATER(ft.) 3.45 WELL DIAM. 2"

<u>Time</u>	<u>Gallons</u>	<u>Salinity</u>	<u>pH</u>	<u>Temp.</u>	<u>Cond.</u>
2:16	1	.03	7.5	15 C	284.0
2:28	3	.03	7.4	15 C	262.0
2:39	5	.03	7.4	15 C	259.0
2:54	7	.04	7.5	15 C	242.0

Volume Evacuated 7 gallons Purging Equip. Stainless Steel Bailer Sampling Equip. Stainless Steel Bailer

Depth to Water Upon Completion of Sampling 7.2

Sheen no Floating Product no Sample Color grey Odor no

Sediment/Foreign Matter: silt

Sample ID# MW-3 Analysis TPHg, BTEX, TPHd, TOG Laboratory Mobile Chem

Sample Containers
3/ 40-ml VOAs
2 Liters

MONITORING WELL SAMPLING DATA/ MW-1

Project Name: Well#
RON GOODE TOYOTA MW-1

Date: September 11, 1992

Name: Time Began:
Mawhinney 1:12

DEPTH OF WELL(ft.) DEPTH TO WATER(ft.) WELL DIAM.
14.78 5.96 2"

<u>Time</u>	<u>Gallons</u>	<u>Salinity</u>	<u>pH</u>	<u>Temp.</u>	<u>Cond.</u>
1:12	1	.03	7.4	24 C	0.89
1:27	3	.03	7.3	24 C	0.86
1:37	5	.04	7.0	23 C	0.78
1:49	7	.04	7.3	23 C	0.85

Volume Purging Equip. Sampling Equip.
Evacuated
7 gallons Stainless Steel Bailer Stainless Steel Bailer

Depth to Water Upon Completion of Sampling
7.42

Sheen Floating Product Sample Color Odor
no no grey no

Sediment/Foreign Matter: silt

Sample ID# Analysis Laboratory
MW-1 TPHg, BTEX, TPHd, TOG S & W Lab.

Sample Containers Preservative
3/ 40-ml VOAS None (48 hr analysis)
2 Liters

MONITORING WELL SAMPLING DATA/ MW-2

Project Name: RON GOODE TOYOTA Well# MW-2

Date: September 11, 1992

Name: Mawhinney Time Began: 1:59

DEPTH OF WELL(ft.) 14.68 DEPTH TO WATER(ft.) 4.21 WELL DIAM. 2"

<u>Time</u>	<u>Gallons</u>	<u>Salinity</u>	<u>pH</u>	<u>Temp.</u>	<u>Cond.</u>
2:07	1	.04	7.6	24 C	0.55
2:20	3	.03	7.2	26 C	0.54
2:36	5	.03	7.3	25 C	0.55
2:49	7	.03	7.5	23 C	0.56

Volume Evacuated 7 gallons Purging Equip. Stainless Steel Bailer Sampling Equip. Stainless Steel Bailer

Depth to Water Upon Completion of Sampling
6.90

<u>Sheen</u>	<u>Floating Product</u>	<u>Sample Color</u>	<u>Odor</u>
no	no	grey	no

Sediment/Foreign Matter: silt

<u>Sample ID#</u>	<u>Analysis</u>	<u>Laboratory</u>
MW-2	TPHg, BTEX, TPHd, TOG	S & W Lab.

<u>Sample Containers</u>	<u>Preservative</u>
3/ 40-ml VOAs 2 Liters	None (48 hr analysis)

MONITORING WELL SAMPLING DATA/ MW-3

Project Name: Well#
 RON GOODE TOYOTA MW-3

Date: September 11, 1992

Name: Time Began:
 Mawhinney 3:10

DEPTH OF WELL(ft.) DEPTH TO WATER(ft.) WELL DIAM.
 14.40 4.20 2"

<u>Time</u>	<u>Gallons</u>	<u>Salinity</u>	<u>pH</u>	<u>Temp.</u>	<u>Cond.</u>
3:17	1	.04	7.6	25 C	0.64
3:31	3	.03	7.4	24 C	0.69
3:39	5	.03	7.5	24 C	0.65
4:49	7	.04	7.5	23 C	0.65

Volume Evacuated Purging Equip. Sampling Equip.
 7 gallons Stainless Steel Bailer Stainless Steel Bailer

Depth to Water Upon Completion of Sampling
 7.2

Sheen Floating Product Sample Color Odor
 no no grey no

Sediment/Foreign Matter: silt

Sample ID# Analysis Laboratory
 MW-3 TPHg, BTEX, TPHd, TOG S & W Lab.

Sample Containers Preservative
 3/ 40-ml VOAs None (48 hr analysis)
 2 Liters

MONITORING WELL SAMPLING DATA
MONITORING WELL NO.1

PROJECT NAME: WELL #
RON GOODE TOYOTA MW-1

DATE:
FEBRUARY 04, 1993

NAME: TIME BEGAN:
Helen Mawhinney 2:31p

DEPTH OF WELL (FT.) DEPTH OF WATER (FT.) WELL DIAM.
14.80 3.84 2"

<u>TIME</u>	<u>GALLONS</u>	<u>pH</u>	<u>TEMP.</u>	<u>COND.</u>
2:31	1	7.49	63.3	.32
2:36	3	7.32	63.1	.34
2:40	5	7.19	63.1	.27
2:42	8	7.18	63.1	.27

VOLUME EVACUATED PURGING EQUIP. SAMPLING EQUIP.
8 gallons Stainless Steel Bailer Stainless Steel Bailer

DEPTH TO WATER UPON COMPLETION OF SAMPLING
Not measured. Recharge very good

SHEEN FLOATING PRODUCT SAMPLE COLOR ODOR
no no grey no

SEDIMENT/FOREIGN MATTER: silt

SAMPLE ID# ANALYSIS LABORATORY
MW-1 TPHg, BTEX, TPHd, TOG S & W Lab.

SAMPLE CONTAINERS
3/ 40-ml VOAs, 2 Liters

MONITORING WELL SAMPLING DATA
MONITORING WELL NO.2

PROJECT NAME: WELL #
RON GOODE TOYOTA MW-2

DATE:
FEBRUARY 04, 1993

NAME: TIME BEGAN:
Helen Mawhinney 1:13

DEPTH OF WELL (FT.) DEPTH OF WATER (FT.) WELL DIAM.
14.60 2.81 2"

<u>TIME</u>	<u>GALLONS</u>	<u>pH</u>	<u>TEMP.</u>	<u>COND.</u>
1:13	1	8.34	67.1	.65
1:15	3	8.29	65.8	.67
1:19	5	8.22	64.9	.77
1:25	8	8.22	64.9	.70

VOLUME EVACUATED PURGING EQUIP. SAMPLING EQUIP.
8 gallons Stainless Steel
Bailer Stainless Steel
Bailer

DEPTH TO WATER UPON COMPLETION OF SAMPLING
Not measured.

SHEEN FLOATING PRODUCT SAMPLE COLOR ODOR
no no grey no

SEDIMENT/FOREIGN MATTER: silt

SAMPLE ID# ANALYSIS LABORATORY
MW-2 TPHg, BTEX, TPHd, TOG S & W Lab.

SAMPLE CONTAINERS
3/ 40-ml VOAs, 2 Liters

MONITORING WELL SAMPLING DATA
MONITORING WELL NO.3

PROJECT NAME:

WELL #

RON GOODE TOYOTA

MW-3

DATE:

FEBRUARY 04, 1993

NAME:

TIME BEGAN:

Helen Mawhinney

1:44

DEPTH OF WELL (FT.)

DEPTH OF WATER (FT.)

WELL DIAM.

14.44

2.56

2"

TIME

GALLONS

pH

TEMP.

COND.

1:44

1

7.49

61.6

.35

1:47

3

7.32

61.9

.34

1:49

5

7.22

61.9

.34

1:57

8

7.35

63.5

.27

VOLUME
EVACUATED

PURGING EQUIP.

SAMPLING EQUIP.

8 gallons

Stainless Steel
Bailer

Stainless Steel
Bailer

DEPTH TO WATER UPON COMPLETION OF SAMPLING

Not measured.

SHEEN

FLOATING PRODUCT

SAMPLE COLOR

ODOR

no

no

grey

no

SEDIMENT/FOREIGN MATTER: silt

SAMPLE ID#

ANALYSIS

LABORATORY

MW-3

TPHg, BTEX, TPHd, TOG

S & W Lab

SAMPLE CONTAINERS

3/ 40-ml VOAs, 2 Liters

MONITORING WELL SAMPLING DATA

<u>Project Name:</u>	<u>Well#</u>
RON GOODE TOYOTA	MW-1

DATE: May 4, 1993

<u>NAME:</u>	<u>Time Began:</u>
Mawhinney	4:05p

<u>DEPTH OF WELL</u>	<u>DEPTH TO WATER</u>	<u>WELL DIAM.</u>
14.74'	4.62'	2"

<u>Time</u>	<u>Gallons</u>	<u>Salinity</u>	<u>pH</u>	<u>Temp.</u>	<u>Cond.</u>
4:08	1	*	*	63.1 F	4.27
4:15	3	*	*	63.1 F	4.04
4:22	5	*	*	63.1 F	6.03
4:37	7	*	*	63.1 F	6.09

<u>Volume Evacuated</u>	<u>Purging Equip.</u>	<u>Sampling Equip.</u>
7 gallons	Stainless Steel Bailer	Stainless Steel Bailer

Depth of Well Upon Completion of Sampling:

14.74' at completion

<u>Sheen</u>	<u>Floating Product</u>	<u>Sample Color</u>	<u>Odor</u>
no	no	gold	no

Sediment/Foreign Matter: very little silt

<u>Sample ID#</u>	<u>Analysis</u>	<u>Laboratory</u>
MW-1	TPHg, BTEX, TPHd, TOG	S & W Lab

Sample Containers

2/40-ml VOAs
2 amber one liter bottles

MONITORING WELL SAMPLING DATA

<u>Project Name:</u>	<u>Well#</u>
RON GOODE TOYOTA	MW-2

DATE: May 4, 1993

<u>NAME:</u>	<u>Time Began:</u>
Mawhinney	3:27p

<u>DEPTH OF WELL</u>	<u>DEPTH TO WATER</u>	<u>WELL DIAM.</u>
14.53'	3.1'	2"

<u>Time</u>	<u>Gallons</u>	<u>Salinity</u>	<u>pH</u>	<u>Temp.</u>	<u>Cond.</u>
3:36	1	*	*	67.1 F	5.22
3:42	3	*	*	65.8 F	5.30
3:48	5	*	*	64.7 F	5.30
3:51	7	*	*	63.8 F	5.30

<u>Volume Evacuated</u>	<u>Purging Equip.</u>	<u>Sampling Equip.</u>
8 gallons	Stainless Steel Bailer	Stainless Steel Bailer

Depth of Well Upon Completion of Sampling:

14.53' Recharge good

<u>Sheen</u>	<u>Floating Product</u>	<u>Sample Color</u>	<u>Odor</u>
no	no	gold	no

Sediment/Foreign Matter: very little silty

<u>Sample ID#</u>	<u>Analysis</u>	<u>Laboratory</u>
MW-2	TPHg, BTEX, TPHd, TOG	S & W Lab

Sample Containers

2/40-ml VOAs
2 amber one liter bottles

MONITORING WELL SAMPLING DATA

<u>Project Name:</u>	<u>Well#</u>
RON GOODE TOYOTA	MW-3

DATE: May 4 , 1993

<u>NAME:</u>	<u>Time Began:</u>
Mawhinney	3:34p

<u>DEPTH OF WELL</u>	<u>DEPTH TO WATER</u>	<u>WELL DIAM.</u>
14.41'	2.52'	2"

<u>Time</u>	<u>Gallons</u>	<u>Salinity</u>	<u>pH</u>	<u>Temp.</u>	<u>Cond.</u>
3:41	1	*	*	61.0 F	3.41
3:46	3	*	*	61.9 F	5.30
3:52	5	*	*	61.9 F	5.43
4:03	7	*	*	62.5 F	5.17

<u>Volume Evacuated</u>	<u>Purging Equip.</u>	<u>Sampling Equip.</u>
7 gallons	Stainless Steel Bailer	Stainless Steel Bailer

Depth of Well Upon Completion of Sampling:

14.41' Good Recharge

<u>Sheen</u>	<u>Floating Product</u>	<u>Sample Color</u>	<u>Odor</u>
no	no	gold	no

Sediment/Foreign Matter: very little silt

<u>Sample ID#</u>	<u>Analysis</u>	<u>Laboratory</u>
MW-3	TPHg, BTEX, TPHd, TOG	S & W Lab

Sample Containers

2/40-ml VOAs
2 amber one liter bottles