

575  
5570 1042



**Chevron**

June 21, 1999

**Chevron Products Company**  
6001 Bollinger Canyon Road  
Building L, Room 1080  
PO Box 6004  
San Ramon, CA 94583-0904

**Philip R. Briggs**  
Project Manager  
Site Assessment & Remediation  
Phone 925 842-9136  
Fax 925 842-8370

Mr. Thomas Peacock, Manager  
Alameda County Health Care Services  
Division of Environmental Protection  
1131 Harbor Bay Parkway, Suite 250  
Alameda, CA 94502-6577

**Re: Chevron Service Station #9-8341  
3530 MacArthur Blvd.  
Oakland, California**

Dear Mr. Peacock:

Enclosed is the Second Quarter Groundwater Monitoring Report for 1999 that was prepared by our consultant Blaine Tech Services Inc. for the above noted site. Ground water samples were collected and analyzed for TPH-g, BTEX and MtBE constituents and sampled quarterly.

The concentrations were below method detection limits for all constituents in monitoring well MW-1, while in monitoring well MW-2 the TPH-g and BTEX constituents were below method detection limits. The concentrations in well MW-3 were below method detection limits for TPH-g, BTE and MtBE constituents.

The consultant that is working on the utility study to evaluate for MtBE contamination downgradient of the site is still waiting to receive depth of the utility conduits from a couple of the utility companies. As soon as this information is received the utility study will be submitted.

Depth to ground water varied from 4.32 feet to 5.34 feet below grade with a direction of flow south southeasterly.

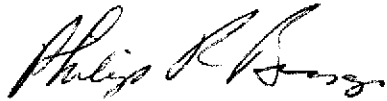
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ENVIRONMENTAL PROTECTION

June 21, 1999  
Mr. Thomas Peacock  
Chevron Service Station #9-8341  
Page 2

If you have any questions, call me at (925) 842-9136.

Sincerely,  
**CHEVRON PRODUCTS COMPANY**



Philip R. Briggs  
Site Assessment and Remediation Project Manager

Enclosure

CC. Mr. Chuck Headlee  
RWQCB-San Francisco Bay Region  
2101 Webster Street, Suite 500  
Oakland, CA 94612

Ms. Madhulla Logan  
Alameda County Health Care Services  
Division of Environmental Protection  
1131 Harbor Bay Parkway, Suite 250  
Alameda, CA 94502-6577

Mr. Jim Perkins, R.G., C.E.M.  
Pacific Environmental Group, Inc.  
2025 Gateway Place, Suite 440  
San Jose, CA 95110-1006

Mr. Bill Scudder, Chevron

**BLAINE**  
TECH SERVICES INC.



1680 ROGERS AVENUE  
SAN JOSE, CALIFORNIA 95112-1105  
(408) 573-7771 FAX  
(408) 573-0555 PHONE

May 27, 1999

Phil Briggs  
Chevron U.S.A. Products Company  
P.O. Box 6004  
San Ramon, CA 94583-0904

### 2nd Quarter 1999 Monitoring at 9-8341

Second Quarter 1999 Groundwater Monitoring at  
Chevron Service Station Number 9-8341  
3530 MacArthur Blvd.  
Oakland, CA

Monitoring Performed on April 15, 1999

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### Groundwater Sampling Report 990415-P-3

This report covers the routine monitoring of groundwater wells at this Chevron facility. Blaine Tech Services, Inc.'s work at the site includes inspection, gauging, evacuation, purgewater containment, sample collection and sample handling in accordance with standard procedures that conform to Regional Water Quality Control Board requirements.

Routine field data collection includes depth to water, total well depth, thickness of any separate immiscible layer, water column volume, calculated volume of a three-case volume purge, elapsed evacuation time, total volume of water removed, and standard water parameter instrument readings. Sample material is collected, contained, stored, and transported to the laboratory in conformance with EPA standards. Purgewater is, likewise, collected and transported to McKittrick Waste Treatment Site for disposal.

Basic field information is presented alongside analytical values excerpted from the laboratory report in the cumulative table of **WELL DATA AND ANALYTICAL RESULTS**. The full analytical report for the most recent samples is located in the **Analytical Appendix**. The table also contains new groundwater elevation calculations taken from the computer plotted gradient map which is located in the **Professional Engineering Appendix**.

At a minimum, Blaine Tech Services, Inc. field personnel are certified upon completion of a forty-hour Hazardous Materials and Emergency Response training course per 29 CFR 1910.120. Field personnel are also enrolled in annual eight hour refresher courses.

Blaine Tech Services, Inc. conducts sampling and documentation assignments of this type as an independent third party. In order to avoid compromising the objectivity necessary for the proper and disinterested performance of this work, Blaine Tech Services, Inc. concentrates on objective data collection and does not participate in the interpretation of analytical results, the definition of geological or hydrological conditions, the formulation of recommendations, or the marketing of remedial systems.

Please call if you have any questions.

Yours truly,

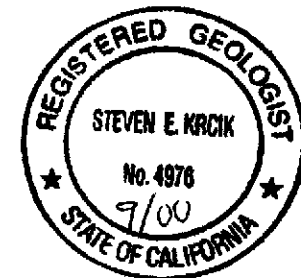
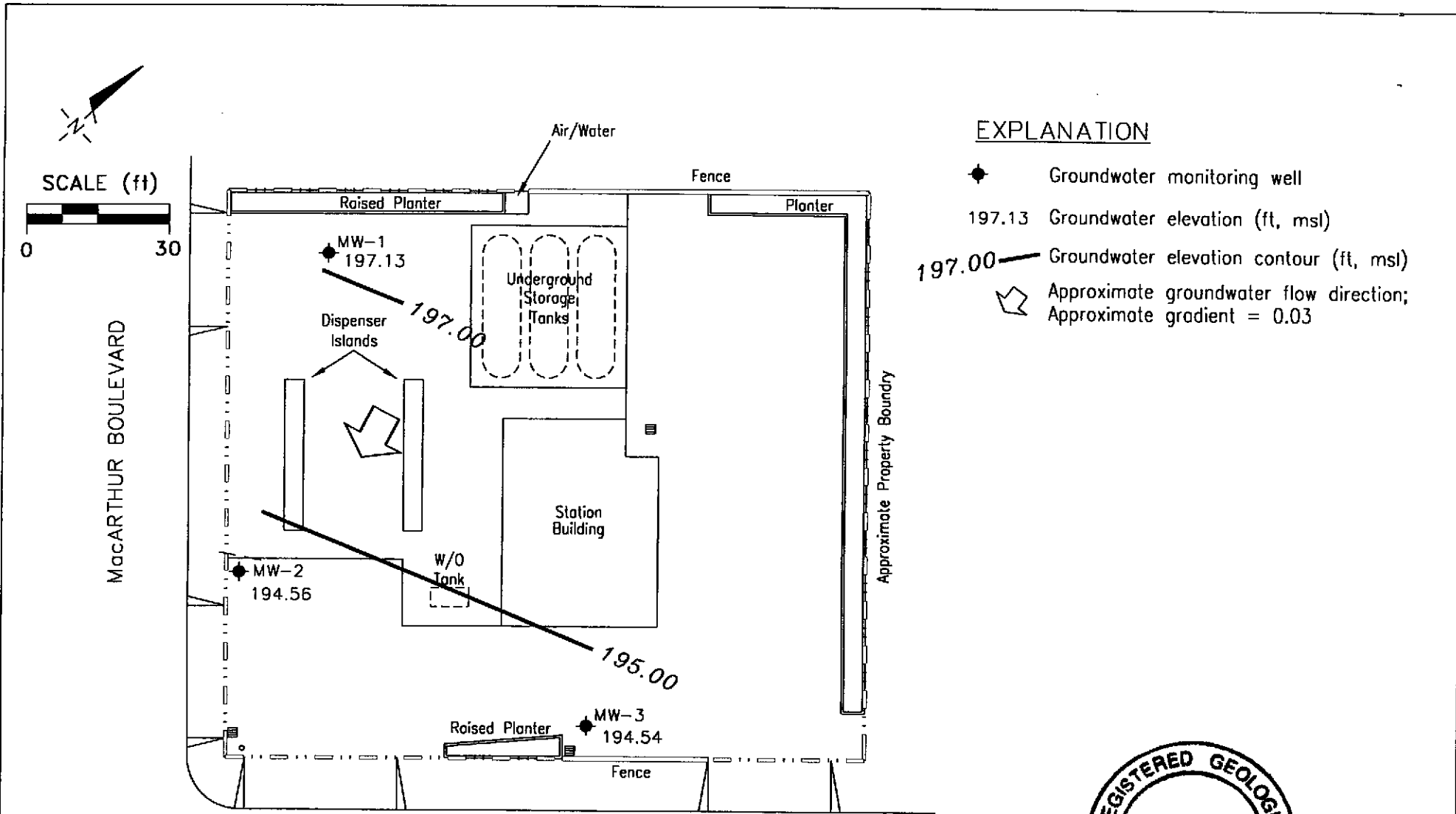
A handwritten signature in cursive script that reads "Christine Lillie".

Christine Lillie  
Project Coordinator

FPT/sb

attachments: Professional Engineering Appendix  
Cumulative Table of Well Data and Analytical Results  
Analytical Appendix  
Field Data Sheets

# **Professional Engineering Appendix**



Ref. Gettler-Ryan, Inc.

PREPARED BY



**Chevron Station 9-8341**  
 3530 MacArthur Boulevard  
 Oakland, California

**GROUNDWATER ELEVATION CONTOUR MAP,**  
 APRIL 15, 1999

FIGURE:  
**1**  
 PROJECT:  
 DAC04

# **Table of Well Data and Analytical Results**

## Cumulative Table of Well Data and Analytical Results

Vertical Measurements are in feet.

Analytical results are in parts per billion (ppb)

DATE	Well Head Elev.	Ground Water Elev.	Depth To Water	Notes	TPH-Gasoline	Benzene	Toluene	Ethyl-Benzene	Xylene	MTBE
<b>MW-1</b>										
04/04/96	202.47	198.65	3.82	--	<50	<0.5	<0.5	<0.5	<0.5	ND
11/01/96	202.47	197.45	5.02	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5
01/06/97	202.47	199.72	2.75	--	<50	<0.5	<0.5	<0.5	<0.5	14
04/14/97	202.47	197.71	4.76	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5
07/17/97	202.47	196.72	5.75	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5
10/29/97	202.47	196.97	5.50	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5
02/04/98	202.47	199.80	2.67	--	<50	4.2	<0.5	<0.5	<0.5	94
04/03/98	202.47	197.06	5.41	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5
07/29/98	202.47	192.26	10.21	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5
10/26/98	202.47	195.66	6.81	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5
01/18/99	202.47	196.05	6.42	--	<50	<0.5	<0.5	<0.5	<0.5	<2.0
04/15/99	202.47	197.13	5.34	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0



## Cumulative Table of Well Data and Analytical Results

Vertical Measurements are in feet. Analytical results are in parts per billion (ppb)

DATE	Well Head Elev.	Ground Water Elev.	Depth To Water	Notes	TPH-Gasoline	Benzene	Toluene	Ethyl-Benzene	Xylene	MTBE
<b>MW-2</b>										
04/04/96	198.88	196.07	2.81	--	<50	<0.5	<0.5	<0.5	<0.5	6100
11/01/96	198.88	195.27	3.61	--	<500	<5.0	<5.0	<5.0	<5.0	2600
01/06/97	198.88	195.97	2.91	--	<2000	31	<20	<20	<20	4000
04/14/97	198.88	195.43	3.45	--	<2000	<20	<20	<20	<20	5100
04/14/97	198.88	195.43	3.45	Confirmation run	--	--	--	--	--	5800
07/17/97	198.88	194.98	3.90	--	<500	<5.0	<5.0	<5.0	<5.0	2300
07/17/97	198.88	194.98	3.90	Confirmation run	--	--	--	--	--	2900
10/29/97	198.88	192.96	5.92	--	120*	12	<0.5	<0.5	<0.5	810
10/29/97	198.88	192.96	5.92	Confirmation run	--	--	--	--	--	900
02/04/98	198.88	195.05	3.83	--	<1000	<10	<10	<10	<10	2100
02/04/98	198.88	195.05	3.83	Confirmation run	--	--	--	--	--	2800
04/03/98	198.88	191.55	7.33	--	<1000	<10	<10	<10	<10	3800
04/03/98	198.88	191.55	7.33	Confirmation run	--	--	--	--	--	3600
07/29/98	198.88	189.86	9.02	--	120**	<0.5	<0.5	<0.5	<0.5	2800
07/29/98	198.88	189.86	9.02	Confirmation run	--	--	--	--	--	3900
10/26/98	198.88	192.77	6.11	--	<50	<0.5	<0.5	<0.5	<0.5	1200
01/18/99	198.88	194.67	4.21	--	<1000	<10	<10	<10	10.5	2530
04/15/99	198.88	194.56	4.32	--	<50	<0.5	<0.5	<0.5	<0.5	5270

\* Chromatogram report indicates an unidentified hydrocarbon and gas.

\*\* Chromatogram report indicates an unidentified hydrocarbon.

## Cumulative Table of Well Data and Analytical Results

Vertical Measurements are in feet. Analytical results are in parts per billion (ppb)

DATE	Well Head Elev.	Ground Water Elev.	Depth To Water	Notes	TPH-Gasoline	Benzene	Toluene	Ethyl-Benzene	Xylene	MTBE
<b>MW-3</b>										
04/04/96	199.10	195.22	3.88	--	<50	<0.5	<0.5	<0.5	<0.5	ND
11/01/96	199.10	194.91	4.19	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5
01/06/97	199.10	195.29	3.81	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5
04/14/97	199.10	194.93	4.17	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5
07/17/97	199.10	194.92	4.18	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5
10/29/97	199.10	193.90	5.20	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5
02/04/98	199.10	194.71	4.39	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5
04/03/98	199.10	195.78	3.32	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5
07/29/98	199.10	189.24	9.86	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5
10/26/98	199.10	193.59	5.51	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5
01/18/99	199.10	194.68	4.42	--	<50	<0.5	<0.5	<0.5	<0.5	<2.0
04/15/99	199.10	194.54	4.56	--	<50	<0.5	<0.5	<0.5	1.16	<5.0
<b>TRIP BLANK</b>										
11/01/96	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5
01/06/97	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5
04/14/97	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5
07/17/97	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5
10/29/97	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5
02/04/98	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5
04/03/98	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5
07/29/98	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5
10/26/98	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5
01/18/99	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.0
04/15/99	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0

Note: Blaine Tech Services, Inc. began routine monitoring of the groundwater wells at this site on October 26, 1998. Earlier field data and analytical results are drawn from the July 29, 1998, Gettler-Ryan, Inc. report.

**ABBREVIATIONS:**

TPH = Total Petroleum Hydrocarbons

ND = Not detected at or above the minimum quantitation limit. See laboratory reports for minimum quantitation limits.

MTBE = Methyl tertiary-butyl ether

# **Analytical Appendix**



# Sequoia Analytical

680 Chesapeake Drive  
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1455 McDowell Blvd, North, Ste. D  
1551 Industrial Road

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FAX (707) 792-0342  
FAX (650) 232-9612

Sequoia Analytical - San Carlos 1551 Industrial Blvd San Carlos, CA 94070	Project: N/A Project Number: (WO# L904197) Project Manager: Mike Gregory	Sampled: 4/15/99 Received: 4/20/99 Reported: 4/30/99
---	--	--

## ANALYTICAL REPORT FOR SAMPLES:

Sample Description	Laboratory Sample Number	Sample Matrix	Date Sampled
L904197-01 (MW-1)	S904263-01	Water	4/15/99
L904197-02 (MW-2)	S904263-02	Water	4/15/99
L904197-03 (MW-3)	S904263-03	Water	4/15/99
L904197-04 (TB)	S904263-04	Water	4/15/99

Sequoia Analytical - Sacramento

*The results in this report apply to the samples analyzed in accordance with the chain of custody document.  
This analytical report must be reproduced in its entirety.*

*Sandra R. Hanson*  
Sandra R. Hanson, Client Services Representative





Sequoia Analytical - San Carlos 1551 Industrial Blvd San Carlos, CA 94070	Project: N/A Project Number: (WO# L904197) Project Manager: Mike Gregory	Sampled: 4/15/99 Received: 4/20/99 Reported: 4/30/99
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**Total Purgeable Hydrocarbons (C6-C12), BTEX and MTBE by DHS LUFT**  
**Sequoia Analytical - Sacramento**

Analyte	Batch Number	Date Prepared	Date Analyzed	Surrogate Limits	Reporting Limit	Result	Units	Notes*
<b>L904197-01 (MW-1)</b>				<b>S904263-01</b>		<b>Water</b>		
Purgeable Hydrocarbons	9040303	4/26/99	4/26/99		50.0	ND	ug/l	
Benzene	"	"	"		0.500	ND	"	
Toluene	"	"	"		0.500	ND	"	
Ethylbenzene	"	"	"		0.500	ND	"	
Xylenes (total)	"	"	"		0.500	ND	"	
Methyl tert-butyl ether	"	"	"		5.00	ND	"	
Surrogate: a,a,a-Trifluorotoluene	"	"	"	60.0-140		82.9	%	
<b>L904197-02 (MW-2)</b>				<b>S904263-02</b>		<b>Water</b>		
Purgeable Hydrocarbons	9040288	4/23/99	4/23/99		50.0	ND	ug/l	
Benzene	"	"	"		0.500	ND	"	
Toluene	"	"	"		0.500	ND	"	
Ethylbenzene	"	"	"		0.500	ND	"	
Xylenes (total)	"	"	"		0.500	ND	"	
Surrogate: a,a,a-Trifluorotoluene	"	"	"	60.0-140		98.9	%	
Methyl tert-butyl ether	9040290	4/26/99	4/26/99		250	5270	ug/l	D
Surrogate: a,a,a-Trifluorotoluene	"	"	"	60.0-140		106	%	
<b>L904197-03 (MW-3)</b>				<b>S904263-03</b>		<b>Water</b>		
Purgeable Hydrocarbons	9040290	4/26/99	4/26/99		50.0	ND	ug/l	
Benzene	"	"	"		0.500	ND	"	
Toluene	"	"	"		0.500	ND	"	
Ethylbenzene	"	"	"		0.500	ND	"	
Xylenes (total)	"	"	"		0.500	1.16	"	
Methyl tert-butyl ether	"	"	"		5.00	ND	"	
Surrogate: a,a,a-Trifluorotoluene	"	"	"	60.0-140		101	%	
<b>L904197-04 (TB)</b>				<b>S904263-04</b>		<b>Water</b>		
Purgeable Hydrocarbons	9040322	4/27/99	4/27/99		50.0	ND	ug/l	
Benzene	"	"	"		0.500	ND	"	
Toluene	"	"	"		0.500	ND	"	
Ethylbenzene	"	"	"		0.500	ND	"	
Xylenes (total)	"	"	"		0.500	ND	"	
Methyl tert-butyl ether	"	"	"		5.00	ND	"	
Surrogate: a,a,a-Trifluorotoluene	"	"	"	60.0-140		80.4	%	





# Sequoia Analytical

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Sequoia Analytical - San Carlos 1551 Industrial Blvd San Carlos, CA 94070	Project: N/A Project Number: (WO# L904197) Project Manager: Mike Gregory	Sampled: 4/15/99 Received: 4/20/99 Reported: 4/30/99
---	--	--

## Total Purgeable Hydrocarbons (C6-C12), BTEX and MTBE by DHS LUFT/Quality Control Sequoia Analytical - Sacramento

Analyte	Date Analyzed	Spike Level	Sample Result	QC Result	Units	Reporting Limit Recov. Limits	Recov. %	RPD Limit	RPD %	Notes*
<b>Batch: 9040288</b>		<b>Date Prepared: 4/23/99</b>		<b>Extraction Method: EPA 5030B (P/T)</b>						
<b>Blank</b>		<b>9040288-BLK1</b>								
Purgeable Hydrocarbons	4/23/99			ND	ug/l	50.0				
Benzene	"			ND	"	0.500				
Toluene	"			ND	"	0.500				
Ethylbenzene	"			ND	"	0.500				
Xylenes (total)	"			ND	"	0.500				
Surrogate: a,a,a-Trifluorotoluene	"	10.0		9.27	"	60.0-140	92.7			
<b>LCS</b>		<b>9040288-BS1</b>								
Benzene	4/23/99	10.0		10.4	ug/l	70.0-130	104			
Toluene	"	10.0		10.5	"	70.0-130	105			
Ethylbenzene	"	10.0		10.3	"	70.0-130	103			
Xylenes (total)	"	30.0		31.1	"	70.0-130	104			
Surrogate: a,a,a-Trifluorotoluene	"	10.0		9.98	"	60.0-140	99.8			
<b>Matrix Spike</b>		<b>9040288-MS1</b>		<b>S904264-01</b>						
Benzene	4/23/99	10.0	ND	11.1	ug/l	60.0-140	111			
Toluene	"	10.0	ND	10.4	"	60.0-140	104			
Ethylbenzene	"	10.0	ND	10.5	"	60.0-140	105			
Xylenes (total)	"	30.0	ND	31.9	"	60.0-140	106			
Surrogate: a,a,a-Trifluorotoluene	"	10.0		10.2	"	60.0-140	102			
<b>Matrix Spike Dup</b>		<b>9040288-MSD1</b>		<b>S904264-01</b>						
Benzene	4/23/99	10.0	ND	9.86	ug/l	60.0-140	98.6	25.0	11.8	
Toluene	"	10.0	ND	10.2	"	60.0-140	102	25.0	1.94	
Ethylbenzene	"	10.0	ND	10.2	"	60.0-140	102	25.0	2.90	
Xylenes (total)	"	30.0	ND	31.3	"	60.0-140	104	25.0	1.90	
Surrogate: a,a,a-Trifluorotoluene	"	10.0		10.1	"	60.0-140	101			
<b>Batch: 9040290</b>		<b>Date Prepared: 4/26/99</b>		<b>Extraction Method: EPA 5030B (P/T)</b>						
<b>Blank</b>		<b>9040290-BLK1</b>								
Purgeable Hydrocarbons	4/26/99			ND	ug/l	50.0				
Benzene	"			ND	"	0.500				
Toluene	"			ND	"	0.500				
Ethylbenzene	"			ND	"	0.500				
Xylenes (total)	"			ND	"	0.500				
Methyl tert-butyl ether	"			ND	"	5.00				
Surrogate: a,a,a-Trifluorotoluene	"	10.0		9.81	"	60.0-140	98.1			
<b>LCS</b>		<b>9040290-BS1</b>								
Benzene	4/26/99	10.0		9.65	ug/l	70.0-130	96.5			

Sequoia Analytical - Sacramento

\*Refer to end of report for text of notes and definitions.

*Sandra R. Hanson*  
Sandra R. Hanson, Client Services Representative





# Sequoia Analytical

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Sequoia Analytical - San Carlos 1551 Industrial Blvd San Carlos, CA 94070	Project: N/A Project Number: (WO# L904197) Project Manager: Mike Gregory	Sampled: 4/15/99 Received: 4/20/99 Reported: 4/30/99
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## Total Purgeable Hydrocarbons (C6-C12), BTEX and MTBE by DHS LUFT/Quality Control Sequoia Analytical - Sacramento

Analyte	Date Analyzed	Spike Level	Sample Result	QC Result	Units	Reporting Limit Recov. Limits	Recov. %	RPD Limit	RPD %	Notes*
<b>LCS (continued)</b>										
<b>9040290-BS1</b>										
Toluene	4/26/99	10.0		9.98	ug/l	70.0-130	99.8			
Ethylbenzene	"	10.0		10.0	"	70.0-130	100			
Xylenes (total)	"	30.0		30.7	"	70.0-130	102			
Methyl tert-butyl ether	"	10.0		10.7	"	70.0-130	107			
Surrogate: a,a,a-Trifluorotoluene	"	10.0		10.3	"	60.0-140	103			
<b>Matrix Spike</b>										
<b>9040290-MS1 S904263-03</b>										
Benzene	4/26/99	10.0	ND	9.97	ug/l	60.0-140	99.7			
Toluene	"	10.0	ND	10.2	"	60.0-140	102			
Ethylbenzene	"	10.0	ND	10.0	"	60.0-140	100			
Xylenes (total)	"	30.0	1.16	30.2	"	60.0-140	96.8			
Methyl tert-butyl ether	"	10.0	ND	16.5	"	60.0-140	165			1
Surrogate: a,a,a-Trifluorotoluene	"	10.0		10.1	"	60.0-140	101			
<b>Matrix Spike Dup</b>										
<b>9040290-MSD1 S904263-03</b>										
Benzene	4/26/99	10.0	ND	9.80	ug/l	60.0-140	98.0	25.0	1.72	
Toluene	"	10.0	ND	10.0	"	60.0-140	100	25.0	1.98	
Ethylbenzene	"	10.0	ND	9.84	"	60.0-140	98.4	25.0	1.61	
Xylenes (total)	"	30.0	1.16	29.9	"	60.0-140	95.8	25.0	1.04	
Methyl tert-butyl ether	"	10.0	ND	26.4	"	60.0-140	NR	25.0	46.2	1,2
Surrogate: a,a,a-Trifluorotoluene	"	10.0		10.4	"	60.0-140	104			
<b>Batch: 9040303</b>										
<b>Blank</b>										
<b>Date Prepared: 4/26/99</b>										
<b>Extraction Method: EPA 5030B (P/T)</b>										
Purgeable Hydrocarbons	4/26/99			ND	ug/l		50.0			
Benzene	"			ND	"		0.500			
Toluene	"			ND	"		0.500			
Ethylbenzene	"			ND	"		0.500			
Xylenes (total)	"			ND	"		0.500			
Methyl tert-butyl ether	"			ND	"		5.00			
Surrogate: a,a,a-Trifluorotoluene	"	10.0		8.32	"	60.0-140	83.2			
<b>LCS</b>										
<b>9040303-BS1</b>										
Benzene	4/26/99	10.0		8.74	ug/l	70.0-130	87.4			
Toluene	"	10.0		8.63	"	70.0-130	86.3			
Ethylbenzene	"	10.0		8.64	"	70.0-130	86.4			
Xylenes (total)	"	30.0		26.0	"	70.0-130	86.7			
Methyl tert-butyl ether	"	10.0		10.0	"	70.0-130	100			
Surrogate: a,a,a-Trifluorotoluene	"	10.0		8.91	"	60.0-140	89.1			

*Sandra R. Hanson*  
Sandra R. Hanson, Client Services Representative





# Sequoia Analytical

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819 Striker Avenue, Suite 8  
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Sacramento, CA 95834 (916) 921-9600 FAX (916) 921-0100  
Petaluma, CA 94954 (707) 792-1865 FAX (707) 792-0342  
San Carlos, CA 94070-4111 (650) 232-9600 FAX (650) 232-9612

Sequoia Analytical - San Carlos 1551 Industrial Blvd San Carlos, CA 94070	Project: N/A Project Number: (WO# L904197) Project Manager: Mike Gregory	Sampled: 4/15/99 Received: 4/20/99 Reported: 4/30/99
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## Total Purgeable Hydrocarbons (C6-C12), BTEX and MTBE by DHS LUFT/Quality Control Sequoia Analytical - Sacramento

Analyte	Date Analyzed	Spike Level	Sample Result	QC Result	Units	Reporting Limit Recov. Limits	Recov. %	RPD Limit	RPD %	Notes*
<b>Matrix Spike</b>		<b>9040303-MS1</b>	<b>S904263-01</b>							
Benzene	4/26/99	10.0	ND	8.89	ug/l	60.0-140	88.9			
Toluene	"	10.0	ND	8.73	"	60.0-140	87.3			
Ethylbenzene	"	10.0	ND	8.72	"	60.0-140	87.2			
Xylenes (total)	"	30.0	ND	26.2	"	60.0-140	87.3			
Methyl tert-butyl ether	"	10.0	ND	8.67	"	60.0-140	86.7			
Surrogate: a,a,a-Trifluorotoluene	"	10.0		8.81	"	60.0-140	88.1			
<b>Matrix Spike Dup</b>		<b>9040303-MSD1</b>	<b>S904263-01</b>							
Benzene	4/26/99	10.0	ND	8.71	ug/l	60.0-140	87.1	25.0	2.05	
Toluene	"	10.0	ND	8.47	"	60.0-140	84.7	25.0	3.02	
Ethylbenzene	"	10.0	ND	8.60	"	60.0-140	86.0	25.0	1.39	
Xylenes (total)	"	30.0	ND	25.9	"	60.0-140	86.3	25.0	1.15	
Methyl tert-butyl ether	"	10.0	ND	8.85	"	60.0-140	88.5	25.0	2.05	
Surrogate: a,a,a-Trifluorotoluene	"	10.0		8.62	"	60.0-140	86.2			
<b>Batch: 9040322</b>	<b>Date Prepared: 4/27/99</b>	<b>Extraction Method: EPA 5030B (P/T)</b>								
<b>Blank</b>	<b>9040322-BLK1</b>									
Purgeable Hydrocarbons	4/27/99			ND	ug/l	50.0				
Benzene	"			ND	"	0.500				
Toluene	"			ND	"	0.500				
Ethylbenzene	"			ND	"	0.500				
Xylenes (total)	"			ND	"	0.500				
Methyl tert-butyl ether	"			ND	"	5.00				
Surrogate: a,a,a-Trifluorotoluene	"	10.0		8.30	"	60.0-140	83.0			
<b>LCS</b>	<b>9040322-BS1</b>									
Benzene	4/27/99	10.0		8.70	ug/l	70.0-130	87.0			
Toluene	"	10.0		8.44	"	70.0-130	84.4			
Ethylbenzene	"	10.0		8.60	"	70.0-130	86.0			
Xylenes (total)	"	30.0		26.1	"	70.0-130	87.0			
Methyl tert-butyl ether	"	10.0		9.97	"	70.0-130	99.7			
Surrogate: a,a,a-Trifluorotoluene	"	10.0		8.81	"	60.0-140	88.1			
<b>Matrix Spike</b>	<b>9040322-MS1</b>	<b>S904327-04</b>								
Benzene	4/27/99	10.0	ND	8.65	ug/l	60.0-140	86.5			
Toluene	"	10.0	ND	8.58	"	60.0-140	85.8			
Ethylbenzene	"	10.0	ND	8.62	"	60.0-140	86.2			
Xylenes (total)	"	30.0	ND	26.0	"	60.0-140	86.7			
Methyl tert-butyl ether	"	10.0	ND	10.7	"	60.0-140	107			
Surrogate: a,a,a-Trifluorotoluene	"	10.0		8.60	"	60.0-140	86.0			

Sequoia Analytical - Sacramento

\*Refer to end of report for text of notes and definitions.

*Sandra R. Hanson*  
Sandra R. Hanson, Client Services Representative







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Sequoia Analytical - San Carlos 1551 Industrial Blvd San Carlos, CA 94070	Project: N/A Project Number: (WO# L904197) Project Manager: Mike Gregory	Sampled: 4/15/99 Received: 4/20/99 Reported: 4/30/99
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## Total Purgeable Hydrocarbons (C6-C12), BTEX and MTBE by DHS LUFT/Quality Control Sequoia Analytical - Sacramento

Analyte	Date Analyzed	Spike Level	Sample Result	QC Result	Units	Reporting Limit Recov. Limits	Recov. %	RPD Limit	RPD %	Notes*
<b>Matrix Spike Dup</b>	<b>9040322-MSD1</b>	<b>S904327-04</b>								
Benzene	4/27/99	10.0	ND	8.60	ug/l	60.0-140	86.0	25.0	0.580	
Toluene	"	10.0	ND	8.40	"	60.0-140	84.0	25.0	2.12	
Ethylbenzene	"	10.0	ND	8.60	"	60.0-140	86.0	25.0	0.232	
Xylenes (total)	"	30.0	ND	25.9	"	60.0-140	86.3	25.0	0.462	
Methyl tert-butyl ether	"	10.0	ND	11.1	"	60.0-140	111	25.0	3.67	
Surrogate: <i>a,a,a</i> -Trifluorotoluene	"	10.0		8.60	"	60.0-140	86.0			

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Sequoia Analytical - San Carlos 1551 Industrial Blvd San Carlos, CA 94070	Project: N/A Project Number: (WO# L904197) Project Manager: Mike Gregory	Sampled: 4/15/99 Received: 4/20/99 Reported: 4/30/99
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## Notes and Definitions

#	Note
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- D Data reported from a dilution.
- 1 The spike recovery for this QC sample is outside of established control limits. Review of associated batch QC indicates the recovery for this analyte does not represent an out-of-control condition for the batch.
- 2 The RPD value for this QC sample is above the established control limit. Review of associated QC indicates the high RPD does not represent an out-of-control condition for the batch.
- DET Analyte DETECTED
- ND Analyte NOT DETECTED at or above the reporting limit
- NR Not Reported
- dry Sample results reported on a dry weight basis
- Recov. Recovery
- RPD Relative Percent Difference

Sequoia Analytical - Sacramento

*Sandra R. Hanson*  
Sandra R. Hanson, Client Services Representative



**Sequoia Analytical - San Carlos Work Order**  
L904197

**Project/Client Information**

<b>Submitted By</b> Blaine Tech Services	<b>Report To</b> Blaine Tech Services Christine Lillie 1680 Rogers Avenue San Jose, CA 95112	<b>Invoice To</b> Chevron Products Co. Tammy Hodge P.O. Box 6004 San Ramon, CA 94583
<b>Project Name</b> Chevron(4)		
<b>Project Number</b> Chevron 9-8341, 990415-P3	Phone: 408-573-0555 Fax: 408-573-7771	Phone: 925-842-9103 Fax: 925-842-8370

**Work Order Information**

<b>Project Manager</b> Mike Gregory	<b>Received</b> 4/16/99 12:20	<b>Received By</b> Phil Le
<b>Report TAT - Due</b> 10 day(s) - 4/30/99	<b>Logged In</b> 4/17/99 14:01	<b>Logged In By</b> Phil Le

**Work Order Comments**

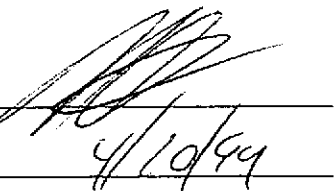
Run Gas/BTEX/MTBE twice per client request.  
CHEV - Tammy Hodge

Containers are unbroken.  
Sample labels/COC agree.  
Samples preserved properly.  
Samples Received at 8°C

**Sample/Analysis Information**

LabNumber	SampleName	Matrix	Sampled/ Expires	Analysis Requested	Due	RTA T	Comments
L904197-01	MW-1	Water	4/15/99				
			4/29/99	TPH-G/B/M	4/30/99	10	SAC
L904197-02	MW-2	Water	4/15/99				
			4/29/99	TPH-G/B/M	4/30/99	10	SAC
L904197-03	MW-3	Water	4/15/99				
			4/29/99	TPH-G/B/M	4/30/99	10	SAC
L904197-04	TB	Water	4/15/99				
			4/29/99	TPH-G/B/M	4/30/99	10	SAC

Reviewed By



Date

4/17/99

Fax copy of Lab Report and COC to Chevron Contact:  Yes  No

Chain-of-Custody-Record

Chevron Products Co.  
P.O. BOX 6004  
San Ramon, CA 94583  
FAX (925)842-8370

L904197

Chevron Facility Number 9-8341  
Facility Address 3530 MacArthur Blvd., Oakland  
Consultant Project Number 990415-P3  
Consultant Name BLAINE TECH SERVICES, INC.  
Address 1680 ROGERS AVE., SAN JOSE  
Project Contact (Name) CHRISTINE LILLIE  
(Phone) 408-573-0555 (Fax Number) 408-573-7771

Chevron Contact (Name) TAMMY HODGE  
(Phone) (925) 842-9449  
Laboratory Name SEQUOIA  
Laboratory Service Order 9144488  
Laboratory Service Code ZZ02800  
Samples Collected by (Name) PAUL SANNA  
Signature Paul Sanna

State Method:  CA  OR  WA  NW Series  CO  UT

Sample Number	Number of Containers	Matrix S = Soil A = Air W = Water C = Charcoal	Sample Preservation	Date/Time	State Method: <input type="checkbox"/> CA <input type="checkbox"/> OR <input type="checkbox"/> WA <input type="checkbox"/> NW Series <input type="checkbox"/> CO <input type="checkbox"/> UT													Remarks						
					BTEX/MTBE+TPH GAS (8020 + 8015)	STEX + TPH GAS (8020 + 8015)	TPH Diesel (8015)	Oxygenates (8260)	Purgeable Hydrocarbons (8010)	Purgeable Organics (8260)	Extractable Organics (8270)	Oil and Grease (8520)	Metals (ICAP or AA) Cd, Cr, Pb, Zn, Ni	BTEX (8020)	BTEX/MTBE/Naph. (8020)	TPH - HCID	TPH-D Extended		Lab Sample No.					
MW-1	3	W		4/5 14:30	X																			
MW-2	↓	↓		↓ 14:55	↓																			
MW-3	↓	↓		↓ 15:25	↓																			
TB	2	W		—	X																			

Relinquished By (Signature) <u>Paul Sanna</u>	Organization <u>Blaine</u>	Date/Time <u>4/16/99 10:59</u>	Received By (Signature) <u>[Signature]</u>	Organization <u>Sequoia</u>	Date/Time <u>4/16/99</u>	Iced Y/N	Turn Around Time (Circle Choice)  24 Hrs. 48 Hrs. 5 Days 10 Days As Contracted
Relinquished By (Signature) <u>[Signature]</u>	Organization	Date/Time <u>4/16/99</u>	Received By (Signature) <u>Craig Medfern</u>	Organization	Date/Time <u>4/16/99 12:20</u>	Iced <input checked="" type="checkbox"/> Y/N	
Relinquished By (Signature)	Organization	Date/Time	Received For Laboratory By (Signature)		Date/Time	Iced Y/N	

CUC - SDWG/07-8B/HCH

# Field Data Sheets



## CHEVRON WELL MONITORING DATA SHEET

Project #: 990415-P3	Station #: 9-8341
Sampler: PAUL	Date: 4-15-99
Well I.D.: MW-1	Well Diameter: (2) 3 4 6 8
Total Well Depth: 29.95	Depth to Water: 5.34
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: PVC Grade	D.O. Meter (if req'd): YSI HACH

Well Diameter	Multiplier	Well Diameter	Multiplier
2"	0.16	5"	1.02
3"	0.37	6"	1.47
4"	0.65	Other	radius <sup>2</sup> * 0.163

Purge Method: Bailer      Disposable Bailer      Middleburg ✓      Electric Submersible      Extraction Pump

Other: \_\_\_\_\_

Sampling Method: ~~Bailer~~ ✓      Disposable Bailer ✓      Extraction Port

Other: \_\_\_\_\_

3.9	x	3	=	11.8	Gals.
1 Case Volume (Gals.)		Specified Volumes		Calculated Volume	

Time	Temp (°F)	pH	Cond.	Gals. Removed	Observations
14:16	69.8	6.9	572	4	
14:20	69.6	6.9	511	8	
14:24	69.4	7.0	509	12	

Did well dewater?    Yes    No    Gallons actually evacuated: 12

Sampling Time: 14:30    Sampling Date: 4-15-99

Sample I.D.: MW-1    Laboratory: Sequoia CORE N. Creek Assoc. Labs

Analyzed for: TPH-G BTEX MTBE TPH-D Other:

Duplicate I.D.:    Analyzed for: TPH-G BTEX MTBE TPH-D Other:

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV

## CHEVRON WELL MONITORING DATA SHEET

Project #: 990415-P3	Station #: 9-8341
Sampler: PA-1	Date: 4-15-99
Well I.D.: MW-2	Well Diameter: (2) 3 4 6 8
Total Well Depth: 33.10	Depth to Water: 4.32
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): YSI HACH

Well Diameter	Multiplier	Well Diameter	Multiplier
(2)	0.16	5"	1.02
3"	0.37	6"	1.47
4"	0.65	Other	radius <sup>2</sup> * 0.163

Purge Method: Bailer      Sampling Method: Bailer

Disposable Bailer      Disposable Bailer ✓

Middleburg ✓      Extraction Port

Electric Submersible      Other: \_\_\_\_\_

Extraction Pump

Other: \_\_\_\_\_

4.6	x	3	=	13.8	Gals.
1 Case Volume (Gals.)		Specified Volumes		Calculated Volume	

Time	Temp (°F)	pH	Cond.	Gals. Removed	Observations
14:40	70.2	6.9	861	5	
14:45	69.8	7.0	749	10	
14:50	69.6	7.0	721	15	

Did well dewater?    Yes    (No)    Gallons actually evacuated: 15

Sampling Time: 14:55      Sampling Date: 4-15-99

Sample I.D.: MW-2      Laboratory: (Sequoia) CORE N. Creek Assoc. Labs

Analyzed for: (TPH-G BTEX MTBE) TPH-D Other:

Duplicate I.D.:      Analyzed for: TPH-G BTEX MTBE TPH-D Other:

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV



# CHEVRON WELL MONITORING DATA SHEET

Project #: 9A0415-P3	Station #: 9-8341
Sampler: Paul	Date: 4-15-99
Well I.D.: MW-3	Well Diameter: (2) 3 4 6 8
Total Well Depth: 32.65	Depth to Water: 4.56
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): YSI HACH

Well Diameter	Multiplier	Well Diameter	Multiplier
(2")	0.16	5"	1.02
3"	0.37	6"	1.47
4"	0.65	Other	radius <sup>2</sup> * 0.163

Purge Method: Bailer  
 Disposable Bailer  
 Middleburg ✓  
 Electric Submersible  
 Extraction Pump  
 Other: \_\_\_\_\_

Sampling Method: Bailer  
 Disposable Bailer ✓  
 Extraction Port  
 Other: \_\_\_\_\_

4.4	x	3	=	13.4	Gals.
1 Case Volume (Gals.)		Specified Volumes		Calculated Volume	

Time	Temp (°F)	pH	Cond.	Gals. Removed	Observations
15:10	69.8	7.0	593	5	
15:15	69.6	7.0	547	10	
15:20	69.6	7.0	536	14	

Did well dewater? Yes  No  Gallons actually evacuated: 14

Sampling Time: 15:25 Sampling Date: 4-15-99

Sample I.D.: MW-3 Laboratory: (Sequoia) CORE N. Creek Assoc. Labs

Analyzed for: (TPH-G) BTEX MTBE TPH-D Other: \_\_\_\_\_

Duplicate I.D.: \_\_\_\_\_ Analyzed for: TPH-G BTEX MTBE TPH-D Other: \_\_\_\_\_

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV