



# GETTLER-RYAN INC.

## TRANSMITTAL

December 20, 2002

G-R #386346

TO: Mr. James Brownell  
Delta Environmental Consultants, Inc.  
3164 Gold Camp Drive, Suite 200  
Rancho Cordova, California 95670

CC: Ms. Karen Streich  
Chevron Products Company  
P.O. Box 6004  
San Ramon, California 94583

FROM: Deanna L. Harding  
Project Coordinator  
Gettler-Ryan Inc.  
6747 Sierra Court, Suite J  
Dublin, California 94568

RE: **Chevron Service Station  
#9-8341  
3530 MacArthur Boulevard  
Oakland, California**

WE HAVE ENCLOSED THE FOLLOWING:

COPIES	DATED	DESCRIPTION
1	December 18, 2002	Groundwater Monitoring and Sampling Report Fourth Quarter - Event of November 11, 2002

### COMMENTS:

This report is being sent for your review. Please provide any comments/changes and propose any groundwater monitoring modifications for the next event prior to *January 8, 2003*, at which time the final report will be distributed to the following:

cc: Mr. Don Hwang, Alameda County Health Care Services, Dept. of Environmental Health, 1153 Harbor Bay Parkway, Suite 250, Alameda, CA 94502-6577  
Mr. Chuck Headlee, RWQCB-S.F. Bay Region, 1515 Clay St., Suite 1400, Oakland, CA 94612  
Mr. Greg Guss, Gettler-Ryan Inc., 3140 Gold Camp Drive, Suite 170, Rancho Cordova, CA 95670

Enclosures



# GETTLER-RYAN INC.

December 18, 2002  
G-R Job #386346

Ms. Karen Streich  
Chevron Products Company  
P.O. Box 6004  
San Ramon, CA 94583

**RE: Fourth Quarter Event of November 11, 2002**  
Groundwater Monitoring & Sampling Report  
Chevron Service Station #9-8341  
3530 MacArthur Boulevard  
Oakland, California

Dear Ms. Streich:

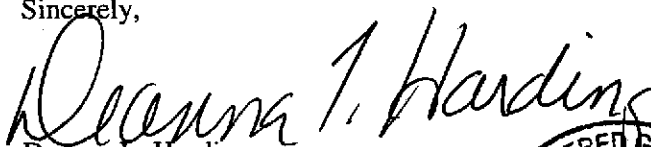
This report documents the most recent groundwater monitoring and sampling event performed by Gettler-Ryan Inc. (G-R) at the referenced site. All field work was conducted in accordance with G-R Standard Operating Procedure - Groundwater Sampling (attached).

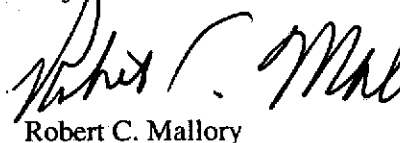
Static groundwater levels were measured and the wells were checked for the presence of separate-phase hydrocarbons. Static water level data, groundwater elevations and separate-phase hydrocarbon thickness (if any) are presented in the attached Table 1. A Potentiometric Map is included as Figure 1.

Groundwater samples were collected from the monitoring wells and submitted to a state certified laboratory for analyses. The field data sheets for this event are attached. Analytical results are presented in the table(s) listed below. The chain of custody document and laboratory analytical report are also attached.

Please call if you have any questions or comments regarding this report. Thank you.

Sincerely,

  
Deanna L. Harding  
Project Coordinator

  
Robert C. Mallory  
Registered Geologist, No. 7285

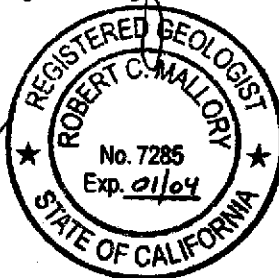
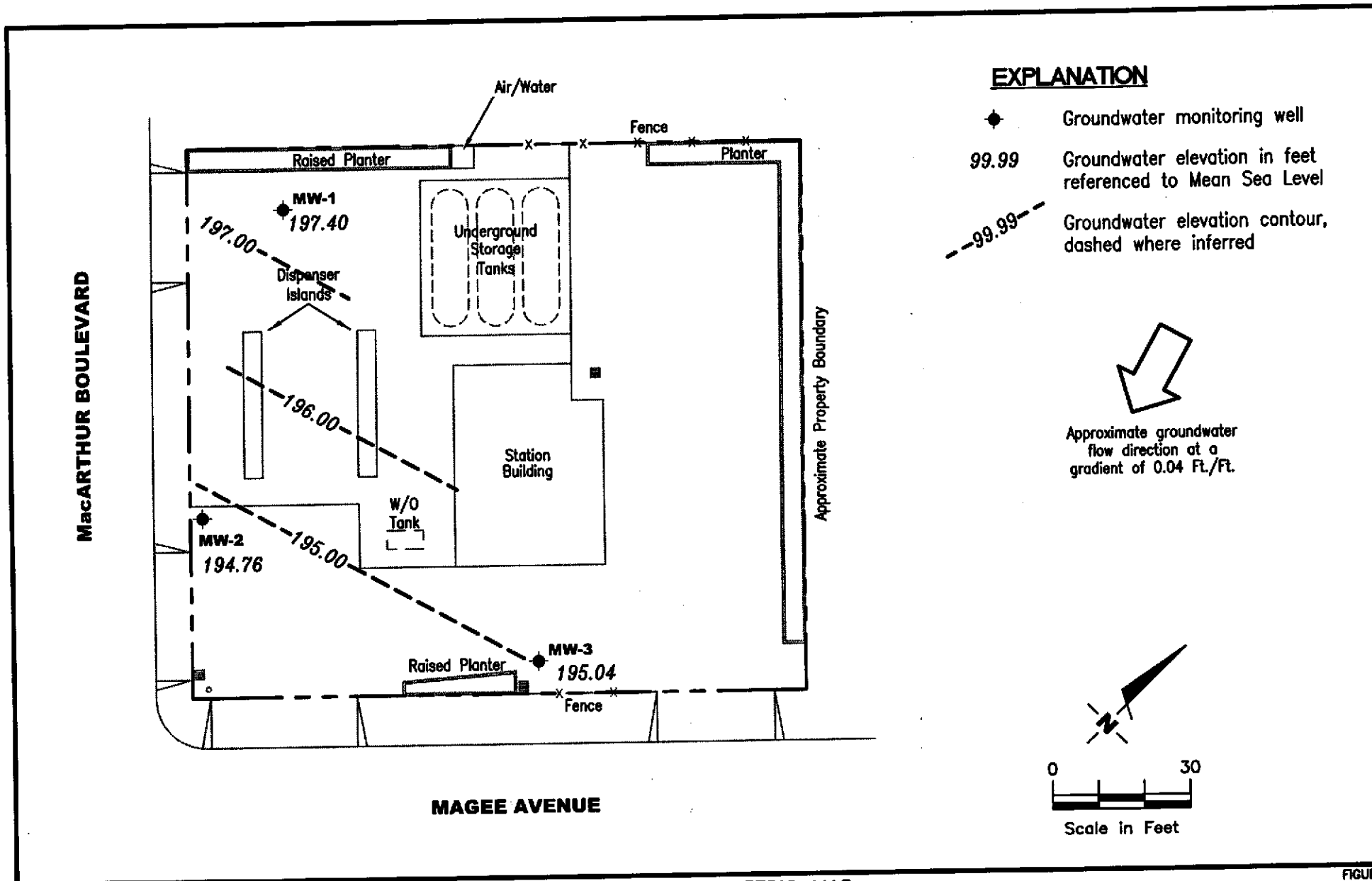


Figure 1: Potentiometric Map  
Table 1: Groundwater Monitoring Data and Analytical Results  
Attachments: Standard Operating Procedure - Groundwater Sampling  
Field Data Sheets  
Chain of Custody Document and Laboratory Analytical Reports



**GETTLER - RYAN INC.**

6747 Sierra Ct., Suite J  
Dublin, CA 94568

(925) 551-7555

**POTENTIOMETRIC MAP**

Chevron Service Station #9-8341  
3530 MacArthur Boulevard  
Oakland, California

FIGURE

1

JOB NUMBER  
386346

REVIEWED BY

DATE

November 11, 2002

REVISED DATE

**Table 1**  
**Groundwater Monitoring Data and Analytical Results**  
Chevron Service Station #9-8341  
3530 MacArthur Boulevard  
Oakland, California

WELL ID/ DATE	TOC (ft.)	GWE (msl)	DTW (ft.)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)
<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
07/22/99	202.47	196.97	5.50	<50	<0.5	<0.5	<0.5	<0.5	<2.5
10/13/99	202.47	196.43	6.04	<50	<0.5	<0.5	<0.5	<0.5	<2.5
01/21/00	202.47	197.11	5.36	<50	<0.5	<0.5	<0.5	<0.5	<2.5
04/10/00	202.47	197.60	4.87	<50	<0.50	<0.50	<0.50	<0.50	<2.5
07/12/00	202.47	197.05	5.42	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50
10/05/00	202.47	196.79	5.68	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50
01/05/01	202.47	197.30	5.17	<50	<0.50	<0.50	<0.50	<0.50	<2.5
04/05/01	202.47	197.83	4.64	<50	<0.50	<0.50	<0.50	<0.50	<2.5
08/20/01	202.47	197.29	5.18	<50	<0.50	<0.50	<0.50	<0.50	<2.5
11/26/01	202.47	197.65	4.82	<50	<0.50	<0.50	<0.50	<1.5	<2.5
02/14/02	202.47	197.68	4.79	<50	<0.50	<0.50	<0.50	<1.5	<2.5
05/07/02	202.47	197.55	4.92	<50	<0.50	<0.50	<0.50	<1.5	<2.5
08/02/02	202.47	197.36	5.11	<50	<0.50	<0.50	<0.50	<1.5	<2.5
11/11/02	202.47	197.40	5.07	<50	<0.50	<0.50	<0.50	<1.5	<2.5
<b>MW-2</b>									
04/04/96	198.88	196.07	2.81	<50	<0.5	<0.5	<0.5	<0.5	6,100
11/01/96	198.88	195.27	3.61	<500	<5.0	<5.0	<5.0	<5.0	2,600
01/06/97	198.88	195.97	2.91	<2,000	31	<20	<20	<20	4,000

**Table 1**  
**Groundwater Monitoring Data and Analytical Results**  
Chevron Service Station #9-8341  
3530 MacArthur Boulevard  
Oakland, California

WELL ID/ DATE	TOC (ft.)	GWE (msl)	DTW (ft.)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)
<b>MW-2 (cont)</b>									
04/14/97	198.88	195.43	3.45	<2,000	<20	<20	<20	<20	5,100/5,800 <sup>1</sup>
07/17/97	198.88	194.98	3.90	<500	<5.0	<5.0	<5.0	<5.0	2,300/2,900 <sup>1</sup>
10/29/97	198.88	192.96	5.92	120 <sup>2</sup>	12	<0.5	<0.5	<0.5	810/900 <sup>1</sup>
02/04/98	198.88	195.05	3.83	<1,000	<10	<10	<10	<10	2,100/2,800 <sup>1</sup>
04/03/98	198.88	191.55	7.33	<1,000	<10	<10	<10	<10	3,800/3,600 <sup>1</sup>
07/29/98	198.88	189.86	9.02	120 <sup>3</sup>	<0.5	<0.5	<0.5	<0.5	2,800/3,900 <sup>1</sup>
10/26/98	198.88	192.77	6.11	<50	<0.5	<0.5	<0.5	<0.5	1,200
01/18/99	198.88	194.67	4.21	<1,000	<10	<10	<10	10.5	2,530
04/15/99	198.88	194.56	4.32	<50	<0.5	<0.5	<0.5	<0.5	5,270
07/22/99	198.88	193.73	5.15	<50	8.92	<0.5	<0.5	<0.5	1,450
10/13/99	198.88	192.23	6.65	<250	<2.5	<2.5	<2.5	<2.5	1,740
01/21/00	198.88	192.78	6.10	69.6	<0.5	<0.5	<0.5	<0.5	1,110
04/10/00	198.88	194.42	4.46	<500	<5.0	<5.0	<5.0	<5.0	1,700
07/12/00	198.88	195.24	3.64	<50.0	<0.500	<0.500	<0.500	<0.500	187
10/05/00	198.88	194.06	4.82	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50
01/05/01	198.88	195.17	3.71	<50	<0.50	<0.50	<0.50	<0.50	1,800
04/05/01	198.88	192.94	5.94	<50	<0.50	<0.50	<0.50	<0.50	5,500
08/20/01	198.88	193.18	5.70	<50	<0.50	<0.50	<0.50	<0.50	2,000
11/26/01	198.88	193.55	5.33	<50	<0.50	<0.50	<0.50	<1.5	990
02/14/02	198.88	194.42	4.46	58	<0.50	<0.50	<0.50	<1.5	1,200
05/07/02	198.88	194.49	4.39	<50	<0.50	<0.50	<0.50	<1.5	<2.5
08/02/02	198.88	194.81	4.07	<50	<0.50	<0.50	<0.50	<1.5	490
11/11/02	198.88	194.76	4.12	<50	<0.50	<0.50	<0.50	<1.5	470
<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

**Table 1**  
**Groundwater Monitoring Data and Analytical Results**  
Chevron Service Station #9-8341  
3530 MacArthur Boulevard  
Oakland, California

<b>WELL ID/ DATE</b>	<b>TOC (ft.)</b>	<b>GWE (msl)</b>	<b>DTW (ft.)</b>	<b>TPH-G (ppb)</b>	<b>B (ppb)</b>	<b>T (ppb)</b>	<b>E (ppb)</b>	<b>X (ppb)</b>	<b>MTBE (ppb)</b>
<b>MW-3 (cont)</b>									
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
07/22/99	199.10	192.45	6.65	<50	<0.5	<0.5	<0.5	<0.5	3.94
10/13/99	199.10	193.79	5.31	<50	<0.5	<0.5	<0.5	<0.5	6.55
01/21/00	199.10	193.18	5.92	<50	<0.5	<0.5	<0.5	<0.5	<2.5
04/10/00	199.10	194.32	4.78	<50	<0.50	<0.50	<0.50	<0.50	<2.5
07/12/00	199.10	193.86	5.24	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50
10/05/00	199.10	195.17	3.93	<50.0	<0.500	<0.500	<0.500	<0.500	39.7
01/05/01	199.10	194.85	4.25	<50	<0.50	<0.50	<0.50	<0.50	2.9
04/05/01	199.10	194.72	4.38	<50	<0.50	<0.50	<0.50	<0.50	<2.5
08/20/01	199.10	194.35	4.75	<50	<0.50	<0.50	<0.50	<0.50	<2.5
11/26/01	199.10	193.60	5.50	<50	<0.50	<0.50	<0.50	<1.5	<2.5
02/14/02	199.10	194.82	4.28	<50	<0.50	<0.50	<0.50	<1.5	<2.5
05/07/02	199.10	194.58	4.52	85	<0.50	<0.50	<0.50	<1.5	610
08/02/02	199.10	194.72	4.38	<50	<0.50	<0.50	<0.50	<1.5	<2.5
11/11/02	199.10	195.04	4.06	<50	<0.50	<0.50	<0.50	<1.5	4.5
<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

**Table 1**  
**Groundwater Monitoring Data and Analytical Results**  
Chevron Service Station #9-8341  
3530 MacArthur Boulevard  
Oakland, California

WELL ID/ DATE	TOC (ft.)	GWE (msl)	DTW (ft.)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)
<b>TRIP BLANK (cont)</b>									
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
07/22/99	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5
10/13/99	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5
01/21/00	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5
04/10/00	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	<2.5
07/12/00	--	--	--	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50
10/05/00	--	--	--	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50
01/05/01	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	<2.5
04/05/01	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	<2.5
08/20/01	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	<2.5
<b>QA</b>									
11/26/01	--	--	--	<50	<0.50	<0.50	<0.50	<1.5	<2.5
02/14/02	--	--	--	<50	<0.50	<0.50	<0.50	<1.5	<2.5
05/07/02	--	--	--	<50	<0.50	<0.50	<0.50	<1.5	<2.5
08/02/02	--	--	--	<50	<0.50	<0.50	<0.50	<1.5	<2.5
11/11/02	--	--	--	<50	<0.50	<0.50	<0.50	<1.5	<2.5

**Table 1**  
**Groundwater Monitoring Data and Analytical Results**  
Chevron Service Station #9-8341  
3530 MacArthur Boulevard  
Oakland, California

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**EXPLANATIONS:**

Groundwater monitoring data and analytical results prior to April 10, 2000, were compiled from reports prepared by Blaine Tech Services, Inc.

TOC = Top of Casing

(ft.) = Feet

GWE = Groundwater Elevation

(msl) = Mean sea level

DTW = Depth to Water

TPH-G = Total Petroleum Hydrocarbons as Gasoline

B = Benzene

T = Toluene

E = Ethylbenzene

X = Xylenes

MTBE = Methyl tertiary butyl ether

ND = Not Detected

-- = Not Measured/Not Analyzed

(ppb) = Parts per billion

QA = Quality Assurance/Trip Blank

<sup>1</sup> Confirmation run.

<sup>2</sup> Chromatogram report indicates an unidentified hydrocarbon and gas.

<sup>3</sup> Chromatogram report indicates an unidentified hydrocarbon.



## STANDARD OPERATING PROCEDURE - GROUNDWATER SAMPLING

Gettler-Ryan Inc. field personnel adhere to the following procedures for the collection and handling of groundwater samples prior to analysis by the analytical laboratory. Prior to sample collection, the type of analysis to be performed is determined. Loss prevention of volatile compounds is controlled and sample preservation for subsequent analysis is maintained.

Prior to sampling, the presence or absence of free-phase hydrocarbons is determined using an interface probe. Product thickness, if present, is measured to the nearest 0.01 foot and is noted in the field notes. In addition, all depth to water level measurements are collected with a static water level indicator and are also recorded in the field notes, prior to purging and sampling any wells.

After water levels are collected and prior to sampling, each well is purged a minimum of three well casing volumes of water using pre-cleaned pumps (stack, suction, Grundfos), or disposable bailers. Temperature, pH and electrical conductivity are measured a minimum of three times during the purging. Purging continues until these parameters stabilize.

Groundwater samples are collected using disposable bailers. The water samples are transferred from the bailer into appropriate containers. Pre-preserved containers, supplied by analytical laboratories, are used when possible. When pre-preserved containers are not available, the laboratory is instructed to preserve the sample as appropriate. Duplicate samples are collected for the laboratory to use in maintaining quality assurance/quality control standards. The samples are labeled to include the job number, sample identification, collection date and time, analysis, preservation (if any), and the sample collector's initials. The water samples are placed in a cooler, maintained at 4°C for transport to the laboratory. Once collected in the field, all samples are maintained under chain of custody until delivered to the laboratory.

The chain of custody document includes the job number, type of preservation, if any, analysis requested, sample identification, date and time collected, and the sample collector's name. The chain of custody is signed and dated (including time of transfer) by each person who receives or surrenders the samples, beginning with the field personnel and ending with the laboratory personnel.

A laboratory supplied trip blank accompanies each sampling set. For sampling sets greater than 20 samples, 5% trip blanks are included. The trip blank is analyzed for some or all of the same compounds as the groundwater samples.

As requested by Chevron Products Company, the purge water and decontamination water generated during sampling activities is transported by IWM to McKittrick Waste Management located in McKittrick, California.



# GETTLER-RYAN INC.

## WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility #: ChevronTexaco #9-8341 Job Number: 386346  
 Site Address: 3530 Macarthur Blvd. Event Date: 11-11-02 (inclusive)  
 City: Oakland, CA Sampler: K. Kelley

Well ID: MW- 1 Date Monitored: \_\_\_\_\_ Well Condition: \_\_\_\_\_

Well Diameter: 2 in.

Total Depth: 26.85 ft.

Depth to Water: 5.07 ft.

21.78 xVF 0.17 = 3.70 x3 (case volume) = Estimated Purge Volume: 11-10 gal.

Volume	3/4"= 0.02	1"= 0.04	2"= 0.17	3"= 0.38
Factor (VF)	4"= 0.66	5"= 1.02	6"= 1.50	12"= 5.80

### Purge Equipment:

Disposable Bailer \_\_\_\_\_  
 Stainless Steel Bailer \_\_\_\_\_  
 Stack Pump \_\_\_\_\_  
 Suction Pump ✓  
 Grundfos \_\_\_\_\_  
 Other: \_\_\_\_\_

### Sampling Equipment:

Disposable Bailer ✓  
 Pressure Bailer \_\_\_\_\_  
 Discrete Bailer \_\_\_\_\_  
 Other: \_\_\_\_\_

Time Started:	_____ (2400 hrs)
Time Bailed:	_____ (2400 hrs)
Depth to Product:	_____ ft
Depth to Water:	_____ ft
Hydrocarbon Thickness:	_____ ft
Visual Confirmation/Description:	_____
Skimmer / Absorbant Sock (circle one)	_____
Amt Removed from Skimmer:	_____ gal
Amt Removed from Well:	_____ gal
Product Transferred to:	_____

Start Time (purge): 1710 Weather Conditions: clear  
 Sample Time/Date: 1836 11-11-02 Water Color: \_\_\_\_\_ Odor: No  
 Purging Flow Rate: 2.5 gpm. Sediment Description: \_\_\_\_\_  
 Did well de-water? No If yes, Time: slow recovery Volume: \_\_\_\_\_ gal.

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (u mhos/cm)	Temperature (°F)	D.O. (mg/L)	ORP (mV)
<u>1712</u>	<u>3.75</u>	<u>8.46</u>	<u>595</u>	<u>20.7</u>	_____	_____
<u>1714</u>	<u>7.50</u>	<u>7.83</u>	<u>614</u>	<u>20.3</u>	_____	_____
<u>1723</u>	<u>11.25</u>	<u>7.76</u>	<u>592</u>	<u>20.4</u>	_____	_____
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____

### LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>MW- 1</u>	<u>3</u> x voa vial	<u>YES</u>	<u>HCL</u>	<u>LANCASTER</u>	<u>TPH-G(8015)/BTEX+MTBE(8021)</u>
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

COMMENTS: \_\_\_\_\_

Add/Replaced Lock: ✓

Add/Replaced Plug: \_\_\_\_\_ Size: \_\_\_\_\_



# GETTLER-RYAN INC.

## WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility #: ChevronTexaco #9-8341 Job Number: 386346  
 Site Address: 3530 Macarthur Blvd. Event Date: 11-11-02 (inclusive)  
 City: Oakland, CA Sampler: K. Kelly

Well ID: MW-2 Date Monitored: \_\_\_\_\_ Well Condition: See notes

Well Diameter: 2 in.

Total Depth: 33.15 ft.

Depth to Water: 4.12 ft.

Volume	3/4"= 0.02	1"= 0.04	2"= 0.17	3"= 0.38
Factor (VF)	4"= 0.66	5"= 1.02	6"= 1.50	12"= 5.80

29.03 xVF 0.17 = 4.93 x3 (case volume) = Estimated Purge Volume: 14.80 gal.

Purge Equipment:  
 Disposable Bailer \_\_\_\_\_  
 Stainless Steel Bailer \_\_\_\_\_  
 Stack Pump \_\_\_\_\_  
 Suction Pump \_\_\_\_\_   
 Grundfos \_\_\_\_\_  
 Other: \_\_\_\_\_

Sampling Equipment:  
 Disposable Bailer \_\_\_\_\_   
 Pressure Bailer \_\_\_\_\_  
 Discrete Bailer \_\_\_\_\_  
 Other: \_\_\_\_\_

Time Started: \_\_\_\_\_ (2400 hrs)  
 Time Bailed: \_\_\_\_\_ (2400 hrs)  
 Depth to Product: \_\_\_\_\_ ft  
 Depth to Water: \_\_\_\_\_ ft  
 Hydrocarbon Thickness: \_\_\_\_\_ ft  
 Visual Confirmation/Description: \_\_\_\_\_  
 Skimmer / Absorbant Sock (circle one)  
 Amt Removed from Skimmer: \_\_\_\_\_ gal  
 Amt Removed from Well: \_\_\_\_\_ gal  
 Product Transferred to: \_\_\_\_\_

Start Time (purge): 1809 Weather Conditions: Clear  
 Sample Time/Date: 1903 11-11-02 Water Color: Clear Odor: No  
 Purging Flow Rate: 2.5 gpm. Sediment Description: \_\_\_\_\_  
 Did well de-water? No If yes, Time: \_\_\_\_\_ Volume: \_\_\_\_\_ gal.

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (u mhos/cm)	Temperature (°F)	D.O. (mg/L)	ORP (mV)
<u>1811</u>	<u>5.0</u>	<u>7.36</u>	<u>700</u>	<u>20.2</u>		
<u>1813</u>	<u>10.0</u>	<u>7.21</u>	<u>686</u>	<u>20.2 (20.4)</u>		
<u>1819</u>	<u>15.0</u>	<u>7.01</u>	<u>681</u>	<u>21.5</u>		
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____

### LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>MW-2</u>	<u>3</u> x voa vial	<u>YES</u>	<u>HCL</u>	<u>LANCASTER</u>	<u>TPH-G(8015)/BTEX+MTBE(8021)</u>
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

COMMENTS: missing 2 bolts Morrison DUBQUE well 12in.

Add/Replaced Lock: \_\_\_\_\_ Add/Replaced Plug: \_\_\_\_\_ Size: \_\_\_\_\_



# GETTLER-RYAN INC.

## WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility #: ChevronTexaco #9-8341 Job Number: 386346  
 Site Address: 3530 Macarthur Blvd. Event Date: 11-11-02 (inclusive)  
 City: Oakland, CA Sampler: K. Kelly

Well ID: MW-3 Date Monitored: \_\_\_\_\_ Well Condition: OK

Well Diameter: 2 in.  
 Total Depth: 32.25 ft.  
 Depth to Water: 4.06 ft.

Volume	3/4"= 0.02	1"= 0.04	2"= 0.17	3"= 0.38
Factor (VF)	4"= 0.66	5"= 1.02	6"= 1.50	12"= 5.80

28.19 xVF 0.17 = 4.79 x3 (case volume) = Estimated Purge Volume: 14.37 gal.

Purge Equipment:  
 Disposable Bailer \_\_\_\_\_  
 Stainless Steel Bailer \_\_\_\_\_  
 Steck Pump \_\_\_\_\_  
 Suction Pump ✓  
 Grundfos \_\_\_\_\_  
 Other: \_\_\_\_\_

Sampling Equipment:  
 Disposable Bailer ✓  
 Pressure Bailer \_\_\_\_\_  
 Discrete Bailer \_\_\_\_\_  
 Other: \_\_\_\_\_

Time Started: \_\_\_\_\_ (2400 hrs)  
 Time Bailed: \_\_\_\_\_ (2400 hrs)  
 Depth to Product: \_\_\_\_\_ ft  
 Depth to Water: \_\_\_\_\_ ft  
 Hydrocarbon Thickness: \_\_\_\_\_ ft  
 Visual Confirmation/Description:  
 Skimmer / Absorbant Sock (circle one)  
 Amt Removed from Skimmer: \_\_\_\_\_ gal  
 Amt Removed from Well: \_\_\_\_\_ gal  
 Product Transferred to: \_\_\_\_\_

Start Time (purge): 1741 Weather Conditions: clear  
 Sample Time/Date: 1848 11-11-02 Water Color: \_\_\_\_\_ Odor: \_\_\_\_\_  
 Purging Flow Rate: 2.5 gpm. Sediment Description: \_\_\_\_\_  
 Did well de-water? No If yes, Time: \_\_\_\_\_ Volume: \_\_\_\_\_ gal.

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (umhos/cm)	Temperature (C/F)	D.O. (mg/L)	ORP (mV)
<u>1743</u>	<u>5.0</u>	<u>7.79</u>	<u>588</u>	<u>20.4</u>	_____	_____
<u>1745</u>	<u>10.0</u>	<u>7.30</u>	<u>538</u>	<u>20.1</u>	_____	_____
<u>1747</u>	<u>15.0</u>	<u>7.13</u>	<u>565</u>	<u>21.8</u>	_____	_____
_____	_____	_____	_____	_____	_____	_____

### LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>MW-3</u>	<u>3</u> x voa vial	<u>YES</u>	<u>HCL</u>	<u>LANCASTER</u>	<u>TPH-G(8015)/BTEX+MTBE(8021)</u>
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

COMMENTS: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Add/Replaced Lock: \_\_\_\_\_ Add/Replaced Plug: \_\_\_\_\_ Size: \_\_\_\_\_



For Lancaster Laboratories use only  
 Acct. #: 10905 Sample #: 3940586-9 SCR#: \_\_\_\_\_

11302-006

gr # 830927

Facility #: 9-8341 Job 386346 Global ID# T0600101790  
 Site Address: 3530 MACARTHUR BLVD, OAKLAND, CA  
 Chevron PM: KS Lead Consultant: Delta/G-R  
 Consultant/Office: G-R, Inc., 6747 Sierra Court, Dublin, Ca 94568  
 Consultant Prj. Mgr.: Deanna L. Harding (Deanna@grinc.com)  
 Consultant Phone #: 925-551-7555 Fax #: 925-551-7899  
 Sampler: Kristina Kelly  
 Service Order #: \_\_\_\_\_  Non SAR:

Matrix  
 Potable  NPDES  
 Water  Air  
 Soil  Oil

Analyses Requested									
Preservation Codes									
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>								
BTEX + MTBE 8260	8021								
TPH 8015 MOD GRO									
TPH 8015 MOD DRO									
8260 full scan									
Oxygenates									
Lead 7420	7421								

**Preservative Codes**  
 H = HCl      T = Thiosulfate  
 N = HNO<sub>3</sub>    B = NaOH  
 S = H<sub>2</sub>SO<sub>4</sub>    O = Other

J value reporting needed  
 Must meet lowest detection limits possible for 8260 compounds

**8021 MTBE Confirmation**  
 Confirm highest hit by 8260  
 Confirm all hits by 8260  
 Run \_\_\_ oxy s on highest hit  
 Run \_\_\_ oxy s on all hits

Sample Identification	Date Collected	Time Collected	Grab	Composite	Soil	Water	Oil	Air	Total Number of Containers	BTEX + MTBE 8260	8021	TPH 8015 MOD GRO	TPH 8015 MOD DRO	8260 full scan	Oxygenates	Lead 7420	7421
<u>QA</u>	<u>11-11-02</u>					<u>W</u>			<u>3</u>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				
<u>MW-1</u>		<u>1836</u>	<input checked="" type="checkbox"/>							<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				
<u>MW-2</u>		<u>1903</u>	<input checked="" type="checkbox"/>							<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				
<u>MW-3</u>		<u>1848</u>	<input checked="" type="checkbox"/>							<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				

Comments / Remarks

**Turnaround Time Requested (TAT) (please circle)**  
STD. TAT      72 hour      48 hour  
 24 hour      4 day      5 day

**Data Package Options (please circle if required)**  
 QC Summary      Type I — Full  
 Type VI (Raw Data)       Coelt Deliverable not needed  
 WIP (RWQCB)  
 Disk

Relinquished by: <u>Kristina Kelly</u>	Date: <u>11/11/02</u>	Time: _____	Received by: <u>[Signature]</u>	Date: <u>11/13/02</u>	Time: <u>1430</u>
Relinquished by: <u>[Signature]</u>	Date: <u>11/13/02</u>	Time: <u>1130</u>	Received by: <u>[Signature]</u>	Date: <u>11/30/02</u>	Time: <u>1430</u>
Relinquished by: <u>[Signature]</u>	Date: <u>11-14-02</u>	Time: <u>1400</u>	Received by: <u>Airborne</u>	Date: <u>11-14-02</u>	Time: _____
Relinquished by Commercial Carrier: UPS      FedEx      Other: <u>Airborne</u>	Temperature Upon Receipt: <u>3.0 c°</u>		Received by: <u>[Signature]</u>	Date: <u>11/15/02</u>	Time: <u>0935</u>
Custody Seals Intact? <u>Yes</u> No					



RECEIVED  
GENERAL

## ANALYTICAL RESULTS

Prepared for:

ChevronTexaco  
6001 Bollinger Canyon Rd L4310  
San Ramon CA 94583

925-842-8582

Prepared by:

Lancaster Laboratories  
2425 New Holland Pike  
Lancaster, PA 17605-2425

## SAMPLE GROUP

The sample group for this submittal is 830927. Samples arrived at the laboratory on Friday, November 15, 2002. The PO# for this group is 99011184 and the release number is STREICH.

<u>Client Description</u>			<u>Lancaster Labs Number</u>
QA-T-021111	NA	Water	3940586
MW-1-W-021111	Grab	Water	3940587
MW-2-W-021111	Grab	Water	3940588
MW-3-W-021111	Grab	Water	3940589

1 COPY TO

Delta C/O Gettler-Ryan

Attn: Deanna L. Harding

Questions? Contact your Client Services Representative  
Teresa M Lis at (717) 656-2300.

Respectfully Submitted,

Steve Stahm  
Group





Lancaster Laboratories Sample No. WW 3940586

Collected: 11/11/2002 00:00

Account Number: 10905

Submitted: 11/15/2002 09:35

ChevronTexaco

Reported: 11/25/2002 at 18:39

6001 Bollinger Canyon Rd L4310

Discard: 12/26/2002

San Ramon CA 94583

QA-T-021111 NA Water  
 Facility# 98341 Job# 386346 GRD  
 3530 Macarthur Blvd T0600101790 QA

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
01729	TPH-GRO - Waters					
01730	TPH-GRO - Waters	n.a.	N.D.	50.	ug/l	1
	The reported concentration of TPH-GRO does not include MTBE or other gasoline constituents eluting prior to the C6 (n-hexane) TPH-GRO range start time. A site-specific MSD sample was not submitted for the project. A LCS/LCSD was performed to demonstrate precision and accuracy at a batch level.					
08214	BTEX, MTBE (8021)					
00776	Benzene	71-43-2	N.D.	0.50	ug/l	1
00777	Toluene	108-88-3	N.D.	0.50	ug/l	1
00778	Ethylbenzene	100-41-4	N.D.	0.50	ug/l	1
00779	Total Xylenes	1330-20-7	N.D.	1.5	ug/l	1
00780	Methyl tert-Butyl Ether	1634-04-4	N.D.	2.5	ug/l	1
	A site-specific MSD sample was not submitted for the project. A LCS/LCSD was performed to demonstrate precision and accuracy at a batch level.					

State of California Lab Certification No. 2116

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
01729	TPH-GRO - Waters	N. CA LUFT Gasoline Method	1	11/17/2002 20:09	Tina L Thoman	1
08214	BTEX, MTBE (8021)	SW-846 8021B	1	11/17/2002 20:09	Tina L Thoman	1
01146	GC VOA Water Prep	SW-846 5030B	1	11/17/2002 20:09	Tina L Thoman	n.a.

#=Laboratory Method Detection Limit exceeded target detection limit  
 N.D.=Not detected above the Reporting Limit



Lancaster, PA 17605-2425  
 717-656-2300 Fax: 717-656-2681



Lancaster Laboratories Sample No. **WW 3940587**

Collected: 11/11/2002 18:36 by **KK**

Account Number: 10905

Submitted: 11/15/2002 09:35  
 Reported: 11/25/2002 at 18:39  
 Discard: 12/26/2002

ChevronTexaco  
 6001 Bollinger Canyon Rd L4310  
 San Ramon CA 94583

MW-1-W-021111 Grab Water GRD  
 Facility# 98341 Job# 386346  
 3530 Macarthur Blvd T0600101790 MW-1

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
01729	TPH-GRO - Waters					
01730	TPH-GRO - Waters	n.a.	N.D.	50.	ug/l	1
	The reported concentration of TPH-GRO does not include MTBE or other gasoline constituents eluting prior to the C6 (n-hexane) TPH-GRO range start time. A site-specific MSD sample was not submitted for the project. A LCS/LCSD was performed to demonstrate precision and accuracy at a batch level.					
08214	BTEX, MTBE (8021)					
00776	Benzene	71-43-2	N.D.	0.50	ug/l	1
00777	Toluene	108-88-3	N.D.	0.50	ug/l	1
00778	Ethylbenzene	100-41-4	N.D.	0.50	ug/l	1
00779	Total Xylenes	1330-20-7	N.D.	1.5	ug/l	1
00780	Methyl tert-Butyl Ether	1634-04-4	N.D.	2.5	ug/l	1
	A site-specific MSD sample was not submitted for the project. A LCS/LCSD was performed to demonstrate precision and accuracy at a batch level.					

State of California Lab Certification No. 2116

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
01729	TPH-GRO - Waters	N. CA LUFT Gasoline Method	1	11/17/2002 20:43	Tina L Thoman	1
08214	BTEX, MTBE (8021)	SW-846 8021B	1	11/17/2002 20:43	Tina L Thoman	1
01146	GC VOA Water Prep	SW-846 5030B	1	11/17/2002 20:43	Tina L Thoman	n.a.

#=Laboratory Method Detection Limit exceeded target detection limit  
 N.D.=Not detected or below the Reporting Limit



Lancaster Laboratories Inc.  
 2425 New Holland Pike.  
 Lancaster, PA 17605-2425  
 717-656-2300 Fax: 717-656-2681





Lancaster Laboratories Sample No. **WW 3940588**

Collected: 11/11/2002 19:03 by **KK**

Account Number: 10905

Submitted: 11/15/2002 09:35  
 Reported: 11/25/2002 at 18:39  
 Discard: 12/26/2002

ChevronTexaco  
 6001 Bollinger Canyon Rd L4310  
 San Ramon CA 94583

MW-2-W-021111 Grab Water  
 Facility# 98341 Job# 386346 GRD  
 3530 Macarthur Blvd T0600101790 MW-2

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
01729	TPH-GRO - Waters					
01730	TPH-GRO - Waters	n.a.	N.D.	50.	ug/l	1
The reported concentration of TPH-GRO does not include MTBE or other gasoline constituents eluting prior to the C6 (n-hexane) TPH-GRO range start time. A site-specific MSD sample was not submitted for the project. A LCS/LCSD was performed to demonstrate precision and accuracy at a batch level.						
08214	BTEX, MTBE (8021)					
00776	Benzene	71-43-2	N.D.	0.50	ug/l	1
00777	Toluene	108-88-3	N.D.	0.50	ug/l	1
00778	Ethylbenzene	100-41-4	N.D.	0.50	ug/l	1
00779	Total Xylenes	1330-20-7	N.D.	1.5	ug/l	1
00780	Methyl tert-Butyl Ether	1634-04-4	470.	2.5	ug/l	1
A site-specific MSD sample was not submitted for the project. A LCS/LCSD was performed to demonstrate precision and accuracy at a batch level.						

State of California Lab Certification No. 2116

### Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
01729	TPH-GRO - Waters	N. CA LUFT Gasoline Method	1	11/17/2002 21:16	Tina L Thoman	1
08214	BTEX, MTBE (8021)	SW-846 8021B	1	11/17/2002 21:16	Tina L Thoman	1
01146	GC VOA Water Prep	SW-846 5030B	1	11/17/2002 21:16	Tina L Thoman	n.a.

#=Laboratory Method Detection Limit exceeded target detection limit  
 N.D.=Not detected or above the Reporting Limit





Lancaster Laboratories Sample No. **WW 3940589**

Collected: 11/11/2002 18:48 by **KK**

Account Number: **10905**

Submitted: 11/15/2002 09:35  
 Reported: 11/25/2002 at 18:39  
 Discard: 12/26/2002

**ChevronTexaco**  
 6001 Bollinger Canyon Rd L4310  
 San Ramon CA 94583

MW-3-W-021111 Grab Water  
 Facility# 98341 Job# 386346 GRD  
 3530 Macarthur Blvd T0600101790 MW-3

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
01729	TPH-GRO - Waters					
01730	TPH-GRO - Waters	n.a.	N.D.	50.	ug/l	1
The reported concentration of TPH-GRO does not include MTBE or other gasoline constituents eluting prior to the C6 (n-hexane) TPH-GRO range start time. A site-specific MSD sample was not submitted for the project. A LCS/LCSD was performed to demonstrate precision and accuracy at a batch level.						
08214	BTEX, MTBE (8021)					
00776	Benzene	71-43-2	N.D.	0.50	ug/l	1
00777	Toluene	108-88-3	N.D.	0.50	ug/l	1
00778	Ethylbenzene	100-41-4	N.D.	0.50	ug/l	1
00779	Total Xylenes	1330-20-7	N.D.	1.5	ug/l	1
00780	Methyl tert-Butyl Ether	1634-04-4	4.5	2.5	ug/l	1
A site-specific MSD sample was not submitted for the project. A LCS/LCSD was performed to demonstrate precision and accuracy at a batch level.						

State of California Lab Certification No. 2116

### Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
01729	TPH-GRO - Waters	N. CA LUFT Gasoline Method	1	11/17/2002 21:49	Tina L Thoman	1
08214	BTEX, MTBE (8021)	SW-846 8021B	1	11/17/2002 21:49	Tina L Thoman	1
01146	GC VOA Water Prep	SW-846 5030B	1	11/17/2002 21:49	Tina L Thoman	n.a.

#=Laboratory Method Detection Limit Exceeded Target detection limit  
 N.D.=Not detected Above the Reporting Limit



Lancaster, PA 17605-2425  
 717-656-2300 Fax: 717-656-2681



Alameda County  
JAN 13 2003

Environmental Health

## Quality Control Summary

Client Name: ChevronTexaco  
Reported: 11/25/02 at 06:39 PM

Group Number: 830927

### Laboratory Compliance Quality Control

Analysis Name	Blank Result	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 02321A16A								
Benzene	N.D.	.2	ug/l	110	115	80-118	4	30
Toluene	N.D.	.2	ug/l	104	108	82-119	4	30
Ethylbenzene	N.D.	.2	ug/l	102	106	81-119	5	30
Total Xylenes	N.D.	.6	ug/l	103	108	82-120	4	30
Methyl tert-Butyl Ether	N.D.	.3	ug/l	101	105	79-127	4	30
TPH-GRO - Waters	N.D.	50.	ug/l	102	104	74-116	2	30

### Sample Matrix Quality Control

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	BKG MAX	DUP CONC	DUP RPD	Dup RPD Max
Batch number: 02321A16A								
Sample number(s): 3940586-3940589								
Benzene	117		83-130					
Toluene	112		87-129					
Ethylbenzene	111		86-133					
Total Xylenes	112		86-132					
Methyl tert-Butyl Ether	105		66-140					
TPH-GRO - Waters	118		74-132					

### Surrogate Quality Control

Analysis Name: BTEX, MTBE (8021)  
Batch number: 02321A16A

	Trifluorotoluene-F	Trifluorotoluene-P
3940586	116	121
3940587	116	121
3940588	111	121
3940589	115	121
Blank	110	120
LCS	115	120
LCSD	115	120
MS	112	120
Limits:	57-146	71-130

\*- Outside of specification

- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The background result was more than four times the spike added.

