



# GETTLER-RYAN INC.

DoH.  
APR 25 2002

## TRANSMITTAL

April 10, 2002  
G-R #386420

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

CC: Mr. Thomas Bauhs  
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: **Former Chevron Service Station  
#9-0517  
3900 Piedmont Avenue  
Oakland, California**

WE HAVE ENCLOSED THE FOLLOWING:

COPIES	DATED	DESCRIPTION
1	April 5, 2002	Groundwater Monitoring and Sampling Report First Quarter - Event of February 26, 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 **April 22, 2002**, at which time the final report will be distributed to the following:

cc: Mr. Larry Seto, Alameda County Health Care Services, Dept. of Environmental Health, 1153 Harbor Bay Parkway, Suite 250, Alameda, CA 94502-6577  
Mr. Greg Gurs, Gettler-Ryan Inc., 3140 Gold Camp Drive, Suite 170, Rancho Cordova, CA 95670  
Neil B. Goodhue and Mrs. Diane C. Goodhue, 300 Hillside Avenue, Piedmont, CA 94611

Enclosures

trans/9-0517-tb



# GETTLER - RYAN INC.

April 5, 2002  
G-R Job #386420

Mr. Thomas Bauhs  
Chevron Products Company  
P.O. Box 6004  
San Ramon, CA 94583

**RE: First Quarter Event of February 26, 2002**  
Groundwater Monitoring & Sampling Report  
Former Chevron Service Station #9-0517  
3900 Piedmont Avenue  
Oakland, California

APR 25 2002

Dear Mr. Bauhs:

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 Depth to Water 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

Douglas J. Lee  
Senior Geologist, R.G. No. 6882

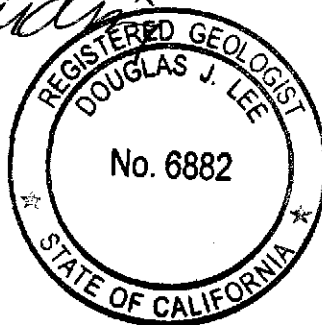
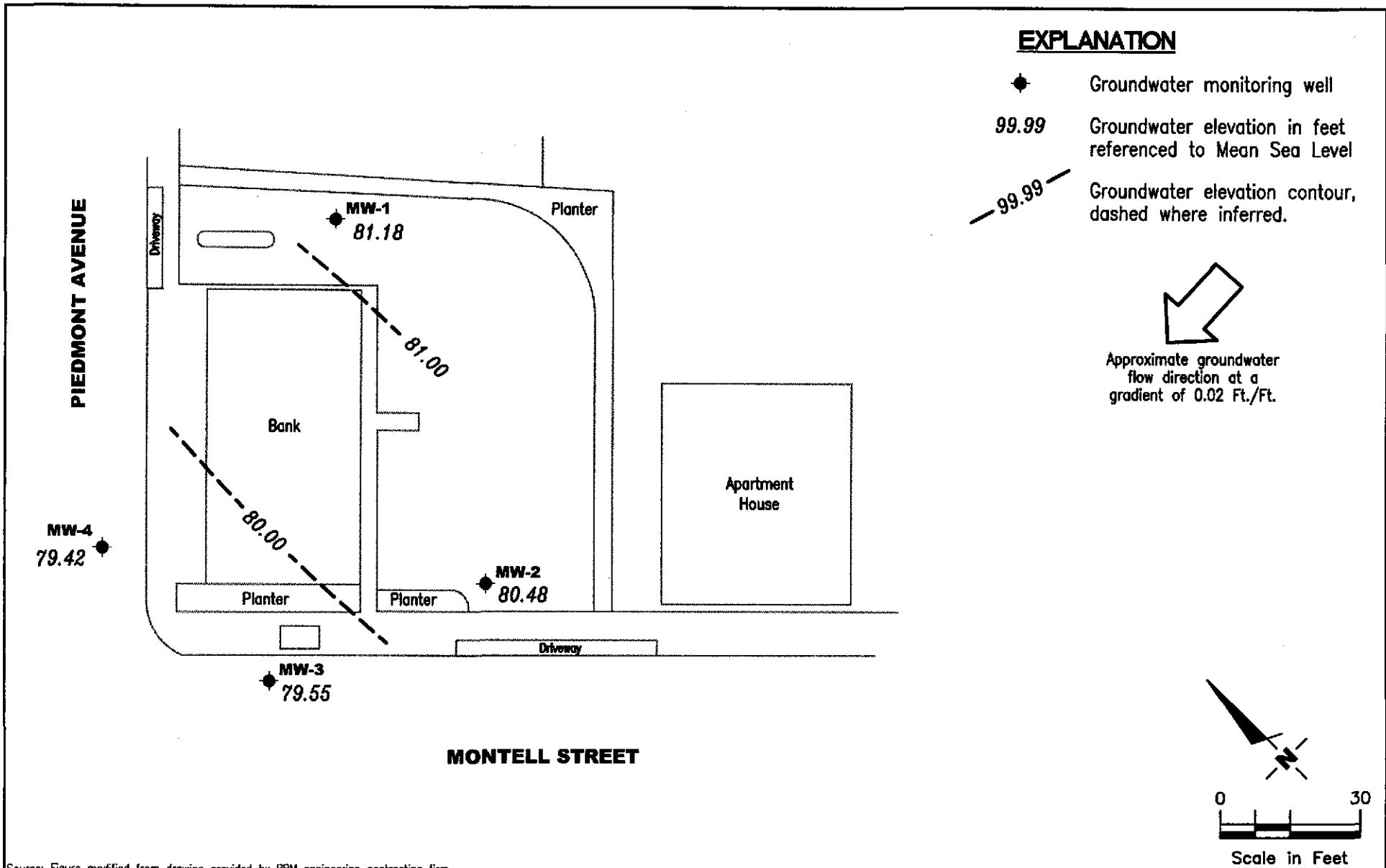


Figure 1: Depth to Water Map  
Table 1: Groundwater Monitoring Data and Analytical Results  
Attachments: Standard Operating Procedure - Groundwater Sampling  
Field Data Sheets  
Chain of Custody Document and Laboratory Analytical Reports



Source: Figure modified from drawing provided by RRM engineering contracting firm.

**GETTLER - RYAN INC.**  
 6747 Sierra Ct., Suite J  
 Dublin, CA 94568 (925) 551-7555

**POTENTIOMETRIC MAP**  
 Former Chevron Service Station #9-0517  
 3900 Piedmont Avenue  
 Oakland, California

FIGURE

1

PROJECT NUMBER  
 386420

REVIEWED BY

DATE  
 February 25, 2002

REVISED DATE

FILE NAME: P:\Enviro\Chevron\9-0517\002-9-0517.dwg | Layout Tab: Pot1

**Table 1**  
**Groundwater Monitoring Data and Analytical Results**  
Former Chevron Service Station #9-0517  
3900 Piedmont Avenue  
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>									
08/03/98	87.89	75.46	12.43	<50	<0.5	<0.5	<0.5	<0.5	<2.5
11/23/98	87.89	78.84	9.05	<50	<0.5	<0.5	<0.5	<0.5	<2.0
02/08/99	87.89	81.39	6.50	<50	<0.5	<0.5	<0.5	<0.5	<2.5
05/07/99	87.89	80.76	7.13	<50	<0.5	<0.5	<0.5	<0.5	<5.0
08/23/99	87.89	78.74	9.15	<50	<0.5	<0.5	<0.5	<0.5	<2.5
11/03/99	87.89	78.35	9.54	<50	<0.5	<0.5	<0.5	<0.5	<2.5
02/15/00	87.89	81.99	5.90	<50	<0.5	<0.5	<0.5	<0.5	<5.0
05/12/00 <sup>3</sup>	87.89	80.84	7.05	<50	<0.50	<0.50	<0.50	<0.50	<2.5
07/31/00	87.89	79.49	8.40	<50	<0.50	<0.50	<0.50	<0.50	<2.5
10/30/00	87.89	79.24	8.65	<50.0	<0.500	<0.500	<0.500	<1.50	<2.50
02/27/01	87.89	82.06	5.83	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50
05/15/01	87.89	80.18	7.71	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50
08/23/01	87.89	DRY	--	--	--	--	--	--	--
02/25/02	87.89	81.18	6.71	<50	<0.50	<0.50	<0.50	<1.5	<2.5
<b>MW-2</b>									
08/03/98	86.09	74.75	11.34	<50	<0.5	<0.5	<0.5	<0.5	3.4
11/23/98	86.09	79.19	6.90	<50	<0.5	<0.5	<0.5	<0.5	<2.0
02/08/99	86.09	80.86	5.23	<50	<0.5	<0.5	<0.5	<0.5	<2.5
05/07/99	86.09	79.97	6.12	<50	<0.5	<0.5	<0.5	<0.5	<5.0
08/23/99	86.09	79.68	6.41	<50	<0.5	<0.5	<0.5	<0.5	<2.5
11/03/99	86.09	78.80	7.29	<50	<0.5	<0.5	<0.5	<0.5	<2.5
02/15/00	86.09	81.60	4.49	<50	<0.5	<0.5	<0.5	<0.5	<5.0
05/12/00	86.09	80.19	5.90	4,000 <sup>3</sup>	240	26	100	76	<100
07/31/00	86.09	79.51	6.58	<50	<0.50	<0.50	<0.50	<0.50	<2.5
10/30/00	86.09	79.86	6.23	<50.0	<0.500	2.92	<0.500	1.88	4.89
02/27/01	86.09	81.49	4.60	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50
05/15/01	86.09	79.79	6.30	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50
08/23/01	86.09	78.81	7.28	<50	<0.50	<0.50	<0.50	<0.50	<2.5
02/25/02	86.09	80.48	5.61	<50	<0.50	<0.50	<0.50	<1.5	<2.5

**Table 1**  
**Groundwater Monitoring Data and Analytical Results**  
Former Chevron Service Station #9-0517  
3900 Piedmont Avenue  
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-3</b>									
08/03/98	86.28	74.20	12.08	4000	160	<5.0	<5.0	73	180
11/23/98	86.28	78.59	7.69	4000	67.7	7.56	17.1	24.5	41.2
02/08/99	86.28	80.01	6.27	<50	<0.5	<0.5	<0.5	<0.5	<2.5
05/07/99	86.28	79.32	6.96	1800	53.6	8.96	33	18.6	21.4
08/23/99	86.28	78.36	7.92	3970	155	24	88.8	39.8	185
11/03/99	86.28	78.36	7.92	3320	108	19.9	98.4	44.8	<25
02/15/00	86.28	80.54	5.74	779	26.7	3.82	15.4	4.24	<12.5
05/12/00	86.28	79.52	6.76	12,000 <sup>3</sup>	3,100	120	980	1,400	820
07/31/00	86.28	78.98	7.30	1,200 <sup>3</sup>	32	<5.0	11	7.3	39
10/30/00	86.28	79.26	7.02	3,300 <sup>4</sup>	119	<5.00	40.0	<15.0	<25.0
02/27/01	86.28	80.39	5.89	432 <sup>3</sup>	15.5	1.53	14.9	1.06	15.7
05/15/01	86.28	79.21	7.07	3,220 <sup>3</sup>	96.4	12.6	11.5	11.6	128
08/23/01	86.28	78.23	8.05	2,300	48	<10	<10	<10	100
<b>02/25/02</b>	<b>86.28</b>	<b>79.55</b>	<b>6.73</b>	<b>3,100</b>	<b>27</b>	<b>2.1</b>	<b>4.8</b>	<b>6.6</b>	<b>&lt;2.5</b>
<b>MW-4</b>									
08/03/98	87.22	74.30	12.92	1900	110	12	<0.5	55	130
11/23/98	87.22	77.82	9.40	4080	136	17.8	37.2	30.1	51.8
02/08/99 <sup>1</sup>	87.22	79.40	7.82	2900	150	16	<5.0	15	230/30.7 <sup>2</sup>
05/07/99	87.22	79.80	7.42	6050	161	<25	39.8	36.9	<250/30.2 <sup>2</sup>
08/23/99	87.22	77.83	9.39	3930	203	37.6	58.6	42.2	255
11/03/99	87.22	77.41	9.81	5350	324	44.7	91.5	56.1	<50
02/15/00	87.22	79.50	7.72	4080	161	27.7	31.1	39.1	73.9
05/12/00	87.22	79.31	7.91	3,600 <sup>3</sup>	170	27	49	64	170
07/31/00	87.22	78.57	8.65	2,900 <sup>3</sup>	160	20	15	56	170
10/30/00	87.22	78.14	9.08	5,630 <sup>4</sup>	301	17.8	11.8	51.5	<25.0
02/27/01	87.22	79.92	7.30	2,140 <sup>3</sup>	95.1	12.8	53.4	43.0	235
05/15/01	87.22	79.07	8.15	4,580 <sup>3</sup>	200	44.1	46.3	51.7	172
08/23/01	87.22	77.89	9.33	2,700	250	44	21	72	130
<b>02/25/02</b>	<b>87.22</b>	<b>79.42</b>	<b>7.80</b>	<b>4,100</b>	<b>100</b>	<b>18</b>	<b>27</b>	<b>39</b>	<b>&lt;10</b>

**Table 1**  
**Groundwater Monitoring Data and Analytical Results**  
Former Chevron Service Station #9-0517  
3900 Piedmont Avenue  
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</b>									
08/03/98	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5
11/23/98	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.0
02/08/99	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5
05/07/99	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0
08/23/99	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5
11/03/99	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5
02/15/00	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0
05/12/00	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	<2.5
07/31/00	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	<2.5
10/30/00	--	--	--	<50.0	<0.500	<0.500	<0.500	<1.50	<2.50
02/27/01	--	--	--	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50
05/15/01	--	--	--	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50
08/23/01	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	<2.5
<b>QA</b>									
02/25/02	--	--	--	<50	<0.50	<0.50	<0.50	<1.5	<2.5

**Table 1**  
**Groundwater Monitoring Data and Analytical Results**  
Former Chevron Service Station #9-0517  
3900 Piedmont Avenue  
Oakland, California

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**EXPLANATIONS:**

Groundwater monitoring data and laboratory analytical results prior to May 12, 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

(ppb) = Parts per billion

-- = Not Measured/Not Analyzed

QA = Quality Assurance

<sup>1</sup> Chromatogram pattern indicates gas and an unidentified hydrocarbon.

<sup>2</sup> Confirmation run.

<sup>3</sup> Laboratory report indicates gasoline C6-C12.

<sup>4</sup> Laboratory report indicates hydrocarbon pattern present in the requested fuel quantitation range but does not resemble the pattern of the requested fuel.

## 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, static water level measurements are collected with the interface probe and are also recorded in the field notes.

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 polyvinyl chloride 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 Chevron-designated 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.



**WELL MONITORING/SAMPLING  
FIELD DATA SHEET.**

CHEVRON  
 Facility # 9-0317  
 Address: 3900 Piedmont Ave.  
 City: Oakland, CA

Job#: 386420  
 Date: 2/25/02  
 Sampler: TC

Well ID MW-1 Well Condition: o.k

Well Diameter 2 in. Hydrocarbon Amount Bailed  
 Thickness: 0 (feet) (product/water): 0 (Gallons)  
 Total Depth 16.05 ft.  
 Depth to Water 6.71 ft.

Volume Factor (VF)	2" = 0.17	3" = 0.38	4" = 0.66
	6" = 1.50	12" = 5.80	

9.34 x VF .17 = 1.5 x 3 (case volume) = Estimated Purge Volume: 5.0 (gal.)

Purge Equipment: Disposable Bailer  
 Bailer  
 Stack  
 Suction  
 Grundfos  
 Other: 2" STAINLESS TO REMOVE ROOTS

Sampling Equipment: Disposable Bailer  
 Bailer  
 Pressure Bailer  
 Grab Sample  
 Other: \_\_\_\_\_

Starting Time: 1155 Weather Conditions: SUNNY  
 Sampling Time: 1208 Water Color: Cloudy Odor: yes  
 Purging Flow Rate: \_\_\_\_\_ gpm.  
 Sediment Description: \_\_\_\_\_  
 Did well de-water? NO If yes; Time: \_\_\_\_\_ Volume: \_\_\_\_\_ (gal.)

Time	Volume (gal.)	pH	Conductivity $\mu\text{mhos/cm}$	Temperature $^{\circ}\text{F}$	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
<u>1157</u>	<u>1.5</u>	<u>7.38</u>	<u>1182</u>	<u>67.3</u>			
<u>1200</u>	<u>3.0</u>	<u>7.16</u>	<u>1164</u>	<u>66.8</u>			
<u>1203</u>	<u>5.0</u>	<u>7.19</u>	<u>1128</u>	<u>66.9</u>			

**LABORATORY INFORMATION**

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>MW-1</u>	<u>3 X VOA VIAL</u>	<u>Y</u>	<u>HCL</u>	<u>LANCASTER</u>	<u>TPH(GI)/btex/mtbe</u>

COMMENTS: \*THERE WAS AN OBSTRUCTION AT 8.95 FT, SURGED W/ STAINLESS BAILER, FOUND OBSTRUCTION WAS ROOTS, NEW WELL DEPTH IS 16.05

**WELL MONITORING/SAMPLING  
FIELD DATA SHEET.**

CHEVRON

Facility # 9-0317

Job#: 386420

Address: 3900 Piedmont Ave.

Date: 2/25/02

City: Oakland, CA

Sampler: TC

Well ID MW-2

Well Condition: o.k

Well Diameter 2 in.

Hydrocarbon Thickness: 0 (feet) Amount Bailed (product/water): 0 (Gallons)

Total Depth 16.30 ft.

Depth to Water 5.61 ft.

Volume Factor (VF)	2" = 0.17	3" = 0.38	4" = 0.66
	6" = 1.50	12" = 5.80	

~~10.69~~ X VF .17 = 1.8 X 3 (case volume) = Estimated Purge Volume: 5.5 (gal.)

Equipment: Disposable Bailer  
Bailer  
Stack  
Suction  
Grundfos  
Other: \_\_\_\_\_

Equipment: Disposable Bailer  
Bailer  
Pressure Bailer  
Grab Sample  
Other: \_\_\_\_\_

Starting Time: 1115

Weather Conditions: Sunny

Sampling Time: 1132

Water Color: Light Brown Odor: NO SLIGHT

Purging Flow Rate: \_\_\_\_\_ gpm.

Sediment Description: \_\_\_\_\_

Did well de-water? NO

If yes; Time: \_\_\_\_\_ Volume: \_\_\_\_\_ (gal.)

Time	Volume (gal.)	pH	Conductivity $\mu$ mhos/cm	Temperature $^{\circ}$ F	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
<u>1121</u>	<u>2.0</u>	<u>7.26</u>	<u>1242</u>	<u>67.4</u>			
<u>1125</u>	<u>4.0</u>	<u>7.18</u>	<u>1258</u>	<u>66.8</u>			
<u>1128</u>	<u>5.5</u>	<u>7.12</u>	<u>1264</u>	<u>66.6</u>			

**LABORATORY INFORMATION**

SAMPLE ID	(#): CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>MW-2</u>	<u>3 X VOA VIAL</u>	<u>Y</u>	<u>HCL</u>	<u>LANCASTER</u>	<u>TPHIG)/btex/mtbe</u>

COMMENTS: TOOK TOTAL well depth.

**WELL MONITORING/SAMPLING  
FIELD DATA SHEET.**

CHEVRON  
Facility # 9-0317  
Address: 3900 Piedmont Ave.  
City: Oakland, CA

Job#: 326420  
Date: 2/25/02  
Sampler: TL

Well ID: MW-3  
Well Diameter: 2 in.  
Total Depth: 17.41 ft.  
Depth to Water: 6.73 ft.

Well Condition: o.k.  
Hydrocarbon Thickness: 0 (feet) Amount Bailed (product/water): 0 (Gallons)  
Volume Factor (VF):  
2" = 0.17      3" = 0.38      4" = 0.66  
6" = 1.50      12" = 5.80

10.68 x VF .17 = 1.8 X 3 (case volume) = Estimated Purge Volume: 5.5 (gal.)

Purge Equipment: Disposable Bailer  
Bailer  
Stack  
Suction  
Grundfos  
Other: \_\_\_\_\_

Sampling Equipment: Disposable Bailer  
Bailer  
Pressure Bailer  
Grab Sample  
Other: \_\_\_\_\_

Starting Time: 1225  
Sampling Time: 1240  
Purging Flow Rate: \_\_\_\_\_ gpm.  
Did well de-water? no

Weather Conditions: Sunny  
Water Color: clear Odor: YES  
Sediment Description: \_\_\_\_\_  
If yes; Time: \_\_\_\_\_ Volume: \_\_\_\_\_ (gal.)

Time	Volume (gal.)	pH	Conductivity $\mu$ mhos/cm	Temperature $^{\circ}$ F	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
<u>1227</u>	<u>2.0</u>	<u>7.41</u>	<u>1198</u>	<u>67.8</u>			
<u>1231</u>	<u>4.0</u>	<u>7.29</u>	<u>1182</u>	<u>67.2</u>			
<u>1234</u>	<u>5.5</u>	<u>7.22</u>	<u>1164</u>	<u>67.0</u>			

**LABORATORY INFORMATION**

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>MW-3</u>	<u>3 X VOA VIAL</u>	<u>Y</u>	<u>HCL</u>	<u>LANCASTER</u>	<u>TPH(GI)/bTEX/mtbe</u>

COMMENTS: TOOK TOTAL well DEPTH.

**WELL MONITORING/SAMPLING  
FIELD DATA SHEET.**

CHEVRON

Facility # 9-0317

Job#: 386420

Address: 3900 Piedmont Ave.

Date: 2/25/02

City: Oakland, CA

Sampler: TL

Well ID MW-4

Well Condition: OK

Well Diameter 2 in.

Hydrocarbon Thickness: 0 (feet) Amount Bailed (product/water): 0 (Gallons)

Total Depth 16.00 ft.

Volume Factor (VF)	2" = 0.17	3" = 0.38	4" = 0.66
	6" = 1.50	12" = 5.80	

Depth to Water 7.80 ft.

8.20 x VF .17 = 1.3 x 3 (case volume) = Estimated Purge Volume: 4.0 (gal.)

Purge Equipment: Disposable Bailer  
Bailer  
Stack  
Suction  
Grundfos  
Other: \_\_\_\_\_

Sampling Equipment: Disposable Bailer  
Bailer  
Pressure Bailer  
Grab Sample  
Other: \_\_\_\_\_

Starting Time: 1252

Weather Conditions: Sunny

Sampling Time: 1305

Water Color: Cloudy Odor: yes

Purging Flow Rate: \_\_\_\_\_ gpm.

Sediment Description: \_\_\_\_\_

Did well de-water? no

If yes; Time: \_\_\_\_\_ Volume: \_\_\_\_\_ (gal.)

Time	Volume (gal.)	pH	Conductivity $\mu\text{mhos/cm}$	Temperature $^{\circ}\text{F}$	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
<u>1255</u>	<u>1.5</u>	<u>7.48</u>	<u>1064</u>	<u>67.8</u>			
<u>1257</u>	<u>3.0</u>	<u>7.41</u>	<u>1121</u>	<u>67.2</u>			
<u>1300</u>	<u>4.0</u>	<u>7.32</u>	<u>1134</u>	<u>66.9</u>			
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____

**LABORATORY INFORMATION**

SAMPLE ID	(#): CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>MW-4</u>	<u>3 X VOA VIAL</u>	<u>Y</u>	<u>HCL</u>	<u>LANCASTER</u>	<u>TPH(G)/bTEX/mtbe</u>
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

COMMENTS: OK total well depth

# Chevron California Region Analysis Request/Chain of Custody



For Lancaster Laboratories use only  
 Acct. #: 10905 Sample #: 3781322-26 SCR#: \_\_\_\_\_

010302-007

Facility #: 9-0517 Job #386420 Global ID #T0600102248

Site Address: 3900 PIEDMONT AVE., OAKLAND, CA

Chevron PM: Tom Bauhs 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: Tom Bauhs

Service Order #: \_\_\_\_\_  Non SAR: \_\_\_\_\_

Matrix		Analyses Requested											Preservative Codes		
		Preservation Codes													
	<input type="checkbox"/> Potable <input type="checkbox"/> NPDES		Total Number of Containers	<input type="checkbox"/> 8021	<input type="checkbox"/> 8260	<input type="checkbox"/> 8021	<input type="checkbox"/> MOD	<input type="checkbox"/> GRO	<input type="checkbox"/> MOD	<input type="checkbox"/> DRO	<input type="checkbox"/> Silica Gel Cleanup	<input type="checkbox"/> 8260 full scan	<input type="checkbox"/> Oxygenates	<input type="checkbox"/> 7421	<input type="checkbox"/> 7421
				<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>										

**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	Matrix			Total Number of Containers	Analyses Requested											Comments / Remarks						
					Soil	Water	Oil		Preservation Codes																	
<u>QA</u>	<u>2/25/02</u>							<u>2</u>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>																
<u>MW-1</u>	<u> </u>	<u>1208</u>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>		<u>3</u>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>																
<u>MW-2</u>	<u> </u>	<u>1132</u>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>		<u>3</u>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>																
<u>MW-3</u>	<u> </u>	<u>1240</u>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>		<u>3</u>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>																
<u>MW-4</u>	<u>†</u>	<u>1305</u>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>		<u>3</u>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>																

<b>Turnaround Time Requested (TAT) (please circle)</b> <u>STD. TAT</u> 72 hour      48 hour 24 hour      4 day      5 day			Relinquished by: <u>[Signature]</u>		Date: <u>2/25/02</u>	Time: _____	Received by: <u>[Signature]</u>		Date: <u>3/1/02</u>	Time: <u>1200</u>
			Relinquished by: <u>[Signature]</u>		Date: <u>3/1/02</u>	Time: <u>1330</u>	Received by: <u>[Signature]</u>		Date: <u>3-1-02</u>	Time: <u>1330</u>
			Relinquished by: <u>[Signature]</u>		Date: <u>3-1-02</u>	Time: <u>1530</u>	Received by: <u>[Signature]</u>		Date: <u>3-1-02</u>	Time: _____
<b>Data Package Options (please circle if required)</b> QC Summary      Type I — Full Type VI (Raw Data) <input type="checkbox"/> Coelt Deliverable not needed WIP (RWQCB) Disk			Relinquished by Commercial Carrier:		Temperature Upon Receipt: <u>15-25C</u>		Received by: <u>[Signature]</u>		Date: <u>03/02/02</u>	Time: <u>0930</u>
			UPS      FedEx <u>Other</u> Airborne		Custody Seals Intact?      Yes      No					



## ANALYTICAL RESULTS

Prepared for:

Chevron Products Company  
6001 Bollinger Canyon Road  
Building L PO Box 6004  
San Ramon CA 94583-0904  
925-842-8582

Prepared by:

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

RECEIVED

MAR 15 2002

GETTLER-RYAN INC.  
GENERAL CONTRACTOR

## SAMPLE GROUP

The sample group for this submittal is 798790. Samples arrived at the laboratory on Saturday, March 02, 2002. The PO# for this group is 99011184 and the release number is BAUHS.

<u>Client Description</u>			<u>Lancaster Labs Number</u>
QA-T-020225	NA	Water	3781322
MW-1-W-020225	Grab	Water	3781323
MW-2-W-020225	Grab	Water	3781324
MW-3-W-020225	Grab	Water	3781325
MW-4-W-020225	Grab	Water	3781326

## METHODOLOGY

The specific methodologies used in obtaining the enclosed analytical results are indicated on the laboratory chronicles.

1 COPY TO

Delta C/O Gettler-Ryan

Attn: Deanna L. Harding



Lancaster Laboratories, Inc.  
2425 New Holland Pike  
PO Box 12425  
Lancaster, PA 17605-2425  
717-656-2300 Fax: 717-656-2681



## Lancaster Laboratories

*Where quality is a science.*

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

Respectfully Submitted,

*Steven A. Skiles*  
Steven A. Skiles  
Sr. Chemist



Lancaster Laboratories, Inc.  
2425 New Holland Pike  
PO Box 12425  
Lancaster, PA 17605-2425  
717-656-2300 Fax: 717-656-2681



Lancaster Laboratories Sample No. **WW 3781322**

Collected: 02/25/2002 00:00

Account Number: 10905

Submitted: 03/02/2002 09:30

Chevron Products Company

Reported: 03/08/2002 at 10:21

6001 Bollinger Canyon Road

Discard: 04/08/2002

Building L PO Box 6004

QA-T-020225

NA

Water

San Ramon CA 94583-0904

Facility# 90517 Job# 386420

GRD

3900 Piedmont-Oakland

T0600102248 QA

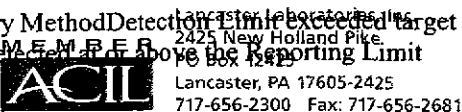
CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
01729	TPH-GRO - Waters					
01730	TPH-GRO - Waters	n.a.	N.D.	50.	ug/l	1
The reported concentration of TPH-GRO does not include MTBE or other gasoline constituents eluting prior to the C6 (n-hexane) 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	03/04/2002 15:28	Melissa D Mann	1
08214	BTEX, MTBE (8021)	SW-846 8021B	1	03/04/2002 15:28	Melissa D Mann	1
01146	GC VOA Water Prep	SW-846 5030B	1	03/04/2002 15:28	Melissa D Mann	n.a.

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







Lancaster Laboratories Sample No. **WW 3781323**

Collected: 02/25/2002 12:08 by TC

Account Number: 10905

Submitted: 03/02/2002 09:30  
 Reported: 03/08/2002 at 10:21  
 Discard: 04/08/2002

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

MW-1-W-020225 Grab Water

Facility# 90517 Job# 386420 GRD  
 3900 Piedmont-Oakland T0600102248 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	03/05/2002 05:30	Linda C Pape	1
08214	BTEX, MTBE (8021)	SW-846 8021B	1	03/05/2002 05:30	Linda C Pape	1
01146	GC VOA Water Prep	SW-846 5030B	1	03/05/2002 05:30	Linda C Pape	n.a.

#=Laboratory Method Detection Limit exceeded target detection limit  
 N.D.=Not detected or above 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 3781324**

Collected: 02/25/2002 11:32 by TC Account Number: 10905

Submitted: 03/02/2002 09:30  
 Reported: 03/08/2002 at 10:22  
 Discard: 04/08/2002  
 MW-2-W-020225 Grab Water  
 Chevron Products Company  
 6001 Bollinger Canyon Road  
 Building L PO Box 6004  
 San Ramon CA 94583-0904

Facility# 90517 Job# 386420 GRD  
 3900 Piedmont-Oakland T0600102248 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	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	03/05/2002 06:05	Linda C Pape	1
08214	BTEX, MTBE (8021)	SW-846 8021B	1	03/05/2002 06:05	Linda C Pape	1
01146	GC VOA Water Prep	SW-846 5030B	1	03/05/2002 06:05	Linda C Pape	n.a.

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



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



Lancaster Laboratories Sample No. **WW 3781325**

Collected: 02/25/2002 12:40 by TC

Account Number: 10905

Submitted: 03/02/2002 09:30  
 Reported: 03/08/2002 at 10:22  
 Discard: 04/08/2002  
 MW-3-W-020225

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

Grab Water

Facility# 90517 Job# 386420 GRD  
 3900 Piedmont-Oakland T0600102248 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.	3,100.	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	27.	0.50	ug/l	1
00777	Toluene	108-88-3	2.1	0.50	ug/l	1
00778	Ethylbenzene	100-41-4	4.8	0.50	ug/l	1
00779	Total Xylenes	1330-20-7	6.6	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	03/05/2002 07:50	Linda C Pape	1
08214	BTEX, MTBE (8021)	SW-846 8021B	1	03/05/2002 07:50	Linda C Pape	1
01146	GC VOA Water Prep	SW-846 5030B	1	03/05/2002 07:50	Linda C Pape	n.a.

#=Laboratory Method Detection Limit exceeded target detection limit  
 N.D.=Not detected above 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 3781326**

Collected: 02/25/2002 13:05 by TC

Account Number: 10905

Submitted: 03/02/2002 09:30

Chevron Products Company

Reported: 03/08/2002 at 10:22

6001 Bollinger Canyon Road

Discard: 04/08/2002

Building L PO Box 6004

MW-4-W-020225

Grab Water

San Ramon CA 94583-0904

Facility# 90517 Job# 386420 GRD

3900 Piedmont-Oakland T0600102248 MW-4

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.	4,100.	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	100.	1.0	ug/l	5
00777	Toluene	108-88-3	18.	1.0	ug/l	5
00778	Ethylbenzene	100-41-4	27.	1.0	ug/l	5
00779	Total Xylenes	1330-20-7	39.	3.0	ug/l	5
00780	Methyl tert-Butyl Ether	1634-04-4	N.D. #	10.	ug/l	5

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.

Due to the presence of an interferent near its retention time, the normal reporting limit was not attained for the compound listed below. The presence or concentration of this compound cannot be determined due to the presence of this interferent.

Methyl t-butyl ether

State of California Lab Certification No. 2116

### Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
---------	---------------	--------	--------	------------------------	---------	-----------------

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



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



## Lancaster Laboratories

Where quality is a science.

Page 2 of 2

Lancaster Laboratories Sample No. **WW 3781326**

Collected: 02/25/2002 13:05 by TC

Account Number: 10905

Submitted: 03/02/2002 09:30

Chevron Products Company

Reported: 03/08/2002 at 10:22

6001 Bollinger Canyon Road

Discard: 04/08/2002

Building L PO Box 6004

MW-4-W-020225

Grab

Water

San Ramon CA 94583-0904

Facility# 90517 Job# 386420

GRD

3900 Piedmont-Oakland

T0600102248 MW-4

01729	TPH-GRO - Waters	N. CA LUFT Gasoline Method	1	03/05/2002 08:24	Linda C Pape	1
08214	BTEX, MTBE (8021)	SW-846 8021B	1	03/05/2002 07:15	Linda C Pape	5
01146	GC VOA Water Prep	SW-846 5030B	1	03/05/2002 07:15	Linda C Pape	n.a.

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



Lancaster Laboratories, Inc.  
2425 NEW HOLLAND PIKE  
Lancaster, PA 17605-2425  
717-656-2300 Fax: 717-656-2681



## Lancaster Laboratories

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### Quality Control Summary

Client Name: Chevron Products Company  
 Reported: 03/08/02 at 10:22 AM

Group Number: 798790

#### Laboratory Compliance Quality Control

<u>Analysis Name</u>	<u>Blank Result</u>	<u>Blank MDL</u>	<u>Report Units</u>	<u>LCS %REC</u>	<u>LCSD %REC</u>	<u>LCS/LCSD Limits</u>	<u>RPD</u>	<u>RPD Max</u>
Batch number: 02063A56A	Sample number(s): 3781322							
Benzene	N.D.	0.5	ug/l	113	110	80-118	3	30
Toluene	N.D.	0.5	ug/l	111	106	82-119	5	30
Ethylbenzene	N.D.	0.5	ug/l	110	105	81-119	5	30
Total Xylenes	N.D.	1.5	ug/l	111	106	82-120	4	30
Methyl tert-Butyl Ether	N.D.	2.5	ug/l	109	103	79-127	6	30
TPH-GRO - Waters	N.D.	50.	ug/l	93	96	76-126	4	30
Batch number: 02063A56B	Sample number(s): 3781323-3781326							
Benzene	N.D.	0.5	ug/l	113	110	80-118	3	30
Toluene	N.D.	0.5	ug/l	111	106	82-119	5	30
Ethylbenzene	N.D.	0.5	ug/l	110	105	81-119	5	30
Total Xylenes	N.D.	1.5	ug/l	111	106	82-120	4	30
Methyl tert-Butyl Ether	N.D.	2.5	ug/l	109	103	79-127	6	30
TPH-GRO - Waters	N.D.	50.	ug/l	93	96	76-126	4	30

#### Sample Matrix Quality Control

<u>Analysis Name</u>	<u>MS %REC</u>	<u>MSD %REC</u>	<u>MS/MSD Limits</u>	<u>RPD</u>	<u>BKG MAX</u>	<u>DUP Conc</u>	<u>DUP RPD</u>	<u>Dup RPD Max</u>
Batch number: 02063A56A	Sample number(s): 3781322							
Benzene	113		77-131					
Toluene	111		80-128					
Ethylbenzene	111		76-132					
Total Xylenes	112		76-132					
Methyl tert-Butyl Ether	102		61-144					
TPH-GRO - Waters	109		74-132					
Batch number: 02063A56B	Sample number(s): 3781323-3781326							
Benzene	113		77-131					
Toluene	111		80-128					
Ethylbenzene	111		76-132					
Total Xylenes	112		76-132					
Methyl tert-Butyl Ether	102		61-144					
TPH-GRO - Waters	109		74-132					

#### Surrogate Quality Control

Analysis Name: TPH-GRO - Waters  
 Batch number: 02063A56A

	Trifluorotoluene-F	Trifluorotoluene-P
3781322	91	99
Blank	94	98

\*- 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.



Lancaster Laboratories, Inc.  
 2425 New Holland Pike  
 PO Box 12425  
 Lancaster, PA 17605-2425  
 717-656-2300 Fax: 717-656-2681



## Lancaster Laboratories

Where quality is a science.

### Quality Control Summary

Client Name: Chevron Products Company  
Reported: 03/08/02 at 10:22 AM

Group Number: 798790

#### Surrogate Quality Control

LCS	108	99
LCSD	108	99
MS	109	98

---

Limits: 67-135 71-130

Analysis Name: TPH-GRO - Waters

Batch number: 02063A56B

	Trifluorotoluene-F	Trifluorotoluene-P
--	--------------------	--------------------

---

3781323	98	95
3781324	98	97
3781325	122	106
3781326	116	89
Blank	96	96
LCS	108	99
LCSD	108	99
MS	109	98

---

Limits: 67-135 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.



Lancaster Laboratories, Inc.  
2425 New Holland Pike  
PO Box 12425  
Lancaster, PA 17605-2425  
717-656-2300 Fax: 717-656-2681