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# GETTLER-RYAN INC.

## TRANSMITTAL

October 15, 2001  
G-R #386358

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  
#9-3864  
5101 Telegraph Avenue  
Oakland, California

WE HAVE ENCLOSED THE FOLLOWING:

COPIES	DATED	DESCRIPTION
1	October 5, 2001	Groundwater Monitoring and Sampling Report Second Semi-Annual - Event of September 4, 2001

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 *October 29, 2001*, at which time the final report will be distributed to the following:

- cc: ~~Ms. Susan Hugo, Alameda County Health Care Services, Dept. of Environmental Health, 1131 Harbor Bay Parkway, Suite 250, Alameda, CA 94502-6577~~
- Mr. Greg Gurss, Gettler-Ryan Inc., 3140 Gold Camp Drive, Suite 170, Rancho Cordova, CA 95670
- Mr. Chuck Headlee, RWQCB-San Francisco Bay Region, 1515 Clay St., Suite 1400, Oakland, CA 94612
- Messrs. Howard Schindler, Saul Gevertz and Jon Eager, Temescal Triangle Investors, 4179 Piedmont Ave., Oakland, CA 94611
- Mr. John Gwynn, Gwynn-Schields & Associates, 300 Lakeside Dr., Ste. 1980, Oakland, CA 94612

Enclosures

trans/9-3864-TB



# GETTLER-RYAN INC.

October 5, 2001  
G-R Job #386358

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

**RE: Second Semi-Annual Event of September 4, 2001**  
Groundwater Monitoring & Sampling Report  
Former Chevron Service Station #9-3864  
5101 Telegraph Avenue  
Oakland, California

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 Potentiometric Map is included as Figure 1.

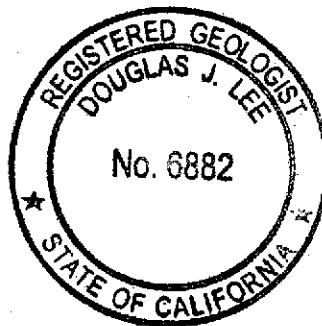
Groundwater samples were collected from the monitoring wells and submitted to a state certified laboratory for analyses. The field data sheets for this event are attached. Analytical results are presented in the table(s) listed below. The chain of custody document and laboratory analytical report are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

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

Sincerely,

Deanna L. Harding  
Project Coordinator

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



- Figure 1: Potentiometric Map
- Table 1: Groundwater Monitoring Data and Analytical Results
- Table 2: Dissolved Oxygen Concentrations
- Table 3: Groundwater Analytical Results - Oxygenate Compounds
- Attachments: Standard Operating Procedure - Groundwater Sampling  
Field Data Sheets  
Chain of Custody Document and Laboratory Analytical Reports

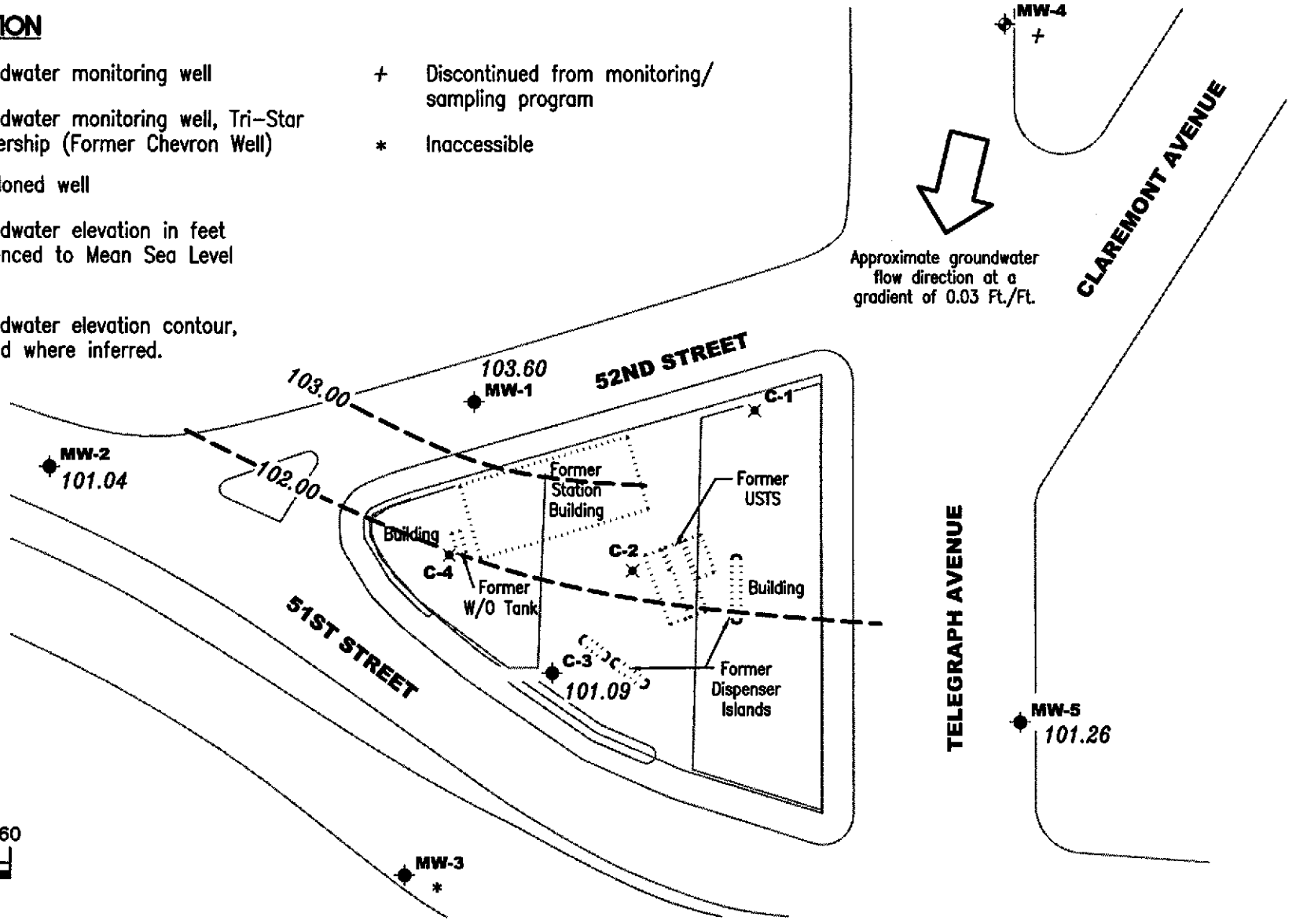
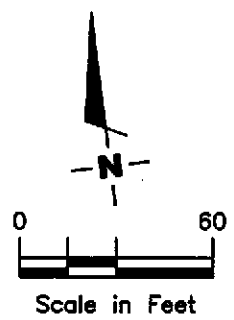
**EXPLANATION**

- ◆ Groundwater monitoring well
- ◆ Groundwater monitoring well, Tri-Star Partnership (Former Chevron Well)
- ✕ Abandoned well
- + Discontinued from monitoring/sampling program
- \* Inaccessible

99.99 Groundwater elevation in feet referenced to Mean Sea Level (MSL)

— 99.99 — Groundwater elevation contour, dashed where inferred.

Approximate groundwater flow direction at a gradient of 0.03 Ft./Ft.



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 #9-3864  
 5101 Telegraph Avenue  
 Oakland, California

FIGURE

1

PROJECT NUMBER  
 386358

REVIEWED BY

DATE  
 September 4, 2001

REVISED DATE

**Table 1**  
**Groundwater Monitoring Data and Analytical Results**  
Former Chevron Service Station #9-3864  
5101 Telegraph 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>C-1</b>									
12/06/90	117.45	102.11	15.34	1,900	17	11	3.0	21	--
06/06/91	117.45	102.83	14.62	3,400	21	15	11	18	--
12/04/91	117.45	102.97	14.48	2,700	22	16	13	23	--
06/02/92	117.45	102.92	14.53	1,900	170	170	13	83	--
09/16/92	117.45	102.52	14.93	810	5.8	5.7	2.0	6.3	--
12/21/92	117.45	103.72	13.73	75	2.4	2.9	1.4	4.7	--
03/11/93	117.45	103.62	13.83	150	2.4	20	3.3	23	--
06/11/93	117.45	103.26	14.19	400	4.3	2.3	1.0	3.5	--
09/13/93	117.45	102.85	14.60	4,100	62	43	34	57	--
12/14/93	117.45	103.67	13.78	3,100	9.5	4.5	1.2	11	--
03/16/94	117.45	103.44	14.01	410	6.3	3.1	1.3	4.5	--
06/17/94	117.45	102.90	14.55	3,700	100	42	30	91	--
08/29/94	117.45	102.96	14.49	2,600	15	<0.5	6.7	9.7	--
12/06/94	117.45	104.04	13.41	510	2.0	2.2	1.7	9.4	--
03/31/95	117.45	105.33	12.12	5,440	9.0	2.3	2.0	3.6	--
06/24/95	117.45	103.45	14.00	260	5.8	1.0	0.94	0.88	--
09/12/95	117.45	103.42	14.03	650	14	1.1	1.6	2.4	--
12/29/95	117.45	104.50	12.95	990	32	6.3	4.0	3.2	46
02/29/96	117.45	105.27	12.18	840	2.5	<1.0	2.6	7.3	<5.0
06/26/96	117.45	103.72	13.73	290	3.6	0.73	1.0	1.1	9.9
09/12/96	117.45	103.32	14.13	1,200	17	1.8	4.0	4.4	24
12/11/96	117.45	104.66	12.79	7,700	<10	53	19	44	87
<b>ABANDONED</b>									
<b>C-2</b>									
12/06/90	116.16	100.82	15.34	210	140	9.0	2.0	11	--
06/06/91	116.16	101.54	14.62	4,800	340	23	19	23	--
12/04/91	116.16	100.73	15.43	3,900	85	15	9.1	15	--
06/02/92	116.16	101.74	14.42	3,300	76	9.2	14	15	--
09/16/92	116.16	101.35	14.81	3,000	16	15	3.4	7.5	--

**Table 1**  
**Groundwater Monitoring Data and Analytical Results**  
Former Chevron Service Station #9-3864  
5101 Telegraph 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>C-2 (cont)</b>									
12/21/92	116.16	102.79	13.37	2,200	21	12	7.1	15	--
03/11/93	116.16	102.69	13.47	2,200	33	24	12	25	--
06/11/93	116.16	102.18	13.98	2,600	21	25	11	26	--
09/13/93	116.16	101.61	14.55	2,100	31	25	18	39	--
12/14/93	116.16	102.46	13.70	3,800	<2.5	24	12	20	--
03/16/94	116.16	102.51	13.65	2,600	12	15	10	17	--
06/17/94	116.16	102.87	13.29	2,400	17	19	28	71	--
08/29/94	116.16	111.60	4.56	3,000	29	15	20	4.2	--
12/06/94	116.16	102.98	13.18	1,900	7.9	30	14	31	--
03/31/95	116.16	104.10	12.06	890	<1.3	<1.3	2.6	<1.3	--
06/24/95	116.16	102.19	13.97	730	4.8	<0.5	5.4	0.96	--
09/12/95	116.16	102.28	13.88	1,600	<2.5	<2.5	5.4	<2.5	--
12/29/95	116.16	103.31	12.85	1,000	9.1	2.7	8.7	2.7	19
02/29/96	116.16	104.09	12.07	850	<2.5	<2.5	8.7	11	<12
06/26/96	116.16	102.50	13.66	2,500	14	<5.0	13	6.3	<25
09/12/96	116.16	102.25	13.91	1,800	26	19	17	31	37
12/11/96	116.16	103.82	12.34	2,800	<5.0	34	14	<5.0	41
ABANDONED									
<b>C-3</b>									
12/06/90	115.70	98.84	16.86	210	2.0	<0.5	<0.5	1.0	--
12/06/90 (D)	--	--	--	220	2.0	0.6	<0.5	2.0	--
06/06/91	115.70	100.01	15.69	6,400	310	21	16	21	--
09/16/92	115.70	99.81	15.89	7,100	130	26	12	30	--
12/04/91	115.70	100.32	15.38	5,100	120	18	17	20	--
06/02/92	115.70	100.30	15.40	6,700	140	44	17	37	--
12/21/92	115.70	101.79	13.91	13,000	390	360	100	410	--
03/11/93	115.70	101.95	13.75	5,100	86	20	12	23	--
06/11/93	115.70	101.03	14.67	7,200	91	38	19	38	--
09/13/93	115.70	100.17	15.53	6,800	100	52	41	75	--

**Table 1**  
**Groundwater Monitoring Data and Analytical Results**  
Former Chevron Service Station #9-3864  
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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>C-3 (cont)</b>									
12/14/93	115.70	101.30	14.40	8,600	74	23	18	36	--
03/16/94	115.70	101.44	14.26	6,000	100	42	27	30	--
06/17/94	115.70	100.60	15.10	15,000	170	120	120	270	--
08/29/94	115.70	100.30	15.40	26,000	51	<0.5	58	107	--
12/06/94	115.70	101.90	13.80	34,000	88	140	98	390	--
03/31/95	115.70	102.91	12.79	2,800	42	<5.0	<5.0	6.6	--
06/24/95	115.70	100.84	14.86	5,200	34	<10	<10	13	--
09/12/95	115.70	100.76	14.94	7,000	45	<10	28	42	--
12/29/95	115.70	102.12	13.58	5,100	20	<10	<10	19	<50
02/29/96	115.70	102.88	12.82	2,600	15	<5.0	17	16	<25
06/26/96	115.70	101.32	14.38	4,400	<10	<10	<10	<10	<50
09/12/96	115.70	100.75	14.95	5,800	73	22	18	17	61
12/11/96	115.70	103.08	12.62	8,800	81	<20	<20	37	200
03/31/97	115.70	100.70	15.00	8,100	38	62	30	42	38
06/29/97	115.70	100.08	15.62	5,800	<10	<10	<10	67	<50
09/30/97	115.70	100.70	15.00	6,200	<10	28	21	27	130
12/12/97	115.70	103.68	12.02	330	1.6	1.1	<1.0	3.4	<5.0
02/19/98	115.70	103.26	12.44	110	1.7	<0.5	<0.5	0.51	<2.5
06/16/98	115.70	102.29	13.41	7,400	63	16	<10	<10	170
08/31/98	115.70	101.70	14.00	4,400	6.4	<2.5	5.4	16	15
12/23/98	115.70	102.91	12.79	11,000	83	37	69	76	86
03/09/99	115.70	102.70	13.00	6,500	45	38	17	30	110
06/23/99 <sup>1</sup>	115.70	101.92	13.78	--	--	--	--	--	--
09/30/99	115.70	99.70	16.00	3,870	29.7	8.72	7.08	7.75	<50
02/29/00	115.70	102.14	13.56	2,660	22.5	<5.0	11.2	11.6	<50
09/18/00 <sup>3</sup>	115.70	103.25	12.45	740 <sup>4</sup>	6.0	4.5	<2.5	6.0	<13
03/21/01 <sup>3</sup>	115.70	102.05	13.65	1,700 <sup>4</sup>	21	12	14	19	59
09/04/01 <sup>3</sup>	115.70	101.09	14.61	4,100	<10	4.8	6.5	14	<5.0/<2 <sup>5</sup>

**Table 1**  
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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>C-4</b>									
12/06/90	116.10	98.42	17.68	<50	<0.5	<0.5	<0.5	<0.5	--
12/18/90	116.10	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
06/06/91	116.10	99.61	16.49	<50	1.0	1.0	<0.5	0.7	--
12/04/91	116.10	99.28	16.82	70	6.5	9.8	1.7	8.6	--
06/02/92	116.10	99.18	16.92	70	3.0	4.4	1.8	9.0	--
09/16/92	116.10	98.39	17.71	<50	1.4	1.8	<0.5	1.1	--
12/21/92	116.10	100.74	15.36	<50	0.6	0.7	<0.5	1.5	--
03/11/93	116.10	100.61	15.49	<50	<0.5	<0.5	<0.5	<1.5	--
06/11/93	116.10	99.83	16.27	52	0.9	3.1	0.7	3.8	--
09/13/93	116.10	98.92	17.18	64	0.9	1.0	<0.5	1.7	--
12/14/93	116.10	101.03	15.07	<50	<0.5	0.8	<0.5	0.7	--
03/16/94	116.10	100.19	15.91	<50	<0.5	1.0	<0.5	0.8	--
06/17/94	116.10	99.46	16.64	230	0.6	2.2	2.2	11	--
08/29/94	116.10	99.05	17.05	<50	<0.5	<0.5	<0.5	<0.5	--
12/06/94	116.10	101.52	14.58	<50	<0.5	<0.5	<0.5	<0.5	--
03/31/95	116.10	102.26	13.84	<50	<0.5	<0.5	<0.5	<0.5	--
06/24/95	116.10	100.05	16.05	<50	<0.5	<0.5	<0.5	<0.5	--
09/12/95	116.10	99.87	16.23	<50	<0.5	<0.5	<0.5	<0.5	--
12/29/95	116.10	101.35	14.75	<50	<0.5	<0.5	<0.5	<0.5	<2.5
02/29/96	116.10	102.40	13.70	<50	<0.5	<0.5	<0.5	<0.5	<2.5
06/26/96	116.10	100.30	15.80	<50	<0.5	<0.5	<0.5	<0.5	<2.5
09/12/96	116.10	99.67	16.43	<50	<0.5	<0.5	<0.5	<0.5	<2.5
12/11/96	116.10	103.18	12.92	<50	<0.5	<0.5	<0.5	<0.5	<2.5
<b>ABANDONED</b>									
<b>MW-1</b>									
09/20/93	115.05	102.37	12.68	<50	<0.5	<0.5	<0.5	<1.5	--
12/14/93	115.05	105.01	10.04	<50	<0.5	<0.5	<0.5	<0.5	--
03/16/94	115.05	103.10	11.95	<50	<0.5	1.7	<0.5	2.1	--
06/17/94	115.05	102.51	12.54	350	1.2	3.7	2.0	12	--

**Table 1**  
**Groundwater Monitoring Data and Analytical Results**  
Former Chevron Service Station #9-3864  
5101 Telegraph 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 (cont)</b>									
08/29/94	115.05	101.98	13.07	<50	<0.5	<0.5	<0.5	<0.5	--
12/06/94	115.05	104.45	10.60	140	0.9	2.8	1.1	4.2	--
03/31/95	115.05	104.74	10.31	<50	<0.5	<0.5	<0.5	<0.5	--
06/24/95	115.05	102.44	12.61	<50	<0.5	<0.5	<0.5	<0.5	--
09/12/95	115.05	102.00	13.05	<50	<0.5	<0.5	<0.5	<0.5	--
02/02/96	115.05	106.19	8.86	<50	<0.5	<0.5	<0.5	<0.5	<2.5
02/29/96	115.05	105.39	9.66	<50	<0.5	<0.5	<0.5	<0.5	<2.5
06/26/96	115.05	102.85	12.20	<50	<0.5	<0.5	<0.5	<0.5	<2.5
09/12/96	115.05	101.55	13.50	<50	<0.5	<0.5	<0.5	<0.5	<2.5
12/11/96	115.05	105.90	9.15	<50	<0.5	<0.5	<0.5	<0.5	<2.5
03/31/97	115.05	102.30	12.75	<50	<0.5	<0.5	<0.5	<0.5	<2.5
06/29/97	115.05	102.01	13.04	<50	<0.5	<0.5	<0.5	<0.5	<2.5
09/30/97	115.05	101.80	13.25	<50	<0.5	<0.5	<0.5	<0.5	<2.5
12/12/97	115.05	106.06	8.99	<50	<0.5	<0.5	<0.5	<0.5	<2.5
02/19/98	115.05	105.64	9.41	<50	<0.5	<0.5	<0.5	<0.5	<2.5
06/16/98	115.02	103.48	11.54	<50	<0.5	<0.5	<0.5	<0.5	2.6
08/31/98	115.02	102.51	12.51	<50	<0.5	<0.5	<0.5	<0.5	<2.5
12/23/98	115.02	103.03	11.99	<50	<0.5	<0.5	<0.5	<0.5	<2.5
03/09/99	115.02	104.57	10.45	<50	<0.5	<0.5	<0.5	<0.5	<2.5
09/30/99	115.02	102.07	12.95	SAMPLED ANNUALLY		--	--	--	--
02/29/00	115.02	105.90	9.12	<50	<0.5	0.816	<0.5	<0.5	<5.0
09/18/00	115.02	104.14	10.88	--	--	--	--	--	--
03/21/01	115.02	104.01	11.01	<50	<0.50	<0.50	<0.50	<0.50	<2.5
09/04/01	115.02	103.60	11.42	--	--	--	--	--	--<2 <sup>5</sup>
<b>MW-2</b>									
09/20/93	112.08	99.93	12.15	<50	<0.5	<0.5	<0.5	<1.5	--
12/14/93	112.08	97.36	14.72	<50	<0.5	<0.5	<0.5	<0.5	--
03/16/94	112.08	100.92	11.16	<50	<0.5	1.1	<0.5	0.9	--
06/17/94	112.08	100.41	11.67	330	1.4	3.3	1.9	11	--



**Table 1**  
**Groundwater Monitoring Data and Analytical Results**  
Former Chevron Service Station #9-3864  
5101 Telegraph 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-2 (cont)</b>									
08/29/94	112.08	100.08	12.00	<50	<0.5	<0.5	<0.5	<0.5	--
12/06/94	112.08	102.57	9.51	<50	<0.5	<0.5	<0.5	<0.5	--
03/31/95	112.08	103.24	8.84	<50	<0.5	<0.5	<0.5	<0.5	--
06/24/95	112.08	100.44	11.64	<50	<0.5	<0.5	<0.5	<0.5	--
09/12/95	112.08	100.00	12.08	<50	<0.5	<0.5	<0.5	<0.5	--
12/29/95	112.08	101.58	10.50	<50	<0.5	<0.5	<0.5	<0.5	<2.5
02/29/96	112.08	104.08	8.00	<50	<0.5	<0.5	<0.5	<0.5	<2.5
06/26/96	112.08	100.58	11.50	<50	<0.5	<0.5	<0.5	<0.5	<2.5
09/12/96	112.08	99.81	12.27	<50	<0.5	<0.5	<0.5	<0.5	<2.5
12/11/96	112.08	104.17	7.91	<50	<0.5	<0.5	<0.5	<0.5	<2.5
03/31/97	112.08	100.20	11.88	<50	<0.5	<0.5	<0.5	<0.5	<2.5
06/29/97	112.08	99.89	12.19	<50	<0.5	<0.5	<0.5	<0.5	<2.5
09/30/97	112.08	99.46	12.62	<50	<0.5	<0.5	<0.5	<0.5	<2.5
12/12/97	112.08	102.85	9.23	<50	<0.5	<0.5	<0.5	<0.5	<2.5
02/19/98	112.08	104.87	7.21	<50	<0.5	<0.5	<0.5	<0.5	<2.5
06/16/98	112.03	101.10	10.93	<50	<0.5	<0.5	<0.5	<0.5	<2.5
08/31/98	112.03	99.69	12.34	<50	<0.5	<0.5	<0.5	<0.5	<2.5
12/23/98	112.03	100.59	11.44	<50	<0.5	<0.5	<0.5	<0.5	<2.5
03/09/99	112.03	103.23	8.80	<50	<0.5	<0.5	<0.5	<0.5	<2.5
09/30/99	112.03	101.22	10.81	SAMPLED ANNUALLY		--	--	--	--
02/29/00	112.03	105.12	6.91	<50	<0.5	<0.5	<0.5	<0.5	<5.0
09/18/00	112.03	101.00	11.03	--	--	--	--	--	--
03/21/01	112.03	101.61	10.42	<50	<0.50	<0.50	<0.50	<0.50	<2.5
09/04/01	112.03	101.04	10.99	--	--	--	--	--	--/ <2 <sup>5</sup>
<b>MW-3</b>									
09/20/93	113.67	97.25	16.42	6,600	400	11	32	23	--
12/14/93	113.67	98.95	14.72	8,400	390	9.4	13	<2.5	--
03/16/94	113.67	98.45	15.22	6,900	260	30	32	27	--
06/17/94	113.67	97.62	16.05	10,000	190	61	58	190	--

**Table 1**  
**Groundwater Monitoring Data and Analytical Results**  
Former Chevron Service Station #9-3864  
5101 Telegraph 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 (cont)</b>									
08/29/94	113.67	97.44	16.23	7,200	74	9.8	26	24	--
12/06/94	113.67	99.35	14.32	13,000	610	86	88	140	--
03/31/95	113.67	99.98	13.69	4,300	120	<10	12	<10	--
06/24/95	113.67	98.02	15.65	6,200	210	24	29	12	--
09/12/95	113.67	97.68	15.99	7,200	190	<20	<20	<20	--
12/29/95	113.67	99.67	14.00	7,100	200	<10	45	24	<50
02/29/96	113.67	100.91	12.76	1,200	30	<5.0	<5.0	<5.0	<25
06/26/96	113.67	98.44	15.23	7,900	180	<20	35	28	240
09/12/96	113.67	97.73	15.94	11,000	150	<5.0	35	28	170
12/11/96	113.67	99.86	13.81	7,500	75	8.8	30	45	110
03/31/97	113.67	98.23	15.44	8,700	100	<10	20	23	50
06/29/97	113.67	97.99	15.68	9,300	120	28	22	19	150
09/30/97	113.67	97.76	15.91	8,200	78	<10	22	25	96
12/12/97	113.67	100.82	12.85	68	1.8	<0.5	<0.5	<0.5	<2.5
02/19/98	113.67	100.41	13.26	220	5.6	1.5	<0.5	<0.5	6.1
06/16/98	113.63	99.12	14.51	7,500	97	21	21	27	160
08/31/98	113.63	98.62	15.01	7,600	24	<2.5	9.5	16	38
12/23/98	113.63	100.03	13.60	5,800	69	<50	<50	<50	<250
03/09/99	113.63	99.59	14.04	5,300	<10	<10	16	20	88
06/23/99 <sup>1</sup>	113.63	--	--	--	--	--	--	--	--
07/19/99 <sup>1</sup>	113.63	--	--	--	--	--	--	--	--
09/30/99	113.63	96.74	16.89	8,660	53.7	16.9	17	19.6	132
02/29/00	113.63	INACCESSIBLE	--	--	--	--	--	--	--
09/18/00 <sup>3</sup>	113.63	100.41	13.22	2,400 <sup>4</sup>	14	6.8	4.7	7.4	28
03/21/01 <sup>3</sup>	113.63	98.88	14.75	7,600 <sup>4</sup>	41	30	<25	50	160
09/04/01	113.63	INACCESSIBLE - CAR PARKED OVER WELL			--	--	--	--	--

**Table 1**  
**Groundwater Monitoring Data and Analytical Results**  
Former Chevron Service Station #9-3864  
5101 Telegraph 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-4</b>									
09/20/93	118.10	107.17	10.93	5,800	16	4.2	35	48	--
12/14/93	118.10	108.33	9.77	7,100	19	6.5	24	35	--
03/16/94	118.10	107.99	10.11	8,500	83	43	60	70	--
06/17/94	118.10	107.20	10.90	21,000	150	20	140	350	--
08/29/94	118.10	107.28	10.82	10,000	86	71	44	85	--
12/06/94	118.10	108.70	9.40	13,000	68	56	67	110	--
03/31/95	118.10	109.31	8.79	6,700	100	9.4	26	23	--
06/24/95	118.10	107.60	10.50	6,300	<20	<20	<20	24	--
09/12/95	118.10	107.90	10.20	7,100	65	16	<10	21	--
12/29/95	118.10	108.86	9.24	3,300	<10	<10	12	14	720
02/29/96	118.10	111.85	6.25	5,100	<10	37	23	21	85
06/26/96	118.10	107.92	10.18	6,800	<20	<20	<20	<20	<100
09/12/96	118.10	107.53	10.57	13,000	150	<10	38	35	240
12/11/96	118.10	109.39	8.71	26,000	<20	<20	<20	170	<100
03/31/97	118.10	107.18	10.92	12,000	120	74	45	70	240
06/29/97	118.10	106.43	11.67	8,800	24	<10	35	36	62
09/30/97	118.10	107.20	10.90	10,000	<10	<10	37	35	72
12/12/97	118.10	105.16	12.94	4,600	95	41	20	25	91
02/19/98	118.10	110.33	7.77	5,400	87	16	32	31	110
06/16/98 <sup>2</sup>	118.08	107.82	10.26	10,000	<20	<20	35	37	150
NOT MONITORED/SAMPLED									
<b>MW-5</b>									
09/20/93	116.74	101.43	15.31	590	25	1.8	0.6	2.0	--
12/14/93	116.74	102.19	14.55	210	11	6.3	2.3	6.1	--
03/16/94	116.74	101.77	14.97	270	12	16	4.8	17	--
06/17/94	116.74	101.36	15.38	220	24	17	6.7	28	--
08/29/94	116.74	101.54	15.20	1,000	<0.5	<0.5	<0.5	<0.5	--
12/06/94	116.74	102.09	14.65	110	9.2	9.7	2.2	11	--
03/31/95	116.74	103.04	13.70	<50	<0.5	<0.5	<0.5	<0.5	--

**Table 1**  
**Groundwater Monitoring Data and Analytical Results**  
Former Chevron Service Station #9-3864  
5101 Telegraph 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-5 (cont)</b>										
06/24/95	116.74	101.95	14.79	<50	<0.5	<0.5	<0.5	<0.5	--	
09/12/95	116.74	102.15	14.59	<50	<0.5	<0.5	<0.5	<0.5	--	
12/29/95	116.74	101.76	14.98	<50	<0.5	<0.5	<0.5	<0.5	<2.5	
02/29/96	116.74	103.07	13.67	<50	<0.5	<0.5	<0.5	<0.5	<2.5	
06/26/96	116.74	102.50	14.24	<50	<0.5	<0.5	<0.5	<0.5	<2.5	
09/12/96	116.74	102.12	14.62	<50	<0.5	<0.5	<0.5	<0.5	<2.5	
12/11/96	116.74	102.93	13.81	<50	<0.5	<0.5	<0.5	<0.5	<2.5	
03/31/97	116.74	101.29	15.45	<50	<0.5	<0.5	<0.5	<0.5	<2.5	
06/29/97	116.74	102.07	14.67	<50	<0.5	<0.5	<0.5	<0.5	<2.5	
09/30/97	116.74	101.89	14.85	<50	<0.5	<0.5	<0.5	<0.5	<2.5	
12/12/97	116.74	102.99	13.75	<50	<0.5	<0.5	<0.5	<0.5	<2.5	
02/19/98	116.74	103.68	13.06	<50	<0.5	<0.5	<0.5	<0.5	<2.5	
06/16/98	116.70	102.35	14.35	<50	<0.5	<0.5	<0.5	<0.5	<2.5	
08/31/98	116.70	101.54	15.16	<50	<0.5	<0.5	<0.5	<0.5	<2.5	
12/23/98	116.70	102.15	14.55	<50	<0.5	<0.5	<0.5	<0.5	<2.5	
03/09/99	116.70	102.63	14.07	<50	<0.5	<0.5	<0.5	<0.5	<2.5	
09/30/99	116.70	100.80	15.90	SAMPLED ANNUALLY			--	--	--	--
02/29/00	116.70	103.40	13.30	<50	<0.5	<0.5	<0.5	<0.5	<5.0	
09/18/00	116.70	101.62	15.08	--	--	--	--	--	--	
03/21/01	116.70	102.04	14.66	<50	<0.50	<0.50	<0.50	<0.50	<2.5	
<b>09/04/01</b>	<b>116.70</b>	<b>101.26</b>	<b>15.44</b>	--	--	--	--	--	<b>-1&lt;2<sup>s</sup></b>	
<b>TRIP BLANK</b>										
12/06/90	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	
12/18/90	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	
06/06/91	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	
12/04/91	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	
06/02/92	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	
09/16/92	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	
12/21/92	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	

**Table 1**  
**Groundwater Monitoring Data and Analytical Results**  
Former Chevron Service Station #9-3864  
5101 Telegraph 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 (cont)</b>									
03/11/93	--	--	--	<50	<0.5	<0.5	<0.5	<1.5	--
06/11/93	--	--	--	<50	<0.5	<0.5	<0.5	<1.5	--
09/13/93	--	--	--	<50	<0.5	<0.5	<0.5	<1.5	--
12/14/93	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
03/16/94	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
06/17/94	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
08/29/94	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
12/06/94	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
03/31/95	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
06/24/95	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
09/12/95	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
12/29/95	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
02/29/96	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5
06/26/96	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5
09/12/96	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
12/11/96	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5
03/31/97	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5
06/29/97	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5
09/30/97	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5
12/12/97	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5
02/19/98	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5
06/16/98	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5
08/31/98	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5
12/23/98	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	2.9
03/09/99	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5
09/30/99	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0
02/29/00	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0
09/18/00	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	<2.5
03/21/01	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	<2.5
09/04/01	--	--	--	<50	<0.50	<0.50	<0.50	<1.5	<2.5

**Table 1**  
**Groundwater Monitoring Data and Analytical Results**  
Former Chevron Service Station #9-3864  
5101 Telegraph Avenue  
Oakland, California

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**EXPLANATIONS:**

Groundwater monitoring data and laboratory analytical results prior to February 9, 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

(D) = Duplicate

- <sup>1</sup> ORC installed.
- <sup>2</sup> Transfer of title to Tri-Star Partnership, Inc. effective July 14, 1998.
- <sup>3</sup> ORC in well.
- <sup>4</sup> Laboratory report indicates gasoline C6-C12.
- <sup>5</sup> MTBE by EPA Method 8260.

**Table 2**  
**Dissolved Oxygen Concentrations**  
Former Chevron Service Station #9-3864  
5101 Telegraph Avenue  
Oakland, California

WELL ID	DATE	Before Purging (mg/L)	After Purging (mg/L)
C-3	09/18/00	3.64	--
	03/21/01	1.00	--
	09/04/01	1.40	--
MW-3	09/18/00	4.01	--
	03/21/01	1.30	--
	09/04/01	INACCESSIBLE - CAR PARKED OVER WELL	

**EXPLANATIONS:**

(mg/L) = Milligrams per liter

-- = Not Measured

**Table 3**  
**Groundwater Analytical Results - Oxygenate Compounds**  
Former Chevron Service Station #9-3864  
5101 Telegraph Avenue  
Oakland, California

WELL ID	DATE	TBA (ppb)	MTBE (ppb)	DIPE (ppb)	ETBE (ppb)	TAME (ppb)	1,2-DCA (ppb)	EDB (ppb)
C-3	09/04/01	<100	<2	<2	<2	<2	<2	<2
MW-1	09/04/01	<100	<2	<2	<2	<2	<2	<2
MW-2	09/04/01	<100	<2	<2	<2	<2	<2	<2
MW-5	09/04/01	<100	<2	<2	<2	<2	<2	<2

**EXPLANATIONS:**

TBA = Tertiary butyl alcohol  
MTBE = Methyl tertiary butyl ether  
DIPE = Di-isopropyl ether  
ETBE = Ethyl tertiary butyl ether  
TAME = Tertiary amyl methyl ether  
1,2-DCA = 1,2-Dichloroethane  
EDB = 1,2-Dibromoethane  
(ppb) = Parts per billion

**ANALYTICAL METHOD:**

EPA Method 8260 for Oxygenate Compounds



## 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

Client/  
Facility # Chevron # 9-3864  
Address: 5101 Telegraph Ave.  
City: Oakland, CA

Job#: 326358  
Date: 9-4-01  
Sampler: T.C.

Well ID: C-3 Well Condition: OK  
Well Diameter: 2 in. Hydrocarbon Amount Bailed  
Thickness: 0 in. (product/water): 0 (gal.)  
Total Depth: 28.73 ft. Volume 2" = 0.17 3" = 0.38 4" = 0.66  
Factor (VF) 6" = 1.50 12" = 5.80  
Depth to Water: 14.61 ft.

14.12 x VF 0.17 = 2.4 x 3 (case volume) = Estimated Purge Volume: 7.5 (gal.)

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

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

Starting Time: 1600 Weather Conditions: Sunny  
Sampling Time: 1620 Water Color: Green Odor: 4  
Purging Flow Rate: \_\_\_\_\_ opm Sediment Description: \_\_\_\_\_  
Did well de-water? N If yes; Time: \_\_\_\_\_ Volume: \_\_\_\_\_ (gal.)

Time	Volume (gal.)	pH	Conductivity $\mu$ mhos/cm	Temperature $^{\circ}$ C	D.O. (mg/L) <i>pre</i>	ORP (mV)	Alkalinity (ppm)
<u>1604</u>	<u>2.5</u>	<u>7.62</u>	<u>692</u>	<u>72.9</u>	<u>1.4</u>		
<u>1609</u>	<u>5.0</u>	<u>7.41</u>	<u>673</u>	<u>72.4</u>			
<u>1613</u>	<u>7.5</u>	<u>7.45</u>	<u>652</u>	<u>72.1</u>			

### LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>C-3</u>	<u>6 X VDA VIAL</u>	<u>Y</u>	<u>HCL</u>	<u>LANCASTER</u>	<u>TPHG/BTEX/MTOE</u> <u>(7) Oxy 8260</u>

COMMENTS: ORC IN WELL / TOOK pre-purge D.O. = (1.4)

## WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/  
Facility # Chevron # 9-3864  
Address: 5101 Telegraph Ave.  
City: Oakland, CA

Job#: 386358  
Date: 9-4-01  
Sampler: T.C

Well ID MW-1

Well Condition: o.k

Well Diameter: 2 in.

Hydrocarbon Thickness: 0 in. Amount Bailed (product/water): 0 (gal.)

Total Depth 22.43 ft

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

Depth to Water 11.42 ft

11.01 x VF 1.7 = 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: 1530  
Sampling Time: 1544  
Purging Flow Rate: \_\_\_\_\_ gpm.  
Did well de-water? N

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

Time	Volume (gal.)	pH	Conductivity $\mu$ mhos/cm	Temperature $^{\circ}$ C	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
<u>1532</u>	<u>2.0</u>	<u>7.39</u>	<u>563</u>	<u>72.4</u>	_____	_____	_____
<u>1535</u>	<u>4.0</u>	<u>7.22</u>	<u>521</u>	<u>72.0</u>	_____	_____	_____
<u>1539</u>	<u>5.5</u>	<u>7.19</u>	<u>502</u>	<u>71.8</u>	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____

### LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>MW-1</u>	<u>6 X VDA VIAL</u>	<u>Y</u>	<u>HCL</u>	<u>LANCASTER</u>	<u>TPH6/BTEX/MTOE</u> <u>(7) orgs 5660</u>
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

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

## WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility # Chevron # 9-3864  
 Address: 5101 Telegraph Ave.  
 City: Oakland, CA

Job#: 386358  
 Date: 9-4-01  
 Sampler: T.C

Well ID: MW-2  
 Well Diameter: 2 in.  
 Total Depth: 23.89 ft.  
 Depth to Water: 10.99 ft.

Well Condition: O.K.  
 Hydrocarbon Thickness: 0 in. Amount Bailed (product/water): 0 (gal.)  
 Volume Factor (VF) 2" = 0.17 3" = 0.38 4" = 0.66  
6" = 1.50 12" = 5.80

12.90 X VF .17 = 2.1 X 3 (case volume) = Estimated Purge Volume: 6.5 (gal.)

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

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

Starting Time: 1645  
 Sampling Time: 1657  
 Purging Flow Rate: \_\_\_\_\_ gpm  
 Did well de-water? N

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

Time	Volume (gal.)	pH	Conductivity (µmhos/cm)	Temperature (°C)	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
1647	2.0	7.48	782	72.6			
1649	4.0	7.52	718	72.0			
1653	6.5	7.39	691	71.9			

### LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-2	6 X VOA VIAL	Y	HCL	LAWCASTER	TPH6/BTEX/MTOE (7) days 8200

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

## WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/  
Facility # Chevron # 9-3864  
Address: 5101 Telegraph Ave.  
City: Oakland, CA

Job#: 386358  
Date: 9-4-01  
Sampler: T-L

Well ID MW-3

Well Condition: parked over

Well Diameter 2 in.  
Total Depth \_\_\_\_\_ ft.  
Depth to Water \_\_\_\_\_ ft.

Hydrocarbon Thickness:	Amount Bailed (product/water):	(gal)
Volume Factor (VF)	2" = 0.17	3" = 0.38
	6" = 1.50	12" = 5.80
		4" = 0.66

\_\_\_\_\_ X VF = \_\_\_\_\_ X 3 (case volume) = Estimated Purge Volume: \_\_\_\_\_ (gal)

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

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

Starting Time: \_\_\_\_\_  
Sampling Time: \_\_\_\_\_  
Purging Flow Rate: \_\_\_\_\_ gpm  
Did well de-water? \_\_\_\_\_

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

Time	Volume (gal)	pH	Conductivity $\mu$ mhos/cm	Temperature $^{\circ}$ C	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)

### LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
	X VDA VIAL	Y	HCL		TPHG/BTEX/MTOE

COMMENTS: well was parked over all day





050901-011

Acct. #: 10905      For Lancaster Laboratories use only      Sample #: 368239-43      SCR#:

Facility #: 9-3864      Job# 386358 Site Address: 5101 Telegraph Ave., Oakland, CA Chevron PM: Thomas Bauhs      Lead Consultant: Delta/G-R Consultant/Office: G/R Inc., 6747 Sierra Ct., Ste. J, Dublin, CA 94568 Consultant Prj. Mgr.: Deanna L. Harding      Deanna@grinc.com Consultant Phone #: 925-551-7555      Fax #: 925-551-7899 Sampler: <u>TONY CAMARDA</u> Service Order #: <input type="checkbox"/> Non SAR:		<b>Matrix</b> <input type="checkbox"/> Potable <input type="checkbox"/> NPDES <input type="checkbox"/> Water <input type="checkbox"/> <input type="checkbox"/> Oil <input type="checkbox"/> Air		<b>Analyses Requested</b> <b>Preservation Codes</b>										<b>Preservative Codes</b> H = HCl      T = Thiosulfate N = HNO <sub>3</sub> B = NaOH S = H <sub>2</sub> SO <sub>4</sub> O = Other <input type="checkbox"/> J value reporting needed <input type="checkbox"/> Must meet lowest detection limits possible for 8260 compounds 8021 MTBE Confirmation <input type="checkbox"/> Confirm highest hit by 8260 <input type="checkbox"/> Confirm all hits by 8260 <input type="checkbox"/> Run ___ oxy s on highest hit <input type="checkbox"/> Run ___ oxy s on all hits				
<b>Sample Identification</b>		Date Collected	Time Collected	Grab	Composite	Soil	Water	Oil	Air	Total Number of Containers	BTEX + MTBE 8260 <input checked="" type="checkbox"/> 8021	TPH 8015 MOD GRO	TPH 8015 MOD DRO <input type="checkbox"/> Silica Gel Cleanup	8260 full scan	7 Oxygenates 8260	Lead 7420 <input type="checkbox"/> 7421 <input type="checkbox"/>	<b>Comments / Remarks</b>	
TB-LB							X			2	X	X						
C-3		9-4-01	1620	X			X			6	X	X			X			
MW-1		9-4-01	1544	X			X			3					X			
MW-2		9-4-01	1657	X			X			3					X			
MW-5		9-4-01	1510	X			X			3					X			
<b>Turnaround Time Requested (TAT) (please circle)</b> STD. TAT      72 hour      48 hour 24 hour      4 day      5 day		Relinquished by: <u>[Signature]</u> Date: 9/5/01      Time: 0645 Received by: <u>[Signature]</u> Date: 9/5/01      Time: 15:38		Relinquished by: <u>[Signature]</u> Date: 9/5/01      Time: 16:55 Received by: <u>[Signature]</u> Date: 9/5/01      Time: 16:55		Relinquished by: <u>[Signature]</u> Date: 9/6/01      Time: 13:15 Received by: <u>[Signature]</u> Date:      Time:		Relinquished by Commercial Carrier: UPS <u>FedEx</u> Other: _____ Temperature Upon Receipt: <u>2.0</u> °C		Received by: <u>[Signature]</u> Date: 9/8/01      Time: 1055 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

## SAMPLE GROUP

The sample group for this submittal is 777408. Samples arrived at the laboratory on Saturday, September 08, 2001. The PO# for this group is 99011184 and the release number is BAUHS.

<u>Client Description</u>		<u>Lancaster Labs Number</u>
TB-LB	Grab Water	3683239
C-3	Grab Water	3683240
MW-1	Grab Water	3683241
MW-2	Grab Water	3683242
MW-5	Grab Water	3683243

## 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





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

Respectfully Submitted,



Victoria M. Martell  
Chemist

## CASE NARRATIVE

### Prepared For:

Thomas Bauhs  
Chevron Products Company  
6001 Bollinger Canyon Road  
Building L  
P.O. Box 6004  
San Ramon, CA 94583-0904

### Prepared By:

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

### SAMPLE GROUP

The sample group for this submittal is 777408. Samples arrived at the laboratory on Saturday, September 08, 2001.

### METHODOLOGY

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

### COMMENTS

Due to the nature of the sample matrix for sample C-3 from Facility 9-3864, the surrogate recovery is above the range of the specification for the TPH-GRO analysis.



Lancaster Laboratories Sample No. WW 3683239

Collected: n.a.

Account Number: 10905

Submitted: 09/08/2001 10:55  
 Reported: 10/08/2001 at 11:15  
 Discard: 10/16/2001

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

TB-LB                                      Grab                      Water

Facility# 9-3864                                      GRD  
 5101 Telegraph Av Oakland T0600100343 QA

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
01729	TPH-GRO N. California (waters)					
01730	TPH-GRO N. California (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 N. California (waters)	N. CALIF. LUFT Gasoline Method	1	09/16/2001 19:18	Melissa-Ann S. McAlpine	1
08214	BTEX, MTBE (8021)	SW-846 8021B	1	09/16/2001 19:18	Melissa-Ann S. McAlpine	1
01146	GC VOA Water Prep	SW-846 5030B	1	09/16/2001 19:18	Melissa-Ann S. McAlpine	n.a.



Lancaster Laboratories Sample No. WW 3683240

Collected: 09/04/2001 16:20 by TC

Account Number: 10905

Submitted: 09/08/2001 10:55  
 Reported: 10/08/2001 at 11:15  
 Discard: 10/16/2001

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

C-3 Grab Water

Facility# 9-3864 GRD  
 5101 Telegraph Av Oakland T0600100343 C-3

C3864

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
01729	TPH-GRO N. California (waters)					
01730	TPH-GRO N. California (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.  Due to the nature of the sample matrix, the surrogate standard recovery is above the range of specifications.						
08214	BTEX, MTBE (8021)					
00776	Benzene	71-43-2	N.D. #	10.	ug/l	5
00777	Toluene	108-88-3	4.8 J	1.0	ug/l	5
00778	Ethylbenzene	100-41-4	6.5	1.0	ug/l	5
00779	Total Xylenes	1330-20-7	14. J	3.0	ug/l	5
00780	Methyl tert-Butyl Ether	1634-04-4	N.D. #	5.0	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 nature of the sample matrix, normal reporting limits were not attained.						
01594	BTEX + Oxygenates by 8260B					
02010	Methyl t-butyl ether	1634-04-4	N.D.	2.	ug/l	1
02011	di-Isopropyl ether	108-20-3	N.D.	2.	ug/l	1
02013	Ethyl t-butyl ether	637-92-3	N.D.	2.	ug/l	1
02014	t-Amyl methyl ether	994-05-8	N.D.	2.	ug/l	1
02015	t-Butyl alcohol	75-65-0	N.D.	100.	ug/l	1
05402	1,2-Dichloroethane	107-06-2	N.D.	2.	ug/l	1
05412	1,2-Dibromoethane	106-93-4	N.D.	2.	ug/l	1



Lancaster Laboratories Sample No. WW 3683240

Collected: 09/04/2001 16:20 by TC

Account Number: 10905

Submitted: 09/08/2001 10:55  
 Reported: 10/08/2001 at 11:15  
 Discard: 10/16/2001  
 C-3

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

Grab Water

Facility# 9-3864  
 5101 Telegraph Av Oakland T0600100343 C-3

GRD

C3864

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
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	Analysis		Analyst	Dilution Factor
			Trial#	Date and Time		
01729	TPH-GRO N. California (waters)	N. CALIF. LUFT Gasoline Method	1	09/17/2001 03:52	Melissa-Ann S. McAlpine	1
08214	BTEX, MTBE (8021)	SW-846 8021B	1	09/17/2001 11:52	Melissa-Ann S. McAlpine	5
01594	BTEX + Oxygenates by 8260B	SW-846 8260B	1	09/13/2001 11:15	Rachel K. Reese	1
01146	GC VOA Water Prep	SW-846 5030B	1	09/17/2001 03:52	Melissa-Ann S. McAlpine	n.a.
01163	GC/MS VOA Water Prep	SW-846 5030B	1	09/13/2001 11:15	Rachel K. Reese	n.a.



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 3683241

Collected: 09/04/2001 15:44 by TC

Account Number: 10905

Submitted: 09/08/2001 10:55

Chevron Products Company

Reported: 10/08/2001 at 11:15

6001 Bollinger Canyon Road

Discard: 10/16/2001

Building L PO Box 6004

MW-1 Grab Water

San Ramon CA 94583-0904

Facility# 9-3864

GRD

5101 Telegraph Av Oakland T0600100343 MW-1

MW164

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
01594	BTEX + Oxygenates by 8260B					
02010	Methyl t-butyl ether	1634-04-4	N.D.	2.	ug/l	1
02011	di-Isopropyl ether	108-20-3	N.D.	2.	ug/l	1
02013	Ethyl t-butyl ether	637-92-3	N.D.	2.	ug/l	1
02014	t-Amyl methyl ether	994-05-8	N.D.	2.	ug/l	1
02015	t-Butyl alcohol	75-65-0	N.D.	100.	ug/l	1
05402	1,2-Dichloroethane	107-06-2	N.D.	2.	ug/l	1
05412	1,2-Dibromoethane	106-93-4	N.D.	2.	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
01594	BTEX + Oxygenates by 8260B	SW-846 8260B	1	09/13/2001 09:23	Rachel K. Reese	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	09/13/2001 09:23	Rachel K. Reese	n.a.



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 3683242

Collected: 09/04/2001 16:57 by TC

Account Number: 10905

Submitted: 09/08/2001 10:55

Reported: 10/08/2001 at 11:16

Discard: 10/16/2001

MW-2 Grab Water

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

Facility# 9-3864 GRD  
5101 Telegraph Av Oakland T0600100343 MW-2

MW264

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
01594	BTEX + Oxygenates by 8260B					
02010	Methyl t-butyl ether	1634-04-4	N.D.	2.	ug/l	1
02011	di-Isopropyl ether	108-20-3	N.D.	2.	ug/l	1
02013	Ethyl t-butyl ether	637-92-3	N.D.	2.	ug/l	1
02014	t-Amyl methyl ether	994-05-8	N.D.	2.	ug/l	1
02015	t-Butyl alcohol	75-65-0	N.D.	100.	ug/l	1
05402	1,2-Dichloroethane	107-06-2	N.D.	2.	ug/l	1
05412	1,2-Dibromoethane	106-93-4	N.D.	2.	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	Analysis		Analyst	Dilution Factor
			Trial#	Date and Time		
01594	BTEX + Oxygenates by 8260B	SW-846 8260B	1	09/13/2001 09:51	Rachel K. Reese	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	09/13/2001 09:51	Rachel K. Reese	n.a.



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 3683243**

Collected: 09/04/2001 15:10 by TC

Account Number: 10905

Submitted: 09/08/2001 10:55  
 Reported: 10/08/2001 at 11:16  
 Discard: 10/16/2001

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

MW-5 Grab Water

Facility# 9-3864 GRD  
 5101 Telegraph Av Oakland T0600100343 MW-5

MW564

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
01594	BTEX + Oxygenates by 8260B					
02010	Methyl t-butyl ether	1634-04-4	N.D.	2.	ug/l	1
02011	di-Isopropyl ether	108-20-3	N.D.	2.	ug/l	1
02013	Ethyl t-butyl ether	637-92-3	N.D.	2.	ug/l	1
02014	t-Amyl methyl ether	994-05-8	N.D.	2.	ug/l	1
02015	t-Butyl alcohol	75-65-0	N.D.	100.	ug/l	1
05402	1,2-Dichloroethane	107-06-2	N.D.	2.	ug/l	1
05412	1,2-Dibromoethane	106-93-4	N.D.	2.	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	Analysis		Analyst	Dilution Factor
			Trial#	Date and Time		
01594	BTEX + Oxygenates by 8260B	SW-846 8260B	1	09/13/2001 10:19	Rachel K. Reese	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	09/13/2001 10:19	Rachel K. Reese	n.a.



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





Client Name: Chevron Products Company  
 Reported: 10/08/01 at 11:16 AM

Group Number: 777408

### 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>
Sample number(s): 3683239-3683240								
Batch number: 01258A53	N.D.	0.5	ug/l	92	97	80-118	5	30
Benzene	N.D.	0.5	ug/l	90	94	82-119	4	30
Toluene	N.D.	0.5	ug/l	91	96	81-119	4	30
Ethylbenzene	N.D.	1.5	ug/l	90	94	82-120	5	30
Total Xylenes	N.D.	2.5	ug/l	100	100	79-127	0	30
Methyl tert-Butyl Ether	N.D.	50.	ug/l	103	99	76-119	4	20
TPH-GRO N. California (waters)								
Sample number(s): 3683240-3683243								
Batch number: U012551AB	N.D.	2.	ug/l	98	100	77-127	1	30
Methyl t-butyl ether	N.D.	2.	ug/l	101	103	74-125	2	30
di-Isopropyl ether	N.D.	2.	ug/l	101	100	74-120	1	30
Ethyl t-butyl ether	N.D.	2.	ug/l	109	113	77-118	4	30
t-Amyl methyl ether	N.D.	100.	ug/l	120	113	58-147	6	30
t-Butyl alcohol	N.D.	2.	ug/l	110	113	84-131	2	30
1,2-Dichloroethane	N.D.	2.	ug/l	104	103	84-119	1	30
1,2-Dibromoethane								

### 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>
Sample number(s): 3683239-3683240								
Batch number: 01258A53	88		66-140					
Benzene	91		72-138					
Toluene	95		71-138					
Ethylbenzene	94		69-140					
Total Xylenes	89		60-145					
Methyl tert-Butyl Ether	108		74-132					
TPH-GRO N. California (waters)								
Sample number(s): 3683240-3683243								
Batch number: U012551AB	97		69-134					
Methyl t-butyl ether	104		75-128					
di-Isopropyl ether	101		73-123					
Ethyl t-butyl ether	109		69-126					
t-Amyl methyl ether	110		50-157					
t-Butyl alcohol	113		75-141					
1,2-Dichloroethane	107		78-120					
1,2-Dibromoethane								

### Surrogate Quality Control

Analysis Name: TPH-GRO N. California (waters)  
 Batch number: 01258A53  
 Trifluorotoluene-F                      Trifluorotoluene-P

\*- 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

Where quality is a science.

## Quality Control Summary

Client Name: Chevron Products Company  
 Reported: 10/08/01 at 11:16 AM

Group Number: 777408

### Surrogate Quality Control

3683239	102	99
3683240	164*	90
Blank	103	95
LCS	108	93
LCSD	111	93
MS	110	93

Limits: 65-137 72-134

Analysis Name: BTEX + Oxygenates by 8260B  
 Batch number: U012551AB

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
3683240	107	102	101	106
3683241	104	100	96	101
3683242	105	101	95	101
3683243	105	104	98	104
Blank	102	100	96	100
LCS	104	100	97	101
LCSD	105	104	98	102
MS	102	101	99	104

Limits: 86-118 80-120 88-110 86-115

\*- 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.



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