



# GETTLER-RYAN INC.

OCT 03 2001

## TRANSMITTAL

September 17, 2001

G-R #386473

# 4249

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  
#9-4612  
3616 San Leandro Street  
Oakland, California

WE HAVE ENCLOSED THE FOLLOWING:

COPIES	DATED	DESCRIPTION
1	September 6, 2001	Groundwater Monitoring and Sampling Report Third Quarter - Event of August 6, 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 1, 2001*, at which time the final report will be distributed to the following:

- cc: ~~Mr. Barry Chen, 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. Leonard B. Ratto, Ratto Land Company, P.O. Box 6104, Oakland, CA 94603-0104  
 Mr. Terry McIlraith, 407 Castello Road, Lafayette, CA 94549

Enclosures

trans/9-4612-TB



# GETTLER - RYAN INC.

September 6, 2001  
G-R Job #386473

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

**RE: Third Quarter Event of August 6, 2001**  
Groundwater Monitoring & Sampling Report  
Former Chevron Service Station #9-4612  
3616 San Leandro Street  
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. Dissolved Oxygen Concentrations are presented in Table 2. 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

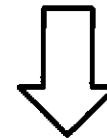
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P.E. No. C55734



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

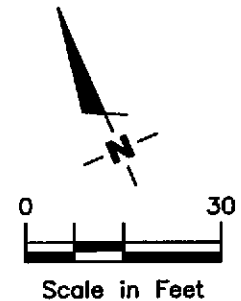
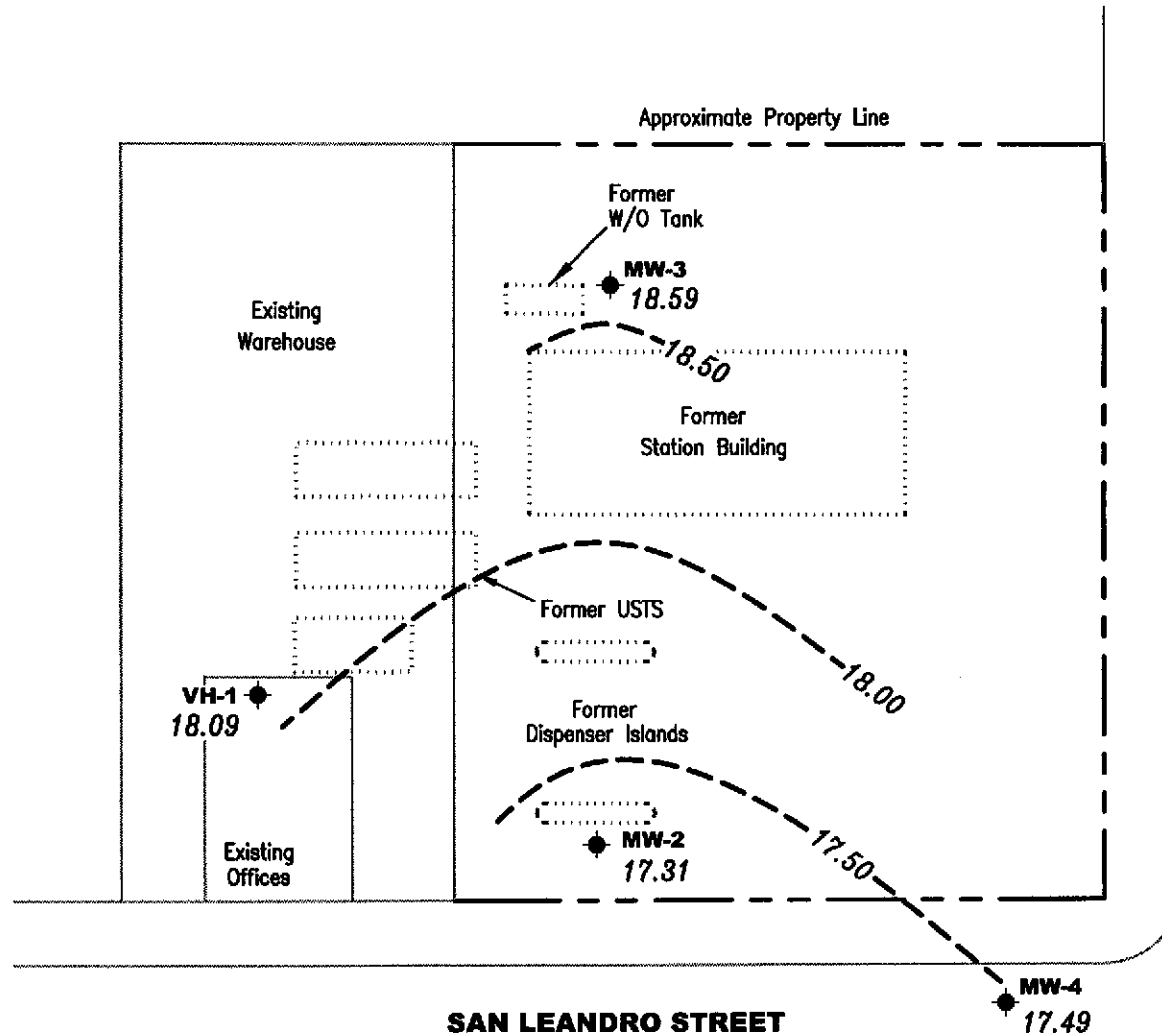
**EXPLANATION**

- ◆ Groundwater monitoring well
- 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 0.02 Ft./Ft.

37TH AVENUE



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 #9-4612  
 3616 San Leandro Street  
 Oakland, California

FIGURE  
**1**

PROJECT NUMBER  
**386473**

REVIEWED BY

DATE  
 August 6, 2001

REVISED DATE

**Table 1**  
**Groundwater Monitoring Data and Analytical Results**  
Former Chevron Service Station #9-4612  
3616 San Leandro Street  
Oakland, California

WELL ID/ DATE	TOC* (ft.)	GWE (msl)	DTW (ft.)	TPH-D (ppb)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)	TOG (ppb)
<b>VH-1</b>											
08/10/88	--	--	13.00	--	11,000	3,300	200	520	540	--	--
06/01/89	--	--	10.32	--	15,000	2,200	120	540	310	--	--
09/15/89	--	--	15.69	--	5,600	1,900	90	350	160	--	--
12/08/89	--	--	14.77	--	11,000	1,900	69	270	99	--	--
03/07/91	--	--	11.26	--	4,500	820	39	120	77	--	--
09/24/91	--	--	12.98	--	3,300	520	19	39	27	--	--
01/08/92	--	--	13.77	--	5,000	600	34	81	76	--	--
04/20/92	--	--	8.18	--	7,400	670	60	110	140	--	--
03/26/93	27.85	21.14	6.71	--	4,900	600	40	72	94	--	--
05/27/93	27.85	19.27	8.58	--	13,000	1,600	120	230	220	--	--
08/18/93	27.85	17.39	10.46	--	2,700	210	10	8.1	18	--	--
11/03/93	27.85	15.28	12.57	--	4,600	680	42	35	68	--	--
02/10/94	27.85	18.77	9.08	--	1,900	260	19	22	29	--	--
05/12/94	27.85	19.76	8.09	--	2,000	390	28	3.9	29	--	--
08/26/94	27.85	17.10	10.75	--	4,900	500	<5.0	23	31	--	--
11/14/94	27.85	18.40	9.45	300	760	69	<2.0	<2.0	2.2	--	--
02/01/95	27.85	21.88	5.97	--	1,300	120	5.9	<0.5	13	--	--
05/12/95	27.85	20.14	7.71	--	4,400	460	31	45	49	--	--
08/22/95	27.85	18.59	9.26	--	2,900	310	15	28	32	--	--
12/19/95	27.85	19.05	8.80	--	930	53	<2.5	<2.5	<2.5	39	--
01/31/96	27.85	22.35	5.50	--	3,700	320	<10	41	40	180	--
04/30/96	27.85	19.81	8.04	--	3,900	270	<20	<20	<20	120	--
08/01/96	27.85	18.67	9.18	--	2,700	140	11	18	28	200	--
10/30/96	27.85	18.67	10.76	--	2,700	140	<12	<12	<12	280	--
02/07/97	27.85	19.75	8.10	--	220	13	0.6	<0.5	1.6	15	--
05/07/97	27.85	18.33	9.52	--	5,200	33	12	21	26	330	--
07/22/97	27.85	17.43	10.42	--	4,200	80	<10	16	24	400	--
11/03/97	27.85	16.85	11.00	--	2,400	150	6.8	6.5	9.5	510	--
01/28/98	27.85	20.75	7.10	--	850	69	4.8	5.0	11	38/48 <sup>12</sup>	--
05/08/98	27.85	20.14	7.71	--	4,200	200	30	40	42	310/200 <sup>12</sup>	--
07/29/98	27.85	18.40	9.45	--	3,800	54	10	27	30	35/290 <sup>12</sup>	--

**Table 1**  
**Groundwater Monitoring Data and Analytical Results**  
Former Chevron Service Station #9-4612  
3616 San Leandro Street  
Oakland, California

WELL ID/ DATE	TOC* ( <i>ft.</i> )	GWE ( <i>msl</i> )	DTW ( <i>ft.</i> )	TPH-D ( <i>ppb</i> )	TPH-G ( <i>ppb</i> )	B ( <i>ppb</i> )	T ( <i>ppb</i> )	E ( <i>ppb</i> )	X ( <i>ppb</i> )	MTBE ( <i>ppb</i> )	TOG ( <i>ppb</i> )
<b>VH-1 (cont)</b>											
11/06/98	27.85	17.15	10.70	--	4,800	100	20	12	23	360/210 <sup>12</sup>	--
02/09/99 <sup>5</sup>	27.85	21.87	5.98	--	2,950	79.5	<10	<10	<10	435/312 <sup>12</sup>	--
05/13/99	27.85	19.71	8.14	--	4,180	147	12.8	16.5	20.3	433245 <sup>12</sup>	--
09/07/99	27.85	17.94	9.91	--	2,750	57.6	<5.0	6.53	<5.0	297/233 <sup>12</sup>	--
11/24/99	27.85	17.36	10.49	--	2,550	38	3.18	2.54	5.21	--/216 <sup>1,12</sup>	--
02/25/00	27.85	21.20	6.65	--	120	2.7	<0.5	<0.5	<0.5	20.5/11.9 <sup>12</sup>	--
05/10/00	27.85	19.76	8.09	--	1,400 <sup>8</sup>	63	3.3	3.1	4.9	230/110 <sup>12</sup>	--
7/31/00 <sup>11</sup>	27.85	18.30	9.55	--	360 <sup>8</sup>	22	2.7	1.6	3.1	100/88 <sup>12</sup>	--
10/30/00 <sup>11</sup>	27.85	17.91	9.94	--	987 <sup>10</sup>	47.0	1.00	<0.500	1.80	153/130 <sup>12</sup>	--
02/05/01	27.91	19.23	8.68	--	2,670	42.7	<5.00	<5.00	<5.00	225/160 <sup>12</sup>	--
05/07/01 <sup>11</sup>	27.91	19.61	8.30	--	1,800 <sup>6</sup>	100	8.2	10	7.9	440/110 <sup>12</sup>	--
08/06/01 <sup>11</sup>	27.91	18.09	9.82	--	1,000 <sup>6</sup>	67	6.1	2.1	7.1	270/140 <sup>12</sup>	--
<i>orc</i>											
<b>MW-2</b>											
02/16/93	27.51	--	--	--	9,200	720	110	250	170	--	--
03/26/93	27.51	19.89	7.62	--	--	--	--	--	--	--	--
05/27/93	27.51	18.04	9.47	--	360	5.3	2.1	1.8	2.5	--	--
08/18/93	27.51	16.46	11.05	--	9,400	1,100	76	110	100	--	--
11/03/93	27.51	14.56	12.95	--	8,600	390	20	2.7	120	--	--
02/10/94	27.51	17.72	9.79	--	2,700	370	38	44	41	--	--
05/12/94	27.51	18.59	8.92	--	3,800	650	76	15	62	--	--
08/26/94	27.51	16.14	11.37	--	16,000	1,300	270	28	120	--	--
11/14/94	27.51	17.48	10.03	--	5,100	390	10	43	27	--	--
02/01/95	27.51	20.47	7.04	--	6,900	520	82	170	110	--	--
05/12/95	27.51	18.76	8.75	--	7,700	510	83	110	100	--	--
08/22/95	27.51	17.35	10.16	--	4,500	220	16	61	47	--	--
12/19/95	27.51	18.05	9.46	--	2,900	240	<10	19	18	220	--
01/31/96	27.51	21.91	5.60	--	3,900	320	18	72	39	<25	--
04/30/96	27.51	18.68	8.83	--	5,600	200	36	55	47	170	--
08/01/96	27.51	17.25	10.26	--	6,200	190	15	62	59	220	--

**Table 1**  
**Groundwater Monitoring Data and Analytical Results**  
Former Chevron Service Station #9-4612  
3616 San Leandro Street  
Oakland, California

WELL ID/ DATE	TOC* (ft.)	GWE (msl)	DTW (ft.)	TPH-D (ppb)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)	TOG (ppb)
<b>MW-2 (cont)</b>											
10/30/96	27.51	17.25	11.48	--	5,700	190	<25	67	36	260	--
02/07/97	27.51	18.11	9.40	--	8,300	210	34	70	59	330	--
05/07/97	27.51	17.57	9.94	--	6,900	190	12	38	37	530	--
07/22/97	27.51	16.36	11.15	--	10,000	18	25	62	41	630	--
11/03/97	27.51	15.93	11.58	--	6,500	260	8.5	26	14	590/9.6 <sup>4,12</sup>	--
01/28/98	27.51	19.38	8.13	--	6,700	65	13	67	54	280/94 <sup>12</sup>	--
05/08/98	27.51	18.89	8.62	--	5,500	91	38	43	61	220/62 <sup>12</sup>	--
07/29/98	27.51	17.06	10.45	--	3,600	41	8.9	3.6	14	16/94 <sup>12</sup>	--
11/06/98	27.51	15.89	11.62	--	6,900	77	<5.0	14	17	290/110 <sup>12</sup>	--
02/09/99 <sup>5</sup>	27.51	20.61	6.90	--	8,070	75.6	<10	<10	<10	397/144 <sup>12</sup>	--
05/13/99	27.51	18.21	9.30	--	5,890	120	<5.0	12.5	26.6	401/69.4 <sup>12</sup>	--
09/07/99	27.51	16.57	10.94	--	5,820	41.2	<5.0	14.6	<5.0	260/145 <sup>12</sup>	--
11/24/99	27.51	15.98	11.53	--	5,940	40.9	<10	10.8	<10	--/120 <sup>1,12</sup>	--
02/25/00	27.51	21.00	6.51	--	6,370	101	9.37	39.8	33.2	321/121 <sup>12</sup>	--
05/10/00	27.51	18.49	9.02	--	6,100 <sup>8</sup>	110	13	27	31	560/120 <sup>12</sup>	--
07/31/00 <sup>11</sup>	27.51	17.18	10.33	--	3,000 <sup>8</sup>	75	14	28	28	200/130 <sup>12</sup>	--
10/30/00 <sup>11</sup>	27.51	16.95	10.56	--	6,810 <sup>10</sup>	162	<5.00	8.05	<15.0	372/140 <sup>12</sup>	--
02/05/01 <sup>11</sup>	28.05	18.47	9.58	--	5,860	28.4	6.86	16.2	11.8	285/140 <sup>12</sup>	--
05/07/01 <sup>11</sup>	28.05	18.85	9.20	--	4,700 <sup>6</sup>	120	15	30	42	540/88 <sup>12</sup>	--
08/06/01 <sup>11</sup>	28.05	17.31	10.74	--	3,700 <sup>6</sup>	120	<20	28	33	490/110 <sup>12</sup>	--
<i>ore</i>											
<b>MW-3</b>											
02/16/93	28.50	--	--	--	3,500	<0.5	8.1	4.6	7.7	--	--
03/26/93	28.50	21.32	7.18	--	--	--	--	--	--	--	--
05/27/93	28.50	19.17	9.33	--	4,200	580	84	150	100	--	--
08/18/93	28.50	16.50	12.00	1,400	910	12	3.7	6.2	3.8	--	<5,000
11/03/93	28.50	15.21	13.29	--	5,300	29	1.9	0.6	27	--	--
02/10/94	28.50	18.87	9.63	<50	63	<0.5	0.7	<0.5	<0.5	--	--
05/12/94	28.50	19.73	8.77	84	<50	<0.5	0.5	<0.5	<0.5	--	--
08/26/94	28.50	17.08	11.42	--	2,100	12	<0.5	5.0	0.5	--	--

**Table 1**  
**Groundwater Monitoring Data and Analytical Results**  
Former Chevron Service Station #9-4612  
3616 San Leandro Street  
Oakland, California

WELL ID/ DATE	TOC* (ft.)	GWE (msl)	DTW (ft.)	TPH-D (ppb)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)	TOG (ppb)
<b>MW-3 (cont)</b>											
11/14/94	28.50	18.43	10.07	--	140	0.78	<0.5	<0.5	<0.5	--	--
02/01/95	28.50	22.21	6.29	<50	<50	<0.5	<0.5	<0.5	<0.5	--	--
05/12/95	28.50	20.43	8.07	540 <sup>2</sup>	330	13	1.1	1.9	0.69	--	--
08/22/95	28.50	18.55	9.95	550 <sup>2</sup>	980	32	<1.0	<1.0	<1.0	--	--
12/19/95	28.50	19.10	9.40	<50	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--
01/31/96	28.50	23.45	5.05	<50	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--
04/30/96	28.50	20.10	8.40	240 <sup>2</sup>	320	2.4	<0.5	0.75	<0.5	7.8	--
08/01/96	28.50	18.70	9.80	470 <sup>2</sup>	980	9.6	<0.5	0.98	2.2	54	--
10/30/96	28.50	18.70	11.48	760 <sup>2</sup>	2,000	14	<10	<10	<10	140	--
02/07/97	28.50	19.90	8.60	61 <sup>2</sup>	200 <sup>2</sup>	<0.5	<0.5	<0.5	<0.5	8.9	--
05/07/97	28.50	19.49	9.01	550 <sup>2</sup>	3,500	14	3.9	3.6	8.0	160	--
07/22/97	28.50	17.38	11.12	800 <sup>2</sup>	3,500	55	<10	<10	<10	150	--
11/03/97	28.50	16.99	11.51	910 <sup>2</sup>	4,100	140	<5.0	<5.0	<5.0	380	--
01/28/98	28.50	21.16	7.34	--	1,100	24	<1.2	<1.2	2.8	33/6.1 <sup>12</sup>	--
05/08/98	28.50	20.44	8.06	250 <sup>2</sup>	990	3.6	7.7	0.7	2.2	37/7.5 <sup>12</sup>	--
07/29/98	28.50	18.25	10.25	290 <sup>2</sup>	1,200	13	<0.5	<0.5	1.4	11/28 <sup>12</sup>	--
11/06/98	28.50	17.11	11.39	390 <sup>2</sup>	2,600	5.3	<2.5	<2.5	3.0	91/41 <sup>12</sup>	--
02/09/99 <sup>5</sup>	28.50	22.40	6.10	184 <sup>2</sup>	406	<1.0	4.03	<1.0	<1.0	17.7/1.97 <sup>12</sup>	--
05/13/99	28.50	19.38	9.12	--	615	13.8	1.05	<0.5	<0.5	43.5/21.2 <sup>12</sup>	--
09/07/99	28.50	17.77	10.73	528 <sup>2</sup>	2,710	<5.0	<5.0	<5.0	<5.0	96.3/57.9 <sup>12</sup>	--
11/24/99	28.50	17.37	11.13	1,070 <sup>2</sup>	5,530	<5.0	<5.0	5.59	<5.0	--/66 <sup>1,12</sup>	--
02/25/00	28.50	22.22	6.28	--	189	4.68	<0.5	<0.5	<0.5	11.9/<2.0 <sup>12</sup>	--
03/01/00	28.50	21.80	6.70	380 <sup>2</sup>	--	--	--	--	--	--	--
05/10/00	28.50	19.90	8.60	830 <sup>7</sup>	1,600 <sup>6</sup>	22	<10	<10	<10	100/51 <sup>12</sup>	--
07/31/00 <sup>11</sup>	28.50	18.43	10.07	490 <sup>7</sup>	2,200 <sup>6</sup>	76	10	<5.0	13	230/52 <sup>12</sup>	--
10/30/00 <sup>11</sup>	28.50	17.97	10.53	580 <sup>9</sup>	3,320 <sup>10</sup>	<5.00	<5.00	<5.00	<15.0	147/64 <sup>12</sup>	--
02/05/01 <sup>11</sup>	29.04	19.78	9.26	--	3,960	<5.00	6.02	<5.00	<5.00	159/70 <sup>12</sup>	--
05/07/01 <sup>11</sup>	29.04	20.29	8.75	--	2,800 <sup>6</sup>	61	12	<10	20	230/49 <sup>12</sup>	--
05/10/01 <sup>11</sup>	29.04	20.21	8.83	390 <sup>13</sup>	--	--	--	--	--	--	--
08/06/01 <sup>11</sup>	29.04	18.59	10.45	870 <sup>7</sup>	1,600 <sup>6</sup>	39	14	1.3	5.6	130/43 <sup>12</sup>	--

*etc*

**Table 1**  
**Groundwater Monitoring Data and Analytical Results**  
Former Chevron Service Station #9-4612  
3616 San Leandro Street  
Oakland, California

WELL ID/ DATE	TOC* (ft.)	GWE (msl)	DTW (ft.)	TPH-D (ppb)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)	TOG (ppb)
<b>MW-4</b>											
08/22/95	27.27	18.16	9.11	--	9,600	100	<10	<10	<10	--	--
12/19/95	27.27	18.97	8.30	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--
01/31/96	27.27	21.67	5.60	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--
04/30/96	27.27	20.27	7.00	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--
08/01/96	27.27	18.12	9.15	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
10/30/96	27.27	18.12	10.74	--	110	<0.5	<0.5	<0.5	<0.5	<2.5	--
02/07/97	27.27	19.47	7.80	--	80	<0.5	<0.5	<0.5	<0.5	4.1	--
05/07/97	27.27	21.42	5.85	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--
07/22/97	27.27	17.22	10.05	--	150	<0.5	<0.5	<0.5	<0.5	<2.5	--
11/03/97	27.27	16.55	10.72	--	52	0.9	<0.5	<0.5	<0.5	-- <sup>3</sup>	--
01/28/98	27.27	20.76	6.51	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5/<2.0 <sup>12</sup>	--
05/08/98	27.27	20.25	7.02	--	56	<0.5	<0.5	<0.5	<0.5	<2.5/<2.0 <sup>12</sup>	--
07/29/98	27.27	18.32	8.95	--	<50	0.9	<0.5	<0.5	<0.5	<2.5/<2.0 <sup>12</sup>	--
11/06/98	27.27	16.68	10.59	--	72	<0.5	<0.5	<0.5	<0.5	<2.5/<2.0 <sup>12</sup>	--
02/09/99	27.27	21.41	5.86	--	<50	<0.5	<0.5	<0.5	<0.5	<2.0/<1.1 <sup>12</sup>	--
05/13/99	27.27	19.32	7.95	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0/<2.0 <sup>12</sup>	--
09/07/99	27.27	17.79	9.48	--	70.2	<0.5	<0.5	<0.5	<0.5	<2.0/<1.0 <sup>12</sup>	--
11/24/99	27.27	17.22	10.05	--	227	<0.5	<0.5	<0.5	<0.5	--/<0.5 <sup>12</sup>	--
02/25/00	27.27	INACCESSIBLE		--	--	--	--	--	--	--	--
03/01/00	27.27	21.10	6.17	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5/<2.0 <sup>12</sup>	--
05/10/00	27.27	INACCESSIBLE - CAR PARKED OVER WELL				--	--	--	--	--	--
07/31/00	27.27	17.90	9.37	--	<50	<0.50	<0.50	<0.50	<0.50	<2.5/<2.0 <sup>12</sup>	--
10/30/00	27.27	17.80	9.47	--	54.0 <sup>10</sup>	<0.500	<0.500	<0.500	<1.50	<2.50/<2.0 <sup>12</sup>	--
02/05/01	27.27	INACCESSIBLE - CAR PARKED OVER WELL				--	--	--	--	--	--
05/07/01	27.27	19.46	7.81	--	<50	<0.50	<0.50	<0.50	<0.50	<2.5/<2.0 <sup>12</sup>	--
08/06/01	27.27	17.49	9.78	--	<50	1.1	0.52	<0.50	1.1	6.0/<2.0 <sup>12</sup>	--



**Table 1**  
**Groundwater Monitoring Data and Analytical Results**  
Former Chevron Service Station #9-4612  
3616 San Leandro Street  
Oakland, California

WELL ID/ DATE	TOC* (ft.)	GWE (msl)	DTW (ft.)	TPH-D (ppb)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)	TOG (ppb)
<b>TRIP BLANK</b>											
05/27/93	--	--	--	--	<50	<0.5	<0.5	<0.5	<1.5	--	--
08/18/93	--	--	--	1,400	<50	<0.5	<0.5	<0.5	<1.5	--	<5,000
11/03/93	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
02/10/94	--	--	--	<50	<50	<0.5	<0.5	<0.5	<0.5	--	--
05/12/94	--	--	--	84	<50	<0.5	<0.5	<0.5	<0.5	--	--
08/26/94	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
11/14/94	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
02/01/95	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
05/12/95	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
08/22/95	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
12/19/95	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--
01/31/96	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--
04/30/96	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--
08/01/96	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--
10/30/96	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--
02/07/97	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--
05/07/97	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--
07/22/97	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--
01/28/98	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--/ <2.0 <sup>12</sup>	--
05/08/98	--	--	--	--	--	--	--	--	--	--/ <2.0 <sup>12</sup>	--
07/29/98	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--/ <2.0 <sup>12</sup>	--
11/06/98	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--
02/09/99	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.0	--
05/13/99	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0/ <2.0 <sup>12</sup>	--
09/07/99	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.0	--
11/24/99	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--
02/25/00	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--
03/01/00	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--
05/10/00	--	--	--	--	<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	--

**Table 1**  
**Groundwater Monitoring Data and Analytical Results**  
Former Chevron Service Station #9-4612  
3616 San Leandro Street  
Oakland, California

WELL ID/ DATE	TOC* (ft.)	GWE (msl)	DTW (ft.)	TPH-D (ppb)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)	TOG (ppb)
<b>TRIP BLANK (cont)</b>											
02/05/01	--	--	--	--	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50	--
05/07/01	--	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	<2.5	--
05/10/01	--	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	<2.5	--
08/06/01	--	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	<2.5	--

**Table 1**  
**Groundwater Monitoring Data and Analytical Results**  
Former Chevron Service Station #9-4612  
3616 San Leandro Street  
Oakland, California

**EXPLANATIONS:**

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

TOC = Top of Casing (ft.) = Feet	TPH-G = Total Petroleum Hydrocarbons as Gasoline B = Benzene	TOG = Total Oil and Grease (ppb) = Parts per billion
GWE = Groundwater Elevation (msl) = Mean sea level	T = Toluene E = Ethylbenzene	-- = Not Measured/Not Analyzed
DTW = Depth to Water	X = Xylenes	
TPH-D = Total Petroleum Hydrocarbons as Diesel	MTBE = Methyl tertiary butyl ether	

\* TOC elevations were re-surveyed on March 8, 2001, by Virgil Chavez Land Surveying. The benchmark for the survey was a City of Oakland benchmark, being a cut square top of curb at the centerline return at the northwest corner of East 14th and 37th Avenue, (Benchmark Elevation = 38.21 feet, NGVD 29).

- 1 Lab could not get a good ion chromatogram match for MTBE. See laboratory report.
- 2 Chromatogram pattern indicates an unidentified hydrocarbon.
- 3 No value for MTBE could be determined; see lab report for analyses.
- 4 Confirmation run.
- 5 ORC was installed.
- 6 Laboratory report indicates gasoline C6-C12.
- 7 Laboratory report indicates unidentified hydrocarbons <C16.
- 8 Laboratory report indicates gasoline C6-C12 + unidentified hydrocarbons <C6.
- 9 Laboratory report indicates unidentified hydrocarbons >C16.
- 10 Laboratory report indicates hydrocarbon pattern present in the requested fuel quantitation range but does not resemble the pattern of the requested fuel.
- 11 ORC in well.
- 12 MTBE by EPA Method 8260.
- 13 Laboratory report indicates unidentified hydrocarbons C9-C17.

**Table 2**  
**Dissolved Oxygen Concentrations**  
Former Chevron Service Station #9-4612  
3616 San Leandro Street  
Oakland, California

WELL ID	DATE	Before Purging (mg/L)	After Purging (mg/L)
VH-1	05/10/00	0.90	--
	07/31/00	1.25	--
	10/30/00	1.97	--
	05/07/01	1.10	--
	08/06/01	1.40	--
MW-2	05/10/00	0.57	--
	07/31/00	1.26	--
	10/30/00	1.25	--
	05/07/01	0.90	--
	08/06/01	1.10	--
MW-3	05/10/00	1.56	--
	07/31/00	1.46	--
	10/30/00	1.18	--
	05/07/01	0.70	--
	08/06/01	0.90	--
MW-4	05/10/00	INACCESSIBLE - CAR PARKED OVER WELL	
	07/31/00	0.64	--
	10/30/00	0.97	--
	02/05/01	INACCESSIBLE - CAR PARKED OVER WELL	
	05/07/01	0.50	--
	08/06/01	0.70	--

*(Handwritten circles around the 'Before Purging' values for VH-1: 0.90, 1.25, 1.97, 1.10, 1.40)*

*(Handwritten circles around the 'Before Purging' values for MW-2: 0.57, 1.26, 1.25, 0.90, 1.10)*

*(Handwritten circles around the 'Before Purging' values for MW-3: 1.56, 1.46, 1.18, 0.70, 0.90)*

*No increase in D.O. from ORC socks*

**EXPLANATIONS:**

(mg/L) = Milligrams per liter

-- = Not Measured

**Table 3**  
**Groundwater Analytical Results - Oxygenate Compounds**  
Former Chevron Service Station #9-4612  
3616 San Leandro Street  
Oakland, California

WELL ID	DATE	ETHANOL (ppb)	TBA (ppb)	MTBE (ppb)	DIPE (ppb)	ETBE (ppb)	TAME (ppb)
VH-1	02/05/01	<500	<50	160	<2.0	<2.0	<2.0
	05/07/01	--	--	110	--	--	--
	08/06/01	--	--	140	--	--	--
MW-2	02/05/01	<500	<50	140	<2.0	<2.0	<2.0
	05/07/01	--	--	88	--	--	--
	08/06/01	--	--	110	--	--	--
MW-3	02/05/01	<500	<50	70	<2.0	<2.0	<2.0
	05/07/01	--	--	49	--	--	--
	08/06/01	--	--	43	--	--	--
MW-4	05/07/01	--	--	<2.0	--	--	--
	08/06/01	--	--	<2.0	--	--	--

**EXPLANATIONS:**

TBA = Tertiary butyl alcohol  
MTBE = Methyl tertiary butyl ether  
DIPE = Di-isopropyl ether  
ETBE = Ethyl tertiary butyl ether  
TAME = Tertiary amyl methyl ether  
(ppb) = Parts per billion  
-- = Not Analyzed

**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/ CHEVRON  
 Facility # 9-4612  
 Address: 3616 SAN LEANDRO ST.  
 City: OAKLAND, CA.

Job#: 386473  
 Date: 8-6-01  
 Sampler: T-C

Well ID: VH-1 Well Condition: o.k.  
 Well Diameter: 4" in. Hydrocarbon Thickness: 0 in. Amount Bailed (product/water): 0 (gal.)  
 Total Depth: 28.22 ft. Volume Factor (VF):  
 Depth to Water: 9.82 ft. 2" = 0.17    3" = 0.38    4" = 0.66  
6" = 1.50    12" = 5.80

18.40 x VF .66 = 12.1 x 3 (case volume) = Estimated Purge Volume: 36.5 (gal.)

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

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

Starting Time: 1138 Weather Conditions: IN BATHROOM  
 Sampling Time: 1202 Water Color: CLEAR Odor: 4  
 Purging Flow Rate: 2.0 gpm. 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)	ORP (mV)	Alkalinity (ppm)
<u>1144</u>	<u>12.0</u>	<u>7.36</u>	<u>783</u>	<u>67.9</u>	<u>prec = 1.4</u>	_____	_____
<u>1150</u>	<u>24.0</u>	<u>7.21</u>	<u>758</u>	<u>67.1</u>	_____	_____	_____
<u>1156</u>	<u>36.5</u>	<u>7.03</u>	<u>739</u>	<u>66.7</u>	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____

### LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>VH-1</u>	<u>5 X VOA VIAL</u>	<u>Y</u>	<u>HCL</u>	<u>SEQUOIA</u>	<u>TPH6/BTEX/MTBE</u> <u>MTBE BY 8260</u>
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

COMMENTS: WELL IS LOCATED IN BATHROOM OF APPLIANCE PARTS  
AND EQUIPMENT DISTRIBUTION, OK IN WELL

## WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/ CHEUKON  
Facility # 9-4612  
Address: 3616 SAN LEANDRO ST.  
City: OAKLAND, CA

Job#: 386473  
Date: 8-6-01  
Sampler: T.C

Well ID: MW-2

Well Condition: o.k

Well Diameter: 2" in.

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

Total Depth: 19.27 ft.

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

Depth to Water: 10.74 ft.

8.53 x VF 1.7 = 1.4 x 3 (case volume) = Estimated Purge Volume: 4.5 (gal.)

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

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

Starting Time: 1218  
Sampling Time: 1226  
Purging Flow Rate: \_\_\_\_\_ gpm  
Did well de-water? N

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

Time	Volume (gal.)	pH	Conductivity $\mu\text{mhos/cm}$	Temperature $^{\circ}\text{C}$	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
<u>1220</u>	<u>1.5</u>	<u>6.98</u>	<u>1022</u>	<u>67.5</u> (me)	<u>1.1</u>		
<u>1228</u>	<u>3.0</u>	<u>6.52</u>	<u>1018</u>	<u>67.1</u>			
<u>1225</u>	<u>4.5</u>	<u>6.68</u>	<u>959</u>	<u>67.3</u>			

### LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>MW-2</u>	<u>5 X VOA VIAL</u>	<u>Y</u>	<u>HCL</u>	<u>SEQUOIA</u>	<u>TPH6/BTEX/MTOE</u> <u>MTBE BY 8260</u>

COMMENTS: ORC IN well



## WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/ CHEVRON  
 Facility # 9-4612  
 Address: 3616 SAN LEANDRO ST.  
 City: OAKLAND, CA.

Job#: 386473  
 Date: 8-6-01  
 Sampler: TL

Well ID: MW-3 Well Condition: o.k.  
 Well Diameter: 2" in. Hydrocarbon Thickness: 0 in. Amount Bailed (product/water): 0 (gal.)  
 Total Depth: 17.92 ft. Volume Factor (VF) table:  
 Depth to Water: 10.45 ft.

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

7.47 x VF .17 = 1.2 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: 1236 Weather Conditions: \_\_\_\_\_  
 Sampling Time: 1244 Water Color: \_\_\_\_\_ Odor: \_\_\_\_\_  
 Purging Flow Rate: \_\_\_\_\_ gpm Sediment Description: \_\_\_\_\_  
 Did well de-water? ~ If yes; Time: \_\_\_\_\_ Volume: \_\_\_\_\_ (gal.)

Time	Volume (gal.)	pH	Conductivity $\mu$ mhos/cm	Temperature $^{\circ}$ C	D.O. (mg/L) (mc)	ORP (mV)	Alkalinity (ppm)
<u>1238</u>	<u>1.5</u>	<u>7.04</u>	<u>989</u>	<u>67.9</u>	<u>.9</u>		
<u>1240</u>	<u>3.0</u>	<u>6.97</u>	<u>932</u>	<u>67.6</u>			
<u>1242</u>	<u>4.0</u>	<u>6.82</u>	<u>948</u>	<u>67.4</u>			

### LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>MW-3</u>	<u>5 X VOA VIAL</u>	<u>Y</u>	<u>HCL</u>	<u>SEQUOIA</u>	<u>TPH/G/BTEX/MTBE</u>
<u>MW-3</u>	<u>1 X AMBER</u>	<u>Y</u>			<u>MTBE By 8260</u>
					<u>TPH-D</u>

COMMENTS: OK IN well

## WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/ CHWAWW  
 Facility # 9-4612  
 Address: 3616 SAN LEANDRO ST.  
 City: OAKLAND, CA.

Job#: 386473  
 Date: 8-6-01  
 Sampler: T-C

Well ID: MW-4  
 Well Diameter: 2" in.  
 Total Depth: 18.75 ft.  
 Depth to Water: 9.78 ft.

Well Condition: OK  
 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

8.97 x VF .17 = 1.5 X 3 (case volume) = Estimated Purge Volume: 4.5 (gal.)

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

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

Starting Time: 1255  
 Sampling Time: 1302  
 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 $\mu$ mhos/cm	Temperature $^{\circ}$ C	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
<u>1257</u>	<u>1.5</u>	<u>7.12</u>	<u>1036</u>	<u>67.8</u>	<u>Pre- .7</u>		
<u>1259</u>	<u>3.0</u>	<u>6.89</u>	<u>1047</u>	<u>67.6</u>			
<u>1301</u>	<u>4.5</u>	<u>6.97</u>	<u>1028</u>	<u>67.2</u>			

### LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>MW-4</u>	<u>5X VOA VIAL</u>	<u>Y</u>	<u>HEC</u>	<u>SEQUOIA</u>	<u>TPH/G/BTEX/MTOE MDOC &amp; LGO</u>

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

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

# Chain-of-Custody-Record

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

Chevron Facility Number #9-4612  
Facility Address 3616 SAN LEANDRO ST. OAKLAND, CA. 94612  
Consultant Project Number 386473  
Consultant Name GETTLER-RYAN INC.  
Address 6747 SIERRA COURT, SUITE J, DUBLIN, CA 94568  
Project Contact (Name) DEANNA L. HARDING  
(Phone) 925-551-7555 (Fax Number) 925-551-7899

Chevron Contact (Name) MR. TOM BAUHS  
(Phone) (925) 842-8898  
Laboratory Name SEQUOIA  
Laboratory Service Order W108163  
Laboratory Service Code \_\_\_\_\_  
Samples Collected by (Name) Tommy Caprianda  
Signature Tommy Caprianda

State Method:  CA  OR  WA  NW Series  CO  UT  IDAHO

Sample Number	Number of Containers	Media S = Soil A = Air W = Water C = Charcoal	Sample Preservation	Date/Time	State Method: <input checked="" type="checkbox"/> CA <input type="checkbox"/> OR <input type="checkbox"/> WA <input type="checkbox"/> NW Series <input type="checkbox"/> CO <input type="checkbox"/> UT <input type="checkbox"/> IDAHO														Remarks		
					BTEX/MTBE/TPH GAS (8020 + 8015)	BTEX + TPH GAS (8020 + 8015)	TPH Dissolved (8015)	Oxyaromatics (8260)	Purgeable Hydrocarbons (8010)	Purgeable Organics (8260)	Extractable Organics (8270)	Oil and Grease (8520)	Metals (ICAP or AA) Cd, Cr, Pb, Zn, Ni	BTEX (8020)	BTEX/MTBE/Naphth. (8020)	TPH - HCD	TPH-D Extended	MTBE BT 8260		Lab Sample No.	
TB-UB	1	W	HW	8-6-01	X															OIA	
VH-1	5			1202	X															X	O2A-E
MW-2	5			1226	X															X	O3A-E
MW-3	6			1244	X		X													X	O4A-F
MW-4	5			1302	X															X	O5A-E

Relinquished By (Signature) Tommy Caprianda

Organization G-R INC.

Date/Time 8/9/01/1530

Received By (Signature) Mark Collins

Organization Sequoia

Date/Time 8-9-01/1530

iced Y/N Y

Turn Around Time (Circle Choice)  
24 Hrs.  
48 Hrs.  
5 Days  
10 Days 10 Days

Relinquished By (Signature) Mark Collins

Organization Seq

Date/Time 8-9-01/1500

Received By (Signature) Michael Goin

Organization Sequoia

Date/Time 8-9-01

iced Y/N 1700



**Sequoia  
Analytical**

404 N. Wiget Lane  
Walnut Creek, CA 94598  
(925) 988-9600  
FAX (925) 988-9673  
www.sequoialabs.com

RECEIVED

AUG 23 2001

GETTLER-RYAN INC.  
GENERAL CONTRACTORS

23 August, 2001

Deanna L. Harding  
Gettler Ryan, Inc. - Dublin  
6747 Sierra Court Suite J  
Dublin, CA 94568

RE: Chevron  
Sequoia Report: W108163

Enclosed are the results of analyses for samples received by the laboratory on 09-Aug-01 17:00. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Charlie Westwater  
Project Manager

CA ELAP Certificate #1271





Gettler Ryan, Inc. - Dublin  
6747 Sierra Court Suite J  
Dublin CA, 94568

Project: Chevron  
Project Number: Chevron # 9-4612  
Project Manager: Deanna L. Harding

**Reported:**  
23-Aug-01 07:59

**ANALYTICAL REPORT FOR SAMPLES**

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
TB-LB	W108163-01	Water	06-Aug-01 00:00	09-Aug-01 17:00
VH-1	W108163-02	Water	06-Aug-01 12:02	09-Aug-01 17:00
MW-2	W108163-03	Water	06-Aug-01 12:26	09-Aug-01 17:00
MW-3	W108163-04	Water	06-Aug-01 12:44	09-Aug-01 17:00
MW-4	W108163-05	Water	06-Aug-01 13:02	09-Aug-01 17:00

Sequoia Analytical - Walnut Creek

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

Charlie Westwater, Project Manager





Gettler Ryan, Inc. - Dublin 6747 Sierra Court Suite J Dublin CA, 94568	Project: Chevron Project Number: Chevron # 9-4612 Project Manager: Deanna L. Harding	Reported: 23-Aug-01 07:59
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## Total Purgeable Hydrocarbons (C6-C12), BTEX and MTBE by DHS LUFT Sequoia Analytical - Walnut Creek

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>TB-LB (W108163-01) Water</b> Sampled: 06-Aug-01 00:00    Received: 09-Aug-01 17:00									
Purgeable Hydrocarbons	ND	50	ug/l	1	1H14002	14-Aug-01	14-Aug-01	EPA 8015M/8020	
Benzene	ND	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	0.50	"	"	"	"	"	"	
Methyl tert-butyl ether (MTBE)	ND	2.5	"	"	"	"	"	"	Q-23a
<i>Surrogate: a,a,a-Trifluorotoluene</i>		<i>104 %</i>	<i>70-130</i>	"	"	"	"	"	
<b>VH-1 (W108163-02) Water</b> Sampled: 06-Aug-01 12:02    Received: 09-Aug-01 17:00									
Purgeable Hydrocarbons	1000	50	ug/l	1	1H14002	14-Aug-01	14-Aug-01	EPA 8015M/8020	P-01
Benzene	67	0.50	"	"	"	"	"	"	
Toluene	6.1	0.50	"	"	"	"	"	"	
Ethylbenzene	2.1	0.50	"	"	"	"	"	"	
Xylenes (total)	7.1	0.50	"	"	"	"	"	"	
Methyl tert-butyl ether (MTBE)	270	2.5	"	"	"	"	"	"	Q-23a
<i>Surrogate: a,a,a-Trifluorotoluene</i>		<i>104 %</i>	<i>70-130</i>	"	"	"	"	"	
<b>MW-2 (W108163-03) Water</b> Sampled: 06-Aug-01 12:26    Received: 09-Aug-01 17:00									
Purgeable Hydrocarbons	3700	2000	ug/l	40	1H14002	15-Aug-01	15-Aug-01	EPA 8015M/8020	P-01
Benzene	120	20	"	"	"	"	"	"	
Toluene	ND	20	"	"	"	"	"	"	
Ethylbenzene	28	20	"	"	"	"	"	"	
Xylenes (total)	33	20	"	"	"	"	"	"	
Methyl tert-butyl ether (MTBE)	490	100	"	"	"	"	"	"	Q-23
<i>Surrogate: a,a,a-Trifluorotoluene</i>		<i>102 %</i>	<i>70-130</i>	"	"	"	"	"	





Gettler Ryan, Inc. - Dublin  
6747 Sierra Court Suite J  
Dublin CA, 94568

Project: Chevron  
Project Number: Chevron # 9-4612  
Project Manager: Deanna L. Harding

Reported:  
23-Aug-01 07:59

**Total Purgeable Hydrocarbons (C6-C12), BTEX and MTBE by DHS LUFT**  
**Sequoia Analytical - Walnut Creek**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>MW-3 (W108163-04) Water</b> Sampled: 06-Aug-01 12:44 Received: 09-Aug-01 17:00									
Purgeable Hydrocarbons	1600	50	ug/l	1	1H14002	15-Aug-01	15-Aug-01	EPA 8015M/8020	E,P-01
Benzene	39	0.50	"	"	"	"	"	"	
Toluene	14	0.50	"	"	"	"	"	"	
Ethylbenzene	1.3	0.50	"	"	"	"	"	"	
Xylenes (total)	5.6	0.50	"	"	"	"	"	"	
Methyl tert-butyl ether (MTBE)	130	2.5	"	"	"	"	"	"	Q-23
Surrogate: a,a,a-Trifluorotoluene		97.7 %	70-130		"	"	"	"	
<b>MW-4 (W108163-05) Water</b> Sampled: 06-Aug-01 13:02 Received: 09-Aug-01 17:00									
Purgeable Hydrocarbons	ND	50	ug/l	1	1H14002	15-Aug-01	15-Aug-01	EPA 8015M/8020	
Benzene	1.1	0.50	"	"	"	"	"	"	
Toluene	0.52	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	1.1	0.50	"	"	"	"	"	"	
Methyl tert-butyl ether (MTBE)	6.0	2.5	"	"	"	"	"	"	Q-23,QR-04
Surrogate: a,a,a-Trifluorotoluene		98.0 %	70-130		"	"	"	"	





Gettler Ryan, Inc. - Dublin 6747 Sierra Court Suite J Dublin CA, 94568	Project: Chevron Project Number: Chevron # 9-4612 Project Manager: Deanna L. Harding	Reported: 23-Aug-01 07:59
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**Diesel Hydrocarbons (C9-C24) by DHS LUFT**

**Sequoia Analytical - Walnut Creek**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-3 (W108163-04) Water	Sampled: 06-Aug-01 12:44		Received: 09-Aug-01 17:00						
Diesel Range Hydrocarbons	870	50	ug/l	1	1H15016	15-Aug-01	16-Aug-01	EPA 8015M	D-11
Surrogate: n-Pentacosane		88.0 %	50-150		"	"	"	"	







Gettler Ryan, Inc. - Dublin  
6747 Sierra Court Suite J  
Dublin CA, 94568

Project: Chevron  
Project Number: Chevron # 9-4612  
Project Manager: Deanna L. Harding

**Reported:**  
23-Aug-01 07:59

## MTBE by EPA Method 8260B Sequoia Analytical - Walnut Creek

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>VH-1 (W108163-02) Water Sampled: 06-Aug-01 12:02 Received: 09-Aug-01 17:00</b>									
Methyl tert-butyl ether (MTBE)	140	2.0	ug/l	1	1H13005	14-Aug-01	15-Aug-01	EPA 8260B	
Surrogate: Dibromofluoromethane		105 %	50-150		"	"	"	"	
<b>MW-2 (W108163-03) Water Sampled: 06-Aug-01 12:26 Received: 09-Aug-01 17:00</b>									
Methyl tert-butyl ether (MTBE)	110	2.0	ug/l	1	1H13005	14-Aug-01	15-Aug-01	EPA 8260B	
Surrogate: Dibromofluoromethane		90.6 %	50-150		"	"	"	"	
<b>MW-3 (W108163-04) Water Sampled: 06-Aug-01 12:44 Received: 09-Aug-01 17:00</b>									
Methyl tert-butyl ether (MTBE)	43	2.0	ug/l	1	1H13005	14-Aug-01	15-Aug-01	EPA 8260B	
Surrogate: Dibromofluoromethane		97.8 %	50-150		"	"	"	"	
<b>MW-4 (W108163-05) Water Sampled: 06-Aug-01 13:02 Received: 09-Aug-01 17:00</b>									
Methyl tert-butyl ether (MTBE)	ND	2.0	ug/l	1	1H13005	14-Aug-01	15-Aug-01	EPA 8260B	
Surrogate: Dibromofluoromethane		98.2 %	50-150		"	"	"	"	





Gettler Ryan, Inc. - Dublin  
6747 Sierra Court Suite J  
Dublin CA, 94568

Project: Chevron  
Project Number: Chevron # 9-4612  
Project Manager: Deanna L. Harding

Reported:  
23-Aug-01 07:59

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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### Batch 1H14002 - EPA 5030B P/T

#### Blank (1H14002-BLK1)

Prepared & Analyzed: 14-Aug-01

Purgeable Hydrocarbons	ND	50	ug/l							
Benzene	ND	0.50	"							
Toluene	ND	0.50	"							
Ethylbenzene	ND	0.50	"							
Xylenes (total)	ND	0.50	"							
Methyl tert-butyl ether (MTBE)	ND	2.5	"							
Surrogate: <i>a,a,a</i> -Trifluorotoluene	30.0		"	30.0		100	70-130			

#### Blank (1H14002-BLK2)

Prepared & Analyzed: 15-Aug-01

Purgeable Hydrocarbons	ND	50	ug/l							
Benzene	ND	0.50	"							
Toluene	ND	0.50	"							
Ethylbenzene	ND	0.50	"							
Xylenes (total)	ND	0.50	"							
Methyl tert-butyl ether (MTBE)	ND	2.5	"							
Surrogate: <i>a,a,a</i> -Trifluorotoluene	29.6		"	30.0		98.7	70-130			

#### LCS (1H14002-BS1)

Prepared & Analyzed: 14-Aug-01

Benzene	18.2	0.50	ug/l	20.0		91.0	70-130			
Toluene	19.1	0.50	"	20.0		95.5	70-130			
Ethylbenzene	19.8	0.50	"	20.0		99.0	70-130			
Xylenes (total)	59.3	0.50	"	60.0		98.8	70-130			
Surrogate: <i>a,a,a</i> -Trifluorotoluene	29.3		"	30.0		97.7	70-130			

#### LCS (1H14002-BS2)

Prepared & Analyzed: 15-Aug-01

Benzene	18.8	0.50	ug/l	20.0		94.0	70-130			
Toluene	19.7	0.50	"	20.0		98.5	70-130			
Ethylbenzene	21.2	0.50	"	20.0		106	70-130			
Xylenes (total)	62.2	0.50	"	60.0		104	70-130			
Surrogate: <i>a,a,a</i> -Trifluorotoluene	29.6		"	30.0		98.7	70-130			





Gettler Ryan, Inc. - Dublin  
6747 Sierra Court Suite J  
Dublin CA, 94568

Project: Chevron  
Project Number: Chevron # 9-4612  
Project Manager: Deanna L. Harding

Reported:  
23-Aug-01 07:59

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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### Batch 1H14002 - EPA 5030B P/T

#### Matrix Spike (1H14002-MS1)

Source: W108164-05

Prepared: 14-Aug-01 Analyzed: 15-Aug-01

Benzene	18.6	0.50	ug/l	20.0	ND	93.0	70-130			
Toluene	20.1	0.50	"	20.0	ND	100	70-130			
Ethylbenzene	20.6	0.50	"	20.0	ND	103	70-130			
Xylenes (total)	64.5	0.50	"	60.0	ND	108	70-130			
<i>Surrogate: a,a,a-Trifluorotoluene</i>	28.7		"	30.0		95.7	70-130			

#### Matrix Spike Dup (1H14002-MSD1)

Source: W108164-05

Prepared: 14-Aug-01 Analyzed: 15-Aug-01

Benzene	18.4	0.50	ug/l	20.0	ND	92.0	70-130	1.08	20	
Toluene	19.8	0.50	"	20.0	ND	99.0	70-130	1.50	20	
Ethylbenzene	20.3	0.50	"	20.0	ND	102	70-130	1.47	20	
Xylenes (total)	63.1	0.50	"	60.0	ND	105	70-130	2.19	20	
<i>Surrogate: a,a,a-Trifluorotoluene</i>	29.4		"	30.0		98.0	70-130			





Gettler Ryan, Inc. - Dublin  
6747 Sierra Court Suite J  
Dublin CA, 94568

Project: Chevron  
Project Number: Chevron # 9-4612  
Project Manager: Deanna L. Harding

Reported:  
23-Aug-01 07:59

## Diesel Hydrocarbons (C9-C24) by DHS LUFT - Quality Control Sequoia Analytical - Walnut Creek

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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### Batch 1H15016 - EPA 3510B

#### Blank (1H15016-BLK1)

Prepared: 15-Aug-01 Analyzed: 16-Aug-01

Diesel Range Hydrocarbons

ND 100 ug/l

Surrogate: n-Pentacosane

30.7 " 33.3 92.2 50-150

#### LCS (1H15016-BS1)

Prepared: 15-Aug-01 Analyzed: 16-Aug-01

Diesel Range Hydrocarbons

448 50 ug/l 500 89.6 60-140

Surrogate: n-Pentacosane

30.0 " 33.3 90.1 50-150

#### LCS Dup (1H15016-BSD1)

Prepared: 15-Aug-01 Analyzed: 16-Aug-01

Diesel Range Hydrocarbons

482 50 ug/l 500 96.4 60-140 7.31 50

Surrogate: n-Pentacosane

34.3 " 33.3 103 50-150





Gettler Ryan, Inc. - Dublin  
6747 Sierra Court Suite J  
Dublin CA, 94568

Project: Chevron  
Project Number: Chevron # 9-4612  
Project Manager: Deanna L. Harding

Reported:  
23-Aug-01 07:59

## MTBE by EPA Method 8260B - Quality Control Sequoia Analytical - Walnut Creek

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch 1H13005 - EPA 5030B (P/T)</b>										
<b>Blank (1H13005-BLK1)</b> Prepared & Analyzed: 13-Aug-01										
Methyl tert-butyl ether (MTBE)	ND	2.0	ug/l							
Surrogate: Dibromofluoromethane	53.4		"	50.0		107	50-150			
<b>Blank (1H13005-BLK2)</b> Prepared: 14-Aug-01 Analyzed: 15-Aug-01										
Methyl tert-butyl ether (MTBE)	ND	2.0	ug/l							
Surrogate: Dibromofluoromethane	50.0		"	50.0		100	50-150			
<b>Blank (1H13005-BLK3)</b> Prepared & Analyzed: 15-Aug-01										
Methyl tert-butyl ether (MTBE)	ND	2.0	ug/l							
Surrogate: Dibromofluoromethane	47.4		"	50.0		94.8	50-150			
<b>LCS (1H13005-BS1)</b> Prepared & Analyzed: 13-Aug-01										
Methyl tert-butyl ether (MTBE)	51.1	2.0	ug/l	50.0		102	70-130			
Surrogate: Dibromofluoromethane	41.1		"	50.0		82.2	50-150			
<b>LCS (1H13005-BS2)</b> Prepared: 14-Aug-01 Analyzed: 15-Aug-01										
Methyl tert-butyl ether (MTBE)	44.1	2.0	ug/l	50.0		88.2	70-130			
Surrogate: Dibromofluoromethane	49.1		"	50.0		98.2	50-150			
<b>LCS (1H13005-BS3)</b> Prepared & Analyzed: 15-Aug-01										
Methyl tert-butyl ether (MTBE)	40.6	2.0	ug/l	50.0		81.2	70-130			
Surrogate: Dibromofluoromethane	46.7		"	50.0		93.4	50-150			
<b>Matrix Spike (1H13005-MS1)</b> Source: W108143-02 Prepared & Analyzed: 15-Aug-01										
Methyl tert-butyl ether (MTBE)	46.0	2.0	ug/l	50.0	ND	92.0	60-150			
Surrogate: Dibromofluoromethane	50.8		"	50.0		102	50-150			
<b>Matrix Spike Dup (1H13005-MSD1)</b> Source: W108143-02 Prepared & Analyzed: 15-Aug-01										
Methyl tert-butyl ether (MTBE)	42.5	2.0	ug/l	50.0	ND	85.0	60-150	7.91	25	
Surrogate: Dibromofluoromethane	47.5		"	50.0		95.0	50-150			





Gettler Ryan, Inc. - Dublin  
6747 Sierra Court Suite J  
Dublin CA, 94568

Project: Chevron  
Project Number: Chevron # 9-4612  
Project Manager: Deanna L. Harding

Reported:  
23-Aug-01 07:59

## Notes and Definitions

- D-11 Chromatogram Pattern: Unidentified Hydrocarbons < C16
- E The concentration indicated for this analyte is an estimated value above the calibration range of the instrument.
- P-01 Chromatogram Pattern: Gasoline C6-C12
- Q-23 The closing calibration was outside acceptance limits by -25%. This should be considered in evaluating the result. The average % difference for all analytes met the 15% requirement and the QC suggests that calibration linearity is not a factor.
- Q-23a The closing calibration was outside acceptance limits by -26%. This should be considered in evaluating the result. The average % difference for all analytes met the 15% requirement and the QC suggests that calibration linearity is not a factor.
- QR-04 The results between the primary and confirmation columns varied by greater than 40% RPD. The results may still be useful for their intended purpose.
- DET Analyte DETECTED
- ND Analyte NOT DETECTED at or above the reporting limit
- NR Not Reported
- dry Sample results reported on a dry weight basis
- RPD Relative Percent Difference

